



LIFE, AND ACCIDENT AND HEALTH COMPANIES/FRATERNAL BENEFIT SOCIETIES - ASSOCIATION EDITION

ANNUAL STATEMENT

FOR THE YEAR ENDED DECEMBER 31, 2024

OF THE CONDITION AND AFFAIRS OF THE

MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

NAIC Group Code

0435

0435

NAIC Company Code

63312

Employer's ID Number

13-1935920

(Current)

(Prior)

Organized under the Laws of

Ohio

State of Domicile or Port of Entry

OH

Country of Domicile

United States of America

Licensed as business type:

Life, Accident and Health [X]

Fraternal Benefit Societies []

Incorporated/Organized

12/29/1961

Commenced Business

08/13/1963

Statutory Home Office

191 Rosa Parks Street

Cincinnati, OH, US 45202

(Street and Number)

(City or Town, State, Country and Zip Code)

Main Administrative Office

191 Rosa Parks Street

Cincinnati, OH, US 45202

(Street and Number)

(City or Town, State, Country and Zip Code)

513-361-9000

(Area Code) (Telephone Number)

Mail Address

Post Office Box 5420

Cincinnati, OH, US 45201

(Street and Number or P.O. Box)

(City or Town, State, Country and Zip Code)

Primary Location of Books and Records

191 Rosa Parks Street

Cincinnati, OH, US 45202

(Street and Number)

(City or Town, State, Country and Zip Code)

513-361-9000

(Area Code) (Telephone Number)

Internet Website Address

www.massmutualascend.com

Statutory Statement Contact

Robert Mayhew Earle II

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(Name)

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513-345-9484

(E-mail Address)

(FAX Number)

OFFICERS

Mark Francis Muething	Brian Patrick Sponaugle
John Paul Gruber	Isaac Cezar Hall

OTHER

Dominic Lusean Blue	Donna Marie Carrelli	Michael Harrison Haney

DIRECTORS OR TRUSTEES

Dominic Lusean Blue	Elizabeth Ward Chicares	Susan Marie Cicco
Geoffrey James Craddock	Roger William Crandall	Vy Ho #
Paul Anthony LaPiana	Sears Andrew Merritt	Mark Francis Muething
Michael James O'Connor	Eric William Partlan	

State of

Ohio

County of

Hamilton

SS

The officers of this reporting entity being duly sworn, each depose and say that they are the described officers of said reporting entity, and that on the reporting period stated above, all of the herein described assets were the absolute property of the said reporting entity, free and clear from any liens or claims thereon, except as herein stated, and that this statement, together with related exhibits, schedules and explanations therein contained, annexed or referred to, is a full and true statement of all the assets and liabilities and of the condition and affairs of the said reporting entity as of the reporting period stated above, and of its income and deductions therefrom for the period ended, and have been completed in accordance with the NAIC Annual Statement Instructions and Accounting Practices and Procedures manual except to the extent that: (1) state law may differ; or, (2) that state rules or regulations require differences in reporting not related to accounting practices and procedures, according to the best of their information, knowledge and belief, respectively. Furthermore, the scope of this attestation by the described officers also includes the related corresponding electronic filing with the NAIC, when required, that is an exact copy (except for formatting differences due to electronic filing) of the enclosed statement. The electronic filing may be requested by various regulators in lieu of or in addition to the enclosed statement.

Mark Francis Muething

John Paul Gruber

Brian Patrick Sponaugle

President

Secretary

Treasurer

Subscribed and sworn to before me this

day of

February 2025

a. Is this an original filing?

b. If no,

1. State the amendment number.....

2. Date filed

3. Number of pages attached.....

Yes [X] No []

OFFICERS AND DIRECTORS WHO DID NOT OCCUPY THE INDICATED POSITION IN THE PREVIOUS ANNUAL STATEMENT

SUMMARY INVESTMENT SCHEDULE

Investment Categories	Gross Investment Holdings		Admitted Assets as Reported in the Annual Statement			
	1	2	3	4	5	6
	Amount	Percentage of Column 1 Line 13	Amount	Securities Lending Reinvested Collateral Amount	Total (Col. 3 + 4) Amount	Percentage of Column 5 Line 13
1. Long-Term Bonds (Schedule D, Part 1):						
1.01 U.S. governments	168,630,006	0.332	168,630,006		168,630,006	0.332
1.02 All other governments	14,774,309	0.029	14,774,309		14,774,309	0.029
1.03 U.S. states, territories and possessions, etc. guaranteed	157,510,457	0.310	157,510,457		157,510,457	0.310
1.04 U.S. political subdivisions of states, territories, and possessions, guaranteed	221,807,733	0.436	221,807,733		221,807,733	0.436
1.05 U.S. special revenue and special assessment obligations, etc. non-guaranteed	1,759,248,221	3.461	1,759,248,221		1,759,248,221	3.462
1.06 Industrial and miscellaneous	29,378,359,993	57.796	29,378,359,993		29,378,359,993	57.808
1.07 Hybrid securities	1,186,616,037	2.334	1,186,616,037		1,186,616,037	2.335
1.08 Parent, subsidiaries and affiliates	969,594,122	1.907	969,594,122		969,594,122	1.908
1.09 SVO identified funds	0	0.000			0	0.000
1.10 Unaffiliated bank loans	3,651,665,815	7.184	3,651,665,815		3,651,665,815	7.185
1.11 Unaffiliated certificates of deposit	0	0.000			0	0.000
1.12 Total long-term bonds	37,508,206,693	73.790	37,508,206,693	0	37,508,206,693	73.805
2. Preferred stocks (Schedule D, Part 2, Section 1):						
2.01 Industrial and miscellaneous (Unaffiliated)	297,875,760	0.586	297,875,760		297,875,760	0.586
2.02 Parent, subsidiaries and affiliates	0	0.000			0	0.000
2.03 Total preferred stocks	297,875,760	0.586	297,875,760	0	297,875,760	0.586
3. Common stocks (Schedule D, Part 2, Section 2):						
3.01 Industrial and miscellaneous Publicly traded (Unaffiliated)	139,051,079	0.274	139,051,079		139,051,079	0.274
3.02 Industrial and miscellaneous Other (Unaffiliated)	157,062,886	0.309	157,062,886		157,062,886	0.309
3.03 Parent, subsidiaries and affiliates Publicly traded	0	0.000			0	0.000
3.04 Parent, subsidiaries and affiliates Other	482,056,721	0.948	482,056,721		482,056,721	0.949
3.05 Mutual funds	0	0.000			0	0.000
3.06 Unit investment trusts	0	0.000			0	0.000
3.07 Closed-end funds	0	0.000			0	0.000
3.08 Exchange traded funds	605,326	0.001	605,326		605,326	0.001
3.09 Total common stocks	778,776,012	1.532	778,776,012	0	778,776,012	1.532
4. Mortgage loans (Schedule B):						
4.01 Farm mortgages	0	0.000			0	0.000
4.02 Residential mortgages	3,333,342,602	6.558	3,333,342,602		3,333,342,602	6.559
4.03 Commercial mortgages	1,711,540,949	3.367	1,711,540,949		1,711,540,949	3.368
4.04 Mezzanine real estate loans	78,215,982	0.154	78,215,982		78,215,982	0.154
4.05 Total valuation allowance	0	0.000			0	0.000
4.06 Total mortgage loans	5,123,099,533	10.079	5,123,099,533	0	5,123,099,533	10.081
5. Real estate (Schedule A):						
5.01 Properties occupied by company		0.000	0		0	0.000
5.02 Properties held for production of income		0.000	0		0	0.000
5.03 Properties held for sale		0.000	0		0	0.000
5.04 Total real estate	0	0.000	0	0	0	0.000
6. Cash, cash equivalents and short-term investments:						
6.01 Cash (Schedule E, Part 1)	61,738,350	0.121	61,738,350		61,738,350	0.121
6.02 Cash equivalents (Schedule E, Part 2)	2,973,539,949	5.850	2,973,539,949		2,973,539,949	5.851
6.03 Short-term investments (Schedule DA)	375,953,404	0.740	375,953,404		375,953,404	0.740
6.04 Total cash, cash equivalents and short-term investments	3,411,231,703	6.711	3,411,231,703	0	3,411,231,703	6.712
7. Contract loans	27,524,475	0.054	27,524,475		27,524,475	0.054
8. Derivatives (Schedule DB)	875,707,311	1.723	875,707,311		875,707,311	1.723
9. Other invested assets (Schedule BA)	2,805,647,922	5.520	2,795,309,682		2,795,309,682	5.500
10. Receivables for securities	2,858,588	0.006	2,858,588		2,858,588	0.006
11. Securities Lending (Schedule DL, Part 1).....	0	0.000	0	XXX	XXX	XXX
12. Other invested assets (Page 2, Line 11)	0	0.000	0		0	0.000
13. Total invested assets	50,830,927,997	100.000	50,820,589,758	0	50,820,589,758	100.000

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE A - VERIFICATION BETWEEN YEARS

Real Estate

1.	Book/adjusted carrying value, December 31 of prior year	
2.	Cost of acquired:	
	2.1 Actual cost at time of acquisition (Part 2, Column 6)	
	2.2 Additional investment made after acquisition (Part 2, Column 9)	
3.	Current year change in encumbrances:	
	3.1 Totals, Part 1, Column 13	
	3.2 Totals, Part 3, Column 11	
4.	Total gain (loss) on disposals, Part 3, Column 18	
5.	Deduct amounts received on disposals, Part 3, Column 15	
6.	Total foreign exchange change in book/adjusted carrying value:	
	6.1 Totals, Part 1, Column 15	
	6.2 Totals, Part 3, Column 13	
7.	Deduct current year's other-than-temporary impairment recognized:	
	7.1 Totals, Part 1, Column 12	
	7.2 Totals, Part 3, Column 10	
8.	Deduct current year's depreciation:	
	8.1 Totals, Part 1, Column 11	
	8.2 Totals, Part 3, Column 9	
9.	Book/adjusted carrying value at the end of current period (Lines 1+2+3+4-5+6-7-8)	
10.	Deduct total nonadmitted amounts	
11.	Statement value at end of current period (Line 9 minus Line 10)	

SCHEDULE B - VERIFICATION BETWEEN YEARS

Mortgage Loans

1.	Book value/recorded investment excluding accrued interest, December 31 of prior year	4,256,509,561
2.	Cost of acquired:	
	2.1 Actual cost at time of acquisition (Part 2, Column 7)	1,551,323,754
	2.2 Additional investment made after acquisition (Part 2, Column 8)	309,004,968
		1,860,328,722
3.	Capitalized deferred interest and other:	
	3.1 Totals, Part 1, Column 12	15,565,041
	3.2 Totals, Part 3, Column 11	0
		15,565,041
4.	Accrual of discount	13,210,092
5.	Unrealized valuation increase/(decrease):	
	5.1 Totals, Part 1, Column 9	0
	5.2 Totals, Part 3, Column 8	0
		0
6.	Total gain (loss) on disposals, Part 3, Column 18	(188,619)
7.	Deduct amounts received on disposals, Part 3, Column 15	1,000,027,599
8.	Deduct amortization of premium and mortgage interest points and commitment fees	23,054,144
9.	Total foreign exchange change in book value/recorded investment excluding accrued interest:	
	9.1 Totals, Part 1, Column 13	756,479
	9.2 Totals, Part 3, Column 13	0
		756,479
10.	Deduct current year's other-than-temporary impairment recognized:	
	10.1 Totals, Part 1, Column 11	0
	10.2 Totals, Part 3, Column 10	0
		0
11.	Book value/recorded investment excluding accrued interest at end of current period (Lines 1+2+3+4+5+6-7-8+9-10)	5,123,099,533
12.	Total valuation allowance	0
13.	Subtotal (Line 11 plus Line 12)	5,123,099,533
14.	Deduct total nonadmitted amounts	0
15.	Statement value of mortgages owned at end of current period (Line 13 minus Line 14)	5,123,099,533

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE BA - VERIFICATION BETWEEN YEARS

Other Long-Term Invested Assets

1.	Book/adjusted carrying value, December 31 of prior year	1,407,752,674
2.	Cost of acquired:	
	2.1 Actual cost at time of acquisition (Part 2, Column 8)	1,386,874,043
	2.2 Additional investment made after acquisition (Part 2, Column 9)	207,646,596
		1,594,520,639
3.	Capitalized deferred interest and other:	
	3.1 Totals, Part 1, Column 16	0
	3.2 Totals, Part 3, Column 12	0
		0
4.	Accrual of discount	9,855,146
5.	Unrealized valuation increase/(decrease):	
	5.1 Totals, Part 1, Column 13	87,093,528
	5.2 Totals, Part 3, Column 9	2,960,940
		90,054,469
6.	Total gain (loss) on disposals, Part 3, Column 19	1,190,794
7.	Deduct amounts received on disposals, Part 3, Column 16	231,751,488
8.	Deduct amortization of premium and depreciation	3,918,835
9.	Total foreign exchange change in book/adjusted carrying value:	
	9.1 Totals, Part 1, Column 17	(2,174,836)
	9.2 Totals, Part 3, Column 14	0
		(2,174,836)
10.	Deduct current year's other-than-temporary impairment recognized:	
	10.1 Totals, Part 1, Column 15	51,983,495
	10.2 Totals, Part 3, Column 11	7,897,147
		59,880,642
11.	Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5+6-7-8+9-10)	2,805,647,921
12.	Deduct total nonadmitted amounts	10,338,240
13.	Statement value at end of current period (Line 11 minus Line 12)	2,795,309,681

SCHEDULE D - VERIFICATION BETWEEN YEARS

Bonds and Stocks

1.	Book/adjusted carrying value, December 31 of prior year	35,889,697,885
2.	Cost of bonds and stocks acquired, Part 3, Column 7	10,331,136,522
3.	Accrual of discount	168,861,494
4.	Unrealized valuation increase/(decrease):	
	4.1. Part 1, Column 12	(13,327,621)
	4.2. Part 2, Section 1, Column 15	12,478,519
	4.3. Part 2, Section 2, Column 13	73,416,484
	4.4. Part 4, Column 11	7,968,244
		80,535,626
5.	Total gain (loss) on disposals, Part 4, Column 19	(105,662,602)
6.	Deduction consideration for bonds and stocks disposed of, Part 4, Column 7	7,559,849,660
7.	Deduct amortization of premium	71,230,083
8.	Total foreign exchange change in book/adjusted carrying value:	
	8.1. Part 1, Column 15	(52,785,748)
	8.2. Part 2, Section 1, Column 19	0
	8.3. Part 2, Section 2, Column 16	(14)
	8.4. Part 4, Column 15	(7,607,315)
		(60,393,076)
9.	Deduct current year's other-than-temporary impairment recognized:	
	9.1. Part 1, Column 14	64,164,077
	9.2. Part 2, Section 1, Column 17	13,593,117
	9.3. Part 2, Section 2, Column 14	8,250,024
	9.4. Part 4, Column 13	2,230,421
		88,237,639
10.	Total investment income recognized as a result of prepayment penalties and/or acceleration fees, Note 5Q, Line 2	0
11.	Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5-6-7+8-9+10)	38,584,858,466
12.	Deduct total nonadmitted amounts	0
13.	Statement value at end of current period (Line 11 minus Line 12)	38,584,858,466

SCHEDULE D - SUMMARY BY COUNTRY

Long-Term Bonds and Stocks OWNED December 31 of Current Year

Description		1 Book/Adjusted Carrying Value	2 Fair Value	3 Actual Cost	4 Par Value of Bonds
BONDS					
Governments (Including all obligations guaranteed by governments)	1. United States	168,630,006	131,239,813	164,953,535	482,785,155
	2. Canada				
	3. Other Countries	14,774,309	13,458,139	14,828,356	14,358,000
	4. Totals	183,404,315	144,697,952	179,781,892	497,143,155
U.S. States, Territories and Possessions (Direct and guaranteed)					
	5. Totals	157,510,457	151,544,932	167,370,681	151,493,177
U.S. Political Subdivisions of States, Territories and Possessions (Direct and guaranteed)					
	6. Totals	221,807,733	217,170,516	228,238,472	217,064,339
U.S. Special Revenue and Special Assessment Obligations and all Non-Guaranteed Obligations of Agencies and Authorities of Governments and their Political Subdivisions					
	7. Totals	1,759,248,221	1,625,584,767	1,799,562,016	1,742,740,904
Industrial and Miscellaneous, SVO Identified Funds, Unaffiliated Bank Loans, Unaffiliated Certificates of Deposit and Hybrid Securities (unaffiliated)	8. United States	26,607,484,108	25,311,405,898	26,691,808,893	26,905,356,496
	9. Canada	562,587,889	559,702,187	558,652,400	577,793,834
	10. Other Countries	7,046,569,848	6,905,807,969	7,072,381,723	7,778,856,922
	11. Totals	34,216,641,845	32,776,916,054	34,322,843,016	35,262,007,251
Parent, Subsidiaries and Affiliates	12. Totals	969,594,122	959,298,933	969,054,719	970,299,476
	13. Total Bonds	37,508,206,693	35,875,213,154	37,666,850,796	38,840,748,302
PREFERRED STOCKS					
Industrial and Miscellaneous (unaffiliated)	14. United States	278,883,608	334,135,357	278,813,094	
	15. Canada				
	16. Other Countries	18,992,152	18,992,152	26,104,165	
	17. Totals	297,875,760	353,127,509	304,917,259	
Parent, Subsidiaries and Affiliates	18. Totals	0	0	0	
	19. Total Preferred Stocks	297,875,760	353,127,509	304,917,259	
COMMON STOCKS					
Industrial and Miscellaneous (unaffiliated), Mutual Funds, Unit Investment Trusts, Closed-End Funds and Exchange Traded Funds	20. United States	282,197,355	282,197,355	204,165,610	
	21. Canada				
	22. Other Countries	14,521,936	14,521,936	11,902,407	
	23. Totals	296,719,291	296,719,291	216,068,017	
Parent, Subsidiaries and Affiliates	24. Totals	482,056,721	482,056,721	243,798,177	
	25. Total Common Stocks	778,776,012	778,776,012	459,866,194	
	26. Total Stocks	1,076,651,773	1,131,903,521	764,783,453	
	27. Total Bonds and Stocks	38,584,858,466	37,007,116,675	38,431,634,249	

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY
SCHEDULE D - PART 1A - SECTION 1

Quality and Maturity Distribution of All Bonds Owned December 31, at Book/Adjusted Carrying Values by Major Types of Issues and NAIC Designations

NAIC Designation	1 1 Year or Less	2 Over 1 Year Through 5 Years	3 Over 5 Years Through 10 Years	4 Over 10 Years Through 20 Years	5 Over 20 Years	6 No Maturity Date	7 Total Current Year	8 Col. 7 as a % of Line 12.7	9 Total from Col. 7 Prior Year	10 % From Col. 8 Prior Year	11 Total Publicly Traded	12 Total Privately Placed (a)
1. U.S. Governments												
1.1 NAIC 1	14,548,161	51,121,207	42,523,412	44,559,685	15,877,539	XXX	168,630,003	0.4	186,662,264	0.5	168,629,999	5
1.2 NAIC 2	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
1.3 NAIC 3	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
1.4 NAIC 4	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
1.5 NAIC 5	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
1.6 NAIC 6	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
1.7 Totals	14,548,161	51,121,207	42,523,412	44,559,685	15,877,539	XXX	168,630,003	0.4	186,662,264	0.5	168,629,999	5
2. All Other Governments												
2.1 NAIC 1	0	0	1,022,246	0	0	XXX	1,022,246	0.0	10,012,554	0.0	0	1,022,246
2.2 NAIC 2	0	2,543,953	10,006,947	1,201,168	0	XXX	13,752,068	0.0	9,138,612	0.0	8,357,286	5,394,782
2.3 NAIC 3	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
2.4 NAIC 4	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
2.5 NAIC 5	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
2.6 NAIC 6	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
2.7 Totals	0	2,543,953	11,029,193	1,201,168	0	XXX	14,774,314	0.0	19,151,166	0.1	8,357,286	6,417,028
3. U.S. States, Territories and Possessions etc., Guaranteed												
3.1 NAIC 1	24,653,529	101,917,936	30,938,992	0	0	XXX	157,510,457	0.4	180,316,608	0.5	157,510,457	0
3.2 NAIC 2	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
3.3 NAIC 3	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
3.4 NAIC 4	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
3.5 NAIC 5	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
3.6 NAIC 6	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
3.7 Totals	24,653,529	101,917,936	30,938,992	0	0	XXX	157,510,457	0.4	180,316,608	0.5	157,510,457	0
4. U.S. Political Subdivisions of States, Territories and Possessions , Guaranteed												
4.1 NAIC 1	83,564,556	59,121,917	42,428,307	26,124,802	908,580	XXX	212,148,162	0.5	222,104,875	0.6	212,148,162	0
4.2 NAIC 2	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
4.3 NAIC 3	9,659,572	0	0	0	0	XXX	9,659,572	0.0	9,321,651	0.0	9,659,572	0
4.4 NAIC 4	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
4.5 NAIC 5	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
4.6 NAIC 6	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
4.7 Totals	93,224,128	59,121,917	42,428,307	26,124,802	908,580	XXX	221,807,734	0.5	231,426,526	0.6	221,807,734	0
5. U.S. Special Revenue & Special Assessment Obligations, etc., Non-Guaranteed												
5.1 NAIC 1	191,316,051	653,464,564	371,274,844	359,371,918	134,195,516	XXX	1,709,622,893	4.2	1,905,232,492	5.2	1,708,686,245	936,648
5.2 NAIC 2	0	33,630,171	110,500	2,105,750	5,783,750	XXX	41,630,171	0.1	8,000,000	0.0	33,630,171	8,000,000
5.3 NAIC 3	108,236	6,891,764	0	0	0	XXX	7,000,000	0.0	7,000,000	0.0	0	7,000,000
5.4 NAIC 4	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
5.5 NAIC 5	0	0	0	0	995,158	XXX	995,158	0.0	0	0.0	995,158	0
5.6 NAIC 6	0	0	0	0	0	XXX	0	0.0	60	0.0	0	0
5.7 Totals	191,424,287	693,986,498	371,385,344	361,477,668	140,974,424	XXX	1,759,248,221	4.3	1,920,232,552	5.2	1,743,311,573	15,936,648

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY
SCHEDULE D - PART 1A - SECTION 1 (Continued)

Quality and Maturity Distribution of All Bonds Owned December 31, at Book/Adjusted Carrying Values by Major Types of Issues and NAIC Designations

	1	2	3	4	5	6	7	8	9	10	11	12
NAIC Designation	1 Year or Less	Over 1 Year Through 5 Years	Over 5 Years Through 10 Years	Over 10 Years Through 20 Years	Over 20 Years	No Maturity Date	Total Current Year	Col. 7 as a % of Line 12.7	Total from Col. 7 Prior Year	% From Col. 8 Prior Year	Total Publicly Traded	Total Privately Placed (a)
6. Industrial & Miscellaneous (Unaffiliated)												
6.1 NAIC 1	2,726,507,676	7,832,916,054	3,960,695,338	1,762,506,120	964,057,216	XXX	17,246,682,404	42.4	15,309,521,134	41.5	4,118,863,320	13,127,819,085
6.2 NAIC 2	3,232,838,674	5,117,827,546	3,424,713,887	1,786,848,107	510,643,404	XXX	14,072,871,618	34.6	12,983,824,670	35.2	6,859,109,680	7,213,761,938
6.3 NAIC 3	81,079,723	295,060,497	246,476,590	22,964,472	34,528,620	XXX	680,109,901	1.7	965,511,612	2.6	170,214,070	509,895,832
6.4 NAIC 4	25,255,707	161,841,946	93,602,254	23,847,460	873,767	XXX	305,421,134	0.8	333,140,463	0.9	88,024,425	217,396,710
6.5 NAIC 5	43,172,541	33,480,182	28,333,976	6,040,680	1,004,618	XXX	112,031,996	0.3	130,088,151	0.4	25,756,135	86,275,861
6.6 NAIC 6	814,864	3,538,761	4,679,363	2,816,188	80,548,974	XXX	92,398,150	0.2	33,335,247	0.1	5,068,342	87,329,808
6.7 Totals	6,109,669,184	13,444,664,986	7,758,501,409	3,605,023,027	1,591,656,599	XXX	32,509,515,204	80.0	29,755,421,277	80.6	11,267,035,971	21,242,479,233
7. Hybrid Securities												
7.1 NAIC 1	3,921,427	5,000,000	66,024,222	15,640,000	88,363,616	XXX	178,949,265	0.4	106,890,613	0.3	87,532,991	91,416,275
7.2 NAIC 2	29,462,834	155,770,462	112,798,849	92,039,230	401,763,902	XXX	791,835,277	1.9	602,996,280	1.6	737,061,715	54,773,562
7.3 NAIC 3	14,883,911	23,403,740	54,095,632	16,601,554	106,846,657	XXX	215,831,494	0.5	62,403,363	0.2	189,229,941	26,601,554
7.4 NAIC 4	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
7.5 NAIC 5	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
7.6 NAIC 6	0	0	0	0	0	XXX	0	0.0	50,000	0.0	0	0
7.7 Totals	48,268,172	184,174,202	232,918,704	124,280,784	596,974,175	XXX	1,186,616,037	2.9	772,340,256	2.1	1,013,824,647	172,791,390
8. Parent, Subsidiaries and Affiliates												
8.1 NAIC 1	76,364,147	294,948,123	243,975,140	55,543,748	33,315,616	XXX	704,146,775	1.7	479,594,926	1.3	7,896,390	696,250,385
8.2 NAIC 2	13,982,936	168,258,932	37,282,389	465,903	3,557,185	XXX	223,547,346	0.6	231,293,687	0.6	0	223,547,346
8.3 NAIC 3	5,401,197	19,512,518	16,486,285	0	0	XXX	41,400,000	0.1	33,250,000	0.1	5,000,000	36,400,000
8.4 NAIC 4	65,532	238,169	196,299	0	0	XXX	500,000	0.0	500,000	0.0	0	500,000
8.5 NAIC 5	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
8.6 NAIC 6	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
8.7 Totals	95,813,813	482,957,743	297,940,113	56,009,651	36,872,801	XXX	969,594,121	2.4	744,638,613	2.0	12,896,390	956,697,731
9. SVO Identified Funds												
9.1 NAIC 1	XXX	XXX	XXX	XXX	XXX	0	0	0.0	0	0.0	0	0
9.2 NAIC 2	XXX	XXX	XXX	XXX	XXX	0	0	0.0	0	0.0	0	0
9.3 NAIC 3	XXX	XXX	XXX	XXX	XXX	0	0	0.0	0	0.0	0	0
9.4 NAIC 4	XXX	XXX	XXX	XXX	XXX	0	0	0.0	0	0.0	0	0
9.5 NAIC 5	XXX	XXX	XXX	XXX	XXX	0	0	0.0	0	0.0	0	0
9.6 NAIC 6	XXX	XXX	XXX	XXX	XXX	0	0	0.0	0	0.0	0	0
9.7 Totals	XXX	XXX	XXX	XXX	XXX	0	0	0.0	0	0.0	0	0
10. Unaffiliated Bank Loans												
10.1 NAIC 1	0	813,258,173	1,103,655,019	520,477,034	164,311,499	XXX	2,601,701,725	6.4	2,187,206,770	5.9	0	2,601,701,725
10.2 NAIC 2	29,832,628	196,388,247	178,341,202	110,998,858	9,546,614	XXX	525,107,550	1.3	430,195,386	1.2	0	525,107,550
10.3 NAIC 3	12,611,480	104,475,904	25,215,410	14,303,756	2,187,801	XXX	158,794,352	0.4	174,879,383	0.5	0	158,794,352
10.4 NAIC 4	11,416,887	184,245,385	24,585,209	0	0	XXX	220,247,481	0.5	160,756,449	0.4	0	220,247,481
10.5 NAIC 5	11,877,368	87,791,111	27,111,684	0	0	XXX	126,780,163	0.3	141,655,675	0.4	0	126,780,163
10.6 NAIC 6	0	15,450,783	3,563,200	20,559	0	XXX	19,034,542	0.0	8,515,557	0.0	0	19,034,542
10.7 Totals	65,738,363	1,401,609,604	1,362,471,724	645,800,207	176,045,914	XXX	3,651,665,813	9.0	3,103,209,220	8.4	0	3,651,665,813
11. Unaffiliated Certificates of Deposit												
11.1 NAIC 1	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
11.2 NAIC 2	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
11.3 NAIC 3	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
11.4 NAIC 4	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
11.5 NAIC 5	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
11.6 NAIC 6	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
11.7 Totals	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY
SCHEDULE D - PART 1A - SECTION 1 (Continued)

Quality and Maturity Distribution of All Bonds Owned December 31, at Book/Adjusted Carrying Values by Major Types of Issues and NAIC Designations

	1	2	3	4	5	6	7	8	9	10	11	12
NAIC Designation	1 Year or Less	Over 1 Year Through 5 Years	Over 5 Years Through 10 Years	Over 10 Years Through 20 Years	Over 20 Years	No Maturity Date	Total Current Year	Col. 7 as a % of Line 12.7	Total from Col. 7 Prior Year	% From Col. 8 Prior Year	Total Publicly Traded	Total Privately Placed (a)
12. Total Bonds Current Year												
12.1 NAIC 1	(d) 3,120,875,547	9,811,747,975	5,862,537,520	2,784,223,307	1,401,029,582	0	22,980,413,931	56.5	XXX	XXX	6,461,267,563	16,519,146,368
12.2 NAIC 2	(d) 3,306,117,072	5,674,419,311	3,763,253,775	1,993,659,015	931,294,855	0	15,668,744,029	38.6	XXX	XXX	7,638,158,852	8,030,585,177
12.3 NAIC 3	(d) 123,744,119	449,344,423	342,273,918	53,869,782	143,563,078	0	1,112,795,319	2.7	XXX	XXX	374,103,582	738,691,737
12.4 NAIC 4	(d) 36,738,125	346,325,501	118,383,762	23,847,460	873,767	0	526,168,616	1.3	XXX	XXX	88,024,425	438,144,191
12.5 NAIC 5	(d) 55,049,909	121,271,293	55,445,660	6,040,680	1,999,775	(c)	239,807,317	0.6	XXX	XXX	26,751,293	213,056,025
12.6 NAIC 6	(d) 814,864	18,989,544	8,242,563	2,836,747	80,548,974	0	111,432,692	0.3	XXX	XXX	5,068,342	106,364,350
12.7 Totals	6,643,339,636	16,422,098,047	10,150,137,198	4,864,476,991	2,559,310,032	0	(b) 40,639,361,904	100.0	XXX	XXX	14,593,374,057	26,045,987,848
12.8 Line 12.7 as a % of Col. 7	16.3	40.4	25.0	12.0	6.3	0.0	100.0	XXX	XXX	XXX	35.9	64.1
13. Total Bonds Prior Year												
13.1 NAIC 1	2,073,239,808	8,463,175,067	5,965,087,422	2,711,047,526	1,374,992,413	0	XXX	XXX	20,587,542,236	55.8	6,021,296,368	14,566,245,868
13.2 NAIC 2	2,231,459,311	4,555,160,308	4,293,798,170	1,965,309,564	1,219,721,282	0	XXX	XXX	14,265,448,635	38.6	7,214,291,535	7,051,157,100
13.3 NAIC 3	72,306,759	547,439,233	521,263,003	44,653,539	66,703,475	0	XXX	XXX	1,252,366,009	3.4	343,002,931	909,363,078
13.4 NAIC 4	49,452,876	272,913,501	156,215,216	15,406,834	408,485	0	XXX	XXX	494,396,912	1.3	77,286,136	417,110,776
13.5 NAIC 5	32,594,285	187,883,089	34,000,484	16,965,250	300,718	0	XXX	XXX	(c) 271,743,826	0.7	32,831,613	238,912,213
13.6 NAIC 6	4,343,575	13,839,065	2,558,160	3,308,737	17,851,327	0	XXX	XXX	(c) 41,900,864	0.1	16,432,599	25,468,265
13.7 Totals	4,463,396,614	14,040,410,263	10,972,922,455	4,756,691,450	2,679,977,700	0	XXX	XXX	(b) 36,913,398,482	100.0	13,705,141,182	23,208,257,300
13.8 Line 13.7 as a % of Col. 9	12.1	38.0	29.7	12.9	7.3	0.0	XXX	XXX	100.0	XXX	37.1	62.9
14. Total Publicly Traded Bonds												
14.1 NAIC 1	625,389,500	2,510,120,117	1,514,085,957	1,121,001,127	690,670,862	0	6,461,267,563	15.9	6,021,296,368	16.3	6,461,267,563	XXX
14.2 NAIC 2	806,063,076	2,811,890,226	1,752,847,668	1,510,268,313	757,089,568	0	7,638,158,852	18.8	7,214,291,535	19.5	7,638,158,852	XXX
14.3 NAIC 3	72,195,218	91,026,942	93,022,253	8,443,541	109,415,629	0	374,103,582	0.9	343,002,931	0.9	374,103,582	XXX
14.4 NAIC 4	21,155,361	29,933,658	22,327,301	13,762,618	845,487	0	88,024,425	0.2	77,286,136	0.2	88,024,425	XXX
14.5 NAIC 5	768,264	16,760,176	5,336,194	2,891,502	995,158	0	26,751,293	0.1	32,831,613	0.1	26,751,293	XXX
14.6 NAIC 6	336,980	914,779	716,549	412,403	2,687,631	0	5,068,342	0.0	16,432,599	0.0	5,068,342	XXX
14.7 Totals	1,525,908,398	5,460,645,899	3,388,335,921	2,656,779,504	1,561,704,335	0	14,593,374,057	35.9	13,705,141,182	37.1	14,593,374,057	XXX
14.8 Line 14.7 as a % of Col. 7	10.5	37.4	23.2	18.2	10.7	0.0	100.0	XXX	XXX	XXX	100.0	XXX
14.9 Line 14.7 as a % of Line 12.7, Col. 7, Section 12	3.8	13.4	8.3	6.5	3.8	0.0	35.9	XXX	XXX	XXX	35.9	XXX
15. Total Privately Placed Bonds												
15.1 NAIC 1	2,495,486,047	7,301,627,858	4,348,451,563	1,663,222,180	710,358,720	0	16,519,146,368	40.6	14,566,245,868	39.5	XXX	16,519,146,368
15.2 NAIC 2	2,500,053,996	2,862,529,085	2,010,406,107	483,390,702	174,205,287	0	8,030,585,177	19.8	7,051,157,100	19.1	XXX	8,030,585,177
15.3 NAIC 3	51,548,901	358,317,481	249,251,665	45,426,242	34,147,449	0	738,691,737	1.8	909,363,078	2.5	XXX	738,691,737
15.4 NAIC 4	15,582,765	316,391,843	96,056,461	10,084,842	28,280	0	438,144,191	1.1	417,110,776	1.1	XXX	438,144,191
15.5 NAIC 5	54,281,645	104,511,117	50,109,467	3,149,178	1,004,617	0	213,056,024	0.5	238,912,213	0.6	XXX	213,056,024
15.6 NAIC 6	477,884	18,074,765	7,526,014	2,424,344	77,861,343	0	106,364,350	0.3	25,468,265	0.1	XXX	106,364,350
15.7 Totals	5,117,431,238	10,961,452,148	6,761,801,277	2,207,697,488	997,605,697	0	26,045,987,847	64.1	23,208,257,300	62.9	XXX	26,045,987,847
15.8 Line 15.7 as a % of Col. 7	19.6	42.1	26.0	8.5	3.8	0.0	100.0	XXX	XXX	XXX	XXX	100.0
15.9 Line 15.7 as a % of Line 12.7, Col. 7, Section 12	12.6	27.0	16.6	5.4	2.5	0.0	64.1	XXX	XXX	XXX	XXX	64.1

(a) Includes \$ 17,027,813,349 freely tradable under SEC Rule 144 or qualified for resale under SEC Rule 144A.
(b) Includes \$ 561,367,354 current year of bonds with Z designations and \$ 694,153,426 prior year of bonds with Z designations. The letter "Z" means the NAIC designation was not assigned by the Securities Valuation Office (SVO) at the date of the statement.
(c) Includes \$ 116,010,207 current year, \$ 120,786,819 prior year of bonds with 5GI designations and \$ 87,863,007 current year, \$ 37,390,063 prior year of bonds with 6* designations. "5GI" means the NAIC designation was assigned by the (SVO) in reliance on the insurer's certification that the issuer is current in all principal and interest payments. "6*" means the NAIC designation was assigned by the SVO due to inadequate certification of principal and interest payments.
(d) Includes the following amount of short-term and cash equivalent bonds by NAIC designation: NAIC 1 \$ 965,317,649 ; NAIC 2 \$ 2,165,837,561 ; NAIC 3 \$ 0 ; NAIC 4 \$ 0 ; NAIC 5 \$ 0 ; NAIC 6 \$ 0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1A - SECTION 2

Maturity Distribution of All Bonds Owned December 31, at Book/Adjusted Carrying Values by Major Type and Subtype of Issues

Distribution by Type	1 1 Year or Less	2 Over 1 Year Through 5 Years	3 Over 5 Years Through 10 Years	4 Over 10 Years Through 20 Years	5 Over 20 Years	6 No Maturity Date	7 Total Current Year	8 Col. 7 as a % of Line 12.09	9 Total from Col. 7 Prior Year	10 % From Col. 8 Prior Year	11 Total Publicly Traded	12 Total Privately Placed
1. U.S. Governments												
1.01 Issuer Obligations	0	600,847	0	0	0	XXX	600,847	0.0	999,642	0.0	600,847	0
1.02 Residential Mortgage-Backed Securities	14,548,161	50,520,360	42,523,412	44,559,685	15,877,539	XXX	168,029,156	0.4	185,662,622	0.5	168,029,152	5
1.03 Commercial Mortgage-Backed Securities	0	0	0	0	0	XXX	0	0	0	0	0	0
1.04 Other Loan-Backed and Structured Securities ...	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
1.05 Totals	14,548,161	51,121,207	42,523,412	44,559,685	15,877,539	XXX	168,630,003	0.4	186,662,264	0.5	168,629,999	5
2. All Other Governments												
2.01 Issuer Obligations	0	2,543,953	11,029,193	1,201,168	0	XXX	14,774,314	0.0	19,151,167	0.1	8,357,286	6,417,028
2.02 Residential Mortgage-Backed Securities	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
2.03 Commercial Mortgage-Backed Securities	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
2.04 Other Loan-Backed and Structured Securities ...	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
2.05 Totals	0	2,543,953	11,029,193	1,201,168	0	XXX	14,774,314	0.0	19,151,167	0.1	8,357,286	6,417,028
3. U.S. States, Territories and Possessions, Guaranteed												
3.01 Issuer Obligations	24,653,529	101,917,936	30,938,992	0	0	XXX	157,510,457	0.4	180,316,608	0.5	157,510,457	0
3.02 Residential Mortgage-Backed Securities	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
3.03 Commercial Mortgage-Backed Securities	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
3.04 Other Loan-Backed and Structured Securities ...	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
3.05 Totals	24,653,529	101,917,936	30,938,992	0	0	XXX	157,510,457	0.4	180,316,608	0.5	157,510,457	0
4. U.S. Political Subdivisions of States, Territories and Possessions, Guaranteed												
4.01 Issuer Obligations	93,224,128	59,121,916	42,428,307	26,124,802	908,580	XXX	221,807,733	0.5	231,426,526	0.6	221,807,734	(2)
4.02 Residential Mortgage-Backed Securities	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
4.03 Commercial Mortgage-Backed Securities	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
4.04 Other Loan-Backed and Structured Securities ...	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
4.05 Totals	93,224,128	59,121,916	42,428,307	26,124,802	908,580	XXX	221,807,733	0.5	231,426,526	0.6	221,807,734	(2)
5. U.S. Special Revenue & Special Assessment Obligations etc., Non-Guaranteed												
5.01 Issuer Obligations	143,077,732	538,967,864	230,283,878	179,518,280	58,583,799	XXX	1,150,431,553	2.8	1,266,250,454	3.4	1,134,494,905	15,936,648
5.02 Residential Mortgage-Backed Securities	48,346,555	155,018,634	141,101,466	181,959,388	82,390,625	XXX	608,816,669	1.5	653,913,141	1.8	608,816,669	0
5.03 Commercial Mortgage-Backed Securities	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
5.04 Other Loan-Backed and Structured Securities ...	0	0	0	0	0	XXX	0	0.0	68,956	0.0	0	0
5.05 Totals	191,424,287	693,986,498	371,385,344	361,477,668	140,974,424	XXX	1,759,248,222	4.3	1,920,232,551	5.2	1,743,311,574	15,936,648
6. Industrial and Miscellaneous												
6.01 Issuer Obligations	4,445,858,015	7,727,014,421	4,816,142,952	2,761,725,413	1,275,264,689	XXX	21,026,005,489	51.7	17,773,449,568	48.1	10,156,258,637	10,869,746,853
6.02 Residential Mortgage-Backed Securities	313,281,011	998,094,383	646,495,150	345,825,619	80,606,024	XXX	2,384,302,186	5.9	2,110,039,555	5.7	438,231,907	1,946,070,279
6.03 Commercial Mortgage-Backed Securities	166,328,253	440,167,480	515,666,293	34,966,577	4,963,203	XXX	1,162,091,806	2.9	1,336,821,282	3.6	362,403,226	799,688,580
6.04 Other Loan-Backed and Structured Securities ...	1,184,201,906	4,279,388,701	1,780,197,014	462,505,418	230,822,682	XXX	7,937,115,720	19.5	8,535,110,869	23.1	310,142,201	7,626,973,519
6.05 Totals	6,109,669,184	13,444,664,985	7,758,501,408	3,605,023,027	1,591,656,598	XXX	32,509,515,202	80.0	29,755,421,274	80.6	11,267,035,971	21,242,479,230
7. Hybrid Securities												
7.01 Issuer Obligations	48,268,172	184,174,202	232,918,703	124,280,785	596,974,175	XXX	1,186,616,037	2.9	772,340,255	2.1	1,013,824,647	172,791,391
7.02 Residential Mortgage-Backed Securities	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
7.03 Commercial Mortgage-Backed Securities	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
7.04 Other Loan-Backed and Structured Securities ...	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
7.05 Totals	48,268,172	184,174,202	232,918,703	124,280,785	596,974,175	XXX	1,186,616,037	2.9	772,340,255	2.1	1,013,824,647	172,791,391
8. Parent, Subsidiaries and Affiliates												
8.01 Issuer Obligations	0	120,765,714	0	0	36,872,801	XXX	157,638,515	0.4	146,895,728	0.4	0	157,638,515
8.02 Residential Mortgage-Backed Securities	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
8.03 Commercial Mortgage-Backed Securities	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
8.04 Other Loan-Backed and Structured Securities ...	95,813,813	362,192,029	297,940,112	56,009,652	0	XXX	811,955,606	2.0	597,742,885	1.6	12,896,390	799,059,216
8.05 Affiliated Bank Loans - Issued	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
8.06 Affiliated Bank Loans - Acquired	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
8.07 Totals	95,813,813	482,957,743	297,940,112	56,009,652	36,872,801	XXX	969,594,120	2.4	744,638,613	2.0	12,896,390	956,697,731

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY
SCHEDULE D - PART 1A - SECTION 2 (Continued)

Maturity Distribution of All Bonds Owned December 31, at Book/Adjusted Carrying Values by Major Type and Subtype of Issues

	1	2	3	4	5	6	7	8	9	10	11	12
Distribution by Type	1 Year or Less	Over 1 Year Through 5 Years	Over 5 Years Through 10 Years	Over 10 Years Through 20 Years	Over 20 Years	No Maturity Date	Total Current Year	Col. 7 as a % of Line 12.09	Total from Col. 7 Prior Year	% From Col. 8 Prior Year	Total Publicly Traded	Total Privately Placed
9. SVO Identified Funds												
9.01 Exchange Traded Funds Identified by the SVO	XXX	XXX	XXX	XXX	XXX	0	0	0.0	0	0.0	0	0
10. Unaffiliated Bank Loans												
10.01 Unaffiliated Bank Loans - Issued	16,811,969	759,467,080	239,677,063	276,100,523	66,426,174	XXX	1,358,482,809	3.3	1,897,529,083	5.1	0	1,358,482,809
10.02 Unaffiliated Bank Loans - Acquired	48,926,394	642,142,524	1,122,794,661	369,699,686	109,619,740	XXX	2,293,183,005	5.6	1,205,680,140	3.3	0	2,293,183,005
10.03 Totals	65,738,363	1,401,609,604	1,362,471,724	645,800,208	176,045,914	XXX	3,651,665,814	9.0	3,103,209,223	8.4	0	3,651,665,814
11. Unaffiliated Certificates of Deposit												
11.01 Totals	0	0	0	0	0	XXX	0	0.0	0	0.0	0	0
12. Total Bonds Current Year												
12.01 Issuer Obligations	4,755,081,575	8,735,106,854	5,363,742,024	3,092,850,448	1,968,604,044	XXX	23,915,384,945	58.8	XXX	XXX	12,692,854,512	11,222,530,432
12.02 Residential Mortgage-Backed Securities	376,175,727	1,203,633,377	830,120,028	572,344,692	178,874,188	XXX	3,161,148,012	7.8	XXX	XXX	1,215,077,728	1,946,070,283
12.03 Commercial Mortgage-Backed Securities	166,328,253	440,167,480	515,666,293	34,966,577	4,963,203	XXX	1,162,091,806	2.9	XXX	XXX	362,403,226	799,688,580
12.04 Other Loan-Backed and Structured Securities	1,280,015,718	4,641,580,730	2,078,137,126	518,515,070	230,822,682	XXX	8,749,071,326	21.5	XXX	XXX	323,038,591	8,426,032,735
12.05 SVO Identified Funds	XXX	XXX	XXX	XXX	XXX	0	0	0.0	XXX	XXX	0	0
12.06 Affiliated Bank Loans	0	0	0	0	0	XXX	0	0.0	XXX	XXX	0	0
12.07 Unaffiliated Bank Loans	65,738,363	1,401,609,604	1,362,471,724	645,800,208	176,045,914	XXX	3,651,665,814	9.0	XXX	XXX	0	3,651,665,814
12.08 Unaffiliated Certificates of Deposit	0	0	0	0	0	XXX	0	0.0	XXX	XXX	0	0
12.09 Totals	6,643,339,636	16,422,098,045	10,150,137,195	4,864,476,995	2,559,310,031	0	40,639,361,902	100.0	XXX	XXX	14,593,374,057	26,045,987,844
12.10 Line 12.09 as a % of Col. 7	16.3	40.4	25.0	12.0	6.3	0.0	100.0	XXX	XXX	XXX	35.9	64.1
13. Total Bonds Prior Year												
13.01 Issuer Obligations	2,924,519,597	6,630,631,677	5,680,389,267	3,171,032,595	1,984,256,811	XXX	XXX	XXX	20,390,829,948	55.2	11,614,684,389	8,776,145,559
13.02 Residential Mortgage-Backed Securities	296,213,571	1,170,886,733	792,903,271	491,281,813	198,329,930	XXX	XXX	XXX	2,949,615,318	8.0	1,259,136,465	1,690,478,853
13.03 Commercial Mortgage-Backed Securities	87,853,913	600,801,353	594,180,107	48,344,363	5,641,546	XXX	XXX	XXX	1,336,821,282	3.6	402,851,868	933,969,414
13.04 Other Loan-Backed and Structured Securities	1,110,013,862	4,681,104,296	2,542,363,168	563,398,442	236,042,942	XXX	XXX	XXX	9,132,922,710	24.7	428,468,461	8,704,454,249
13.05 SVO Identified Funds	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	0	0.0	0	0
13.06 Affiliated Bank Loans	0	0	0	0	0	XXX	XXX	XXX	0	0.0	0	0
13.07 Unaffiliated Bank Loans	44,795,672	956,986,202	1,363,086,642	482,634,236	255,706,471	XXX	XXX	XXX	3,103,209,223	8.4	0	3,103,209,223
13.08 Unaffiliated Certificates of Deposit	0	0	0	0	0	XXX	XXX	XXX	0	0.0	0	0
13.09 Totals	4,463,396,615	14,040,410,261	10,972,922,455	4,756,691,449	2,679,977,700	0	XXX	XXX	36,913,398,481	100.0	13,705,141,183	23,208,257,298
13.10 Line 13.09 as a % of Col. 9	12.1	38.0	29.7	12.9	7.3	0.0	XXX	XXX	100.0	XXX	37.1	62.9
14. Total Publicly Traded Bonds												
14.01 Issuer Obligations	1,230,303,176	4,902,075,683	2,813,369,570	2,309,303,036	1,437,803,047	XXX	12,692,854,512	31.2	11,614,684,389	31.5	12,692,854,512	XXX
14.02 Residential Mortgage-Backed Securities	113,895,541	361,999,495	290,100,294	330,435,470	118,646,928	XXX	1,215,077,728	3.0	1,259,136,465	3.4	1,215,077,728	XXX
14.03 Commercial Mortgage-Backed Securities	81,950,023	20,595,456	253,099,807	2,681,803	4,076,137	XXX	362,403,226	0.9	402,851,868	1.1	362,403,226	XXX
14.04 Other Loan-Backed and Structured Securities	99,759,659	175,975,265	31,766,251	14,359,194	1,178,223	XXX	323,038,591	0.8	428,468,461	1.2	323,038,591	XXX
14.05 SVO Identified Funds	XXX	XXX	XXX	XXX	XXX	0	0	0.0	0	0.0	0	XXX
14.06 Affiliated Bank Loans	0	0	0	0	0	XXX	0	0.0	0	0.0	0	XXX
14.07 Unaffiliated Bank Loans	0	0	0	0	0	XXX	0	0.0	0	0.0	0	XXX
14.08 Unaffiliated Certificates of Deposit	0	0	0	0	0	XXX	0	0.0	0	0.0	0	XXX
14.09 Totals	1,525,908,398	5,460,645,899	3,388,335,921	2,656,779,504	1,561,704,335	0	14,593,374,057	35.9	13,705,141,183	37.1	14,593,374,057	XXX
14.10 Line 14.09 as a % of Col. 7	10.5	37.4	23.2	18.2	10.7	0.0	100.0	XXX	XXX	XXX	100.0	XXX
14.11 Line 14.09 as a % of Line 12.09, Col. 7, Section 12	3.8	13.4	8.3	6.5	3.8	0.0	35.9	XXX	XXX	XXX	35.9	XXX
15. Total Privately Placed Bonds												
15.01 Issuer Obligations	3,524,778,399	3,833,031,170	2,550,372,455	783,547,412	530,800,996	XXX	11,222,530,432	27.6	8,776,145,559	23.8	XXX	11,222,530,432
15.02 Residential Mortgage-Backed Securities	262,280,186	841,633,882	540,019,734	241,909,222	60,227,260	XXX	1,946,070,283	4.8	1,690,478,853	4.6	XXX	1,946,070,283
15.03 Commercial Mortgage-Backed Securities	84,378,231	419,572,024	262,566,486	32,284,773	887,066	XXX	799,688,580	2.0	933,969,414	2.5	XXX	799,688,580
15.04 Other Loan-Backed and Structured Securities	1,180,256,059	4,465,605,465	2,046,370,875	504,155,876	229,644,459	XXX	8,426,032,735	20.7	8,704,454,249	23.6	XXX	8,426,032,735
15.05 SVO Identified Funds	XXX	XXX	XXX	XXX	XXX	0	0	0.0	0	0.0	XXX	0
15.06 Affiliated Bank Loans	0	0	0	0	0	XXX	0	0.0	0	0.0	XXX	0
15.07 Unaffiliated Bank Loans	65,738,363	1,401,609,604	1,362,471,724	645,800,208	176,045,914	XXX	3,651,665,814	9.0	3,103,209,223	8.4	XXX	3,651,665,814
15.08 Unaffiliated Certificates of Deposit	0	0	0	0	0	XXX	0	0.0	0	0.0	XXX	0
15.09 Totals	5,117,431,238	10,961,452,146	6,761,801,273	2,207,697,491	997,605,696	0	26,045,987,844	64.1	23,208,257,298	62.9	XXX	26,045,987,844
15.10 Line 15.09 as a % of Col. 7	19.6	42.1	26.0	8.5	3.8	0.0	100.0	XXX	XXX	XXX	XXX	100.0
15.11 Line 15.09 as a % of Line 12.09, Col. 7, Section 12	12.6	27.0	16.6	5.4	2.5	0.0	64.1	XXX	XXX	XXX	XXX	64.1

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DA - VERIFICATION BETWEEN YEARS

Short-Term Investments

	1	2	3	4	5
	Total	Bonds	Mortgage Loans	Other Short-term Investment Assets (a)	Investments in Parent, Subsidiaries and Affiliates
1. Book/adjusted carrying value, December 31 of prior year	424,197,318	424,197,318	0	0	0
2. Cost of short-term investments acquired	1,153,451,244	1,153,451,244	0	0	0
3. Accrual of discount	14,949,157	14,949,157	0	0	0
4. Unrealized valuation increase/(decrease)	0		0	0	0
5. Total gain (loss) on disposals	(1,091,539)	(1,091,539)	0	0	0
6. Deduct consideration received on disposals	1,215,552,776	1,215,552,776	0	0	0
7. Deduct amortization of premium	0	0	0	0	0
8. Total foreign exchange change in book/adjusted carrying value	0	0	0	0	0
9. Deduct current year's other-than-temporary impairment recognized	0	0	0	0	0
10. Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5-6-7+8-9)	375,953,404	375,953,404	0	0	0
11. Deduct total nonadmitted amounts	0	0	0	0	0
12. Statement value at end of current period (Line 10 minus Line 11)	375,953,404	375,953,404	0	0	0

(a) Indicate the category of such assets, for example, joint ventures, transportation equipment:

SCHEDULE DB - PART A - VERIFICATION BETWEEN YEARS

Options, Caps, Floors, Collars, Swaps and Forwards

1.	Book/adjusted carrying value, December 31, prior year (Line 10, prior year)	222,241,110
2.	Cost paid/(consideration received) on additions:	
2.1	Current year paid/(consideration received) at time of acquisition, still open, Section 1, Column 12	731,278,165
2.2	Current year paid/(consideration received) at time of acquisition, terminated, Section 2, Column 14	0731,278,165
3.	Unrealized valuation increase/(decrease):	
3.1	Section 1, Column 17	156,799,900
3.2	Section 2, Column 19	12,795,957169,595,857
4.	SSAP No. 108 Adjustments	
5.	Total gain (loss) on termination recognized, Section 2, Column 22	994,889,862
6.	Considerations received/(paid) on terminations, Section 2, Column 15	994,549,506
7.	Amortization:	
7.1	Section 1, Column 19	(400,497,961)
7.2	Section 2, Column 21	(260,848,917)(661,346,878)
8.	Adjustment to the book/adjusted carrying value of hedged item:	
8.1	Section 1, Column 20	0
8.2	Section 2, Column 23	00
9.	Total foreign exchange change in book/adjusted carrying value:	
9.1	Section 1, Column 18	0
9.2	Section 2, Column 20	00
10.	Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5-6+7+8+9)	462,108,610
11.	Deduct nonadmitted assets	
12.	Statement value at end of current period (Line 10 minus Line 11)	462,108,610

SCHEDULE DB - PART B - VERIFICATION

Futures Contracts

1.	Book/Adjusted carrying value, December 31 of prior year (Line 6, prior year)	20,973,705
2.	Cumulative cash change (Section 1, Broker Name/Net Cash Deposits Footnote - Cumulative Cash Change Column)	
3.1	Add:	
	Change in variation margin on open contracts - Highly effective hedges:	
3.11	Section 1, Column 15, current year minus	
3.12	Section 1, Column 15, prior year	00
	Change in variation margin on open contracts - All other:	
3.13	Section 1, Column 18, current year minus	
3.14	Section 1, Column 18, prior year	20,973,705(20,973,705)(20,973,705)
3.2	Add:	
	Change in adjustment to basis of hedged item:	
3.21	Section 1, Column 17, current year to date minus	
3.22	Section 1, Column 17, prior year	00
	Change in amount recognized	
3.23	Section 1, Column 19, current year to date minus	
3.24	Section 1, Column 19, prior year plus	20,973,705
3.25	SSAP No. 108 Adjustments	(20,973,705)(20,973,705)
3.3	Subtotal (Line 3.1 minus Line 3.2)	0
4.1	Cumulative variation margin on terminated contracts during the year (Section 2, Column 15)	(21,878,446)
4.2	Less:	
4.21	Amount used to adjust basis of hedged item (Section 2, Column 17)	0
4.22	Amount recognized (Section 2, Column 16)	(42,852,151)
4.23	SSAP No. 108 Adjustments	(42,852,151)
4.3	Subtotal (Line 4.1 minus Line 4.2)	20,973,705
5.	Dispositions gains (losses) on contracts terminated in prior year:	
5.1	Total gain (loss) recognized for terminations in prior year	
5.2	Total gain (loss) adjusted into the hedged item(s) for terminations in prior year	
6.	Book/adjusted carrying value at end of current period (Lines 1+2+3.3-4.3-5.1-5.2)	0
7.	Deduct total nonadmitted amounts	
8.	Statement value at end of current period (Line 6 minus Line 7)	0

Schedule DB - Part C - Section 1 - Replication (Synthetic Asset) Transactions (RSATs) Open
N O N E

Schedule DB-Part C-Section 2-Reconciliation of Replication (Synthetic Asset) Transactions Open
N O N E

SCHEDULE DB - VERIFICATION

Verification of Book/Adjusted Carrying Value, Fair Value and Potential Exposure of all Open Derivative Contracts

		Book/Adjusted Carrying Value Check
1.	Part A, Section 1, Column 14.....	462,108,609
2.	Part B, Section 1, Column 15 plus Part B, Section 1 Footnote - Total Ending Cash Balance	0
3.	Total (Line 1 plus Line 2)	462,108,609
4.	Part D, Section 1, Column 6	875,643,003
5.	Part D, Section 1, Column 7	(413,534,393)
6.	Total (Line 3 minus Line 4 minus Line 5)	0
		Fair Value Check
7.	Part A, Section 1, Column 16	1,058,323,167
8.	Part B, Section 1, Column 13	
9.	Total (Line 7 plus Line 8)	1,058,323,167
10.	Part D, Section 1, Column 9	1,166,072,333
11.	Part D, Section 1, Column 10	(107,749,167)
12.	Total (Line 9 minus Line 10 minus Line 11)	0
		Potential Exposure Check
13.	Part A, Section 1, Column 21	82,664,824
14.	Part B, Section 1, Column 20	
15.	Part D, Section 1, Column 12	82,664,824
16.	Total (Line 13 plus Line 14 minus Line 15)	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE E - PART 2 - VERIFICATION BETWEEN YEARS

(Cash Equivalents)

	1	2	3	4
	Total	Bonds	Money Market Mutual funds	Other (a)
1. Book/adjusted carrying value, December 31 of prior year	1,944,403,033	1,516,948,102	427,454,931	0
2. Cost of cash equivalents acquired	101,302,252,262	53,704,873,322	47,597,378,939	0
3. Accrual of discount	133,468,767	133,468,767		0
4. Unrealized valuation increase/(decrease)	0			0
5. Total gain (loss) on disposals	10,313	10,313		0
6. Deduct consideration received on disposals	100,406,594,426	52,600,098,699	47,806,495,726	0
7. Deduct amortization of premium	0	0	0	0
8. Total foreign exchange change in book/adjusted carrying value	0	0	0	0
9. Deduct current year's other-than-temporary impairment recognized	0	0	0	0
10. Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5-6-7+8-9)	2,973,539,949	2,755,201,805	218,338,143	0
11. Deduct total nonadmitted amounts	0	0	0	0
12. Statement value at end of current period (Line 10 minus Line 11)	2,973,539,949	2,755,201,805	218,338,143	0

(a) Indicate the category of such investments, for example, joint ventures, transportation equipment:

Schedule A - Part 1 - Real Estate Owned

N O N E

Schedule A - Part 2 - Real Estate Acquired and Additions Made

N O N E

Schedule A - Part 3 - Real Estate Disposed

N O N E

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE B - PART 1

Showing All Mortgage Loans OWNED December 31 of Current Year

1	2	Location		5	6	7	8	Change in Book Value/Recorded Investment					14	15
		3	4					9	10	11	12	13		
Loan Number	Code	City	State	Loan Type	Date Acquired	Rate of Interest	Book Value/Recorded Investment Excluding Accrued Interest	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Capitalized Deferred Interest and Other	Total Foreign Exchange Change in Book Value	Value of Land and Buildings	Date of Last Appraisal or Valuation
151315BC1		Various	AZ. ....	.....	..03/01/2022 ...	6. 270	414, 225	.....	.....	.....	.....	.....	.....398, 745	... 03/01/2022 ...
1550201J1		Various	TX. ....	.....	..07/01/2021 ...	3. 687	671, 810	.....	.....	.....	.....	.....	.....630, 202	... 07/01/2021 ...
155020JK7		Various	TX. ....	.....	..09/01/2021 ...	2. 870	596, 604	.....	.....	.....	.....	.....	.....559, 699	... 09/01/2021 ...
155020KL3		Various	TX. ....	.....	..10/01/2021 ...	2. 990	657, 055	.....	.....(45, 309)	.....	.....	.....	.....594, 597	... 10/01/2021 ...
155020LMO		Various	TX. ....	.....	..11/01/2021 ...	2. 180	2, 015, 280	.....	.....10, 070	.....	.....	.....	.....1, 877, 441	... 11/01/2021 ...
155020MN7		Various	TX. ....	.....	..12/01/2021 ...	2. 240	2, 076, 553	.....	.....(29, 328)	.....	.....	.....	.....1, 964, 440	... 12/01/2021 ...
155020NO4		Various	VA. ....	.....	..01/03/2022 ...	2. 560	2, 465, 551	.....	.....(44, 915)	.....	.....	.....	.....2, 374, 503	... 01/03/2022 ...
155020PO7		Various	TX. ....	.....	..02/01/2022 ...	3. 290	781, 115	.....	.....(7, 554)	.....	.....	.....	.....726, 425	... 02/01/2022 ...
155020QR4		Various	CO. ....	.....	..03/01/2022 ...	4. 130	612, 717	.....	.....(18, 682)	.....	.....	.....	.....603, 349	... 03/01/2022 ...
155020ST8		Various	WA. ....	.....	..09/15/2023 ...	4. 290	35, 206, 484	.....	.....2, 152, 362	.....	.....	.....	.....33, 364, 096	... 09/15/2023 ...
337945AA7		Various	CA. ....	.....	..12/22/2021 ...	4. 080	13, 408, 571	.....	.....46, 611	.....	.....	.....	.....12, 251, 748	... 12/22/2021 ...
709301KJ3		Various	FL. ....	.....	..07/01/2021 ...	4. 168	20, 675, 598	.....	.....(199, 716)	.....	.....	.....	.....18, 356, 734	... 07/01/2021 ...
709301LK9		Various	TX. ....	.....	..08/02/2021 ...	3. 772	48, 089, 776	.....	.....16, 560	.....	.....	.....	.....44, 043, 293	... 08/02/2021 ...
709301ML6		Various	MD. ....	.....	..09/01/2021 ...	3. 830	42, 138, 959	.....	.....(399, 166)	.....	.....	.....	.....37, 367, 372	... 09/01/2021 ...
709301MM3		Various	TX. ....	.....	..10/01/2021 ...	3. 470	53, 473, 946	.....	.....(1, 047, 539)	.....	.....	.....	.....49, 577, 703	... 10/01/2021 ...
709301NO0		Various	TX. ....	.....	..11/01/2021 ...	3. 590	43, 848, 250	.....	.....(555, 258)	.....	.....	.....	.....39, 414, 087	... 11/01/2021 ...
709301PO7		Various	TX. ....	.....	..12/01/2021 ...	2. 750	39, 356, 047	.....	.....178, 019	.....	.....	.....	.....35, 533, 953	... 12/01/2021 ...
709301OP3		Various	CA. ....	.....	..01/03/2022 ...	3. 360	18, 166, 034	.....	.....	.....	.....	.....	.....16, 563, 865	... 01/03/2022 ...
709301RO0		Various	TX. ....	.....	..02/01/2022 ...	3. 560	13, 468, 619	.....	.....2, 327	.....	.....	.....	.....12, 291, 867	... 02/01/2022 ...
709301SR7		Various	FL. ....	.....	..03/01/2022 ...	4. 220	5, 358, 878	.....	.....7, 099	.....	.....	.....	.....5, 015, 549	... 03/01/2022 ...
709301TS4		Various	MD. ....	.....	..04/01/2022 ...	4. 570	2, 687, 718	.....	.....	.....	.....	.....	.....2, 521, 469	... 04/01/2022 ...
B6S291SH2		Various	WA. ....	.....	..04/04/2024 ...	4. 040	28, 079, 031	.....	.....1, 211, 112	.....	.....	.....	.....26, 669, 762	... 04/04/2024 ...
0299999. Mortgages in good standing - Residential mortgages-insured or guaranteed							374, 248, 821	0	1, 276, 693	0	0	0	342, 700, 899	XXX
121836AB6		Various	NJ. ....	.....	..08/02/2022 ...	6. 964	429, 597	.....	.....(2, 507)	.....	.....	.....	.....426, 941	... 08/02/2022 ...
121836BC3		Various	WI. ....	.....	..08/18/2022 ...	7. 170	168, 914	.....	.....(422)	.....	.....	.....	.....168, 240	... 08/18/2022 ...
121836CD0		Various	NJ. ....	.....	..09/15/2022 ...	6. 694	2, 341, 110	.....	.....(10, 431)	.....	.....	.....	.....2, 272, 572	... 09/15/2022 ...
121836DE7		Various	NY. ....	.....	..10/20/2022 ...	6. 917	1, 827, 192	.....	.....(34, 883)	.....	.....	.....	.....1, 796, 363	... 10/20/2022 ...
121836EF3		Various	NJ. ....	.....	..11/03/2022 ...	6. 478	3, 195, 083	.....	.....(38, 038)	.....	.....	.....	.....3, 093, 442	... 11/03/2022 ...
121836FG0		Various	MD. ....	.....	..11/17/2022 ...	7. 835	12, 424, 311	.....	.....(46, 720)	.....	.....	.....	.....12, 742, 666	... 11/17/2022 ...
121836GH7		Various	TX. ....	.....	..12/22/2022 ...	6. 903	2, 674, 286	.....	.....(23, 493)	.....	.....	.....	.....2, 651, 386	... 12/22/2022 ...
121836HI4		Various	HI. ....	.....	..01/19/2023 ...	8. 530	679, 847	.....	.....(10, 460)	.....	.....	.....	.....718, 377	... 01/19/2023 ...
121836JK7		Various	MD. ....	.....	..02/16/2023 ...	6. 340	3, 905, 243	.....	.....(18, 022)	.....	.....	.....	.....3, 760, 763	... 02/16/2023 ...
121836LM0		Various	NJ. ....	.....	..03/16/2023 ...	8. 146	1, 035, 785	.....	.....(4, 816)	.....	.....	.....	.....1, 063, 645	... 03/16/2023 ...
121836NO0		Various	NY. ....	.....	..04/20/2023 ...	7. 285	2, 818, 545	.....	.....(63, 992)	.....	.....	.....	.....2, 844, 833	... 04/20/2023 ...
121836PQ7		Various	FL. ....	.....	..05/18/2023 ...	5. 935	4, 402, 727	.....	.....34, 300	.....	.....	.....	.....4, 153, 892	... 05/18/2023 ...
121836RS1		Various	NJ. ....	.....	..06/15/2023 ...	8. 552	2, 486, 989	.....	.....	.....	.....	.....	.....2, 630, 220	... 06/15/2023 ...
121836TU4		Various	PA. ....	.....	..07/20/2023 ...	8. 028	1, 609, 762	.....	.....(21, 912)	.....	.....	.....	.....1, 658, 569	... 07/20/2023 ...
121836VII7		Various	IN. ....	.....	..08/17/2023 ...	8. 131	2, 547, 803	.....	.....(9, 597)	.....	.....	.....	.....2, 639, 626	... 08/17/2023 ...
121836XY1		Various	NJ. ....	.....	..09/21/2023 ...	8. 275	3, 880, 955	.....	.....(37, 216)	.....	.....	.....	.....4, 032, 210	... 09/21/2023 ...
121836ZA1		Various	PA. ....	.....	..10/19/2023 ...	8. 044	2, 612, 312	.....	.....(9, 442)	.....	.....	.....	.....2, 669, 751	... 10/19/2023 ...
121836ZC7		Various	TX. ....	.....	..11/16/2023 ...	7. 462	1, 463, 312	.....	.....3, 091	.....	.....	.....	.....1, 489, 229	... 11/16/2023 ...
146738AB5		Various	NY. ....	.....	..11/29/2022 ...	9. 473	1, 672, 250	.....	.....28, 042	.....	.....	.....	.....1, 665, 450	... 11/29/2022 ...
146738BC2		Various	NC. ....	.....	..12/09/2022 ...	8. 519	1, 460, 548	.....	.....	.....	.....	.....	.....1, 445, 517	... 12/09/2022 ...
146738CD9		Various	WA. ....	.....	..12/22/2022 ...	11. 670	2, 471, 515	.....	.....(265)	.....	.....	.....	.....2, 467, 465	... 12/22/2022 ...
146738DE6		Various	FL. ....	.....	..01/11/2023 ...	9. 633	1, 615, 624	.....	.....	.....	.....	.....	.....1, 611, 697	... 01/11/2023 ...
146738EF2		Various	FL. ....	.....	..01/26/2023 ...	12. 240	1, 226, 875	.....	.....(39, 458)	.....	.....	.....	.....1, 227, 771	... 01/26/2023 ...
146738FG9		Various	FL. ....	.....	..02/09/2023 ...	10. 936	780, 590	.....	.....	.....	.....	.....	.....779, 277	... 02/09/2023 ...
146738GH6		Various	MA. ....	.....	..02/24/2023 ...	7. 885	2, 610, 425	.....	.....	.....	.....	.....	.....2, 580, 247	... 02/24/2023 ...
146738HI3		Various	FL. ....	.....	..03/09/2023 ...	8. 271	3, 514, 848	.....	.....	.....	.....	.....	.....3, 477, 761	... 03/09/2023 ...
146738IJ0		Various	FL. ....	.....	..03/23/2023 ...	7. 381	4, 150, 475	.....	.....	.....	.....	.....	.....4, 090, 877	... 03/23/2023 ...
146738JK6		Various	FL.		..04/11/2023 ...	8. 594	6, 601, 709						6, 551, 040	... 04/11/2023 ...
146738KL2		Various	MA.		..04/27/2023 ...	9. 103	2, 990, 117						2, 975, 991	... 04/27/2023 ...

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SCHEDULE B - PART 1

Showing All Mortgage Loans OWNED December 31 of Current Year

1	2	Location		5	6	7	8	Change in Book Value/Recorded Investment					14	15
		3	4					9	10	11	12	13		
Loan Number	Code	City	State	Loan Type	Date Acquired	Rate of Interest	Book Value/Recorded Investment Excluding Accrued Interest	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Capitalized Deferred Interest and Other	Total Foreign Exchange Change in Book Value	Value of Land and Buildings	Date of Last Appraisal or Valuation
146738LI9		Various	CA.		05/11/2023	7.111	4,164,390						4,102,735	05/11/2023
146738NO3		Various	CA.		05/11/2023	7.315	1,866,687						1,838,432	05/11/2023
146738OP9		Various	CA.		06/06/2023	7.504	6,949,012						6,860,929	06/06/2023
146738PO6		Various	FL.		06/23/2023	8.586	9,368,773						9,309,462	06/23/2023
146738OR3		Various	CA.		07/11/2023	8.881	11,814,699		(5)				11,756,609	07/11/2023
146738RS0		Various	FL.		07/27/2023	7.324	8,621,183						8,498,058	07/27/2023
146738ST7		Various	CO.		08/10/2023	6.600	7,518,917						7,390,312	08/10/2023
146738TU3		Various	CO.		08/11/2023	7.674	12,471,929		555				12,318,758	08/11/2023
146738UV9		Various	CA.		08/24/2023	8.830	7,794,610						7,753,389	08/24/2023
146738VI6		Various	CA.		09/07/2023	9.079	7,019,106						6,987,929	09/07/2023
146738WX3		Various	FL.		09/21/2023	9.026	12,255,826						12,206,442	09/21/2023
146738XY0		Various	CA.		10/12/2023	9.591	10,571,380						10,558,661	10/12/2023
146738YZ6		Various	FL.		10/26/2023	9.334	6,879,143						6,858,726	10/26/2023
146738ZA0		Various	CA.		11/09/2023	9.089	10,140,824						10,054,458	11/09/2023
146738ZB8		Various	FL.		11/29/2023	9.968	3,014,202						3,016,519	11/29/2023
146738ZD4		Various	CA.		12/07/2023	7.536	5,762,261						5,702,079	12/07/2023
146738ZF9		Various	HI.		12/07/2023	9.573	3,072,250						3,070,428	12/07/2023
146738ZG7		Various	CA.		12/21/2023	9.361	9,094,435						9,023,046	12/21/2023
146738ZJ3		Various	CA.		12/21/2023	8.789	6,813,469						6,751,474	12/21/2023
146738ZJ1		Various	FL.		01/11/2024	6.729	6,086,658						6,019,801	01/11/2024
146738ZK8		Various	FL.		01/11/2024	6.485	18,010,293						17,801,542	01/11/2024
15912ZAB3		Various	CA.		12/13/2021	4.999	15,064,261		(2,608,361)				13,206,712	12/13/2021
15912ZBC0		Various	CA.		11/30/2021	4.890	15,471,217		(3,532,017)				13,539,493	11/30/2021
15912ZCD7		Various	CA.		01/28/2022	4.911	18,061,399		(2,368,641)				15,378,003	01/28/2022
15912ZDE4		Various	CA.		06/15/2022	6.826	12,823,949		(55,091)				12,245,990	06/15/2022
161225AA5		Various	AZ.		05/06/2022	5.580	529,858		1,506				499,260	05/06/2022
161225AB3		Various	NC.		06/09/2022	6.689	894,182		1,168				881,534	06/09/2022
161225BB2		Various	PA.		10/19/2023	7.238	7,741,996		(105,223)				7,711,396	10/19/2023
161225BC0		Various	TN.		07/21/2022	7.159	582,287		(2,010)				575,852	07/21/2022
161225CD7		Various	WA.		08/18/2022	7.867	235,786		(945)				237,684	08/18/2022
161225DE4		Various	AZ.		09/15/2022	7.642	1,075,330		(4,756)				1,092,462	09/15/2022
161225EF0		Various	MA.		09/29/2022	7.896	242,116		35,118				215,493	09/29/2022
161225FG7		Various	NY.		11/03/2022	7.573	9,605,295		(18,073)				9,777,286	11/03/2022
161225GH7		Various	NY.		11/17/2022	7.687	9,101,302		(68,193)				9,328,856	11/17/2022
161225HJ9		Various	NY.		12/22/2022	7.761	4,558,625		(731,124)				4,656,521	12/22/2022
161225JI9		Various	NJ.		01/19/2023	8.585	8,170,902		73,226				8,343,514	01/19/2023
161225KL0		Various	TX.		02/16/2023	6.376	9,509,190		(1,076,554)				9,197,577	02/16/2023
161225MN0		Various	IL.		03/16/2023	8.574	14,285,810		523,346				14,294,406	03/16/2023
161225OP7		Various	FL.		04/13/2023	7.990	12,380,939		(465,855)				12,681,902	04/13/2023
161225OR1		Various	FL.		05/18/2023	7.876	19,152,181		201,526				19,489,995	05/18/2023
161225ST5		Various	TX.		06/15/2023	8.215	12,455,615		(18,739)				12,756,283	06/15/2023
161225UV7		Various	HI.		07/20/2023	7.231	12,322,868		(64,736)				12,245,876	07/20/2023
161225WX1		Various	PA.		08/17/2023	8.209	20,054,779		(38,867)				20,658,750	08/17/2023
161225YZ4		Various	MD.		09/21/2023	8.224	25,083,138		(75,151)				25,951,067	09/21/2023
230921AB4		Various	FL.		09/21/2023	7.561	1,323,621		2,699				1,355,885	09/21/2023
230921AD0		Various	OH.		10/19/2023	7.722	547,773		555				568,963	10/19/2023
243820AB3		Various	CA.		09/29/2022	6.830	4,049,454		(99,159)				4,008,559	09/29/2022
243820AC1		Various	FL.		11/16/2023	8.641	15,204,617		(86,395)				15,642,039	11/16/2023
243820AE7		Various	CA.		12/21/2023	9.320	8,169,495		(98,307)				8,588,947	12/21/2023
243820AF4		Various	CO.		12/15/2023	8.278	164,937		(1,249)				173,455	12/15/2023
243820AH0		Various	FL.		01/18/2024	9.901	3,512,141		(12,819)				3,699,037	01/18/2024
243820IWX1		Various	CA.		06/28/2022	6.667	12,783,415		(93,386)				12,427,599	06/28/2022

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Showing All Mortgage Loans OWNED December 31 of Current Year

1	2	Location		5	6	7	8	Change in Book Value/Recorded Investment					14	15
		3	4					9	10	11	12	13		
Loan Number	Code	City	State	Loan Type	Date Acquired	Rate of Interest	Book Value/Recorded Investment Excluding Accrued Interest	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Capitalized Deferred Interest and Other	Total Foreign Exchange Change in Book Value	Value of Land and Buildings	Date of Last Appraisal or Valuation
243820XV8		Various	FL		07/21/2022	7.151	23,672,553		(102,972)				23,179,849	07/21/2022
243820Y24		Various	FL		08/19/2022	7.194	21,276,656		(4,458)				20,745,615	08/19/2022
243820ZA8		Various	CA		09/16/2022	7.540	7,752,876		(58,860)				7,743,712	09/16/2022
243820ZB6		Various	CA		10/20/2022	8.078	8,796,716						9,075,523	10/20/2022
243820ZC4		Various	CA		11/03/2022	8.126	18,974,046		(486,146)				19,387,390	11/03/2022
243820ZD2		Various	CA		11/17/2022	7.837	12,987,932		130,778				12,967,504	11/17/2022
243820ZE0		Various	TX		12/22/2022	8.862	6,045,889		(59,813)				6,312,254	12/22/2022
243820ZF7		Various	CA		01/19/2023	8.708	19,786,758		(406,566)				20,615,785	01/19/2023
243820ZH3		Various	CA		02/16/2023	7.968	11,634,551		(32,862)				11,669,814	02/16/2023
243820ZJ9		Various	FL		03/16/2023	9.010	4,059,744		7,583				4,188,190	03/16/2023
243820ZL4		Various	CA		04/13/2023	8.525	5,776,336		(19,471)				5,871,939	04/13/2023
243820ZN0		Various	FL		05/18/2023	9.023	7,198,091		(135,684)				7,475,036	05/18/2023
243820ZO3		Various	TX		06/15/2023	8.552	6,960,297		(38,585)				7,152,331	06/15/2023
243820ZS9		Various	FL		07/20/2023	8.319	17,163,185		(109,652)				17,375,256	07/20/2023
243820ZU4		Various	FL		08/17/2023	8.537	25,873,859		(140,183)				26,283,263	08/17/2023
243820ZV1		Various	CA		09/21/2023	8.813	18,247,654		(217,709)				18,854,282	09/21/2023
243820ZY6		Various	FL		10/18/2023	8.424	13,126,237		(57,212)				13,556,275	10/18/2023
489123BC2		Various	CA		04/20/2023	8.145	954,289		(37,131)				959,207	04/20/2023
489123DE6		Various	NY		05/18/2023	7.866	1,786,613		1,367				1,794,341	05/18/2023
489123FG9		Various	FL		06/02/2023	6.125	3,078,831		(34,630)				2,880,611	06/02/2023
489123H13		Various	CA		06/15/2023	8.000	2,523,102		(48,410)				2,504,883	06/15/2023
489123KL2		Various	FL		07/06/2023	7.770	4,264,278		(13,892)				4,286,131	07/06/2023
489123MN6		Various	NY		07/20/2023	6.169	4,389,559		(25,939)				4,081,044	07/20/2023
489123OP9		Various	CA		08/03/2023	7.711	3,866,042		(86,740)				3,880,592	08/03/2023
489123OR3		Various	CA		08/17/2023	8.171	3,661,394		(10,788)				3,698,082	08/17/2023
489123ST7		Various	NY		09/11/2023	8.184	5,394,937		2,440				5,509,994	09/11/2023
489123UV9		Various	NY		09/21/2023	8.409	5,114,618		(3,296)				5,223,863	09/21/2023
489123WX3		Various	CA		10/05/2023	7.776	8,718,250		(26,637)				8,790,104	10/05/2023
489123YZ6		Various	NY		10/19/2023	7.987	4,454,945		(4,350)				4,505,913	10/19/2023
489123ZB8		Various	NY		11/09/2023	8.364	6,575,466		(89,503)				6,848,989	11/09/2023
489123ZD4		Various	NY		11/16/2023	8.482	6,373,166		15,759				6,586,525	11/16/2023
489123ZF9		Various	IN		11/21/2023	7.990	5,122,502		(18,085)				5,208,619	11/21/2023
489123ZH5		Various	NJ		11/29/2023	9.060	6,135,029		(65,558)				6,536,131	11/29/2023
489123ZJ1		Various	CA		12/07/2023	8.042	9,195,224		34,191				9,411,544	12/07/2023
489123ZL6		Various	PA		12/12/2023	7.867	4,861,786		(4,022)				4,791,074	12/12/2023
489123ZN2		Various	FL		12/21/2023	8.037	11,423,339		9,158				11,759,655	12/21/2023
489123ZO5		Various	DC		12/28/2023	8.270	8,161,511		(9,829)				8,481,140	12/28/2023
489123ZS1		Various	CA		01/05/2024	7.911	3,237,806		17,538				3,270,385	01/05/2024
489123ZU6		Various	NJ		01/11/2024	8.063	14,520,003		(34,106)				14,951,516	01/11/2024
489123ZW2		Various	NY		01/19/2024	8.271	3,857,831		(23,004)				3,969,392	01/19/2024
62388XFG9		Various	FL		06/08/2023	8.312	22,372,800		(37,092)				22,674,527	06/08/2023
62398XIM4		Various	FL		08/10/2023	8.315	8,682,692		(15,741)				8,956,167	08/10/2023
62398XAA2		Various	FL		03/09/2022	5.085	11,432,336		(14,964)				10,230,523	03/09/2022
62398XBB9		Various	FL		04/21/2022	5.822	11,754,938		10,456				10,885,967	04/21/2022
62398XB07		Various	CA		05/05/2023	8.535	21,995,385		(257,739)				22,629,861	05/05/2023
62398XC06		Various	FL		05/12/2022	6.553	11,935,206		(6,542)				11,502,240	05/12/2022
62398XDD3		Various	FL		06/09/2022	6.394	12,287,653		(12,011)				11,656,343	06/09/2022
62398XDE1		Various	CA		05/18/2023	8.211	18,202,179		(109,524)				18,448,747	05/18/2023
62398XEE0		Various	CA		07/15/2022	7.677	15,425,083		(76,248)				15,330,408	07/15/2022
62398XFF6		Various	FL		08/19/2022	7.889	22,529,506		(132,147)				22,568,920	08/19/2022
62398XGG3		Various	FL		09/16/2022	8.139	6,340,477		(105,168)				6,548,200	09/16/2022
62398XHH0		Various	AZ		09/16/2022	5.221	3,270,509		(21,243)				2,904,425	09/16/2022

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1	2	Location		5	6	7	8	Change in Book Value/Recorded Investment					14	15
		3	4					9	10	11	12	13		
Loan Number	Code	City	State	Loan Type	Date Acquired	Rate of Interest	Book Value/Recorded Investment Excluding Accrued Interest	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Capitalized Deferred Interest and Other	Total Foreign Exchange Change in Book Value	Value of Land and Buildings	Date of Last Appraisal or Valuation
62938XHJ6		Various	FL		07/06/2023	7.971	22,471,150		175,163				22,620,354	07/06/2023
62938XJJ4		Various	FL		09/30/2022	6.879	5,985,101		(129,122)				5,923,656	09/30/2022
62938XKK9		Various	FL		09/30/2022	7.507	4,875,826		(111,667)				4,960,656	09/30/2022
62938XKL7		Various	FL		07/20/2023	7.834	6,602,959		(8,721)				6,627,001	07/20/2023
62938XMM3		Various	FL		10/20/2022	8.350	9,298,373		(39,557)				9,297,654	10/20/2022
62938XNN0		Various	FL		11/17/2022	8.341	324,329		(5,725)				327,685	11/17/2022
62938XPP3		Various	FL		11/17/2022	7.909	31,704,849		324,217				32,028,412	11/17/2022
62938XQQ0		Various	CA		12/22/2022	8.472	16,138,731		(378,936)				16,572,834	12/22/2022
62938XRR7		Various	CA		01/19/2023	7.862	17,310,275		(237,372)				17,625,151	01/19/2023
62938XST2		Various	FL		08/24/2023	8.587	21,181,932		(26,873)				21,843,573	08/24/2023
62938XTT1		Various	FL		02/16/2023	6.621	10,519,373		(264,350)				10,158,237	02/16/2023
62938XUV4		Various	CA		09/11/2023	8.543	13,599,649		(49,232)				14,039,638	09/11/2023
62938XVV3		Various	FL		03/16/2023	8.746	30,182,333		1,882,637				26,858,199	03/16/2023
62938XWX8		Various	FL		09/27/2023	8.852	16,614,942		(103,148)				17,359,697	09/27/2023
62938XYX4		Various	FL		04/13/2023	7.968	32,103,421		(214,892)				32,499,908	04/13/2023
62938XYZ1		Various	FL		10/19/2023	8.529	11,671,369		168,151				11,927,484	10/19/2023
62938XZB3		Various	FL		11/16/2023	8.824	18,419,880		(54,822)				19,081,308	11/16/2023
62938XZD9		Various	NY		11/29/2023	9.358	12,457,398		(77,524)				13,194,743	11/29/2023
62938XZF4		Various	FL		12/07/2023	8.545	11,241,170		(2,746)				11,602,162	12/07/2023
62938XZH0		Various	CA		12/21/2023	9.198	22,469,071		(124,574)				23,592,752	12/21/2023
62938XZJ6		Various	NY		01/11/2024	7.900	9,114,758		(42,830)				9,284,887	01/11/2024
671483AA3		Various	CA		06/09/2022	5.564	2,564,938		10,029				2,431,610	06/09/2022
671483BB0		Various	SC		07/21/2022	6.020	1,644,704		(11,383)				1,570,484	07/21/2022
671483BC8		Various	TX		09/01/2022	6.505	923,664		(1,561)				894,946	09/01/2022
671483CD5		Various	AZ		09/29/2022	6.667	1,152,297		10,953				1,102,334	09/29/2022
671483DE2		Various	TX		10/20/2022	8.375	472,081		13,443				458,768	10/20/2022
671483EF8		Various	MD		12/22/2022	8.375	42,427		(29)				44,579	12/22/2022
671483FG5		Various	MS		01/19/2023	8.280	312,175		(1,257)				333,763	01/19/2023
749002AA9		Various	NY		01/15/2022	5.645	15,702,216		(57,083)				13,854,528	01/15/2022
749002AB7		Various	NY		01/25/2022	5.484	24,558,690		551,077				21,133,602	01/25/2022
749002AC5		Various	NY		02/24/2022	5.724	26,309,851		(140,017)				23,611,518	02/24/2022
749002AD3		Various	NY		03/29/2022	5.603	19,728,220		(176,339)				17,945,394	03/29/2022
749002AE1		Various	NY		05/20/2022	5.771	9,124,504		15,352				8,547,725	05/20/2022
749002AF8		Various	NY		05/20/2022	5.801	20,260,104		81,331				19,198,814	05/20/2022
749002AG6		Various	NY		05/27/2022	5.983	4,992,922		25,837				4,719,608	05/27/2022
78416#ZZ6		Various	MO		04/20/2021	4.000	28,968,001						28,096,064	04/20/2021
92838ZMM6		Various	CA		09/27/2021	6.163	15,978,466		571,757				14,889,631	09/27/2021
92838ZMN4		Various	CA		10/22/2021	4.640	19,019,196		(1,857,918)				16,095,543	10/22/2021
BGS16ATK8		Various	OH		09/20/2022	6.690	75,000,000						75,652,500	09/20/2022
BGS16AVS8		Various	GA		12/22/2021	3.500	60,500,000						57,130,150	12/22/2021
BGS16AYD8		Various	TX		10/14/2021	6.210	23,165,151		62,620				23,148,935	10/14/2021
BGS16B2R0		Various	AZ		03/30/2022	6.000	42,863,709		1,334,053				42,863,709	03/30/2022
BGS16B3F5		Various	OH		01/18/2022	3.500	100,000,000						94,260,000	01/18/2022
BGS16B8V5		Various	TN		07/20/2022	7.360	9,991,800						10,031,767	07/20/2022
BGS16BBV1		Various	CA		03/01/2022	4.070	15,000,000						14,464,500	12/09/2021
BGS16BCP3		Various	FL		10/14/2021	6.210	16,742,843						16,774,655	10/14/2021
BGS21TW27		Various	NC		01/25/2024	6.741	5,674,592						5,614,006	01/25/2024
BGS21TRV6		Various	MD		01/25/2024	8.336	10,211,948		(32,596)				10,400,750	01/25/2024
BGS22CBN3		Various	CA		02/01/2024	7.287	10,683,306		836,693				9,490,381	02/01/2024
BGS22C9H5		Various	PA		02/08/2024	8.299	9,579,815		(17,074)				9,961,785	02/08/2024
BGS22X8H0		Various	FL		02/08/2024	8.955	248,399						245,845	02/08/2024
BGS23LJR1		Various	NY		02/15/2024	7.198	7,637,354		7,626				7,589,892	02/15/2024

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BGS26EOC9		Various	MA		05/26/2023	7.346	6,331,016						6,239,968	05/26/2023
BGS26ES03		Various	CA		01/25/2024	7.834	16,212,119						16,059,014	01/25/2024
BGS26ES11		Various	MA		02/08/2024	7.972	9,067,480						8,983,391	02/08/2024
BGS26QLY9		Various	FL		02/15/2024	8.038	12,222,476	(17,008)					12,402,919	02/15/2024
BGS26QM02		Various	VA		02/23/2024	8.384	8,205,212	(12,072)					8,417,017	02/23/2024
BGS272DT1		Various	NJ		02/29/2024	8.018	3,819,188	(165,455)					3,817,482	02/29/2024
BGS272K22		Various	FL		03/07/2024	8.879	5,641,416	(17,707)					5,879,085	03/07/2024
BGS274U7		Various	CA		03/14/2024	8.453	9,080,870	1,538					9,323,957	03/14/2024
BGS277MN3		Various	CA		02/22/2024	8.711	9,437,030						9,358,555	02/22/2024
BGS277N02		Various	CA		03/07/2024	8.817	9,911,096						9,831,297	03/07/2024
BGS27NDZ1		Various	CA		03/21/2024	7.142	8,293,951	(34,016)					8,184,407	03/21/2024
BGS27RM25		Various	MA		03/21/2024	8.999	10,294,213						10,208,425	03/21/2024
BGS27TO25		Various	FL		03/21/2024	8.417	8,282,671	(16,931)					8,364,920	03/21/2024
BGS28LBN3		Various	CA		03/28/2024	7.249	2,919,819	18,166					2,878,942	03/28/2024
BGS29H2G6		Various	CA		04/11/2024	7.865	6,427,382	(2,239)					6,463,782	04/11/2024
BGS29JX94		Various	FL		04/11/2024	8.256	18,471,638	(88,872)					18,739,676	04/11/2024
BGS29VH79		Various	CA		04/11/2024	9.075	15,052,515						14,942,176	04/11/2024
BGS2AB1G8		Various	CO		04/18/2024	7.151	6,104,132	(18,085)					5,975,724	04/18/2024
BGS2AX8X6		Various	FL		04/25/2024	7.703	7,955,263	(61,329)					7,932,765	04/25/2024
BGS2AZPX2		Various	FL		04/25/2024	9.346	15,117,304						15,019,082	04/25/2024
BGS2AZRT9		Various	CA		04/25/2024	7.630	2,611,987	(651)					2,640,643	04/25/2024
BGS2B5J06		Various	TX		04/26/2024	8.083	2,012,928	(12,643)					2,030,774	04/26/2024
BGS2BKNT5		Various	CA		05/02/2024	6.862	8,279,176	(8,476)					8,100,721	05/02/2024
BGS2C65N8		Various	NJ		05/09/2024	8.840	10,654,539						10,567,983	05/09/2024
BGS2C6K27		Various	CA		05/09/2024	7.112	4,265,984	(5,994)					4,226,578	05/09/2024
BGS2D2F96		Various	FL		05/16/2024	8.179	12,052,919	(47,885)					12,148,615	05/16/2024
BGS2D2FR6		Various	NJ		05/16/2024	6.696	6,966,204	(12,347)					6,787,112	05/16/2024
BGS2D7P05		Various	CA		05/23/2024	9.630	872,052	19,682					864,287	05/23/2024
BGS2DFFS3		Various	CA		05/23/2024	8.570	4,494,190	2,667					4,515,305	05/23/2024
BGS2DSSB0		Various	FL		05/23/2024	8.486	10,667,272						10,558,831	05/23/2024
BGS2EBG68		Various	FL		05/28/2024	7.635	8,168,981	29,676					8,119,879	05/28/2024
BGS2EYCC1		Various	CA		06/06/2024	7.701	5,028,641	(29,512)					5,040,907	06/06/2024
BGS2F2V21		Various	WA		06/13/2024	7.970	1,926,904	2,425					1,932,212	06/13/2024
BGS2F2WD6		Various	NJ		06/13/2024	7.446	11,326,031	(4,183)					11,307,890	06/13/2024
BGS2F5SJ1		Various	CA		06/26/2024	7.816	8,510,622	(18,772)					8,571,194	06/26/2024
BGS2F5TD3		Various	FL		06/26/2024	9.698	4,566,131						4,537,303	06/26/2024
BGS2F5Z53		Various	CA		06/21/2024	8.581	17,391,952	(96,339)					17,612,447	06/21/2024
BGS2F5Z07		Various	FL		06/13/2024	9.196	7,648,437						7,587,670	06/13/2024
BGS2HJLR8		Various	CA		07/03/2024	8.030	7,425,482	13,368					7,450,356	07/03/2024
BGS2HJUX5		Various	CA		07/25/2024	7.830	14,835,762	49,400					14,789,995	07/25/2024
BGS2HJW13		Various	NY		07/25/2024	8.513	17,255,737	(34,414)					17,488,005	07/25/2024
BGS2HJY68		Various	CA		07/11/2024	7.720	10,045,127	(13,831)					10,098,183	07/11/2024
BGS2HJYJ2		Various	FL		07/11/2024	9.710	1,434,516						1,430,469	07/11/2024
BGS2HJZM4		Various	FL		07/25/2024	9.290	5,336,729						5,317,245	07/25/2024
BGS2HK072		Various	CA		07/18/2024	7.790	11,727,703	16,240					11,732,679	07/18/2024
BGS2HRE07		Various	OR		07/25/2024	8.920	2,203,834	5,977					2,224,748	07/25/2024
BGS2LDKU0		Various	NY		08/15/2024	7.473	6,580,580	(9,319)					6,531,821	08/15/2024
BGS2LDM04		Various	CA		08/01/2024	7.909	5,397,284	(6,502)					5,403,643	08/01/2024
BGS2LDMD6		Various	CT		08/27/2024	7.563	7,327,848	(6,044)					7,317,577	08/27/2024
BGS2LDMH7		Various	CA		08/08/2024	7.636	20,473,680	74,907					20,385,735	08/08/2024
BGS2LDMN4		Various	CA		08/22/2024	7.678	4,919,327	(15,058)					4,920,266	08/22/2024
BGS2LDNK9		Various	TX		08/15/2024	8.591	2,470,791	(3,847)					2,470,831	08/15/2024

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BGS2LDT56		Various	WA.		08/22/2024	9.165	5,138,166						5,132,390	08/22/2024
BGS2LDXL6		Various	CA.		08/22/2024	8.316	47,637,448	(166,357)					47,977,749	08/22/2024
BGS2LE147		Various	CA.		08/06/2024	4.180	22,598,642	390,377					22,991,583	08/06/2024
BGS2NY5I5		Various	CA.		09/05/2024	7.679	6,704,054	(10,099)					6,736,665	09/05/2024
BGS2NVZN2		Various	CA.		09/12/2024	7.936	10,431,267	(8,688)					10,479,449	09/12/2024
BGS2NZ031		Various	CA.		09/19/2024	7.520	5,809,308	31,491					5,755,964	09/19/2024
BGS2NZ0N7		Various	CA.		09/19/2024	7.853	6,616,727	4,092					6,566,588	09/19/2024
BGS2NZ189		Various	CA.		09/26/2024	7.450	3,556,784	1,560					3,539,218	09/26/2024
BGS2NZ3V6		Various	CA.		09/20/2024	8.040	61,597,861	(86,429)					61,967,287	09/20/2024
BGS2PKW2		Various	CA.		09/11/2024	8.405	52,317,796	(154,344)					52,460,581	09/11/2024
BGS2R04B2		Various	CA.		10/17/2024	7.060	7,736,566	(1,195)					7,549,330	10/17/2024
BGS2R05C9		Various	NY.		10/11/2024	8.116	48,557,891	(81,497)					48,675,873	10/11/2024
BGS2R05T2		Various	IL.		10/10/2024	7.389	4,585,342	(979)					4,533,270	10/10/2024
BGS2R05J9		Various	GA.		10/31/2024	6.788	7,020,241						6,829,339	10/31/2024
BGS2R05Z8		Various	CA.		10/17/2024	8.813	1,724,213	(24,807)					1,746,755	10/17/2024
BGS2R06I4		Various	CA.		10/03/2024	7.136	6,225,901	31,872					6,097,402	10/03/2024
BGS2R07V5		Various	CA.		10/24/2024	7.231	6,151,474	(3,812)					6,074,328	10/24/2024
BGS2T5RY4		Various	FL.		10/24/2024	7.890	6,272,752	(5,870)					6,272,490	10/24/2024
BGS2V2R44		Various	CA.		11/07/2024	6.830	2,155,896						2,085,549	11/07/2024
BGS2VH2L0		Various	NJ.		11/14/2024	8.004	40,975,182	(16,968)					41,056,963	11/14/2024
BGS2VH2U0		Various	FL.		11/26/2024	8.030	47,710,414	(11,142)					48,101,041	11/26/2024
BGS2VHR6		Various	PA.		11/21/2024	8.406	308,814	(86)					313,187	11/21/2024
BGS2VUC63		Various	NY.		12/10/2024	11.590	5,268,834	(2,727)					5,018,734	12/10/2024
BGS2W78B4		Various	TX.		11/21/2024	8.770	3,942,077						3,942,077	11/21/2024
BGS2WQIE2		Various	CA.		11/26/2024	7.570	11,879,031	(3,377)					11,801,343	11/26/2024
BGS2YCNM3		Various	FL.		12/19/2024	7.610	40,587,540	(3,785)					40,395,147	12/19/2024
BGS2YCRG2		Various	CA.		12/19/2024	7.170	6,781,614	(550)					6,677,568	12/19/2024
BGS2YMU76		Various	GA.		12/19/2024	7.354	5,511,204	(600)					5,418,791	12/19/2024
BGS2YMZH9		Various	TX.		12/18/2024	4.590	45,704,335	7,893					45,696,442	12/18/2024
BGS2YI408		Various	CA.		12/19/2024	7.449	26,265,596	(2,443)					26,020,137	12/19/2024
BGS2YI4N8		Various	CA.		12/19/2024	7.610	24,827,064	(2,202)					24,740,702	12/19/2024
BGS2ZDAY8		Various	CA.		12/27/2024	7.700	2,147,405	29,424					2,147,405	12/27/2024
0399999. Mortgages in good standing - Residential mortgages-all other							2,959,093,781	0	(12,770,581)	0	0	0	2,934,235,696	XXX
N214051		Channahon	IL.		09/10/2021	6.316	6,569,225	0	6,425	0	0	0	12,135,000	09/10/2021
N214071		Denver	CO.		07/29/2021	2.970	12,991,019	0	1,217	0	0	0	21,365,575	07/29/2021
N214081		Dallas	TX.		08/27/2021	2.670	9,994,544	0	1,401	0	0	0	15,950,619	08/27/2021
N214111		The Woodlands	TX.		01/31/2022	2.640	7,195,623	0	994	0	0	0	11,535,000	01/31/2022
N214121		Austin	TX.		12/15/2021	2.860	9,379,103	0	1,821	0	0	0	17,799,966	12/15/2021
N214131		Centennial	CO.		11/19/2021	3.020	11,213,453	0	1,551	0	0	0	21,845,000	11/19/2021
N214141		Itasca	IL.		12/22/2021	2.990	14,990,230	0	1,784	0	0	0	24,165,002	12/22/2021
N216311		Salt Lake City	UT.		07/19/2022	12.153	48,711,330	0	542,222	0	2,235,934	0	87,743,502	07/19/2022
N219011		Mansfield	MA.		12/13/2021	2.620	9,364,470	0	1,294	0	0	0	15,218,378	12/13/2021
N219012		Mansfield	MA.		12/13/2021	3.490	127,483	0	0	0	0	0	207,034	12/13/2021
N219031		Charleston	SC.		11/04/2021	2.680	19,860,783	0	1,845	0	0	0	39,750,000	11/04/2021
N219041		Hingham	MA.		12/02/2021	2.990	9,994,093	0	1,369	0	0	0	18,075,424	12/02/2021
N224021		Sedona	AZ.		11/04/2022	4.500	29,975,667	0	2,688	0	0	0	95,000,000	11/04/2022
N224031		Baytown	TX.		08/31/2022	6.503	39,818,011	0	48,658	0	0	0	71,886,970	08/31/2022
N224041		Severn	MD.		12/21/2022	6.553	39,828,868	0	41,102	0	0	0	64,418,740	12/21/2022
N226021		Arlington	VA.		05/05/2022	4.490	44,427,670	0	64,583	0	1,651,293	0	108,311,878	05/05/2022
N226161		Flower Mound	TX.		12/02/2022	9.977	3,488,798	0	37,415	0	54,720	0	15,665,903	12/02/2022
N229011		Rochester	NY.		05/03/2022	3.730	13,718,514	0	1,837	0	0	0	27,455,000	05/03/2022
N229021		New York	NY.		05/01/2023	4.730	39,968,354	0	5,094	0	0	0	71,373,492	05/01/2023

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N234011		Chicago	IL		05/05/2023	6.170	12,741,573	0	2,438	0	0	0	29,412,415	05/05/2023
N234021		Chicago	IL		08/08/2023	7.180	9,859,247	0	1,228	0	0	0	27,625,000	08/08/2023
N236011		Philadelphia	PA		06/23/2023	9.553	7,696,330	0	74,999	0	447,057	0	13,632,247	06/23/2023
N236031		New York	NY		07/19/2023	9.327	2,546,507	0	52,500	0	227,116	0	16,672,211	07/19/2023
N236071		The Woodlands	TX		08/15/2023	7.390	3,779,070	0	20,930	0	31,508	0	2,197,213	08/15/2023
N236081		Bedford	MA		07/27/2023	9.803	25,927,608	0	233,833	0	2,350,873	0	85,131,049	07/27/2023
N236101		Lancaster	TX		09/20/2023	9.227	7,441,205	0	43,750	0	148,605	0	26,571,427	09/20/2023
N236121		Buena Park	CA		10/04/2023	7.677	20,355,363	0	71,007	0	131,140	0	31,754,350	10/04/2023
N236131		Beverly Hills	CA		10/30/2023	9.977	24,367,381	0	0	0	2,011,353	0	34,951,375	10/30/2023
N236151		Evanston	IL		11/21/2023	8.053	26,897,155	0	67,320	0	0	0	43,067,251	11/21/2023
N236161		Minnetonka	MN		11/29/2023	8.053	23,630,251	0	38,131	0	590,583	0	35,848,747	11/29/2023
N236281		Sandy	UT		03/25/2024	7.627	12,362,577	0	0	0	0	0	19,682,839	03/25/2024
N237011		Los Angeles	CA		03/29/2023	6.310	14,988,050	0	3,051	0	0	0	39,250,000	03/29/2023
N23A021		Willawong	AUS		08/02/2023	9.337	3,912,003	0	0	0	296,173	(337,179)	7,185,403	08/02/2023
N23A031		Te Kauhata	NZL		12/21/2023	9.087	5,059,498	0	0	0	445,728	(585,871)	10,028,378	12/21/2023
N244011		Edgerton	KS		05/23/2024	7.303	25,517,824	0	0	0	0	0	52,733,598	05/23/2024
N246021		Menifee	CA		07/30/2024	9.553	4,508,580	0	69,667	0	118,374	0	3,500,000	07/30/2024
N246031		Los Angeles	CA		07/11/2024	11.303	3,823,785	0	0	0	85,738	0	6,874,120	07/11/2024
N246081		Darien	CT		06/25/2024	9.977	1,829,971	0	17,647	0	62,716	0	3,823,529	06/25/2024
N246111		Lakeville	MN		09/12/2024	8.803	5,047,236	0	21,429	0	54,408	0	18,181,820	09/12/2024
N246231		Green Bay	WI		11/26/2024	10.303	56	0	0	0	0	0	127,542	11/26/2024
N249021		Alexandria	VA		11/26/2024	6.270	7,380,000	0	0	0	0	0	13,398,000	11/26/2024
N24A011		Melbourne	AUS		09/04/2024	9.337	408,670	0	0	0	2,554	157,829	3,202,483	09/04/2024
N24E021		Worksop	GBR		08/16/2024	8.709	3,754,690	0	0	0	95,342	25,917	4,892,444	08/16/2024
N24E051		Kitzingen	DEU		11/27/2024	4.250	7,563,559	0	0	0	6,328,357	2,290,183	6,328,357	11/27/2024
N24E061		Redhill	GBR		11/15/2024	6.850	50,750,997	0	0	0	0	(794,400)	156,718,620	11/15/2024
N24E071		Northampton	GBR		12/20/2024	7.040	14,805,634	0	0	0	0	0	24,746,086	12/20/2024
N24E081		Cardiff	GBR		12/11/2024	7.190	29,379,955	0	0	0	42,616,224	0	42,616,224	12/11/2024
NA00021		New York	NY		07/07/2022	8.031	4,163,571	0	0	0	0	0	11,916,108	07/07/2022
NA00031		New York	NY		12/21/2022	9.103	22,917,331	0	0	0	0	0	198,370,000	12/21/2022
NA00041		New York	NY		09/29/2022	9.733	69,241,461	0	0	0	0	0	313,571,554	09/29/2022
NA00051		Las Vegas	NV		05/03/2023	10.203	50,000,000	0	0	0	0	0	31,746,032	05/03/2023
NA00071		Boston	MA		09/21/2023	8.733	34,119,999	0	0	0	0	0	75,793,085	09/21/2023
NA00081		North Las Vegas	NV		11/13/2023	9.313	24,538,932	0	0	0	44,750,000	0	44,750,000	11/13/2023
NA00091		Lithia Springs	GA		11/13/2023	9.243	20,516,341	0	0	0	0	0	26,600,000	11/13/2023
NA00101		North Fort Myers	FL		02/28/2024	9.633	32,500,000	0	0	0	0	0	6,400,000	02/28/2024
NA00111		Chicago	IL		03/07/2024	9.400	30,500,000	0	0	0	0	0	40,200,000	03/07/2024
NA00431		Sacramento	CA		06/01/2021	4.650	36,835,691	0	0	0	0	0	35,000,000	06/01/2021
NA00511		West Bloomfield	MI		06/01/2021	5.250	22,972,041	0	0	0	0	0	73,800,000	06/01/2021
NA00571		Prescott	AZ		06/01/2021	4.500	20,370,882	0	0	0	0	0	22,312,812	06/01/2021
NA00581		The Woodlands	TX		06/01/2021	4.500	18,649,006	0	0	0	0	0	20,449,247	06/01/2021
NA00641		Chatham	MA		06/01/2021	5.100	30,512,683	0	0	0	0	0	107,843,620	06/01/2021
NA00671		Indianapolis	IN		06/01/2021	5.000	19,586,937	0	0	0	0	0	53,100,000	06/01/2021
NA00681		Austin	TX		06/01/2021	4.600	18,332,605	0	0	0	0	0	39,700,000	06/01/2021
NA00711		Brooklyn	NY		06/01/2021	4.750	25,100,000	0	0	0	0	0	75,100,000	06/01/2021
NA00751		Jacksonville	FL		06/01/2021	5.200	18,677,652	0	0	0	0	0	24,879,462	06/01/2021
NA00761		Franklin	TN		06/01/2021	5.200	26,168,711	0	0	0	0	0	55,458,610	06/01/2021
NA00771		Miramar Beach	FL		06/01/2021	6.000	45,873,652	0	0	0	0	0	67,176,459	06/01/2021
NA00781		Miramar Beach	FL		06/01/2021	6.000	15,775,460	0	0	0	0	0	24,679,931	06/01/2021
NA00801		Beaverton	OR		06/01/2021	4.650	21,198,274	0	0	0	0	0	21,338,674	06/01/2021
NA00811		Kendall	FL		06/01/2021	3.800	82,875,000	0	0	0	0	0	82,875,000	06/01/2021
NA00821		Indianapolis	IN		06/01/2021	4.950	20,324,000	0	0	0	0	0	21,653,007	06/01/2021

SCHEDULE B - PART 1

1	2	Location		5	6	7	8	Change in Book Value/Recorded Investment					14	15
		3	4					9	10	11	12	13		
Loan Number	Code	City	State	Loan Type	Date Acquired	Rate of Interest	Book Value/Recorded Investment Excluding Accrued Interest	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Capitalized Deferred Interest and Other	Total Foreign Exchange Change in Book Value	Value of Land and Buildings	Date of Last Appraisal or Valuation
NAG0831		Portland	OR.....	.....	06/01/2021	4.450	21,582,076	0	0	0	0	0	22,900,000	06/01/2021
NAG0841		Middleburg	VA.....	.....	06/01/2021	3.750	76,500,000	0	0	0	0	0	76,500,000	06/01/2021
NAG0861		Avon	IN.....	.....	06/01/2021	3.850	29,000,000	0	0	0	0	0	29,000,000	06/01/2021
NAG0891		Louisville	KY.....	.....	06/01/2021	3.000	8,500,000	0	0	0	0	0	16,999,992	06/01/2021
NAG0892		Louisville	KY.....	.....	06/01/2021	3.000	3,500,000	0	0	0	0	0	7,000,008	06/01/2021
NAG0901		Northglen	CO.....	.....	06/01/2021	3.000	27,773,603	0	0	0	0	0	55,547,205	06/01/2021
NAG0911		Greensboro	NC.....	.....	06/01/2021	3.000	17,795,967	0	0	0	0	0	35,591,933	06/01/2021
NAG0961		Columbus	OH.....	.....	06/01/2021	3.250	35,700,000	0	0	0	0	0	51,000,000	06/01/2021
NAG0971		Beloit	WI.....	.....	02/24/2022	4.000	4,487,057	0	0	0	0	0	5,854,278	02/24/2022
0599999. Mortgages in good standing - Commercial mortgages-all other							1,664,540,945	0	1,481,230	0	11,041,215	756,479	3,274,982,228	XXX
N226091		Brooklyn	NY.....	.....	11/16/2022	13.727	30,482,899	0	51,875	0	1,545,993	0	293,999,510	11/16/2022
N236171		Mountain View	CA.....	.....	12/06/2023	11.000	27,733,083	0	111,250	0	2,977,833	0	145,300,000	12/06/2023
NAC0011		Stafford	TX.....	.....	02/24/2022	10.233	20,000,000	0	0	0	0	0	34,856,864	02/24/2022
0699999. Mortgages in good standing - Mezzanine Loans							78,215,982	0	163,125	0	4,523,826	0	474,156,374	XXX
0899999. Total Mortgages in good standing							5,076,099,529	0	(9,849,533)	0	15,565,041	756,479	7,026,075,197	XXX
N229031		Tampa	FL.....	.....	12/13/2024	5.520	40,000,005	0	0	0	0	0	80,666,644	12/13/2024
N229032		Tampa	FL.....	.....	12/13/2024	7.040	6,999,999	0	0	0	0	0	14,116,693	12/13/2024
1399999. Restructured mortgages - Commercial mortgages-all other							47,000,004	0	0	0	0	0	94,783,337	XXX
1699999. Total - Restructured Mortgages							47,000,004	0	0	0	0	0	94,783,337	XXX
2499999. Total - Mortgages with overdue interest over 90 days							0	0	0	0	0	0	0	XXX
3299999. Total - Mortgages in the process of foreclosure							0	0	0	0	0	0	0	XXX
3399999 - Totals							5,123,099,533	0	(9,849,533)	0	15,565,041	756,479	7,120,858,534	XXX

1.	Mortgages in good standing \$	unpaid taxes \$	interest due and unpaid.
2.	Restructured mortgages \$	unpaid taxes \$	interest due and unpaid.
3.	Mortgages with overdue interest over 90 days not in process of foreclosure \$	unpaid taxes \$	interest due and unpaid.
4.	Mortgages in process of foreclosure \$	unpaid taxes \$	interest due and unpaid.

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE B - PART 2

Showing All Mortgage Loans ACQUIRED AND ADDITIONS MADE During the Current Year

1 Loan Number	Location		4 Loan Type	5 Date Acquired	6 Rate of Interest	7 Actual Cost at Time of Acquisition	8 Additional Investment Made After Acquisition	9 Value of Land and Buildings
	2 City	3 State						
1550201J1	Various	TX		07/01/2021	3.687		2,498	630,202
155020KL3	Various	TX		10/01/2021	2.990		4,938	594,597
B6S2919H2	Various	FL		04/04/2024	4.040	34,956,840		26,669,762
0299999. Mortgages in good standing - Residential mortgages-insured or guaranteed						34,956,840	7,436	27,894,561
121836H14	Various	HI		01/19/2023	8.510		51	718,377
121836PQ7	Various	FL		05/18/2023	6.009		58,458	4,153,892
121836RS1	Various	NJ		06/15/2023	8.522		146	2,630,220
121836XY1	Various	NJ		09/21/2023	8.136		2,787	4,032,210
146738AB5	Various	NY		11/29/2022	9.434		(692,799)	1,665,450
146738BC2	Various	NC		12/09/2022	11.320	1,219,398		1,445,517
146738CD9	Various	WA		12/22/2022	11.670	232,168		2,467,465
146738DE6	Various	FL		01/11/2023	9.275	877,038		1,611,697
146738EF2	Various	FL		01/26/2023	12.240	300,887		1,227,771
146738FG9	Various	FL		02/09/2023	10.609	1,484,127		779,277
146738GH6	Various	MA		02/24/2023	7.681	2,038,019		2,580,247
146738HI3	Various	FL		03/09/2023	7.964	1,146,789		3,477,761
146738IJ0	Various	FL		03/23/2023	7.278	3,194,781		4,090,877
146738JK6	Various	FL		04/11/2023	8.536	5,775,759		6,551,040
146738KL2	Various	MA		04/27/2023	8.165	69,657		2,975,991
146738LM9	Various	CA		05/11/2023	6.906	1,829,119		4,102,735
146738MN6	Various	MA		05/26/2023	8.675	(21,273,441)		15,647,738
146738NO3	Various	CA		05/11/2023	9.489	255,663		1,838,432
146738OP9	Various	CA		06/06/2023	7.581	3,368,496		6,860,929
146738PQ6	Various	FL		06/23/2023	8.600	5,069,758		9,309,462
146738QR3	Various	CA		07/11/2023	8.867	2,576,291		11,756,609
146738RS0	Various	FL		07/27/2023	7.283	3,060,337		8,498,058
146738ST7	Various	CO		08/10/2023	6.518	3,068,823		7,390,312
146738TU3	Various	CO		08/11/2023	7.572	5,964,507		12,318,758
146738UV9	Various	CA		08/24/2023	8.696	3,974,206		7,753,389
146738VI6	Various	CA		09/07/2023	8.974	2,570,765		6,987,929
146738WX3	Various	FL		09/21/2023	8.823	4,331,668		12,206,442
146738XY0	Various	CA		10/12/2023	9.489	3,729,933		10,558,661
146738YZ6	Various	FL		10/26/2023	8.984	3,983,038		6,858,726
146738ZAO	Various	CA		11/09/2023	8.932	3,633,340		10,054,458
146738ZB8	Various	FL		11/29/2023	9.893	465,194		3,016,519
146738ZD4	Various	CA		12/07/2023	7.388	1,960,752		5,702,079
146738ZG7	Various	CA		12/21/2023	9.219	2,692,928		9,023,046
146738ZI3	Various	CA		12/21/2023	8.606	2,029,564		6,751,474
146738ZJ1	Various	FL		01/11/2024	6.417	7,584,240		6,019,801
146738ZK8	Various	FL		01/11/2024	6.373	22,477,798		17,801,542
161225BB2	Various	PA		10/19/2023	7.424		11,030	7,711,396
161225FG7	Various	NY		11/03/2022	7.495		14,100	9,777,286
161225OR1	Various	FL		05/18/2023	7.799		7,984	19,489,995
161225WX1	Various	PA		08/17/2023	8.175		9,965	20,658,750
209999ZB0	Various	AL		11/15/2019	4.330		2,660,562	37,831,296
209999ZC8	Various	AL		04/28/2020	4.010		3,125,813	40,881,383
243820AF4	Various	CO		12/15/2023	8.682	168,488		173,455
243820AH0	Various	FL		01/18/2024	9.736	3,716,867		3,699,037
243820XY8	Various	FL		07/21/2022	7.210		36,680	23,179,849
489123ZD4	Various	NY		11/16/2023	8.488		5,082	6,586,525
489123ZS1	Various	CA		01/05/2024	7.902	4,723,516		3,270,385
489123ZU6	Various	NJ		01/11/2024	8.019	15,339,880		14,951,516
489123ZW2	Various	NY		01/19/2024	7.890	3,889,571		3,969,392
62938XEEO	Various	FL		07/15/2022	7.613		9,068	15,330,408
62938XPP3	Various	FL		11/17/2022	7.825		37,436	32,028,412

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE B - PART 2

Showing All Mortgage Loans ACQUIRED AND ADDITIONS MADE During the Current Year

1	Location		4	5	6	7	8	9
	2	3						
Loan Number	City	State	Loan Type	Date Acquired	Rate of Interest	Actual Cost at Time of Acquisition	Additional Investment Made After Acquisition	Value of Land and Buildings
B2938XZJ6	Various	.NY		01/11/2024	7.981	9,736,308		9,284,887
BC01531674	Various	.VA		11/07/2023	8.825	17,018,141		14,873,202
BGS16AVS8	Various	.GA		12/22/2021	3.500			57,130,150
BGS16AYD8	Various	.TX		10/14/2021	6.210		15,706,679	23,148,935
BGS16B2R0	Various	.AZ		03/30/2022	6.000		1,430,692	42,863,709
BGS16B3F5	Various	.OH		01/18/2022	3.500		9,680,000	94,260,000
BGS21TM27	Various	.NC		01/25/2024	6.150	8,723,886		5,614,006
BGS21TRW6	Various	.MD		01/25/2024	8.336	10,748,481		10,400,750
BGS22C8N3	Various	.CA		02/01/2024	7.287	10,196,327		9,490,321
BGS22C9H5	Various	.PA		02/08/2024	8.299	9,957,316		9,961,785
BGS22X8H0	Various	.FL		02/08/2024	8.955	1,836,899		245,845
BGS23LJR1	Various	.NY		02/15/2024	7.198	7,694,220		7,589,892
BGS26EQC9	Various	.MA		05/26/2023	7.346	19,484,954		6,239,968
BGS26ES03	Various	.CA		01/25/2024	7.586	21,518,545		16,059,014
BGS26ES11	Various	.MA		02/08/2024	7.853	15,692,813		8,983,391
BGS26QLY9	Various	.FL		02/15/2024	8.033	12,296,845		12,402,919
BGS26QM02	Various	.VA		02/23/2024	8.505	8,247,170		8,417,017
BGS272DT1	Various	.NJ		02/29/2024	7.991	8,537,675		8,317,482
BGS272K22	Various	.FL		03/07/2024	8.907	5,688,841		5,879,085
BGS274UV7	Various	.CA		03/14/2024	8.190	10,289,308		9,323,957
BGS277MN3	Various	.CA		02/22/2024	8.608	14,495,451		9,358,555
BGS277N02	Various	.CA		03/07/2024	8.666	16,303,787		9,831,297
BGS27NDZ1	Various	.CA		03/21/2024	7.194	8,341,208		8,184,407
BGS27RM25	Various	.MA		03/21/2024	8.793	16,169,923		10,208,425
BGS27T025	Various	.FL		03/21/2024	8.371	8,552,973		8,364,920
BGS28LBN3	Various	.CA		03/28/2024	7.290	2,907,850		2,878,942
BGS29H2G6	Various	.CA		04/11/2024	7.825	7,161,854		6,463,782
BGS29JX94	Various	.FL		04/11/2024	8.223	18,675,559		18,739,676
BGS29VH79	Various	.CA		04/11/2024	8.901	17,920,285		14,942,176
BGS2AB1G8	Various	.CO		04/18/2024	6.686	6,168,864		5,975,724
BGS2AX8X6	Various	.FL		04/25/2024	7.717	10,148,088		7,932,765
BGS2AZPX2	Various	.FL		04/25/2024	9.072	20,343,180		15,019,082
BGS2AZRT9	Various	.CA		04/25/2024	7.606	2,616,502		2,640,643
BGS2B5J06	Various	.TX		04/26/2024	8.147	2,165,138		2,030,774
BGS2BKNT5	Various	.CA		05/02/2024	6.953	8,322,017		8,100,721
BGS2C6SN8	Various	.NJ		05/09/2024	8.597	10,793,221		10,567,983
BGS2C6K27	Various	.CA		05/09/2024	7.181	4,291,918		4,226,578
BGS2D2F96	Various	.FL		05/16/2024	8.164	13,081,593		12,148,615
BGS2D2FR6	Various	.NJ		05/16/2024	6.903	7,262,619		6,787,112
BGS2DPTD5	Various	.CA		05/23/2024	9.625	864,475		864,287
BGS2DPFS3	Various	.CA		05/23/2024	6.787	6,915,995		4,515,305
BGS2DSSB0	Various	.FL		05/23/2024	8.269	11,141,351		10,558,831
BGS2EBG86	Various	.FL		05/28/2024	7.482	8,162,319		8,119,879
BGS2EYCC1	Various	.CA		06/06/2024	7.668	6,327,513		5,040,907
BGS2F2V21	Various	.WA		06/13/2024	7.975	1,930,116		1,932,212
BGS2F2WD6	Various	.NJ		06/13/2024	7.496	11,374,088		11,307,890
BGS2F5SJ1	Various	.CA		06/26/2024	7.748	8,548,751		8,571,194
BGS2F5TD3	Various	.FL		06/26/2024	9.281	4,776,106		4,537,303
BGS2F5Z53	Various	.CA		06/21/2024	8.566	20,516,419		17,612,447
BGS2F5Z07	Various	.FL		06/13/2024	8.779	14,274,099		7,587,670
BGS2HJLR8	Various	.CA		07/03/2024	7.493	8,119,143		7,450,356
BGS2HJUX5	Various	.CA		07/25/2024	7.830	15,301,376		14,789,995
BGS2HJW13	Various	.NY		07/25/2024	8.399	17,736,138		17,488,005
BGS2HJVG8	Various	.CA		07/11/2024	7.634	10,086,462		10,098,183
BGS2HJYJ2	Various	.FL		07/11/2024	8.167	2,219,596		1,430,469

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE B - PART 2

Showing All Mortgage Loans ACQUIRED AND ADDITIONS MADE During the Current Year

1	Location		4	5	6	7	8	9
	2	3						
Loan Number	City	State	Loan Type	Date Acquired	Rate of Interest	Actual Cost at Time of Acquisition	Additional Investment Made After Acquisition	Value of Land and Buildings
BGS2HJZM4	Various	FL		07/25/2024	7.854	5,536,729		5,317,245
BGS2HK072	Various	CA		07/18/2024	7.790	11,737,495		11,732,679
BGS2HRE07	Various	OR		07/25/2024	8.920	2,202,714		2,224,748
BGS2LDKU0	Various	NY		08/15/2024	7.881	6,643,516		6,531,821
BGS2LDM04	Various	CA		08/01/2024	7.909	5,410,706		5,403,643
BGS2LDM06	Various	CT		08/27/2024	7.563	7,340,127		7,317,577
BGS2LDMH7	Various	CA		08/08/2024	7.636	20,434,662		20,385,735
BGS2LDMN4	Various	CA		08/22/2024	7.678	5,442,488		4,920,266
BGS2LDNK9	Various	TX		08/15/2024	7.985	2,959,460		2,470,831
BGS2LDT56	Various	WA		08/22/2024	9.165	5,400,666		5,132,390
BGS2LDXL6	Various	CA		08/22/2024	8.053	51,828,958		47,977,749
BGS2LE147	Various	CA		08/06/2024	3.102	25,531,358		22,991,583
BGS2NY5I5	Various	CA		09/05/2024	7.679	6,722,128		6,736,665
BGS2NVZN2	Various	CA		09/12/2024	7.936	10,452,233		10,479,449
BGS2NZ031	Various	CA		09/19/2024	7.520	5,781,933		5,755,964
BGS2NZ0N7	Various	CA		09/19/2024	7.853	6,622,300		6,566,588
BGS2NZ189	Various	CA		09/26/2024	7.450	3,555,224		3,539,218
BGS2NZ3V6	Various	CA		09/20/2024	8.040	61,862,301		61,967,287
BGS2P4KI2	Various	CA		09/11/2024	8.405	57,753,331		52,460,581
BGS2R04B2	Various	CA		10/17/2024	7.060	7,740,231		7,549,330
BGS2R05C9	Various	NY		10/11/2024	8.116	49,698,397		48,675,873
BGS2R05T2	Various	IL		10/10/2024	7.389	4,594,125		4,533,270
BGS2R05J9	Various	GA		10/31/2024	6.788	7,020,241		6,829,339
BGS2R05Z8	Various	CA		10/17/2024	8.813	2,371,367		1,746,755
BGS2R06I4	Various	CA		10/03/2024	7.136	6,200,717		6,097,402
BGS2R07V5	Various	CA		10/24/2024	7.231	6,155,452		6,074,328
BGS2T5RY4	Various	FL		10/24/2024	7.890	6,284,688		6,272,490
BGS2V2R44	Various	CA		11/07/2024	6.830	2,155,896		2,085,549
BGS2VH2L0	Various	NJ		11/14/2024	8.004	40,992,150		41,056,963
BGS2VH2U0	Various	FL		11/26/2024	8.030	47,721,556		48,101,041
BGS2VH3R6	Various	PA		11/21/2024	8.406	308,900		313,187
BGS2VUC63	Various	NY		12/10/2024	11.590	5,271,561		5,018,734
BGS2W78B4	Various	TX		11/21/2024	8.770	3,942,077		3,942,077
BGS2WQIE2	Various	CA		11/26/2024	7.570	11,882,408		11,801,343
BGS2YQNI3	Various	FL		12/19/2024	7.610	40,591,325		40,395,147
BGS2YCRG2	Various	CA		12/19/2024	7.170	6,782,163		6,677,568
BGS2YMU76	Various	GA		12/19/2024	7.354	5,511,804		5,418,791
BGS2YMZH9	Various	TX		12/18/2024	4.590	45,696,442		45,696,442
BGS2YI408	Various	CA		12/19/2024	7.449	26,268,039		26,020,137
BGS2YI4N8	Various	CA		12/19/2024	7.610	24,829,266		24,740,702
BGS2ZDAY8	Various	CA		12/27/2024	7.700	2,147,405		2,147,405
0399999. Mortgages in good standing - Residential mortgages-all other						1,733,958,605	81,733,300	1,753,803,353
N216311	Salt Lake City	UT		07/19/2022	12.150		41,463,430	87,743,502
N226021	Arlington	VA		05/05/2022	4.490		14,494,102	108,131,878
N226161	Flower Mound	TX		12/02/2022	9.980		3,396,569	15,665,903
N236011	Philadelphia	PA		06/23/2023	9.550		5,561,968	13,632,247
N236031	New York	NY		07/19/2023	9.330		76,857	16,672,211
N236071	The Woodlands	TX		08/15/2023	7.390		3,726,522	2,197,213
N236081	Bedford	MA		07/27/2023	9.800		5,446,527	85,131,049
N236101	Lancaster	TX		09/20/2023	9.230		7,248,632	26,571,427
N236121	Buena Park	CA		10/04/2023	7.680		109,355	31,754,350
N236131	Beverly Hills	CA		10/30/2023	9.980		1,300,000	34,951,375
N236151	Evanston	IL		11/21/2023	8.050		(244,800)	43,067,251
N236161	Minnetonka	MN		11/29/2023	8.050		(214,200)	35,848,747
N236281	Sandy	UT		03/25/2024	7.630		12,362,577	19,682,839

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE B - PART 2

Showing All Mortgage Loans ACQUIRED AND ADDITIONS MADE During the Current Year

1 Loan Number	Location		4 Loan Type	5 Date Acquired	6 Rate of Interest	7 Actual Cost at Time of Acquisition	8 Additional Investment Made After Acquisition	9 Value of Land and Buildings
	2 City	3 State						
N237011	Los Angeles	CA .....	.....	03/29/2023	6.310 .....	.....	(15,000)	39,250,000
N23A021	Willawong	AUS .....	.....	08/02/2023	9.340 .....	.....	2,315,200	7,185,403
N23A031	Te Kauwhata	NZL .....	.....	12/21/2023	9.090 .....	.....	2,287,507	10,028,378
N244011	Edgerton	KS .....	.....	05/23/2024	7.300	29,999,995 .....	.....	52,733,598
N246021	Menifee	CA .....	.....	07/30/2024	9.550	4,320,540 .....	.....	3,500,000
N246081	Darien	CT .....	.....	06/25/2024	9.980	1,749,608 .....	.....	3,823,529
N246111	Lakeville	MN .....	.....	09/12/2024	8.800	4,971,400 .....	.....	18,181,820
N246231	Green Bay	WI .....	.....	11/26/2024	10.300	.55 .....	.....	127,542
N249021	Alexandria	VA .....	.....	11/26/2024	6.270	7,380,000 .....	.....	13,398,000
N24A011	Melbourne	AUS .....	.....	09/04/2024	9.340	248,288 .....	.....	3,202,483
N24E021	Worksop	GBR .....	.....	08/16/2024	8.710	3,633,431 .....	.....	4,892,444
N24E052	Kitzingen	DEU .....	.....	11/27/2024	4.250	5,273,377 .....	.....	6,328,357
N24E061	Guildford	GBR .....	.....	11/15/2024	6.850	51,545,397 .....	.....	156,718,620
N24E071	Northampton	GBR .....	.....	12/20/2024	7.040	14,805,635 .....	.....	24,746,086
N24E081	Cardiff	GBR .....	.....	12/11/2024	7.190	29,379,956 .....	.....	42,616,224
NAC0021	New York	NY .....	.....	07/07/2022	8.030 .....	.....	12,213,301	11,916,108
NAC0022	New York	NY .....	.....	07/07/2022	12.480 .....	.....	269,881	6,113,840
NAC0031	New York	NY .....	.....	12/21/2022	9.100 .....	.....	19,482,680	198,370,000
NAC0041	New York	NY .....	.....	09/29/2022	9.730 .....	.....	35,316,461	313,571,554
NAC0051	Las Vegas	NV .....	.....	05/03/2023	10.200 .....	.....	(1,600,000)	31,746,032
NAC0071	Boston	MA .....	.....	09/21/2023	8.730 .....	.....	19,637,244	75,793,085
NAC0081	North Las Vegas	NV .....	.....	11/13/2023	9.310 .....	.....	8,786,738	44,750,000
NAC0091	Lithia Springs	GA .....	.....	11/13/2023	9.240 .....	.....	17,676,896	26,600,000
NAC0101	North Fort Myers	FL .....	.....	02/28/2024	9.630	32,500,000 .....	.....	6,400,000
NAC0111	Chicago	IL .....	.....	03/07/2024	9.400	30,500,000 .....	.....	40,200,000
ND24603	Los Angeles	CA .....	.....	07/11/2024	11.300	3,738,046 .....	.....	6,874,120
0599999. Mortgages in good standing - Commercial mortgages-all other						232,408,305	198,735,870	1,670,117,215
N226091	Brooklyn	NY .....	.....	11/16/2022	13.730 .....	.....	28,884,362	293,999,510
N236171	Mountain View	CA .....	.....	12/06/2023	11.000 .....	.....	(356,000)	145,300,000
0699999. Mortgages in good standing - Mezzanine Loans						0	28,528,362	439,299,510
0899999. Total Mortgages in good standing						1,504,323,750	309,004,968	3,891,114,639
N229031	Tampa	FL .....	.....	12/13/2024	5.520	40,000,005 .....	.....	80,666,644
N229032	Tampa	FL .....	.....	12/13/2024	7.040	6,999,999 .....	.....	14,116,693
1399999. Restructured mortgages - Commercial mortgages-all other						47,000,004	0	94,783,337
1699999. Total - Restructured Mortgages						47,000,004	0	94,783,337
2499999. Total - Mortgages with overdue interest over 90 days						0	0	0
3299999. Total - Mortgages in the process of foreclosure						0	0	0
3399999 - Totals						1,551,323,754	309,004,968	3,985,897,976

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE B - PART 3

Showing All Mortgage Loans DISPOSED, Transferred or Repaid During the Current Year

1	Location		4	5	6	7	Change in Book Value/Recorded Investment						14	15	16	17	18
	2	3					8	9	10	11	12	13					
Loan Number	City	State	Loan Type	Date Acquired	Disposal Date	Book Value/Recorded Investment Excluding Accrued Interest Prior Year	Unrealized Valuation Increase/(Decrease)	Current Year's (Amortization)/Accretion	Current Year's Other-Temporary Impairment Recognized	Capitalized Deferred Interest and Other	Total Change in Book Value (8+9-10+11)	Total Foreign Exchange Change in Book Value	Book Value/Recorded Investment Excluding Accrued Interest on Disposal	Consid-eration	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal
146738MNB	Various	MA .....	.....	...05/26/2023	...07/22/2024	 15,759,162 .....	..... .....	..... .....	..... .....	..... .....	.....0 .....	..... .....	..... (5,514,279)	 (5,514,279) .....	..... .....	..... .....	.....0
209999ZA2	Various	AL .....	.....	...09/30/2019	...11/15/2024	 78,552,357 .....	..... .....	..... .....	..... .....	..... .....	.....0 .....	..... .....	..... 78,552,357	 78,552,357 .....	..... .....	..... .....	.....0
209999ZB0	Various	AL .....	.....	...11/15/2019	...11/15/2024	 42,580,338 .....	..... .....	..... .....	..... .....	..... .....	.....0 .....	..... .....	..... 45,240,900	 45,240,900 .....	..... .....	..... .....	.....0
209999ZC8	Various	SC .....	.....	...04/28/2020	...11/15/2024	 39,264,448 .....	..... .....	..... .....	..... .....	..... .....	.....0 .....	..... .....	..... 42,390,261	 42,390,261 .....	..... .....	..... .....	.....0
N184123	Edgerton	KS .....	.....	...07/15/2022	...11/01/2024	 4,849,238 .....	..... .....	..... 5,481 .....	..... .....	..... .....	..... 5,481 .....	..... .....	..... 4,854,719	 4,854,719 .....	..... .....	..... .....	.....0
NAG0491	Lehi	UT .....	.....	...06/01/2021	...02/23/2024	 17,655,461 .....	..... .....	..... .....	..... .....	..... .....	.....0 .....	..... .....	..... 17,655,461	 17,655,461 .....	..... .....	..... .....	.....0
NAG0531	Tucson	AZ .....	.....	...06/01/2021	...05/30/2024	 16,457,127 .....	..... .....	..... .....	..... .....	..... .....	.....0 .....	..... .....	..... 16,457,127	 16,457,127 .....	..... .....	..... .....	.....0
NAG0851	Denver	CO .....	.....	...06/01/2021	...12/05/2024	 71,600,000 .....	..... .....	..... .....	..... .....	..... .....	.....0 .....	..... .....	..... 71,600,000	 71,600,000 .....	..... .....	..... .....	.....0
NAG0881	Colorado Springs	CO .....	.....	...06/01/2021	...12/13/2024	 22,150,846 .....	..... .....	..... .....	..... .....	..... .....	.....0 .....	..... .....	..... 22,150,846	 22,150,846 .....	..... .....	..... .....	.....0
NAG0931	Colorado Springs	CO .....	.....	...06/01/2021	...09/27/2024	 30,045,120 .....	..... .....	..... .....	..... .....	..... .....	.....0 .....	..... .....	..... 30,045,120	 30,045,120 .....	..... .....	..... .....	.....0
NAC0022	New York	NY .....	.....	...07/07/2022	...12/31/2024	 2,593,047 .....	..... .....	..... .....	..... .....	..... .....	.....0 .....	..... .....	..... 2,862,928	 2,862,928 .....	..... .....	..... .....	.....0
Foreign Exchange Coupon Adj .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....0 .....	..... .....	..... .....	..... 72,501	 72,501 .....	..... .....	..... 72,501
0199999. Mortgages closed by repayment						341,507,144	0	5,481	0	0	5,481	0	326,295,440	326,367,941	72,501	0	72,501
Residential .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	.....	608,121,004	607,859,884	.....	(261,120)	(261,120)
Commercial .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	.....	48,781,633	48,781,633	.....	.....	0
0299999. Mortgages with partial repayments						0	0	0	0	0	0	0	656,902,637	656,641,517	0	(261,120)	(261,120)
BC01531674	Various	VA .....	.....	...11/07/2023 .....	.....	.....	.....	.....	.....	.....	0	.....	17,018,141	17,018,141	.....	.....	0
0499999. Mortgages transferred						0	0	0	0	0	0	0	17,018,141	17,018,141	0	0	0
0599999 - Totals						341,507,144	0	5,481	0	0	5,481	0	1,000,216,218	1,000,027,599	72,501	(261,120)	(188,619)

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE BA - PART 1

Showing Other Long-Term Invested Assets OWNED December 31 of Current Year

1	2	3	Location		6	7	8	9	10	11	12	Change in Book/Adjusted Carrying Value					18	19	20
			4	5								13	14	15	16	17			
CUSIP Identi- fication	Name or Description	Code	City	State	Name of Vendor or General Partner	NAIC Designation, NAIC Designation Modifier and SVO Admini- strative Symbol	Date Originally Acquired	Type and Strategy	Actual Cost	Fair Value	Book/ Adjusted Carrying Value Less Encum- brances	Unrealized Valuation Increase/ (Decrease)	Current Year's (Depreci- ation) or (Amorti- zation)/ Accretion	Current Year's Other- Than- Tempo- rary Impair- ment Recog- nized	Capital- ized Deferred Interest and Other	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Invest- ment Income	Commit- ment for Additional Invest- ment	Percent- age of Owner- ship
000000-00-0	2869 TW WTG Co Invest LP .....	.....	Dallas	TX.....	Tailwater Capital .....	.....	12/19/2024	3.....	4,985,535	0	4,985,535	(14,465)	0	0	0	0	0	34,442	0.040
0199999. Oil and Gas Production - Unaffiliated									4,985,535	0	4,985,535	(14,465)	0	0	0	0	0	34,442	XXX
000000-00-0	2725 Sprott Private Resource Lending Fund III LP .....	.....	Toronto	CAN.....	Sprott Resource Lending Corp .....	.....	11/29/2022	3.....	1,836,629	1,802,116	1,836,629	81,613	0	0	0	0	10,335	3,157,327	0.060
000000-00-0	2848 CB UNI Consumer JV LLC .....	.....	New York	NY.....	Centerbridge Partners LP .....	.....	06/30/2024	3.....	9,125,334	9,125,334	9,125,334	0	0	0	0	0	0	0	0.000
1399999. Non-Registered Private Funds - Other Fixed Income Instruments - Unaffiliated									10,961,963	10,927,450	10,961,963	81,613	0	0	0	0	10,335	3,157,327	XXX
000000-00-0	2781 FIRST EAGLE DCF A FUNDING LLC .....	.....	Boston	MA.....	First Eagle DCF Manager LLC .....	.....	07/06/2023	1.....	1,966,478	2,124,404	1,966,478	(51,938)	0	0	0	0	0	1,694,988	2.800
000000-00-0	6116 Sierra Senior Loan Strategy JV I LLC .....	.....	New York	NY.....	Medley Capital LLC .....	.....	07/16/2015	.....	5,191,403	5,191,403	5,191,403	484,171	0	0	0	0	474,194	0	0.900
000000-00-0	6117 Monarch Capital Partners III LP .....	.....	New York	NY.....	Monarch Alternative Capital GP III LLC .....	.....	01/12/2015	.....	1,894,171	2,592,531	1,894,171	(825,294)	0	0	0	0	0	1,474,472	0.289
000000-00-0	6118 Yukon Capital Partners II LP .....	.....	Minneapolis	MN.....	Yukon Partners II LLC .....	.....	07/17/2014	2.....	1,865,412	2,599,508	1,865,412	58,489	0	0	0	0	58,489	536,042	0.101
000000-00-0	6123 NB Private Equity Credit Opportunities Fund LP .....	.....	New York	NY.....	NB Private Equity Credit Opp Assocs LP .....	.....	06/07/2017	.....	2,882,141	3,212,193	2,882,141	356,717	0	0	0	0	2,263,433	659,774	0.109
000000-00-0	6124 Yukon Capital Partners III LP .....	.....	Minneapolis	MN.....	Yukon Partners III LLC .....	.....	07/18/2017	2.....	3,979,922	3,946,224	3,979,922	1,630,235	0	0	0	0	609,821	826,025	0.620
000000-00-0	6125 Monarch Capital Partners IV LP .....	.....	New York	NY.....	Yukon Partners II LLC .....	.....	10/30/2017	.....	3,974,524	4,348,356	3,974,524	445,513	0	0	0	0	0	1,955,966	0.347
000000-00-0	6126 Gryphon Mezzanine Partners LP .....	.....	San Francisco	CA.....	Gryphon Mezzanine Partners GP LP .....	.....	11/30/2017	.....	1,453,128	1,392,031	1,453,128	320,786	0	0	0	0	287,162	403,265	0.619
000000-00-0	6132 Sagard Credit Partners LP .....	.....	Toronto	CAN.....	Sagard Credit Partners Cayman GP Inc .....	.....	10/09/2018	.....	(328,795)	0	(328,795)	370,916	0	0	0	0	0	3,747,145	0.902
000000-00-0	6133 PineBridge Private Credit Feeder LP .....	.....	WESTPORT	CT.....	PineBridge Private Credit Gen Part LP .....	.....	11/28/2018	.....	8,229,558	7,956,729	8,229,558	2,772,496	0	0	0	0	2,625,201	1,823,842	1.292
000000-00-0	6134 Gryphon Mezzanine Partners II Feeder Fund LP .....	.....	San Francisco	CA.....	Gryphon Mezzanine Partners II LP .....	.....	12/20/2019	.....	322,664	403,227	322,664	(234,971)	0	0	0	0	(91,911)	1,156,112	0.507
000000-00-0	6135 NB Direct Access Insurance SPV LLC .....	.....	Wilmington	DE.....	NB Direct Access Associates LP .....	.....	08/21/2020	.....	6,525,208	6,334,711	6,525,208	(132,506)	0	0	0	0	8,645	0	2.357
000000-00-0	6137 Cyprium Parallel Investors V LP .....	.....	Cleveland	OH.....	Cyprium V Management LLC .....	.....	08/15/2019	.....	5,247,786	5,330,811	5,247,786	577,711	0	0	0	0	134,331	678,009	0.256
000000-00-0	6148 TTGA SBIC Pioneer Feeder Fund LP .....	.....	Purchase	NY.....	TTGA SBIC Feeder GP LLC .....	.....	05/25/2021	.....	2,227,468	3,902,723	2,227,468	2,846,485	0	0	0	0	2,273,524	290,615	6.000
1799999. Joint Venture Interests - Fixed Income - NAIC Designation Not Assigned by the SVO - Unaffiliated									45,431,066	49,334,852	45,431,066	8,618,809	0	0	0	0	8,642,888	15,246,255	XXX
000000-00-0	2060 Gryphon Partners IV LP .....	.....	San Francisco	CA.....	Gryphon GenPar IV LP .....	.....	11/25/2015	3.....	0	0	0	0	0	0	0	0	0	478,023	0.000
000000-00-0	2182 River Cities Capital Fund VI LP .....	.....	Cincinnati	OH.....	River Cities Management VI LLC .....	.....	02/15/2018	3.....	7,997,586	6,894,842	7,997,586	1,102,744	0	0	0	0	0	560,000	0.000
000000-00-0	2242 Gryphon Partners V LP .....	.....	San Francisco	CA.....	Gryphon GenPar V LP .....	.....	08/29/2018	3.....	0	0	0	0	0	0	0	0	0	881,642	0.000
000000-00-0	2244 Hidden Harbor Capital Parnters I LP .....	.....	Boca Raton	FL.....	Hidden Harbor Capital Partners GP I LP .....	.....	02/08/2018	3.....	3,000,000	3,000,000	3,000,000	0	0	0	0	0	0	0	0.599
000000-00-0	2250 Goldner Hawn Fund VII LP .....	.....	Minneapolis	MN.....	Goldner Hawn GP LLC .....	.....	04/29/2019	3.....	0	0	0	0	0	0	0	0	0	673,027	0.000
000000-00-0	2416 Gryphon Partners VI LP .....	.....	San Francisco	CA.....	Gryphon GenPar VI LP .....	.....	11/26/2021	3.....	2,616,768	4,552,637	2,380,584	107,358	0	236,184	0	0	417,369	1,565,864	0.085
000000-00-0	2518 MidOcean Partners VI LP .....	.....	New York	NY.....	MidOcean Associates V LP .....	.....	11/09/2021	3.....	916,906	1,311,903	913,189	54,502	0	270,524	0	0	0	2,629,683	0.034
000000-00-0	2556 FSS Software Topco LP .....	.....	McHenry	IL.....	Francisco Partners .....	.....	08/27/2021	2.....	38,282	38,282	38,282	0	0	0	0	0	0	0	0.000
000000-00-0	2557 FSS Content Topco LP .....	.....	McHenry	IL.....	Francisco Partners .....	.....	08/27/2021	2.....	8,707	8,707	8,707	0	0	0	0	0	9,947	0	0.000
000000-00-0	2558 JFL-NG Continuation Fund .....	.....	ARLINGTON	VA.....	J F Lehman & Company .....	.....	10/27/2021	3.....	14,754,049	14,739,258	14,754,049	(27,178)	0	0	0	0	0	2,003,884	0.262
000000-00-0	2569 IVP XII DK Co-Invest LP .....	.....	New York	NY.....	Insight Venture Associates IX LP .....	.....	09/30/2021	2.....	309,574	309,574	309,574	0	0	0	0	0	0	0	0.006
000000-00-0	2581 Energy Impact Fund II LP .....	.....	New York	NY.....	Energy Impact Fund II GP LLC .....	.....	11/12/2021	1.....	4,571,107	4,299,897	4,571,107	0	0	0	0	0	150,938	893,767	0.092
000000-00-0	2584 One Equity Partners VIII LP .....	.....	New York	NY.....	One Equity Partners .....	.....	01/26/2022	3.....	7,228,033	7,099,819	7,228,033	1,516,752	0	0	0	0	623,005	594,559	0.053
000000-00-0	2589 Hidden Harbor Capital Partners II L P .....	.....	Boca Raton	FL.....	Hidden Harbor Capital Partners GP I LP .....	.....	09/07/2022	3.....	4,739,410	4,403,597	4,739,410	1,388,203	0	0	0	0	297,453	2,106,181	0.225
000000-00-0	2591 VSC Polara LLC .....	.....	Los Angeles	CA.....	VSC III Polara Holdings GP .....	.....	12/02/2021	2.....	116,398	119,962	116,398	0	0	0	0	0	0	0	0.000
000000-00-0	2614 NSH Verisma Holdco LP .....	.....	Radnor	PA.....	NewSpring Health Capital .....	.....	12/16/2021	3.....	31,998,512	32,010,686	31,998,512	14,209,113	0	0	0	0	0	1,840,000	1.451
000000-00-0	2619 OSP Hamilton Equity Aggregator LP .....	.....	Wilmington	DE.....	OceanSound Partners LP .....	.....	07/22/2022	2.....	0	0	0	21,205	0	0	0	0	21,205	0	0.004
000000-00-0	2620 JFL-NARDA Partners LLC .....	.....	New York	NY.....	J F Lehman and Company LLC .....	.....	12/28/2021	2.....	36,064	36,064	36,064	0	0	0	0	0	0	0	0.001
000000-00-0	2622 OceanSound Partners Fund LP .....	.....	New York	NY.....	OceanSound Partners .....	.....	12/27/2021	3.....	6,126,068	5,935,453	6,126,068	448,992	0	0	0	0	1,308,528	390,197	0.083
000000-00-0	2624 KLCP Domestic Fund III LP .....	.....	New York	NY.....	Kennedy Lewis GP III LLC .....	.....	12/27/2021	3.....	(100)	3,143,049	(100)	2,712,187	0	0	0	0	2,931,281	1,444,380	0.056
000000-00-0	2633 Weatherby Parent Holdings LLC .....	.....	Boston	MA.....	TA Associates .....	.....	02/07/2022	2.....	10,357	10,357	10,357	0	0	0	0	0	0	0	0.000
000000-00-0	2635 Karakoram Fund I LP .....	.....	Manhattan Beach	CA.....	K5 Capital Advisors LP .....	.....	01/28/2022	3.....	2,719,431	2,577,926	2,719,431	570,421	0	0	0	0	0	1,110,827	0.068
000000-00-0	2644 SDC Digital Infrastructure Opportunity Fund III LP .....	.....	New York	NY.....	SDC DIOF III GP LP .....	.....	04/25/2022	1.....	3,119,718	3,119,718	3,119,718	(63,828)	0	0	0	0	0	1,643,819	0.036
000000-00-0	2656 Trident IX LP .....	.....	Greenwich	CT.....	Trident Capital IX LP .....	.....	06/24/2022	1.....	4,088,981	3,541,226	4,088,981	736,327	0	0	0	0	(2,828)	1,974,407	0.007
000000-00-0	2657 A&M Capital Partners III LP .....	.....	Greenwich	CT.....	A&M Capital GP III LP .....	.....	12/16/2022	3.....	1,491,802	1,476,732	1,491,802	(46,196)	0	0	0	0	12,010	3,700,116	0.024

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE BA - PART 1

Showing Other Long-Term Invested Assets OWNED December 31 of Current Year

1	2	3	Location		6	7	8	9	10	11	12	Change in Book/Adjusted Carrying Value					18	19	20
			4	5								13	14	15	16	17			
CUSIP Identifi- cation	Name or Description	Code	City	State	Name of Vendor or General Partner	NAIC Designation, NAIC Designation Modifier and SVO Admini- strative Symbol	Date Originally Acquired	Type and Strategy	Actual Cost	Fair Value	Book/ Adjusted Carrying Value Less Encum- brances	Unrealized Valuation Increase/ (Decrease)	Current Year's (Depreci- ation) or (Amorti- zation)/ Accretion	Current Year's Other- Than- Impair- ment Recog- nized	Capital- ized Deferred Interest and Other	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Invest- ment Income	Commit- ment for Additional Invest- ment	Percent- age of Owner- ship
000000-00-0	2662 Gallant Capital Partners II LP		Los Angeles	CA	Gallant Capital Partners GP I LP		11/02/2022	3	1,000,351	620,687	1,000,351	(229,236)	0	0	0	0	0	3,673,061	0.178
000000-00-0	2665 AEA Growth Equity Fund LP		San Francisco	CA	AEA Growth		04/29/2022	3	3,924,064	3,654,070	3,924,064	301,413	0	0	0	0	333,005	1,388,619	0.186
000000-00-0	2672 River Cities Capital Fund VII LP		Cincinnati	OH	River Cities Management VI LLC		07/15/2022	3	2,269,745	2,355,192	2,269,745	(47,533)	0	0	0	0	0	2,650,000	0.198
000000-00-0	2686 SER Capital Partners I LP		Houston	TX	Apollo Global Management		07/31/2021	3	4,551,813	4,531,029	4,551,813	349,285	0	0	0	0	(335)	716,585	0.254
000000-00-0	2691 PEP Secure Assets Fund II LP		JERSEY	JEY	Pacific Equity Partners Fund V GP Ltd		12/19/2022	3	61,165	0	61,165	(174,875)	0	0	0	0	0	3,952,215	0.053
000000-00-0	2692 NexPhase Capital Fund V LP		New York	NY	NexPhase Capital Fund IV GP LP		12/16/2022	3	420,306	402,964	420,306	(78,071)	0	0	0	0	0	4,388,275	0.106
000000-00-0	2693 Sunstone Partners III Main LP		San Mateo	CA	Sunstone Partners		04/12/2023	3	1,134,491	814,071	1,134,491	(89,374)	0	0	0	0	0	2,671,065	0.048
000000-00-0	2705 Energy Acquisition Vehicle LP		New York	NY	Stone Ridge Asset Management LLC		09/22/2022	3	3,142,882	6,390,126	3,142,882	(2,517,800)	0	0	0	0	0	0	1.020
000000-00-0	2710 Asper DHUK LP		London	GBR	Asper Investment Management		10/21/2022	3	420,766	465,644	420,766	4,003	0	0	0	(8,906)	0	2,962,294	0.122
000000-00-0	2713 Rockland Power Partners IV LP		The Woodlands	TX	Rockland Power Partners III GP LLC		10/20/2022	3	3,249,393	2,299,753	3,249,393	(47,587)	0	0	0	0	(1,250)	2,515,183	0.068
000000-00-0	2717 Ampersand 2022 LP		Wellesley	MA	AMIP CF Management Company Ltd Partner		11/02/2022	3	1,153,551	552,924	1,153,551	(39,848)	0	0	0	0	0	3,787,500	0.024
000000-00-0	2733 Capital Z Partners (MGA) L.P.		New York	NY	Capital Z Partners		12/14/2022	3	7,576,067	6,920,134	7,576,067	6,553,915	0	0	0	0	2,031,119	0	0.211
000000-00-0	2741 Matador Film Partners LP		LOS ANGELES	CA	Matador Film Management LLC		03/14/2023	1	1,205,496	1,011,102	1,205,496	(220,806)	0	0	0	0	0	0	0.223
000000-00-0	2743 Cressey & Company Fund VII LP		Chicago	IL	Cressey & Company GP VI LP		10/31/2023	3	330,701	330,000	330,701	(89,299)	0	0	0	0	0	2,580,000	0.003
000000-00-0	2748 INDUSTRY VENTURES SECONDARY X LP		San Francisco	CA	INDUSTRY VENTURES MANAGEMENT X LLC		01/02/2024	3	744,811	622,120	744,811	184,580	0	0	0	0	0	1,439,769	0.010
000000-00-0	2754 Agilitas NewNordic 2023 GP LP SCSp NNIT		London	GBR	Agilitas 2020 Prvt Equity GP Sarl		06/20/2023	3	1,935,539	1,529,305	1,935,539	716,610	0	0	0	(125,560)	0	627,426	0.191
000000-00-0	2755 Bertram Capital V LP		Foster City	CA	Bertram Growth Capital IV GP LP		06/09/2023	3	965,006	549,866	965,006	245,870	0	0	0	0	44,787	3,025,537	0.041
000000-00-0	2756 IPCC Fund LP		Wilmington	DE	IPCC GP LLC		05/25/2023	1	1,567,876	1,545,798	1,567,876	82,050	0	0	0	0	82,050	1,397,402	0.095
000000-00-0	2762 IPCC Advisor LP		Wilmington	DE	IPCC GP LLC		05/25/2023	1	94	27,000	94	(26,447)	0	0	0	0	0	0	0.070
000000-00-0	2771 LS Power Fund V Feeder 1 LP		New Castle County	DE	LS Power Fund V GP LLC		12/04/2023	3	174,715	552,458	174,715	(52,702)	0	0	0	0	0	4,772,089	0.072
000000-00-0	2774 Terramont SC Co-Invest LP		New York	NY	Terramont Infrastructure Partners		08/01/2023	3	2,443,392	325,525	2,443,392	11,644	0	0	0	(208,668)	0	1,021,277	0.766
000000-00-0	2776 JFL Equity Investors VI LP		New York	NY	JFL GP Investors IV LLC		09/05/2023	3	926,818	817,640	926,818	122,152	0	0	0	0	103,187	1,550,597	0.012
000000-00-0	2780 Amulet Capital Fund III LP		Greenwich	CT	Amulet Capital Fund II GP LP		08/01/2023	3	995,376	571,252	995,376	5,708	0	0	0	0	14,122	2,559,139	0.018
000000-00-0	2791 Eurazeo Transition Infrastructure Fund SLP		Paris	FRA	Eurazeo Infrastructure Partners		10/03/2023	3	1,988,995	2,101,353	1,988,995	115,103	0	0	0	(135,581)	(6,240)	1,616,928	0.027
000000-00-0	2800 Blue Ocean Income Fund III LP		New York	NY	Blue Ocean GP LLC		11/07/2023	3	2,474,421	2,273,398	2,474,421	(5,784)	0	0	0	0	0	566,181	0.220
000000-00-0	2802 Ara USDCF US Co Invest LP		Houston	TX	Ara Infrastructure		02/16/2024	3	1,609,818	1,522,571	1,609,818	(48,823)	0	0	0	0	(227,807)	3,481,080	0.100
000000-00-0	2804 EIV Capital Fund V LP		Houston	TX	EIV Fund Advisors IV LLC		06/03/2024	3	2,106,512	964,116	2,106,512	(132,617)	0	0	0	0	0	2,788,612	0.010
000000-00-0	2808 KUDU Investment Mnnagement LLC		New York	NY	Massachusetts Mutual Life Ins Co		12/31/2023	3	7,145,021	7,145,021	7,145,021	0	0	0	0	0	1,173,486	0	0.116
000000-00-0	2811 Preservation Capital Partners Fund II LP		London	GBR	Preservation Capital Partners		01/17/2024	3	2,177,423	6,064,443	2,177,423	482,150	0	0	0	(245,676)	(91,632)	1,081,520	0.009
000000-00-0	2813 OSP BELL AGGREGATOR LP		Wilmington	DE	OceanSound Partners II		04/30/2024	2	39,000	39,000	39,000	0	0	0	0	0	0	0	0.000
000000-00-0	2814 IHA GROUP HOLDINGS LLC		Boston	MA	Parent LLC c/o Fort Point Capital LLC		01/12/2024	2	115,700	115,700	115,700	0	0	0	0	0	(5,554)	0	0.002
000000-00-0	2820 MEGAWATT ACQUISITION PARTNERS LLC		Wilmington	DE	MEGAWATT ACQUISITION PARTNERS LLC		03/01/2024	2	49,300	49,300	49,300	0	0	0	0	0	0	0	0.000
000000-00-0	2821 TRP Continuation Fund GenOx LP		Birmingham	MI	TRP Capital Partners		02/22/2024	3	3,161,664	3,127,554	3,161,664	486,534	0	0	0	0	0	324,870	0.039
000000-00-0	2828 KLAR Partners II SCSp		London	GBR	KLAR Partners		05/21/2024	3	233,753	438,328	233,753	(171,282)	0	0	0	(11,698)	(10,035)	2,042,577	0.006
000000-00-0	2834 Apollo Asset-Backed Finance Lending Company, L.P.		Wilmington	DE	Apollo ABF Advisors GP LLC		06/28/2024	3	3,750,000	3,000,000	3,750,000	0	0	0	0	0	0	0	0.000
000000-00-0	6001 A&M Capital Partners LP		GREENWICH	CT	A&M Capital-GP LP		12/06/2013	3	3,155,175	3,183,273	3,155,175	157,674	0	0	0	0	0	0	0.080
000000-00-0	6002 A&M Capital Partners II LP		Greenwich	CT	A&M Capital-GP II LP		05/25/2018	3	11,101,152	10,990,130	11,101,152	18,852	0	0	0	0	233,476	0	0.185
000000-00-0	6005 ArcLight Energy Partners Fund VI LP		Boston	MA	ArcLight PEF GP VI LLC		08/04/2015	3	5,034,739	4,736,397	5,034,739	274,908	0	0	0	0	(115,180)	1,961,335	0.035
000000-00-0	6009 LLR Equity Partners IV LP		Philadelphia	PA	LLR Capital IV LP		03/14/2014	3	2,024,260	1,674,960	2,024,260	511,324	0	0	0	0	1,753,842	560,000	0.244
000000-00-0	6010 NB Secondary Opportunities Fund III LP		New York	NY	NB Secondary Opportunities Assoc III LP		05/23/2013	3	3,996,536	4,065,042	3,996,536	246,317	0	0	0	0	616,991	3,631,404	0.125
000000-00-0	6011 NB Strategic Co-Investment Partners II LP		New York	NY	NB Strat Co-Investment Assoc II GP LLC		10/01/2012	3	1,696,456	1,687,295	1,696,456	75,790	0	0	0	0	29,439	518,324	0.136
000000-00-0	6012 NB Strategic Co-Investment Partners III LP		New York	NY	NB Strat Co-Investment Assoc III GP LLC		01/28/2016	3	10,437,745	10,602,350	10,437,745	339,405	0	0	0	0	0	635,382	0.139
000000-00-0	6013 NB Secondary Opportunities Fund IV LP		New York	NY	NB Secondary Opportunities Assoc IV LP		04/19/2017	3	6,605,467	6,720,612	6,605,467	496,091	0	0	0	0	1,323,640	1,982,731	0.063

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Showing Other Long-Term Invested Assets OWNED December 31 of Current Year

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			4	5								13	14	15	16	17			
CUSIP Identifi- cation	Name or Description	Code	City	State	Name of Vendor or General Partner	NAIC Designation, NAIC Designation Modifier and SVO Admini- strative Symbol	Date Originally Acquired	Type and Strategy	Actual Cost	Fair Value	Book/ Adjusted Carrying Value Less Encum- brances	Unrealized Valuation Increase/ (Decrease)	Current Year's (Depreci- ation) or (Amorti- zation)/ Accretion	Current Year's Other- Than- Tempo- rary Impair- ment Recogn- ized	Capital- ized Deferred Interest and Other	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Invest- ment Income	Commit- ment for Additional Invest- ment	Percent- age of Owner- ship
000000-00-0	6014 OLG Investment Partners LP .....	.....	Cincinnati	OH.....	OLG Investment Partners LP Lucas Group .....	.....	09/27/2013	3.....	45,592	45,592	45,592	(29,355)	0	0	0	0	129,684	0	5.312
000000-00-0	6015 Bridge Growth Partners LP .....	.....	New York	NY.....	Bridge Growth Partners LP .....	.....	07/15/2014	3.....	11,127,508	18,222,190	11,127,508	1,651,979	0	0	0	0	7,178,453	109,242	0.855
000000-00-0	6016 Channel 51 LLC .....	.....	MIAMI	FL.....	Channel 51 LLC .....	.....	04/29/2016 .....	.....	935,386	935,386	935,386	2,461,369	0	0	0	0	4,661,508	374,309	0.040
000000-00-0	6017 Financial Edge Fund LP .....	.....	Naples	FL.....	PL Capital LLC .....	.....	11/29/2007 .....	.....	12,930,402	11,447,515	12,930,402	4,110,942	0	0	0	0	0	0	2.815
000000-00-0	6018 StepStone VC Opportunities IV, L.P .....	.....	Owing Mills	MD.....	Greenspring Opportunities Gen Part IV LP .....	.....	04/25/2016 .....	.....	1,213,593	1,534,085	1,213,593	45,746	0	0	0	0	0	0	0.141
000000-00-0	6019 Narya Capital Fund I LP .....	.....	Cincinnati	OH.....	Narya Capital Fund I LP .....	.....	03/20/2020 .....	.....	2,278,814	2,286,632	2,278,814	(42,693)	0	0	0	0	0	557,606	0.271
000000-00-0	6021 Orchard Tosca Investment Partners LP .....	.....	Cincinnati	OH.....	Orchard Investment Management LLC .....	.....	08/19/2011 .....	.....	7,317,277	7,337,638	7,317,277	(126,639)	0	0	0	0	0	0	6.678
000000-00-0	6022 Patriot Financial Partners II LP .....	.....	Radnor	PA.....	Patriot Financial Partners GP II LP .....	.....	04/30/2014	3.....	2,920,764	2,835,656	2,920,764	938,287	0	0	0	0	440,387	362,070	0.902
000000-00-0	6023 Patriot Financial Partners III, L.P. ....	.....	Radnor	PA.....	Patriot Financial Partners GP III LP .....	.....	07/21/2017	3.....	13,084,896	12,943,866	13,084,896	2,186,739	0	0	0	0	1,500,000	429,455	0.362
000000-00-0	6024 Project Senator Holdings LP .....	.....	New York	NY.....	Bridge Growth Partners LP .....	.....	05/11/2016 .....	.....	13,569,662	13,570,567	13,569,662	1,745,323	0	0	0	0	0	0	0.420
000000-00-0	6025 RCCF IFBYPHONE LLC .....	.....	Cincinnati	OH.....	RCCF IfbypHONE LLC .....	.....	09/09/2014 .....	.....	795,009	795,009	795,009	(553,003)	0	0	0	0	0	0	3.006
000000-00-0	6026 River Cities Capital Fund IV LP .....	.....	CINCINNATI	OH.....	River Cities Management IV LLC .....	.....	09/30/2012	3.....	567,540	595,855	567,540	(73,012)	0	0	0	0	349,259	314,160	0.455
000000-00-0	6027 River Cities Capital Fund V LP .....	.....	CINCINNAT	OH.....	River Cities Management V LLC .....	.....	12/31/2012	3.....	1,399,908	1,854,322	1,399,908	445,594	0	0	0	0	182,219	0	0.205
000000-00-0	6030 Snow Phipps II LP .....	.....	New York	NY.....	Snow Phipps GP II LP .....	.....	01/08/2010	3.....	4,016,078	4,112,727	4,016,078	615,930	0	0	0	0	0	81,872	0.225
000000-00-0	6031 Snow Phipps III LP .....	.....	New York	NY.....	Snow Phipps GP III LLC .....	.....	06/08/2016	3.....	7,634,468	7,637,606	7,634,468	622,949	0	0	0	0	167,447	1,123,104	0.150
000000-00-0	6032 Snow Phipps LP .....	.....	New York	NY.....	SPG GP LLC .....	.....	02/06/2007	3.....	4,878,668	4,897,284	4,878,668	1,136,737	0	0	0	0	467,715	113,864	0.223
000000-00-0	6033 Solamere Capital Fund II LP .....	.....	Boston	MA.....	Solamere Capital Fund II GP LP .....	.....	08/19/2013	3.....	7,737,166	9,160,508	7,737,166	1,367,816	0	0	0	0	1,367,816	1,019,892	0.282
000000-00-0	6034 Solamere Capital Fund II-A LP .....	.....	Cincinnati	OH.....	Snow Phipps GP III LLC .....	.....	08/19/2013	3.....	3,782,600	4,336,508	3,782,600	1,006,415	0	0	0	0	1,136,157	511,909	0.271
000000-00-0	6035 Solamere Portfolio Company Investments II LLC Vivint .....	.....	Boston	MA.....	Solamere Capital LLC .....	.....	01/18/2019 .....	.....	4,899	4,907	4,899	(581)	0	0	0	0	(573)	0	0.912
000000-00-0	6036 Solamere Portfolio Company Investments II LLC .....	.....	Boston	MA.....	Solamere Capital LLC .....	.....	04/18/2016	3.....	2,496,940	2,496,940	2,496,940	0	0	0	0	0	0	0	2.000
000000-00-0	6039 Tritium Partners LLC .....	.....	Austin	TX.....	Tritium I GP LLC .....	.....	06/26/2015 .....	.....	6,414,211	6,274,858	6,414,211	90,334	0	0	0	0	29,085	444,910	0.244
000000-00-0	6040 Vida Longevity Fund LP .....	.....	Austin	TX.....	Vida Management I LLC .....	.....	04/01/2015	10.....	9,158,329	9,158,329	9,158,329	259,125	0	0	0	0	428,794	0	0.201
000000-00-0	6047 Gryphon Partners IV LP .....	.....	San Francisco	CA.....	Gryphon GenPar IV LP .....	.....	12/06/2016 .....	.....	2,752,343	2,896,642	2,752,343	500,795	0	0	0	0	451,015	0	0.066
000000-00-0	6048 Gryphon Partners V LP .....	.....	San Francisco	CA.....	Gryphon GenPar V LP .....	.....	08/29/2018 .....	.....	5,757,871	7,536,543	4,692,916	385,010	0	1,064,954	0	0	871,518	0	0.085
000000-00-0	6050 ManchesterStory Ventures Fund LP .....	.....	West Des Moines	IA.....	ManchesterStory GP1 LLC .....	.....	03/23/2017 .....	.....	2,829,670	2,824,878	2,829,670	(266,022)	0	0	0	0	225,313	771,792	0.354
000000-00-0	6052 Bridge Growth Partners LP Accedian Holdings .....	.....	New York	NY.....	Bridge Growth Partners LP .....	.....	05/19/2017 .....	.....	1,825,656	1,826,542	1,825,656	(11,583)	0	0	0	0	22,557	0	0.867
000000-00-0	6053 Energy Impact Fund LP .....	.....	CINCINNATI	OH.....	Energy Impact Partners LLC .....	.....	05/11/2017 .....	.....	10,201,675	10,752,948	10,201,675	(927,469)	0	0	0	0	9,272	1,266,782	0.198
000000-00-0	6054 Greenspring Global Partners VIII LP .....	.....	Owing Mills	MD.....	Greenspring Opportunities VIII LP .....	.....	07/14/2017	1.....	4,797,559	4,799,461	4,797,559	(100,066)	0	0	0	0	336,431	67,280	1.472
000000-00-0	6055 Greenspring Opportunities V LP .....	.....	Owing Mills	MD.....	Greenspring Opportunities Gen Part V LP .....	.....	01/22/2018	1.....	3,860,885	4,041,683	3,860,885	137,365	0	0	0	0	137,365	175,000	0.098
000000-00-0	6056 OVP LP .....	.....	CINCINNATI	OH.....	Orchard Investment Management III LLC .....	.....	07/27/2017 .....	.....	3,252,322	3,252,328	3,252,322	(6,938,538)	0	0	0	0	0	0	7.049
000000-00-0	6057 LLR Equity Partners V LP .....	.....	Philadelphia	PA.....	LLR Capital V LP .....	.....	03/31/2017	3.....	10,836,352	10,384,918	10,836,352	1,832,680	0	0	0	0	1,143,114	1,066,320	0.191
000000-00-0	6058 Cintrifuse Syndicate Fund II, LLC .....	.....	Cincinnati	OH.....	Cintrifuse Fund Management II LLC .....	.....	09/18/2017	1.....	2,727,032	2,686,101	2,727,032	(119,535)	0	0	0	0	0	83,276	1.254
000000-00-0	6059 Cintrifuse Syndicate Fund I LLC .....	.....	Cincinnati	OH.....	Cintrifuse Fund Management LLC .....	.....	04/29/2013	1.....	1,935,526	1,863,309	1,935,526	(8,943)	0	0	0	0	0	239,153	0.630
000000-00-0	6060 Bridge Growth Partners Aggregator LLC ..	.....	New York	NY.....	Bridge Growth Partners LP .....	.....	09/29/2017 .....	.....	587,931	22,807,164	587,931	1,958,970	0	0	0	0	9,478,834	0	0.830
000000-00-0	6062 Foresite Capital Fund IV LP .....	.....	LARKSPUR	CA.....	Foresite Capital Management IV .....	.....	04/16/2018 .....	.....	6,120,109	6,519,180	6,120,109	(1,582,960)	0	0	0	0	150,000	0	0.083
000000-00-0	6063 Rivercrest Capital Partners LP .....	.....	Fort Worth	TX.....	Rivercrest Capital GP LLC .....	.....	04/02/2018 .....	.....	7,302,237	7,679,332	7,302,237	(991,864)	0	0	0	0	651,443	3,378	0.593
000000-00-0	6064 Corsair Assist Investors LP .....	.....	New York	NY.....	Rivercrest Capital GP LLC .....	.....	05/25/2018 .....	.....	7,603,848	7,523,451	7,603,848	(49,294)	0	0	0	0	0	0	1.474
000000-00-0	6065 Corsair Boomer Investors LP .....	.....	New York	NY.....	Corsair Boomer Management LP .....	.....	06/25/2018 .....	.....	10,124,711	9,430,745	10,124,711	2,660,652	0	0	0	0	0	0	1.003
000000-00-0	6066 Corsair V Financial Services Capital Partners LP .....	.....	New York	NY.....	Rivercrest Capital GP LLC .....	.....	06/25/2018 .....	.....	15,901,200	15,128,038	15,901,200	1,311,430	0	0	0	0	164,827	2,450,482	0.169
000000-00-0	6067 NB Dyal IV US Investors LP .....	.....	New York	NY.....	NB Dyal Associates IV LP .....	.....	06/11/2018	3.....	6,420,721	6,411,984	6,420,721	1,486,270	0	0	0	0	1,486,270	4,921,929	0.035
000000-00-0	6068 Trilantic Capital Partners VI LP .....	.....	New York	NY.....	Trilantic Capital Partners Assoc VI LP .....	.....	07/25/2018 .....	.....	8,469,310	8,467,473	8,469,310	(82,864)	0	0	0	0	1,214,105	1,138,470	0.064
000000-00-0	6071 Cowboy Parent LLC .....	.....	New York	NY.....	Snow Phipps III LP .....	.....	10/29/2018 .....	.....	9,741,476	10,049,825	9,741,476	854,734	0	0	0	0	0	0	0.322
000000-00-0	6072 Solamere Capital Fund III LP .....	.....	Boston	MA.....	Solamere Capital Fund III GP LP .....	.....	11/20/2018 .....	.....	12,489,549	11,920,269	12,489,549	1,181,749	0	0	0	0	0	2,021,191	0.237

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE BA - PART 1

Showing Other Long-Term Invested Assets OWNED December 31 of Current Year

1	2	3	Location		6	7	8	9	10	11	12	Change in Book/Adjusted Carrying Value					18	19	20
			4	5								13	14	15	16	17			
CUSIP Identification	Name or Description	Code	City	State	Name of Vendor or General Partner	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Date Originally Acquired	Type and Strategy	Actual Cost	Fair Value	Book/ Adjusted Carrying Value Less Encumbrances	Unrealized Valuation Increase/ (Decrease)	Current Year's (Depreciation) or (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Capitalized Deferred Interest and Other	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Investment Income	Commitment for Additional Investment	Percentage of Ownership
000000-00-0	6073 Roark Capital Partners Fund V LP .....	.....	Atlanta	GA.....	Roark Capital GenPar V LP .....	.....	11/01/2018 .....	.....	4,963,672	4,886,875	4,963,672	115,155	0	0	0	0	100,405	520,206	0.020
000000-00-0	6074 OTAIP LP .....	.....	CINCINNATI	OH.....	Orchard Investment Management III LLC .....	.....	02/01/2019 .....	.....	5,573,730	5,576,729	5,573,730	158,285	0	0	0	0	0	0	5.409
000000-00-0	6075 Greenspring Global Partners IX-B LP .....	.....	Owing Mills	MD.....	Greenspring General Partner IX LP .....	.....	02/08/2019 .....	.....	3,168,245	3,107,178	3,168,245	(46,546)	0	0	0	0	0	222,822	0.036
000000-00-0	6076 Blackstone Tactical Opportunities Fund III LP .....	.....	New York	NY.....	Blackstone Tac Opportunities Assoc 3 LLC .....	.....	02/08/2019 .....	.....	7,098,615	7,024,240	7,098,615	515,904	0	0	0	0	425,276	0	0.039
000000-00-0	6077 Bridge Growth Partners LP Accedian Holdings II .....	.....	New York	NY.....	Bridge Growth Partners LP .....	.....	03/08/2019	3.....	1,826,105	1,827,136	1,826,105	(13,489)	0	0	0	0	21,108	0	1.053
000000-00-0	6078 TriArtisan PFC Partners LLC .....	.....	New York	NY.....	Get Me Mears Group Holdings LLC .....	.....	02/27/2019 .....	.....	12,178,873	12,067,244	12,178,873	2,411,292	0	0	0	0	0	0	1.314
000000-00-0	6079 Goldner Hawn Fund VII LP .....	.....	Minneapolis	MN.....	Goldner Hawn GP LLC .....	.....	04/29/2019 .....	.....	3,566,509	3,378,870	3,566,509	693,933	0	0	0	0	1,639,156	0	0.420
000000-00-0	6081 OBIP LP .....	.....	Cincinnati	OH.....	Orchard Investment Management III LLC .....	.....	06/27/2019 .....	.....	9,318,292	9,320,727	9,318,292	134,910	0	0	0	0	0	0	5.496
000000-00-0	6082 Nutraceutical Investco LP .....	.....	MADISON	CT.....	M&S GP LLC .....	.....	10/18/2019 .....	.....	399,446	384,991	399,446	(501,094)	0	0	0	0	0	0	0.278
000000-00-0	6083 Tritium Partners II LLC .....	.....	Austin	TX.....	Tritium II GP LLC .....	.....	11/13/2019	3.....	9,792,934	9,512,671	9,792,934	575,793	0	0	0	0	14,766	362,167	0.287
000000-00-0	6085 Corsair Blade Investors LP .....	.....	New York	NY.....	Corsair Blade Management LP .....	.....	12/16/2019 .....	.....	11,734,507	11,721,071	11,721,071	1,242,542	0	0	0	0	0	0	1.869
000000-00-0	6086 Gallant Capital Partners I LP .....	.....	Los Angeles	CA.....	CincyTech LLC .....	.....	05/29/2020 .....	.....	6,189,058	6,200,505	6,189,058	454,607	0	0	0	0	1,061,697	596,096	0.409
000000-00-0	6088 Cross Creek Capital III LP .....	.....	Salt Lake City	UT.....	Cross Creek Capital III GP LP .....	.....	03/09/2021 .....	.....	1,197,750	839,036	1,197,750	7,156	0	0	0	0	0	1,267,535	0.221
000000-00-0	6089 Bridge Growth Partners II LP .....	.....	New York	NY.....	Bridge Growth Partners LP .....	.....	10/01/2021 .....	.....	5,633,997	10,746,432	5,633,997	2,982,962	0	0	0	0	3,102,280	499,660	0.763
000000-00-0	6091 CCA Life Settlements Fund II LP .....	.....	Dublin	IRL.....	CCA Life Settlements Fund II ICAV .....	.....	12/16/2019 .....	.....	3,653,865	3,807,073	3,653,865	(549,284)	0	0	0	0	(151,369)	0	2.025
000000-00-0	6092 Corsair Indigo Investors LP .....	.....	New York	NY.....	Corsair Indigo Management LP .....	.....	12/07/2020 .....	.....	6,900,587	6,785,326	6,900,587	162,308	0	0	0	0	0	580,826	0.839
000000-00-0	6093 Foresite Capital Fund V LP .....	.....	LARKSPUR	CA.....	Foresite Capital Management V LLC .....	.....	06/08/2020 .....	.....	4,125,652	4,344,106	4,125,652	(121,289)	0	0	0	0	22,465	140,000	0.064
000000-00-0	6094 Foresite Capital Opportunity Fund V LP .....	.....	LARKSPUR	CA.....	Foresite Capital Opportunity Mgmt V LLC .....	.....	06/29/2020 .....	.....	1,012,538	1,033,376	1,012,538	(1,311)	0	0	0	0	0	100,000	0.065
000000-00-0	6095 Greenspring Opportunities VI LP .....	.....	Owing Mills	MD.....	Greenspring Opportunities VI LP .....	.....	01/21/2020 .....	.....	2,366,986	2,493,300	2,366,986	(176,586)	0	0	0	0	0	125,000	0.052
000000-00-0	6096 LLR Equity Partners VI LP .....	.....	Philadelphia	PA.....	LLR Capital VI LP .....	.....	05/13/2021 .....	.....	2,168,143	2,350,067	2,168,143	349,695	0	0	0	0	428,908	0	0.059
000000-00-0	6098 Dyal V US Investors LP .....	.....	New York	NY.....	NB Dyal Associates V LP .....	.....	10/01/2021 .....	.....	3,398,350	2,627,415	3,398,350	439,242	0	0	0	0	265,279	4,891,530	0.020
000000-00-0	6099 NB Strategic Capital LP .....	.....	New York	NY.....	NB Strategic Capital Associates LP .....	.....	03/05/2020 .....	.....	9,903,355	9,976,238	9,903,355	796,384	0	0	0	0	984,634	2,353,599	0.166
000000-00-0	6100 NB Strategic Co-Investment Partners IV LP .....	.....	New York	NY.....	NB Alternatives Advisors LLC .....	.....	01/29/2020 .....	.....	9,451,259	9,054,093	9,451,259	1,046,458	0	0	0	0	152,653	724,781	0.064
000000-00-0	6101 Revelstoke EPIC Fund I LP .....	.....	Denver	CA.....	RCP Single Asset Fund I GP LLC .....	.....	10/01/2021 .....	.....	3,815,494	3,816,715	3,815,494	(1,461,057)	0	0	0	0	0	143,505	0.049
000000-00-0	6102 Riverwood Capital Partners III LP .....	.....	Menlo Park	CA.....	Riverwood Capital III LP .....	.....	03/27/2020 .....	.....	6,235,168	6,425,430	6,235,168	483,945	0	0	0	0	300,734	421,914	0.075
000000-00-0	6103 Cranemere Group Limited .....	.....	Palo Alto	CA.....	The Cranemere Group Limited .....	.....	05/21/2014 .....	.....	60,028,650	60,028,650	60,028,650	(17,806,351)	0	0	0	0	0	0	0.442
000000-00-0	6104 Vivo Capital Fund IX LP .....	.....	Palo Alto	CA.....	Vivo Capital IX LLC .....	.....	09/09/2019 .....	.....	6,557,135	6,775,610	6,557,135	(490,220)	0	0	0	0	0	197,808	0.049
000000-00-0	6138 A&M Capital Europe SCSp .....	.....	Greenwich	CT.....	A&M Capital Europe-GP LP .....	.....	06/30/2019 .....	.....	8,853,631	8,785,572	8,853,631	699,929	0	0	0	0	0	1,594,226	0.172
000000-00-0	6139 GreyLion Capital LP .....	.....	New York	NY.....	GreyLion Capital GP LP .....	.....	08/20/2014 .....	.....	7,142,367	7,141,860	7,142,367	(3,078,347)	0	0	0	0	0	1,655,131	0.220
000000-00-0	6140 GreyLion Capital II LP .....	.....	New York	NY.....	GreyLion Capital II GP LP .....	.....	02/28/2018 .....	.....	5,758,434	7,174,439	5,758,434	1,959,296	0	0	0	0	1,373,965	1,201,125	0.119
000000-00-0	6141 Vida Insurance Credit Opportunity Fund II LP .....	.....	Austin	TX.....	Vida Management I LLC .....	.....	10/01/2021 .....	.....	14,562,930	14,245,692	14,562,930	976,337	0	0	0	0	0	0	0.435
000000-00-0	6142 TriArtisan Orlando Partners LLC .....	.....	New York	NY.....	TriArtisan Orlando MM LLC .....	.....	03/12/2018 .....	.....	756,691	960,887	756,691	(119,898)	0	0	0	0	0	0	1.951
000000-00-0	6143 Private Equity Solutions SCSP .....	.....	Luxembourg	LUX.....	DWS Investment SA .....	.....	12/16/2019 .....	.....	5,565,043	5,675,118	5,565,043	83,031	0	0	0	0	0	1,091,154	0.191
000000-00-0	6144 Blackstone Diversified Alternatives Issuer LLC .....	.....	New York	NY.....	Blackstone Diversified Alt Issuer LLC .....	.....	05/21/2019 .....	.....	9,134,048	9,205,680	9,134,048	(230,897)	0	0	0	0	0	0	0.269
000000-00-0	6149 Greylion Capital Fund III LP .....	.....	New York	NY.....	Greylion Capital Fund III GP .....	.....	12/14/2021	3.....	1,539,244	1,510,622	1,539,244	72,728	0	0	0	0	0	1,375,303	0.127
000000-00-0	2826A WHCO INVESTMENTS DE PARENT Sidecar .....	.....	Wilmington	DE.....	WHCO ADVISORS GP LTD .....	.....	04/16/2024	3.....	4,169,691	3,831,075	4,169,691	795,145	0	0	0	0	0	15,375,454	0.000
000000-00-0	2192 A&M Capital Opportunities Fund LP .....	.....	Greenwich	CT.....	A&M Capital Opportunities-GP LP .....	.....	09/08/2017	3.....	3,965,696	4,376,783	3,965,696	(2,529,149)	0	(2,118,062)	0	0	0	0	0.000
000000-00-0	2859 CB Laker Buyer LP .....	.....	New York	NY.....	Centerbridge Partners LP .....	.....	07/01/2024	2.....	9,741,025	9,741,025	9,741,025	0	0	0	0	0	0	0	0.000
000000-00-0	2861 Kudu Investment Management LLC .....	.....	New York	NY.....	Centerbridge Partners LP .....	.....	07/01/2024	1.....	9,417,457	9,417,457	9,417,457	0	0	0	0	0	0	0	0.000
000000-00-0	2783 Long Ridge Equity Partners IV LP .....	.....	New York	NY.....	Long Ridge Equity Partners .....	.....	11/10/2023	3.....	358	0	358	0	0	0	0	0	0	2,400,000	0.000
000000-00-0	2882 ENDIYA PARTNERS FUND MAURITIUS III .....	.....	Port Louis	MUS.....	ENDIYA PARTNERS FUND MAURITIUS III .....	.....	12/31/2024	3.....	217,014	0	217,014	0	0	0	0	0	0	1,606,702	0.000
1999999. Joint Venture Interests - Common Stock - Unaffiliated									737,902,007	775,611,550	736,597,152	39,651,929	0	(546,401)	0	(736,088)	57,021,991	152,603,341	XXX

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Showing Other Long-Term Invested Assets OWNED December 31 of Current Year

1	2	3	Location		6	7	8	9	10	11	12	Change in Book/Adjusted Carrying Value					18	19	20
			4	5								13	14	15	16	17			
CUSIP Identification	Name or Description	Code	City	State	Name of Vendor or General Partner	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Date Originally Acquired	Type and Strategy	Actual Cost	Fair Value	Book/ Adjusted Carrying Value Less Encumbrances	Unrealized Valuation Increase/ (Decrease)	Current Year's (Depreciation) or (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Capitalized Deferred Interest and Other	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Investment Income	Commitment for Additional Investment	Percentage of Ownership
000000-00-0	2757 MassMutual Ventures US IV GP .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	05/11/2023	3.....	12,384	12,516	12,384	(599)	0	0	0	0	0	0	0.040
000000-00-0	2759 MMV Climate Technology Fund GP .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	05/15/2023	3.....	1,845	44,056	1,845	(66,341)	0	0	0	0	0	0	0.080
000000-00-0	2900 Vine Street LLC .....	.....	Wilmington	DE.....	Massachusetts Mutual Life Ins Co .....	.....	12/09/2024	3.....	1,205,633,786	0	1,205,633,786	(29,262,458)	0	0	0	0	0	0	1.000
2099999. Joint Venture Interests - Common Stock - Affiliated									1,205,648,015	56,573	1,205,648,015	(29,329,398)	0	0	0	0	0	0	XXX
000000-00-0	2737 Appian Natural Resources Fund III LP .....	.....	Jersey	DE.....	Appian Natural Resources Fund GP II Limi .....	.....	01/13/2023	3.....	1,117,452	60,638	1,117,452	(240,653)	0	0	0	0	0	3,570,297	0.043
000000-00-0	2773 Arrow Prince Co-Investment SCSp .....	.....	Grand Duchy of Luxembourg	LUX.....	Bow Advisers II S a r l .....	.....	07/25/2023	3.....	7,186,274	6,781,288	7,186,274	1,891,866	0	0	0	(412,917)	0	0	0.833
000000-00-0	2792 Hayfin Maritime Yield Fund LP .....	.....	George Town	CYM.....	HAYFIN MARITIME YIELD FUND GP LIMITED .....	.....	10/25/2023	3.....	1,606,497	982,653	1,606,497	831,992	0	0	0	0	866,840	3,956,395	0.043
000000-00-0	2844 CB Addison Holdings LLC .....	.....	New York	NY.....	Centerbridge Partners LP .....	.....	06/30/2024	3.....	10,562,049	10,562,049	10,562,049	0	0	0	0	0	0	0	0.000
000000-00-0	2849 CP Argo Marina Holdings .....	.....	New York	NY.....	Centerbridge Partners LP .....	.....	06/30/2024	3.....	1,481,000	870,900	1,481,000	0	0	0	0	0	0	0	0.000
000000-00-0	6105 L-A Laramar Urban Neighborhood Fund LP ..	.....	Philadelphia	PA.....	L-A Battery Group LLC .....	.....	10/15/2015 .....	.....	5,868,740	6,376,876	5,868,740	(3,168,764)	0	0	0	0	0	313,988	0.416
000000-00-0	6106 Lubert-Adler Real Estate Fund VII LP .....	.....	Philadelphia	PA.....	Lubert-Adler Group VII LP .....	.....	10/15/2013 .....	.....	16,213,214	18,234,093	16,213,214	(4,312,993)	0	0	0	0	0	1,250,000	1.307
000000-00-0	6107 Lubert-Adler Real Estate Fund VII-B LP ..	.....	Philadelphia	PA.....	Lubert-Adler Group VII-B LLC .....	.....	04/07/2017 .....	.....	2,989,789	3,731,481	2,989,789	131,870	0	0	0	0	0	1,666,667	0.376
000000-00-0	6108 NB Real Estate Secondary Opportunities Fund LP .....	.....	New York	NY.....	NB Real Estate Secondary Opp Assoc LP ..	.....	12/05/2018 .....	.....	8,136,573	8,127,361	8,136,573	(205,968)	0	0	0	0	1,454,326	2,933,800	0.219
000000-00-0	6110 Lubert-Adler Workforce Housing Fund LP ..	.....	Philadelphia	PA.....	Lubert-Adler Group WH LP .....	.....	10/01/2021 .....	.....	9,977,175	9,083,690	9,977,175	851,047	0	0	0	0	0	160,519	0.501
000000-00-0	6111 Hillpointe Workforce Housing Partnership I LP .....	.....	Winter Park	FL.....	Hillpointe Fund I GP LLC .....	.....	03/17/2020 .....	.....	658,339	653,035	658,339	(275,732)	0	0	0	0	(155,589)	0	0.238
000000-00-0	6112 Hillpointe Workforce Housing Partnership II LP .....	.....	WINTER PARK	FL.....	Hillpointe Fund II GP LLC .....	.....	11/03/2020 .....	.....	4,103,412	4,171,984	4,103,412	(523,679)	0	0	0	0	1,493,421	0	0.355
000000-00-0	2860 CP Fresh Recreational Holdings LP .....	.....	New York	NY.....	Centerbridge Partners LP .....	.....	07/01/2024	3.....	13,480,195	13,480,195	13,480,195	0	0	0	0	0	0	0	0.000
2199999. Joint Venture Interests - Real Estate - Unaffiliated									83,380,709	83,116,242	83,380,709	(5,021,015)	0	0	0	(412,917)	3,658,997	13,851,667	XXX
000000-00-0	2458 Barings Innovations & Growth Real Estate Fund .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	10/06/2021	3.....	28,994,047	11,740,180	12,658,617	(1,191,824)	0	0	0	0	(194,897)	0	1.119
000000-00-0	2525 MM BIG Peninsula Co-Invest Member LLC ..	.....	Hartford	CT.....	Massachusetts Mutual Life Ins Co .....	.....	06/30/2021	3.....	4,963,198	1,971,654	2,089,275	125,620	0	0	0	0	(29,940)	10,873,899	0.857
000000-00-0	2530 MM Horizon Savannah Member LLC .....	.....	CHARLOTTE	NC.....	Massachusetts Mutual Life Ins Co .....	.....	10/25/2021	3.....	10,345,562	11,368,892	6,704,074	(454,574)	0	0	0	0	(10,678)	0	1.140
000000-00-0	2530A MM Horizon Savannah Member II LLC .....	.....	CHARLOTTE	NC.....	Massachusetts Mutual Life Ins Co .....	.....	03/15/2024	3.....	1,376,031	598,363	1,376,031	(20,113)	0	0	0	0	(1)	0	1.140
000000-00-0	2676 Trailside MM Member II LLC .....	.....	Hartford	CT.....	Massachusetts Mutual Life Ins Co .....	.....	07/26/2022	3.....	16,467,473	11,118,452	10,540,014	(20,762)	0	0	0	0	(134)	1,100,404	1.988
000000-00-0	2731 MM Kannapolis Industrial Member LLC .....	.....	Boston	MA.....	Massachusetts Mutual Life Ins Co .....	.....	02/08/2023	3.....	4,843,909	3,914,497	3,370,082	(270,043)	0	0	0	0	(105)	1,070,317	0.982
000000-00-0	2833 Barings Miller Investment Trust .....	.....	Sydney	AUS.....	Barings Australia Asset Management Pty .....	.....	06/28/2024	3.....	8,405,116	4,161,511	4,332,429	191,192	0	0	0	(505,839)	0	0	0.280
000000-00-0	2866 MM Ironhead Commerce Center .....	.....	Springfield	MA.....	MassMutual .....	.....	09/26/2024	3.....	4,204,395	0	4,204,395	0	0	0	0	0	(129)	0	0.396
000000-00-0	2902 MM Sedona Vortex Investor LLC .....	.....	Charlotte	NC.....	MM Sedona Vortex Investor LLC .....	.....	12/01/2024	3.....	6,946,846	0	3,149,256	0	0	0	0	0	(33)	0	0.000
000000-00-0	2895A Barings Construction Lending Fund LP ..	.....	Springfield	MA.....	BRECS VII GP LLC .....	.....	12/12/2024	3.....	505,276	0	505,276	(1,735)	0	0	0	0	(3,334)	0	0.000
2299999. Joint Venture Interests - Real Estate - Affiliated									87,051,853	44,873,549	48,929,450	(1,642,238)	0	0	0	(505,839)	(239,250)	13,044,619	XXX
000000-00-0	6115 SHARB Investors LP .....	.....	New York	NY.....	Waterfall Sentinel GP LLC .....	.....	11/24/2020 .....	.....	1,061,144	1,110,202	1,061,144	(315,639)	0	0	0	0	0	0	3.255
2399999. Joint Venture Interests - Mortgage Loans - Unaffiliated									1,061,144	1,110,202	1,061,144	(315,639)	0	0	0	0	0	0	XXX
000000-00-0	2461 Barings Real Estate Debt Income Fund LP ..	.....	Hartford	CT.....	BREDIF GP LLC .....	.....	03/24/2021	3.....	55,971,457	55,985,472	55,971,457	5,186,153	0	0	0	0	5,516,087	0	3.758
000000-00-0	2735 MALIC Debt Participations LLC .....	.....	Charlotte	NC.....	MassMutual Ascend Life Insurance Company .....	.....	02/06/2023	3.....	0	0	0	(14,880)	0	0	0	0	(540)	0	8.000
000000-00-0	2806 MM Ascend Mtg. Lending LLC .....	.....	Wilmington	MA.....	Massachusetts Mutual Life Ins Co .....	.....	11/13/2023	3.....	43,049,175	42,415,314	43,049,175	3,082,889	0	0	0	0	0	0	11.000
000000-00-0	2461A Barings Real Estate Debt Income Fund LP ..	.....	Hartford	CT.....	BREDIF GP LLC .....	.....	12/09/2021	3.....	163,866,323	163,907,353	163,866,323	15,059,639	0	0	0	0	15,369,554	0	3.758
2499999. Joint Venture Interests - Mortgage Loans - Affiliated									262,886,956	262,308,139	262,886,956	23,313,801	0	0	0	0	20,885,100	0	XXX
000000-00-0	2554 PDQ Topco LP .....	.....	Menlo Park	CA.....	TA Associates .....	.....	08/27/2021	3.....	0	0	0	0	0	0	0	0	0	0	0.000
000000-00-0	2572 Brightsign Holdings Partnership LP .....	.....	Newtown Square	PA.....	Graham Partners V GP LLC .....	.....	10/14/2021	2.....	0	0	0	0	0	0	0	0	5,898	0	0.000
000000-00-0	2579 Renovation Parent LLC .....	.....	West Palm Beach	FL.....	Comvest Partners .....	.....	11/15/2021	2.....	197,368	197,368	197,368	0	0	0	0	0	0	0	0.000
000000-00-0	2590 Woodland Parent LLC .....	.....	Wilmington	DE.....	Woodland Graham Holdings GP LLC .....	.....	12/01/2021	2.....	55,867	55,867	55,867	0	0	0	0	0	0	0	0.001
000000-00-0	2599 ITI Ultimate Holdco LLC .....	.....	WILMINGTON	IL.....	Calera Capital .....	.....	01/14/2022	2.....	257,758	257,758	257,758	0	0	0	0	0	0	0	0.003
000000-00-0	2601 BSP TS Co-Invest I LLC .....	.....	New York	NY.....	Broad Sky Partners LLC .....	.....	12/10/2021	3.....	550,342	0	550,342	0	0	0	0	0	0	0	4.679

SCHEDULE BA - PART 1

1	2	3	Location		6	7 NAIC Designation, NAIC Designation Modifier and SVO Admini- strative Symbol	8	9	10	11	12	Change in Book/Adjusted Carrying Value					18	19	20	
			4	5								13	14	15	16	17				
CUSIP Identi- fication	Name or Description	Code	City	State	Name of Vendor or General Partner		Date Originally Acquired	Type and Strategy	Actual Cost	Fair Value	Book/ Adjusted Carrying Value Less Encum- brances	Unrealized Valuation Increase/ (Decrease)	Current Year's (Depre- ciation) or (Amorti- zation)/ Accretion	Current Year's Other- Than- Tempo- rary Impair- ment Recogn- ized	Capital- ized Deferred Interest and Other	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Invest- ment Income	Commit- ment for Additional Invest- ment	Percent- age of Owner- ship	
000000-00-0	2616 Stork SPV LP		Greenwich	CT.....	Amulet Capital Fund II GP LP		12/20/2021	3.....	33,081	0	33,081	0	0	0	0	0	(13,073)	0	0	0.588
000000-00-0	2636 ZB Parent LLC .....	.....	Austin	TX.....	Peak Rock Capital .....	.....	02/09/2022	2.....	27,069	27,069	27,069	0	0	0	0	0	0	0	0.000	
000000-00-0	2652 Accurus Aerospace Holdings LLC .....	.....	TULSA	OK.....	Liberty Hall Capital Partners .....	.....	04/04/2022	2.....	81,121	81,121	81,121	0	0	0	0	0	0	0	0.001	
000000-00-0	2673 KSL Capital Partners CV I LP		Denver	CO.....	KSL Capital Partners		05/25/2022	1.....	4,019,273	3,565,890	4,019,273	646,704	0	0	0	0	(718)	175,947	0	0.064
000000-00-0	2687 ASC Communications Holdings LLC .....	.....	Charlotte	NC.....	Pamlico Capital .....	.....	07/15/2022	2.....	22,387	22,387	22,387	0	0	0	0	0	696	0	0.078	
000000-00-0	2688 Burgess Point Holdings LP .....	.....	Santa Monica	CA.....	Burgess Point Holdings LP .....	.....	07/25/2022	2.....	204,273	204,273	204,273	0	0	0	0	0	0	0	0.000	
000000-00-0	2698 Exos Collateralized SPAC Holdings Fund LP .....	.....	New York	NY.....	Exos Collateralized SPAC Holdings Fund .....	.....	11/14/2022	1.....	855,966	2,095,393	855,966	721,839	0	0	0	0	1,655,966	0	0.000	
000000-00-0	2707 TSS Co-Invest Holdings LP .....	.....	Beverly Hills	CA.....	Levine Leichtman Capital Partners .....	.....	09/09/2022	3.....	4,996,544	4,769,564	4,996,544	914,828	0	0	0	0	30,892	0	0.146	
000000-00-0	2709 Low Carbon Renewables Fund SCSp		Luxembourg	LUX.....	Low Carbon GP		02/09/2023	1.....	1,327,505	1,494,600	1,327,505	24,506	0	0	0	(90,046)	(65)	401,676	0	0.384
000000-00-0	2712 GB King Holdings LP .....	.....	Rye	NY.....	Greenbriar Equity Group LP .....	.....	10/31/2022	2.....	66,390	66,390	66,390	0	0	0	0	0	0	0	0.000	
000000-00-0	2720 AASC Holdings LP .....	.....	GREENWICH	CT.....	Greenbriar Equity Group LP .....	.....	12/01/2022	2.....	46,048	84,931	46,048	0	0	0	0	0	0	0	0.002	
000000-00-0	2724 Solo Topco L.P. ....	.....	San Francisco	CA.....	OA Topco GP LLC .....	.....	12/01/2022	2.....	51,640	51,640	51,640	0	0	0	0	0	0	0	0.001	
000000-00-0	2729 TSYL TA Aggregator LP .....	.....	Boston	MA.....	Pacific Equity Partners Fund V GP Ltd .....	.....	12/19/2022	2.....	1,142	4,673	1,142	0	0	0	0	0	3,531	0	0.000	
000000-00-0	2739 PPW Aero Topco LP .....	.....	New York	NY.....	PPW Aero Topco GP LLC .....	.....	02/15/2023	2.....	12,500	12,500	12,500	0	0	0	0	0	0	0	0.000	
000000-00-0	2742 OceanSound Partners Co-Invest II LP .....	.....	New York	NY.....	OceanSound Partners .....	.....	03/01/2023	3.....	4,589,107	3,056,770	4,589,107	1,572,786	0	0	0	0	0	0	0.183	
000000-00-0	2744 OEP VIII Project Laser Co-Investment Partners LP .....	.....	New York	NY.....	One Equity Partners .....	.....	03/17/2023	3.....	2,919,958	2,618,406	2,919,958	1,141,131	0	0	0	0	0	0	0.078	
000000-00-0	2746 AEA SBP CF LP		New York	NY.....	AEA Small Business Private Equity		03/24/2023	3.....	1,330,575	1,412,300	1,330,575	131,655	0	0	0	0	0	170,282	0	0.024
000000-00-0	2747 KLCC FEEDER FUND I LP .....	.....	Wilmingtion	DE.....	KLCC GP LLC .....	.....	03/31/2023	1.....	5,273,											

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE BA - PART 1

Showing Other Long-Term Invested Assets OWNED December 31 of Current Year

1	2	3	Location		6	7	8	9	10	11	12	Change in Book/Adjusted Carrying Value					18	19	20
			4	5								13	14	15	16	17			
CUSIP Identi- fication	Name or Description	Code	City	State	Name of Vendor or General Partner	NAIC Designation, NAIC Designation Modifier and SVO Admini- strative Symbol	Date Originally Acquired	Type and Strategy	Actual Cost	Fair Value	Book/ Adjusted Carrying Value Less Encum- brances	Unrealized Valuation Increase/ (Decrease)	Current Year's (Depre- ciation) or (Amorti- zation)/ Accretion	Current Year's Other- Than- Tempo- rary Impair- ment Recog- nized	Capital- ized Deferred Interest and Other	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Invest- ment Income	Commit- ment for Additional Invest- ment	Percent- age of Owner- ship
677412-AF-5 ..	8007 Ohio National Life Ins .....	.....	Springfield	MA.....	Ohio National Life Ins	2.C FE	06/06/2012 ..	.....	5,500,000	5,009,472	5,500,000	0	0	0	0	0	378,125	0	0.000
878091-BD-8 ..	8008 Teachers Insurance & Annuity .....	.....	Springfield	MA.....	Teachers Insurance & Annuity	1.D FE	07/15/2021 ..	.....	5,941,465	3,028,710	5,941,465	0	(48,552)	0	0	0	178,024	0	0.000
638671-AK-3 ..	8012 Nationwide Mutual Ins Co .....	.....	Springfield	MA.....	Nationwide Mutual Ins Co	1.G FE	07/21/2016 ..	.....	39,258,209	35,157,873	39,258,209	0	(497,034)	0	0	0	2,128,008	0	0.000
743917-AH-9 ..	8015 Prudential Ins Co America .....	.....	Springfield	MA.....	Prudential Ins Co America	1.F FE	12/21/2016 ..	.....	2,444,287	2,626,543	2,444,287	0	(95,624)	0	0	0	103,161	0	0.000
401378-AC-8 ..	8017 Guardian Life Insurance Co of America ..	.....	Springfield	MA.....	Guardian Life Ins Co Amer	1.D FE	01/17/2017 ..	.....	17,073,390	11,356,349	17,073,390	0	(5,308)	0	0	0	771,614	0	0.000
023138-AA-8 ..	8020 Ambac Assurance Corp .....	.....	Springfield	MA.....	Ambac Assurance Corp	5.B Z*	02/12/2018 ..	.....	16,590	30,637	16,590	0	0	0	0	0	(1,326)	0	0.000
309588-AC-5 ..	8026 Farmers Exchange Capital-Subordinated ...	.....	Springfield	MA.....	Farmers exchange CAP III	2.A FE	12/01/2016 ..	.....	9,522,261	0	9,522,261	0	(131,066)	0	0	0	503,434	0	0.000
91020E-AA-2 ..	8033 United Educators Insurance .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co	1.G FE	01/31/2023 ..	.....	20,000,000	19,904,877	20,000,000	0	0	0	0	0	1,558,000	0	0.000
39225A-AA-2 ..	8034 Greater New York Mutual Surplus Note Series A .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co	1.F FE	01/30/2024 ..	.....	30,000,000	30,000,000	30,000,000	0	0	0	0	0	2,137,708	0	0.000
628312-AA-8 ..	8502 MUTUAL OF OMAHA SURPLUS NOTE .....	.....	Wilmington	DE.....	Stifel	1.G FE	09/22/2016 ..	.....	11,097,704	8,794,141	11,097,704	0	(108,053)	0	0	0	532,507	0	0.000
592173-AE-8 ..	8505 MET LIFE 7.80 11/01/2025 .....	.....	New York	NY.....	Stifel	1.F FE	08/31/2017 ..	.....	0	331,082	0	0	0	0	0	0	0	0	0.000
694475-AA-2 ..	8507 PACIFIC LIFE INSURANCE 9.25 06/15/2039 ..	.....	Newport Beach	CA.....	Stifel	1.F FE	10/31/2016 ..	.....	11,574,337	10,363,711	11,574,337	0	(151,638)	0	0	0	610,100	0	0.000
707567-AC-7 ..	8509 PENN MUTUAL LIFE 7.625 06/15/2040 .....	.....	Horsham	PA.....	Stifel	1.F FE	10/18/2016 ..	.....	16,335,616	12,941,982	16,335,616	0	(137,180)	0	0	0	855,595	0	0.000
638671-AE-7 ..	8510 NATIONWIDE MUTL 144A 7.875 04/01/2033 ..	.....	Columbus	OH.....	Stifel	1.G FE	07/20/2016 ..	.....	19,843,438	16,850,183	19,843,438	0	(350,768)	0	0	0	928,920	0	0.000
628312-AB-6 ..	8511 MUTUAL OF OMAHA 6.95 10/15/2040 .....	.....	Omaha	NE.....	Stifel	1.G FE	09/27/2017 ..	.....	2,537,839	1,557,036	2,537,839	0	(22,888)	0	0	0	116,112	0	0.000
309588-AE-1 ..	8514 Farmers Surplus Note 7.20 .....	.....	Cincinnati	OH.....	Jeffries & Company	2.A FE	04/11/2017 ..	.....	7,457,908	5,917,275	7,457,908	0	(29,469)	0	0	0	405,411	0	0.000
30958P-AA-1 ..	8515 Farmers Surplus Note 6.151 .....	.....	Cincinnati	OH.....	Stifel	2.A FE	04/11/2017 ..	.....	16,054,559	13,846,638	16,054,559	0	(92,344)	0	0	0	830,307	0	0.000
309601-AE-2 ..	8516 Farmers Ins Exch 4.747 11/01/2057 .....	.....	Cincinnati	OH.....	Stifel	2.A FE	10/10/2017 ..	.....	7,000,507	4,589,043	7,000,507	0	(52)	0	0	0	332,238	0	0.000
80529E-AA-1 ..	8517 Savings Bank Life Insurance Company Surplus Note 6.50 .....	.....	Cincinnati	OH.....	Stifel	2.B FE	07/21/2017 ..	.....	5,500,882	968,532	5,500,882	0	(24)	0	0	0	357,476	0	0.000
53079Q-AC-1 ..	8518 Liberty Mutual Insurance Company Surplus Note 7.875 .....	.....	Cincinnati	OH.....	Stifel	2.A FE	08/31/2017 ..	.....	0	860,084	0	0	0	0	0	0	0	0	0.000
2799999. Surplus Debentures, etc - Unaffiliated									241,840,434	202,793,846	241,840,434	0	(1,804,206)	0	0	0	13,387,368	0	XXX
000000-00-0 ..	2690 Invesco Direct Lending Associates II, LLC .....	.....	New York	NY.....	Invesco Direct Lending Associates II LLC .....	.....	08/03/2022 ..	1.....	0	0	0	0	0	0	0	0	0	0	0.198
2999999. Collateral Loans - Unaffiliated									0	0	0	0	0	0	0	0	0	0	XXX
0066RQ-BK-9 ..	7135 AMMC CLO XI Ltd .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	10/17/2012 ..	.....	1,481,307	1,799,752	1,481,307	7,514,731	0	8,473,016	0	0	0	0	0.000
US0017-7C-A ..	7136 Ammc Clo 20 Ltd .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	03/08/2017 ..	.....	0	0	0	11,871,476	0	11,863,507	0	0	0	0	0.000
US0017-4B-A ..	7137 AMMC CLO XIV Ltd .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	06/12/2014 ..	.....	27,174	39,830	27,174	593,705	0	23,520	0	0	0	0	0.000
US0017-5N-A ..	7138 AMMC CLO 15 Ltd .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	05/09/2014 ..	.....	0	0	0	0	0	0	0	0	0	0	0.000
US0017-6N-A ..	7140 AMMC CLO 22 Ltd .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	03/08/2018 ..	.....	6,884,935	6,786,168	6,884,935	3,246,703	52,795	507,913	0	0	52,795	0	0.000
US0017-6R-A ..	7141 AMMC CLO 23 Ltd .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	05/09/2014 ..	.....	0	0	0	0	0	0	0	0	796,095	0	0.000
US0017-9T-A ..	7142 AMMC CLO 21 LTD .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	05/09/2014 ..	.....	0	0	0	0	0	0	0	0	131,258	0	0.000
US0017-43-A ..	7143 AMMC CLO 18 Ltd .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	05/09/2014 ..	.....	0	0	0	0	0	0	0	0	0	0	0.000
US0017-6E-A ..	7144 AMMC CLO XII Ltd .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	05/09/2014 ..	.....	0	0	0	0	0	0	0	0	29,530	0	0.000
US0017-6Q-A ..	7145 Ammc Clo 19 Ltd .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	10/07/2016 ..	.....	0	0	0	1,049,918	0	1,049,918	0	0	0	0	0.000
US2682-9D-A ..	7146 Man GLG US CLO .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	08/03/2018 ..	.....	38,364	658,424	38,364	2,799,634	0	6,331,785	0	0	0	0	0.000
US5595-3P-A ..	7147 Magnetite XVI Ltd .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	02/02/2018 ..	.....	86,210	87,325	86,210	3,015	0	24,466	0	0	0	0	0.000
US6738-9Y-A ..	7194 Oaktree CLO 2015-1 Ltd .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	05/24/2022 ..	.....	0	0	0	127,850	168	218,480	0	0	168	0	0.000
US3631-9H-A ..	7161 Galaxy XXIII CLO Ltd .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	06/22/2022 ..	.....	3,226,554	3,226,554	0	1,122,248	0	0	0	0	0	0	0.000
4665SH-AK-9 ..	7164 JCP Direct Lending CLO 2022 LLC .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	06/01/2022 ..	.....	1,606,848	6,200,716	3,226,554	1,886,877	0	12,697,453	0	0	(7,919)	0	0.000
53950T-10-5 ..	7165 LOAN ASSET ISSUER LLC SER 2021 M-2 .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	11/04/2021 ..	.....	0	0	1,606,848	0	0	0	0	0	0	0	0.000
53950X-10-6 ..	7166 Loan Asset Issuer LLC Series 2022 NG-1 ..	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	02/28/2022 ..	.....	54,329	2,397,489	0	258,745	0	591,759	0	0	0	0	0.000
US0017-6K-A ..	7167 AMMC CLO 16 Ltd .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	04/10/2015 ..	.....	0	100,641	54,329	1,634,332	(1,378,717)	1,114,016	0	0	(1,340,533)	0	0.000
00834H-10-4 ..	7171 Affirm Asset Securitization Trust 2022- X1 .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	02/04/2022 ..	.....	50,063	50,063	0	0	0	0	0	0	0	0	0.000
53949H-10-3 ..	7174 Loan Asset Issuer LLC Series 2021 NG-1 ..	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	08/30/2021 ..	.....	291,912	685,791	50,063	(14,844)	(421,094)	3,236,538	0	0	(421,094)	0	0.000
US9291-7T-A ..	7177 Voya CLO 2018-2 Ltd .....	.....	Springfield	MA.....	Massachusetts Mutual Life Ins Co .....	.....	12/06/2022 ..	.....	145,243	1,489,504	291,912	0	22,079	794,121	0	0	22,079	0	0.000

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE BA - PART 1

Showing Other Long-Term Invested Assets OWNED December 31 of Current Year

1	2	3	Location		6	7	8	9	10	11	12	Change in Book/Adjusted Carrying Value					18	19	20
			4	5								13	14	15	16	17			
CUSIP Identi- fication	Name or Description	Code	City	State	Name of Vendor or General Partner	NAIC Designation, NAIC Designation Modifier and SVO Admini- strative Symbol	Date Originally Acquired	Type and Strategy	Actual Cost	Fair Value	Book/ Adjusted Carrying Value Less Encum- brances	Unrealized Valuation Increase/ (Decrease)	Current Year's (Depre- ciation) or (Amorti- zation)/ Accretion	Current Year's Other- Than- Tempo- rary Impair- ment Recog- nized	Capital- ized Deferred Interest and Other	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Invest- ment Income	Commit- ment for Additional Invest- ment	Percent- age of Owner- ship
US4493-1B-A ..	7182 10G US CLO 2015-1 Ltd .....	.....	Springfield	 MA.....	Massachusetts Mutual Life Ins Co .....	.....	...06/24/2022 ...	.....	..... 216,356	1,490,582	 145,243	0	293,714	 1,186,891	 0	 0	293,714	 0	0.000
US5018-8R-A ..	7183 LCM XVIII LP .....	.....	Springfield	 MA.....	Massachusetts Mutual Life Ins Co .....	.....	...12/08/2022 .....	.....	..... 349,233	 441,583	 216,356	 (12,533)	29,105	256,111	 0	 0	29,105	 0	0.000
US6759-23-A ..	7184 Octagon Investment Partners 34 Ltd .....	.....	Springfield	 MA.....	Massachusetts Mutual Life Ins Co .....	.....	...06/27/2022 .....	.....	..... 0	 0	 349,233	0	 0	 0	 0	 0	215,595	 0	0.000
87251F-AF-6 ..	7202 TCW DIRECT LENDING STRUCTURED SOLUTIONS 2022 LLC .....	.....	White Plains	 NY.....	Massachusetts Mutual Life Ins Co .....	.....	...06/01/2023 .....	.....	.....2,093,800	 2,000,000	2,093,800	 (83,092)	176,892	 0	 0	 0	176,892	 0	0.000
863931-10-1 ..	7203 Structured Carbon Level Mitigation Trust III 2023-1 .....	.....	Springfield	 MA.....	Massachusetts Mutual Life Ins Co .....	.....	...09/29/2023 .....	.....	..... 494,323	 525,732	 494,323	 588,334	 (100,342)	 0	 0	 0	 (100,342)	 0	0.000
92259U-AG-3 ..	7206 Velocity Commercial Capital Loan Trust 2022-2 .....	.....	Springfield	 MA.....	Massachusetts Mutual Life Ins Co .....	.....	...04/05/2022 .....	.....	.....3,693,804	 3,608,508	3,693,804	 (14,254)	92,903	 0	 0	 0	378,604	 0	0.000
00BD36-70-4 ..	7207 Thunderbolt II Aircraft Lease Ltd .....	.....	Springfield	 MA.....	Massachusetts Mutual Life Ins Co .....	.....	...07/20/2018 .....	.....	..... 156,618	 208,639	 156,618	 0	 (214,475)	 0	 0	 0	 (214,475)	 0	0.000
US8860-7B-A ..	7208 Thunderbolt III Aircraft Lease Ltd .....	.....	Springfield	 MA.....	Massachusetts Mutual Life Ins Co .....	.....	...10/31/2019 .....	.....	..... 0	 0	 0	 3,108,878	6,954,401	 3,507,679	 0	 0	6,954,401	 0	0.000
03770*-AD-4 ..	7220 Apollo Asset-Backed Finance Lending Company, L.P. BA Residual Tranche .....	.....	Springfield	 MA.....	Massachusetts Mutual Life Ins Co .....	.....	...06/28/2024 .....	.....	.....3,824,074	 0	3,824,074	 0	 0	 0	 0	 0	 0	 0	0.000
43739K-AF-0 ..	7221 HOMEE 2024-1 BARCLAYS LN-CL R SUB NT 144A .....	.....	Springfield	 MA.....	Massachusetts Mutual Life Ins Co .....	.....	...11/26/2024 .....	.....	.....268,894	 0	268,894	 (2,390)	 2,036	 0	 0	 0	 2,036	 0	0.000
4699999. Residual Tranches or Interests with Underlying Assets Having Characteristics of Fixed Income Instruments - Unaffiliated									24,990,041	31,797,304	24,990,041	35,679,330	5,509,464	51,877,174	0	0	6,997,908	0	XXX
US0561-6M-A ..	7111 Barings Clo Ltd 2015-II .....	.....	Springfield	 MA.....	Massachusetts Mutual Life Ins Co .....	.....	...07/23/2015 ...	 3.....	 62,052	 103,828	 62,052	 793,231	 0	652,721	 0	 0	70,928	 0	0.000
US0676-3C-A ..	7155 Barings Clo Ltd 2023-I .....	.....	Springfield	 MA.....	Massachusetts Mutual Life Ins Co .....	.....	...12/02/2021 ...	 3.....	21,214,247	15,844,612	21,214,247	1,761,630	2,231,054	 0	 0	 0	2,231,054	 0	0.000
4799999. Residual Tranches or Interests with Underlying Assets Having Characteristics of Fixed Income Instruments - Affiliated									21,276,299	15,948,440	21,276,299	2,554,862	2,231,054	652,721	0	0	2,301,982	0	XXX
6099999. Total - Unaffiliated									1,268,212,057	1,257,551,611	1,266,907,202	92,196,502	3,705,258	51,330,774	0	(1,668,997)	97,032,290	193,074,494	XXX
6199999. Total - Affiliated									1,576,863,123	323,186,700	1,538,740,720	(5,102,973)	2,231,054	652,721	0	(505,839)	22,947,832	13,044,619	XXX
6299999 - Totals									2,845,075,180	1,580,738,312	2,805,647,922	87,093,528	5,936,312	51,983,495	0	(2,174,836)	119,980,123	206,119,113	XXX

1. Line Book/Adjusted Carrying Value by NAIC Designation Category Footnote:
Number
1A 1A ..\$ 0 1B ..\$ 0 1C ..\$ 14,681,442 1D ..\$ 23,014,855 1E ..\$ 0 1F ..\$ 60,354,240 1G ..\$ 92,737,190
1B 2A ..\$ 40,035,235 2B ..\$ 5,500,882 2C ..\$ 5,500,000
1C 3A ..\$ 0 3B ..\$ 0 3C ..\$ 0
1D 4A ..\$ 0 4B ..\$ 0 4C ..\$ 0
1E 5A ..\$ 0 5B ..\$ 16,590 5C ..\$ 0
1F 6\$ 0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE BA - PART 2

Showing Other Long-Term Invested Assets ACQUIRED AND ADDITIONS MADE December 31 of Current Year

1 CUSIP Identification	2 Name or Description	Location		5 Name of Vendor or General Partner	6 Date Originally Acquired	7 Type and Strategy	8 Actual Cost at Time of Acquisition	9 Additional Investment Made After Acquisition	10 Amount of Encumbrances	11 Percentage of Ownership
		3 City	4 State							
000000-00-0	2869 TW WTG Co Invest LP	Dallas	TX	Tailwater Capital	12/19/2024	3	5,000,000	0	0	0.040
0199999. Oil and Gas Production - Unaffiliated										
000000-00-0	2725 Sprott Private Resource Lending Fund III LP	Toronto	CAN.	Sprott Resource Lending Corp	11/29/2022	3	0	787,483	0	0.060
000000-00-0	2848 GB UNI Consumer JV LLC	New York	NY	Centerbridge Partners LP	06/30/2024	3	0	9,125,334	0	0.000
1399999. Non-Registered Private Funds - Other Fixed Income Instruments - Unaffiliated										
000000-00-0	2781 FIRST EAGLE DCF A FUNDING LLC	Boston	MA	First Eagle DCF Manager LLC	07/06/2023	1	0	1,244,812	0	2.800
000000-00-0	6118 Yukon Capital Partners II LP	Minneapolis	MN	Yukon Partners II LLC	07/17/2014	2	0	37,939	0	0.101
000000-00-0	6123 NB Private Equity Credit Opportunities Fund LP	New York	NY	NB Private Equity Credit Opp Assocs LP	06/07/2017	0	0	396,618	0	0.109
000000-00-0	6124 Yukon Capital Partners III LP	Minneapolis	MN	Yukon Partners III LLC	07/18/2017	2	0	25,665	0	0.620
000000-00-0	6126 Gryphon Mezzanine Partners LP	San Francisco	CA	Gryphon Mezzanine Partners GP LP	11/30/2017	0	0	74,137	0	0.619
000000-00-0	6132 Sagard Credit Partners LP	Toronto	CAN.	Sagard Credit Partners Cayman GP Inc	10/09/2018	0	0	11,854	0	1.127
000000-00-0	6133 PineBridge Private Credit Feeder LP	WESTPORT	CT	PineBridge Private Credit Gen Part LP	11/28/2018	0	0	730,502	0	1.292
000000-00-0	6134 Gryphon Mezzanine Partners II Feeder Fund LP	San Francisco	CA	Gryphon Mezzanine Partners II LP	12/20/2019	0	0	158,563	0	0.507
000000-00-0	6137 Cyprium Parallel Investors V LP	Cleveland	OH	Cyprium V Management LLC	08/15/2019	0	0	131,318	0	0.256
000000-00-0	6148 TTGA SBIC Pioneer Feeder Fund LP	Purchase	NY	TTGA SBIC Feeder GP LLC	05/25/2021	0	0	220,588	0	6.000
1799999. Joint Venture Interests - Fixed Income - NAIC Designation Not Assigned by the SVO - Unaffiliated										
000000-00-0	2416 Gryphon Partners VI LP	San Francisco	CA	Gryphon GenPar VI LP	11/26/2021	3	0	292,224	0	0.085
000000-00-0	2558 JFL-NG Continuation Fund	ARLINGTON	VA	J F Lehman & Company	10/27/2021	3	0	50,773	0	0.262
000000-00-0	2581 Energy Impact Fund II LP	New York	NY	Energy Impact Fund II GP LLC	11/12/2021	1	0	532,787	0	0.092
000000-00-0	2584 One Equity Partners VIII LP	New York	NY	One Equity Partners	01/26/2022	3	0	460,223	0	0.053
000000-00-0	2589 Hidden Harbor Capital Partners II L P	Boca Raton	FL	Hidden Harbor Capital Partners GP I LP	09/07/2022	3	0	633,266	0	0.225
000000-00-0	2614 NSH Verisma Holdco LP	Radnor	PA	NewSpring Health Capital	12/16/2021	3	0	110,000	0	1.451
000000-00-0	2624 KLP Domestic Fund III LP	New York	NY	Kennedy Lewis GP III LLC	12/27/2021	3	0	1,042,054	0	0.056
000000-00-0	2644 SDC Digital Infrastructure Opportunity Fund III LP	New York	NY	SDC DIOF III GP LP	04/25/2022	1	0	496,605	0	0.036
000000-00-0	2656 Trident IX LP	Greenwich	CT	Trident Capital IX LP	06/24/2022	1	0	938,931	0	0.007
000000-00-0	2657 A&M Capital Partners III LP	Greenwich	CT	A&M Capital GP III LP	12/16/2022	3	0	23,707	0	0.024
000000-00-0	2665 AEA Growth Equity Fund LP	San Francisco	CA	AEA Growth	04/29/2022	3	0	615,210	0	0.186
000000-00-0	2672 River Cities Capital Fund VII LP	Cincinnati	OH	River Cities Management VI LLC	07/15/2022	3	0	850,000	0	0.198
000000-00-0	2686 SER Capital Partners I LP	Houston	TX	Apollo Global Management	07/31/2021	3	0	1,698,518	0	0.254
000000-00-0	2691 PEP Secure Assets Fund II LP	JERSEY	JEY	Pacific Equity Partners Fund V GP Ltd	12/19/2022	3	0	236,040	0	0.053
000000-00-0	2693 Sunstone Partners III Main LP	San Mateo	CA	Sunstone Partners	04/12/2023	3	0	814,707	0	0.048
000000-00-0	2710 Asper DHLK LP	London SE1 9SG	GBR	Asper Investment Management	10/21/2022	3	0	147,825	0	0.122
000000-00-0	2713 Rockland Power Partners IV LP	The Woodlands	TX	Rockland Power Partners III GP LLC	10/20/2022	3	0	1,071,942	0	0.068
000000-00-0	2717 Ampersand 2022 LP	Wellesley	MA	AMP CF Management Company Ltd Partner	11/02/2022	3	0	970,000	0	0.024
000000-00-0	2733 Capital Z Partners (MGA) L.P.	New York	NY	Capital Z Partners	12/14/2022	3	0	53,745	0	0.211
000000-00-0	2743 Cressey & Company Fund VII LP	Chicago	IL	Cressey & Company GP VI LP	10/31/2023	3	0	420,000	0	0.003
000000-00-0	2748 INDUSTRY VENTURES SECONDARY X LP	San Francisco	CA	INDUSTRY VENTURES MANAGEMENT X LLC	01/02/2024	3	100,000	460,231	0	0.010
000000-00-0	2756 IPCC Fund LP	Wilmington	DE	IPCC GP LLC	05/25/2023	1	0	1,319,823	0	0.095
000000-00-0	2771 LS Power Fund V Feeder 1 LP	New Castle County	DE	LS Power Fund V GP LLC	12/04/2023	3	0	644,590	0	0.072
000000-00-0	2774 Terramont SC Co-Invest LP	New York	NY	Terramont Infrastructure Partners	08/01/2023	3	0	2,345,417	0	0.766
000000-00-0	2776 JFL Equity Investors VI LP	New York	NY	JFL GP Investors IV LLC	09/05/2023	3	0	937,952	0	0.012
000000-00-0	2780 Amulet Capital Fund III LP	Greenwich	CT	Amulet Capital Fund II GP LP	08/01/2023	3	0	514,405	0	0.018
000000-00-0	2800 Blue Ocean Income Fund III LP	New York	NY	Blue Ocean GP LLC	11/07/2023	3	0	2,365,257	0	0.220
000000-00-0	2814 IHA GROUP HOLDINGS LLC	Boston	MA	Parent LLC c/o Fort Point Capital LLC	01/12/2024	2	115,700	0	0	0.002
000000-00-0	2820 MEGAWATT ACQUISITION PARTNERS LLC	Wilmington	DE	MEGAWATT ACQUISITION PARTNERS LLC	03/01/2024	2	44,400	4,900	0	0.000
000000-00-0	2821 TRP Continuation Fund Gen0x LP	Birmingham	MI	TRP Capital Partners	02/22/2024	3	2,675,130	0	0	0.039
000000-00-0	2518 MidOcean Partners VI LP	New York	NY	MidOcean Associates V LP	11/09/2021	3	0	876,373	0	0.034
000000-00-0	2622 OceanSound Partners Fund LP	New York	NY	OceanSound Partners	12/27/2021	3	0	433,418	0	0.083
000000-00-0	2662 Gallant Capital Partners II LP	Los Angeles	CA	Gallant Capital Partners GP I LP	11/02/2022	3	0	1,326,939	0	0.178
000000-00-0	2692 NexPhase Capital Fund V LP	New York	NY	NexPhase Capital Fund IV GP LP	12/16/2022	3	0	420,008	0	0.106
000000-00-0	2755 Bertram Capital V LP	Foster City	CA	Bertram Growth Capital IV GP LP	06/09/2023	3	0	284,059	0	0.041
000000-00-0	2802 Ara USDCF US Co Invest LP	Houston	TX	Ara Infrastructure	02/16/2024	3	2,290,181	552,407	0	0.100
000000-00-0	2804 EIV Capital Fund V LP	Houston	TX	EIV Fund Advisors IV LLC	06/03/2024	3	896,759	1,342,370	0	0.010
000000-00-0	2811 Preservation Capital Partners Fund II LP	London	GBR	Preservation Capital Partners	01/17/2024	3	5,911,581	(3,878,999)	0	0.009
000000-00-0	2813 OSP BELL AGGREGATOR LP	Wilmington	DE	OceanSound Partners II	04/30/2024	2	39,000	0	0	0.000
000000-00-0	2828 KLAR Partners II SCSp	London	GBR	KLAR Partners	05/21/2024	3	426,768	0	0	0.008
000000-00-0	2834 Apollo Asset-Backed Finance Lending Company, L.P.	Wilmington	DE	Apollo ABF Advisors GP LLC	06/28/2024	3	2,000,000	1,750,000	0	0.000
000000-00-0	6002 A&M Capital Partners II LP	Greenwich	CT	A&M Capital-GP II LP	05/25/2018	3	0	966,462	0	0.185
000000-00-0	6010 NB Secondary Opportunities Fund III LP	New York	NY	NB Secondary Opportunities Assoc III LP	05/23/2013	3	0	159,667	0	0.125
000000-00-0	6011 NB Strategic Co-Investment Partners II LP	New York	NY	NB Strat Co-Investment Assoc II GP LLC	10/01/2012	3	0	5,509	0	0.136
000000-00-0	6012 NB Strategic Co-Investment Partners III LP	New York	NY	NB Strat Co-Investment Assoc III GP LLC	01/28/2016	3	0	96,333	0	0.139

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Showing Other Long-Term Invested Assets ACQUIRED AND ADDITIONS MADE December 31 of Current Year

1	2	Location		5	6	7	8	9	10	11
		3	4							
CUSIP Identification	Name or Description	City	State	Name of Vendor or General Partner	Date Originally Acquired	Type and Strategy	Actual Cost at Time of Acquisition	Additional Investment Made After Acquisition	Amount of Encumbrances	Percentage of Ownership
000000-00-0	6013 NB Secondary Opportunities Fund IV LP	New York	NY	NB Secondary Opportunities Assoc IV LP	04/19/2017	3	0	471,969	0	0.063
000000-00-0	6015 Bridge Growth Partners LP	New York	NY	Bridge Growth Partners LP	07/15/2014	3	0	35,310	0	0.855
000000-00-0	6021 Orchard Tosca Investment Partners LP	Cincinnati	OH	Orchard Investment Management LLC	08/19/2011		0	78,708	0	6.678
000000-00-0	6030 Snow Phipps II LP	New York	NY	Snow Phipps GP II LP	01/08/2010	3	0	26,649	0	0.225
000000-00-0	6031 Snow Phipps III LP	New York	NY	Snow Phipps GP III LLC	06/08/2016	3	0	128,649	0	0.150
000000-00-0	6033 Solamere Capital Fund II LP	Boston	MA	Solamere Capital Fund II GP LP	08/19/2013	3	0	87,417	0	0.282
000000-00-0	6034 Solamere Capital Fund II-A LP	Cincinnati	OH	Snow Phipps GP III LLC	08/19/2013	3	0	73,030	0	0.271
000000-00-0	6039 Tritium Partners LLC	Austin	TX	Tritium I GP LLC	06/26/2015		0	296,306	0	0.244
000000-00-0	6047 Gryphon Partners IV LP	San Francisco	CA	Gryphon GenPar IV LP	12/06/2016		0	57,392	0	0.066
000000-00-0	6048 Gryphon Partners V LP	San Francisco	CA	Gryphon GenPar V LP	08/29/2018		0	66,454	0	0.085
000000-00-0	6049 A&M Capital Opportunities Fund LP	Greenwich	CT	A&M Capital Opportunities-GP LP	10/01/2021		0	2,653,572	0	0.180
000000-00-0	6050 ManchesterStory Venture Fund LP	West Des Moines	IA	ManchesterStory GP1 LLC	03/23/2017		0	66,386	0	0.354
000000-00-0	6053 Energy Impact Fund LP	CINCINNATI	OH	Energy Impact Partners LLC	05/11/2017		0	9,272	0	0.198
000000-00-0	6058 Cintrifuse Syndicate Fund II, LLC	Cincinnati	OH	Cintrifuse Fund Management II LLC	09/18/2017	1	0	216,043	0	1.254
000000-00-0	6064 Corsair Assist Investors LP	New York	NY	Rivercrest Capital GP LLC	05/25/2018		0	26,673	0	1.474
000000-00-0	6065 Corsair Boomer Investors LP	New York	NY	Corsair Boomer Management LP	06/25/2018		0	7,887	0	1.003
000000-00-0	6066 Corsair V Financial Services Capital Partners LP	New York	NY	Rivercrest Capital GP LLC	06/25/2018		0	557,558	0	0.169
000000-00-0	6067 NB Dyal IV US Investors LP	New York	NY	NB Dyal Associates IV LP	06/11/2018	3	0	363,329	0	0.035
000000-00-0	6068 Trilantic Capital Partners VI LP	New York	NY	Trilantic Capital Partners Assoc VI LP	07/25/2018		0	256,182	0	0.064
000000-00-0	6073 Roark Capital Partners Fund V LP	Atlanta	GA	Roark Capital GenPar V LP	11/01/2018		0	440,946	0	0.020
000000-00-0	6075 Greenspring Global Partners IX-B LP	Owing Mills	MD	Greenspring General Partner IX LP	02/08/2019		0	148,548	0	0.036
000000-00-0	6076 Blackstone Tactical Opportunities Fund III LP	New York	NY	Blackstone Tac Opportunities Assoc 3 LLC	02/08/2019		0	300,395	0	0.039
000000-00-0	6078 TriArtisan PFC Partners LLC	New York	NY	Get Me Mears Group Holdings LLC	02/27/2019		0	8,550	0	1.314
000000-00-0	6079 Goldner Hawn Fund VII LP	Minneapolis	MN	Goldner Hawn GP LLC	04/29/2019		0	469,972	0	0.420
000000-00-0	6081 OBIP LP	Cincinnati	OH	Orchard Investment Management III LLC	06/27/2019		0	17,489	0	5.496
000000-00-0	6082 Nutraceutical Investco LP	MADISON	CT	M&S GP LLC	10/18/2019		0	28,638	0	0.278
000000-00-0	6083 Tritium Partners II LLC	Austin	TX	Tritium II GP LLC	11/13/2019	3	0	256,469	0	0.287
000000-00-0	6086 Gallant Capital Partners I LP	Los Angeles	CA	CincyTech LLC	05/29/2020		0	346,484	0	0.409
000000-00-0	6088 Cross Creek Capital III LP	Salt Lake City	UT	Cross Creek Capital III GP LP	03/09/2021		0	344,965	0	0.221
000000-00-0	6089 Bridge Growth Partners II LP	New York	NY	Bridge Growth Partners LP	10/01/2021		0	1,264,272	0	0.763
000000-00-0	6092 Corsair Indigo Investors LP	New York	NY	Corsair Indigo Management LP	12/07/2020		0	14,982	0	0.839
000000-00-0	6094 Foresite Capital Opportunity Fund V LP	LARKSPUR	CA	Foresite Capital Opportunity Mgmt V LLC	06/29/2020		0	30,000	0	0.065
000000-00-0	6095 Greenspring Opportunities VI LP	Owing Mills	MD	Greenspring Opportunities VI LP	01/21/2020		0	50,000	0	0.052
000000-00-0	6096 LLR Equity Partners VI LP	Philadelphia	PA	LLR Capital VI LP	05/13/2021		0	250,000	0	0.059
000000-00-0	6098 Dyal V US Investors LP	New York	NY	NB Dyal Associates V LP	10/01/2021		0	1,352,068	0	0.020
000000-00-0	6099 NB Strategic Capital LP	New York	NY	NB Strategic Capital Associates LP	03/05/2020		0	325,000	0	0.166
000000-00-0	6100 NB Strategic Co-Investment Partners IV LP	New York	NY	NB Alternatives Advisors LLC	01/29/2020		0	689,159	0	0.064
000000-00-0	6101 Revelstoke EPIC Fund I LP	Denver	CA	RCP Single Asset Fund I GP LLC	10/01/2021		0	16,204	0	0.049
000000-00-0	6102 Riverwood Capital Partners III LP	Menlo Park	CA	Riverwood Capital III LP	03/27/2020		0	227,705	0	0.075
000000-00-0	6103 Cranemere Group Limited	Palo Alto	CA	The Cranemere Group Limited	05/21/2014		0	3,514,004	0	0.442
000000-00-0	6104 Vivo Capital Fund IX LP	Palo Alto	CA	Vivo Capital IX LLC	09/09/2019		0	62,086	0	0.049
000000-00-0	6139 GreyLion Capital LP	New York	NY	GreyLion Capital GP LP	08/20/2014		0	67,557	0	0.220
000000-00-0	6140 GreyLion Capital II LP	New York	NY	GreyLion Capital II GP LP	02/28/2018		0	306,184	0	0.119
000000-00-0	6142 TriArtisan Orlando Partners LLC	New York	NY	TriArtisan Orlando MM LLC	03/12/2018		0	16,552	0	1.951
000000-00-0	6143 Private Equity Solutions SCSP	Luxembourg	LUX	DWS Investment SA	12/16/2019		0	241,373	0	0.191
000000-00-0	2826A WHCO INVESTMENTS DE PARENT LP Sidecar	Wilmington	DE	WHCO ADVISORS GP LTD	04/16/2024	3	3,374,546	0	0	0.000
000000-00-0	2192 A&M Capital Opportunities Fund LP	Greenwich	CT	A&M Capital Opportunities-GP LP	09/08/2017	3	0	6,494,845	0	0.000
000000-00-0	2859 OB Laker Buyer LP	New York	NY	Centerbridge Partners LP	07/01/2024	2	9,741,025	0	0	0.000
000000-00-0	2861 Kudu Investment Management LLC	New York	NY	Centerbridge Partners LP	07/01/2024	1	9,417,457	0	0	0.000
000000-00-0	2783 Long Ridge Equity Partners IV LP	New York	NY	Long Ridge Equity Partners	11/10/2023	3	0	358	0	0.000
000000-00-0	2882 ENDIYA PARTNERS FUND MAURITIUS III	Port Louis	MUS	ENDIYA PARTNERS FUND MAURITIUS III	12/31/2024	3	217,014	0	0	0.000
1999999. Joint Venture Interests - Common Stock - Unaffiliated							37,249,561	47,149,268	0	XXX
000000-00-0	2757 MassMutual Ventures US IV GP	Springfield	MA	Massachusetts Mutual Life Ins Co	05/11/2023	3	0	755	0	0.040
000000-00-0	2759 MMV Climate Technology Fund GP	Springfield	MA	Massachusetts Mutual Life Ins Co	05/15/2023	3	0	24,800	0	0.080
000000-00-0	2900 Vine Street LLC	Wilmington	DE	Massachusetts Mutual Life Ins Co	12/09/2024	3	1,234,896,245	0	0	1.000
2099999. Joint Venture Interests - Common Stock - Affiliated							1,234,896,245	25,555	0	XXX
000000-00-0	2737 Applan Natural Resources Fund III LP	Jersey	JEY	Applan Natural Resources Fund GP II Limi	01/13/2023	3	0	1,111,721	0	0.043

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Showing Other Long-Term Invested Assets ACQUIRED AND ADDITIONS MADE December 31 of Current Year

1	2	Location		5	6	7	8	9	10	11
		3	4							
CUSIP Identification	Name or Description	City	State	Name of Vendor or General Partner	Date Originally Acquired	Type and Strategy	Actual Cost at Time of Acquisition	Additional Investment Made After Acquisition	Amount of Encumbrances	Percentage of Ownership
000000-00-0	2773 Arrow Prince Co-Investment SCSp	Grand Duchy of Luxembourg	LUX	Bow Advisers II S a r l	07/25/2023	3	0	642,404	0	0.833
000000-00-0	2792 Hayfin Maritime Yield Fund LP	George Town	CYM	HAYFIN MARITIME YIELD GP LIMITED	10/25/2023	3	0	837,987	0	0.043
000000-00-0	2844 CB Addison Holdings LLC	New York	NY	Centerbridge Partners LP	06/30/2024	3	10,562,049	0	0	0.000
000000-00-0	2849 OP Argo Marina Holdings	New York	NY	Centerbridge Partners LP	06/30/2024	3	870,900	610,100	0	0.000
000000-00-0	6108 NB Real Estate Secondary Opportunities Fund LP	New York	NY	NB Real Estate Secondary Opp Assoc LP	12/05/2018		0	689,179	0	0.219
000000-00-0	6110 Lubert-Adler Workforce Housing Fund LP	Philadelphia	PA	Lubert-Adler Group WH LP	10/01/2021		0	1,916,667	0	0.501
000000-00-0	2860 CP Fresh Recreational Holdings LP	New York	NY	Centerbridge Partners LP	07/01/2024	3	13,480,195	0	0	0.000
2199999. Joint Venture Interests - Real Estate - Unaffiliated							24,913,144	5,808,057	0	XXX
000000-00-0	2458 Barings Innovations & Growth Real Estate Fund	Springfield	MA	Massachusetts Mutual Life Ins Co	10/06/2021	3	0	3,578,583	16,335,430	1.119
000000-00-0	2525 MM BIG Peninsula Co-Invest Member LLC	Hartford	CT	Massachusetts Mutual Life Ins Co	06/30/2021	3	0	285,935	2,873,923	0.857
000000-00-0	2530 MM Horizon Savannah Member LLC	CHARLOTTE	NC	Massachusetts Mutual Life Ins Co	10/25/2021	3	0	6,263,015	3,641,488	1.140
000000-00-0	2530A MM Horizon Savannah Member II LLC	CHARLOTTE	NC	Massachusetts Mutual Life Ins Co	10/25/2021	3	1,580,001	20,088	0	0.019
000000-00-0	2676 Trailside MM Member II LLC	Hartford	CT	Massachusetts Mutual Life Ins Co	07/26/2022	3	0	4,854,215	5,927,459	1.988
000000-00-0	2731 MM Kannapolis Industrial Member LLC	Boston	MA	Massachusetts Mutual Life Ins Co	02/08/2023	3	0	129,508	1,473,826	0.992
000000-00-0	2833 Barings Miller Investment Trust	Sydney	AUS	Barings Australia Asset Management Pty	06/28/2024	3	4,647,075	0	4,072,687	0.280
000000-00-0	2866 MM Ironhead Commerce Center	Springfield	MA	MassMutual	09/26/2024	3	4,204,395	0	0	0.396
000000-00-0	2902 MM Sedona Vortex Investor LLC	Charlotte	NC	MM Sedona Vortex Investor LLC	12/01/2024	3	3,051,950	97,306	3,797,591	0.000
000000-00-0	2895A Barings Construction Lending Fund LP	Springfield	MA	BRECS VII GP LLC	12/12/2024	3	510,346	0	0	0.000
000000-00-0	6115 SHARB Investors LP	New York	NY	Waterfall Sentinel GP LLC	11/24/2020		0	71,142	0	3.255
2299999. Joint Venture Interests - Real Estate - Affiliated							13,993,768	15,299,791	38,122,403	XXX
000000-00-0	2461 Barings Real Estate Debt Income Fund LP	Hartford	CT	BREDIF GP LLC	03/24/2021	3	0	3,794,978	0	3.758
000000-00-0	2735 MALIC Debt Participations LLC	Charlotte	NC	MassMutual Ascend Life Insurance Company	02/06/2023	3	0	14,880	0	8.000
000000-00-0	2461A Barings Real Estate Debt Income Fund LP	Hartford	CT	BREDIF GP LLC	03/24/2021	3	0	47,422,596	0	3.758
000000-00-0	2590 Woodland Parent LLC	Wilmington	DE	Woodland Graham Holdings GP LLC	12/01/2021	2	0	55,867	0	0.001
000000-00-0	2601 BSP TS Co-Invest I LLC	New York	NY	Broad Sky Partners LLC	12/10/2021	3	0	550,342	0	4.679
000000-00-0	2616 Stork SPV LP	Greenwich	CT	Amulet Capital Fund II GP LP	12/20/2021	3	0	33,081	0	0.588
000000-00-0	2673 KSL Capital Partners CV I LP	Denver	CO	KSL Capital Partners	05/25/2022	1	0	1,218,918	0	0.064
000000-00-0	2742 OceanSound Partners Co-Invest II LP Series F	New York	NY	OceanSound Partners	03/01/2023	3	0	1,582,716	0	0.183
000000-00-0	2744 CEP VIII Project Laser Co-Investment Partners LP	New York	NY	One Equity Partners	03/17/2023	3	0	5,239	0	0.078
000000-00-0	2782 Q-Energy V FOR	Madrid	ESP	Amulet Capital Fund II GP LP	08/18/2023	3	0	1,642,649	0	0.006
000000-00-0	2793 Preservation Capital Partners Strategic Opportunities I LP	London	GBR	Preservation Capital Partners	11/06/2023	3	0	430,142	0	0.054
000000-00-0	2798 Eurazeo Transition Infrastructure Co Investment Fund SLP	Paris	FRA	Eurazeo Infrastructure Partners	11/03/2023	3	0	443	0	0.190
000000-00-0	2746 AEA SBP OF LP	New York	NY	AEA Small Business Private Equity	03/24/2023	3	0	11,133	0	0.024
000000-00-0	2823 CCFP PARENT LLC	Austin	TX	CCFP PARENT LLC	04/01/2024	2	9,000	0	0	0.000
000000-00-0	2824 FOREST ULTIMATE HOLDINGS LLC	Chicago	IL	FOREST ULTIMATE HOLDINGS LLC	04/30/2024	2	51,000	0	0	0.000
000000-00-0	2847 CB Notepad Co-Invest LP	New York	NY	Centerbridge Partners LP	06/30/2024	3	11,697,576	0	0	0.000
2499999. Joint Venture Interests - Mortgage Loans - Affiliated							11,757,576	56,762,984	0	XXX
000000-00-0	2601A BSP TS Co-Invest I LLC	New York	NY	Broad Sky Partners LLC	12/10/2021	3	0	82,105	0	4.679
000000-00-0	2616A Stork SPV LP	Greenwich	CT	Amulet Capital Fund II GP LP	12/20/2021	3	0	26,425	0	0.588
000000-00-0	2862 CB Catalyst Co-Invest LP	New York	NY	Centerbridge Partners LP	07/01/2024	3	8,841,460	0	0	0.000
000000-00-0	2874 CB Atlantic II Co-Invest,L.P.	New York	NY	Centerbridge Partners LP	09/24/2024	3	8,051,142	0	0	0.000
000000-00-0	2841 SPATCO HOLDINGS LLC	Charlotte	NC	SPATCO HOLDINGS LLC	12/01/2024	2	68,557	0	0	0.000
000000-00-0	2857 AIMPERA Waste Coinvest LP	San Francisco	CA	AIMPERA Capital Partners LLC	12/12/2024	3	3,170,629	318,036	0	0.000
000000-00-0	2875 Rapid Aggregator LLC	San Francisco	CA	Rapid Aggregator LLC	10/15/2024	2	28,000	0	0	0.000
000000-00-0	2884 Resurgens Technology Partners III LP	Atlanta	GA	Resurgens Technology Partners	12/01/2024	3	10,776	0	0	0.000
000000-00-0	2887 TAPCO BUYER LLC	Austin	TX	TAPCO BUYER LLC	11/15/2024	2	0	19,000	0	0.000
000000-00-0	2890 CB PARIS CO-INVEST LP	New York	NY	Centerbridge Partners LP	11/25/2024	1	0	5,042,207	0	0.000
2593999. Joint Venture Interests - Other - Unaffiliated							20,170,564	5,487,773	0	XXX
800199-49-3	2856 BKF LPC INVESTORS LLC	NEW YORK	NY	BKF LPC INVESTORS LLC	07/01/2024	2	0	34,811	0	0.000
649526-AF-5	8003 New York Life Insurance Co	Springfield	MA	New York Life Insurance Co	03/25/2010		0	309	0	0.000
638671-AK-3	8012 Nationwide Mutual Ins Co	Springfield	MA	Nationwide Mutual Ins Co	08/31/2017		0	5,462	0	0.000
743917-AH-9	8015 Prudential Ins Co America	Springfield	MA	Prudential Ins Co America	08/03/2016		0	584	0	0.000
401378-AC-8	8017 Guardian Life Insurance Co of America	Springfield	MA	Guardian Life Ins Co Amer	05/31/2017		0	15	0	0.000
023138-AA-8	8020 Ambac Assurance Corp	Springfield	MA	Ambac Assurance Corp	12/31/2018		0	0	0	0.000
309588-AC-5	8026 Farmers Exchange Capital-Subordinated	Springfield	MA	Farmers exchange CAP III	07/31/2020		0	302	0	0.000
39225A-AA-2	8034 Greater New York Mutual Surplus Note Series A	Springfield	MA	Massachusetts Mutual Life Ins Co	02/28/2024		30,000,000	0	0	0.000
628312-AA-8	8502 MUTUAL OF OMAHA SURPLUS NOTE	Wilmington	DE	Stifel	12/06/2016		0	231	0	0.000
592173-AE-8	8505 MET LIFE 7.80 11/01/2025	New York	NY	Stifel	08/31/2017		0	429	0	0.000
694475-AA-2	8507 PACIFIC LIFE INSURANCE 9.25 06/15/2039	Newport Beach	CA	Stifel	10/01/2021		0	324	0	0.000
707567-AC-7	8509 PENN MUTUAL LIFE 7.625 06/15/2040	Horsham	PA	Stifel	08/31/2017		0	312	0	0.000

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE BA - PART 2

Showing Other Long-Term Invested Assets ACQUIRED AND ADDITIONS MADE December 31 of Current Year

1	2	Location		5	6	7	8	9	10	11
		3	4							
CUSIP Identification	Name or Description	City	State	Name of Vendor or General Partner	Date Originally Acquired	Type and Strategy	Actual Cost at Time of Acquisition	Additional Investment Made After Acquisition	Amount of Encumbrances	Percentage of Ownership
638671-AE-7	8510 NATIONWIDE MUTL 144A 7.875 04/01/2033	Columbus	OH.....	Stifel	...10/01/2021 ...	.....	.....0	828	0	0.000
628312-AB-6	8511 MUTUAL OF OMAHA 6.95 10/15/2040	Omaha	NE.....	Stifel	...12/01/2018 ...	.....	.....0	54	0	0.000
309588-AE-1	8514 Farmers Surplus Note 7.20	Cincinnati	OH.....	Jeffries & Company	...04/11/2017 ...	.....	.....0	60	0	0.000
30958P-AA-1	8515 Farmers Surplus Note 6.151	Cincinnati	OH.....	Stifel	...04/11/2017 ...	.....	.....0	202	0	0.000
80529E-AA-1	8517 Savings Bank Life Insurance Company Surplus Note 6.50	Cincinnati	OH.....	Stifel	...08/31/2017 ...	.....	.....0	1	0	0.000
53079Q-AC-1	8518 Liberty Mutual Insurance Company Surplus Note 7.875	Cincinnati	OH.....	Stifel	...08/31/2017 ...	.....	.....0	577	0	0.000
2799999. Surplus Debentures, etc - Unaffiliated							30,000,000	44,500	0	XXX
00BGRQ-BK-9	7135 AMMC CLO XI Ltd	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...05/09/2014 ...	.....	.....0	3,652,247	0	0.000
0177CA-C4-7	7136 Ammc Clo 20 Ltd	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...05/09/2014 ...	.....	.....0	4,451,287	0	0.000
01748A-D4-2	7137 AMMC CLO XIV Ltd	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...05/09/2014 ...	.....	.....0	1,804,768	0	0.000
US0017-5N-A	7138 AMMC CLO 15 Ltd	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...05/09/2014 ...	.....	.....0	4,752,349	0	0.000
US0017-6N-A	7140 AMMC CLO 22 Ltd	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...05/09/2014 ...	.....	.....0	8,024,213	0	0.000
US0017-6R-A	7141 AMMC CLO 23 Ltd	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...05/09/2014 ...	.....	.....0	9,736,781	0	0.000
US0017-9T-A	7142 AMMC CLO 21 LTD	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...05/09/2014 ...	.....	.....0	944,341	0	0.000
US0017-43-A	7143 AMMC CLO 18 Ltd	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...05/09/2014 ...	.....	.....0	3,692,215	0	0.000
US0017-6E-A	7144 AMMC CLO XII Ltd	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...05/09/2014 ...	.....	.....0	145,871	0	0.000
53950T-10-5	7165 LOAN ASSET ISSUER LLC SER 2021 M-2	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...03/13/2014 ...	.....	.....0	7,208,083	0	0.000
53950X-10-6	7166 Loan Asset Issuer LLC Series 2022 NG-1	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...03/13/2014 ...	.....	.....0	6,171,781	0	0.000
US0017-6K-A	7167 AMMC CLO 16 Ltd	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...03/13/2014 ...	.....	.....0	2,343,159	0	0.000
US9291-7T-A	7177 Voya CLO 2018-2 Ltd	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...03/31/2023 ...	.....	.....0	157,408	0	0.000
US4493-1B-A	7182 ICG US CLO 2015-1 Ltd	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...03/31/2023 ...	.....	.....0	76,811	0	0.000
US5018-8R-A	7183 LCM XVIII LP	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...03/31/2023 ...	.....	.....0	20,700	0	0.000
US6759-23-A	7184 Octagon Investment Partners 34 Ltd	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...03/31/2023 ...	.....	.....0	97,788	0	0.000
87251F-AF-6	7202 TOW DIRECT LENDING STRUCTURED SOLUTIONS 2022 LLC	White Plains	NY.....	Massachusetts Mutual Life Ins Co	...03/13/2014 ...	.....	.....0	68	0	0.000
863931-10-1	7203 Structured Carbon Level Mitigation Trust III 2023-1	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...11/30/2023 ...	.....	.....0	634,015	0	0.000
92259U-AG-3	7206 Velocity Commercial Capital Loan Trust 2022-2	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...02/28/2024 ...	.....	4,768,814	196,780	0	0.000
00BD36-70-4	7207 Thunderbolt II Aircraft Lease Ltd	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...02/28/2024 ...	.....	371,093	0	0	0.000
US8860-7B-A	7208 Thunderbolt III Aircraft Lease Ltd	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...02/28/2024 ...	.....	3,753,278	21,618	0	0.000
03770*-AD-4	7220 Apollo Asset-Backed Finance Lending Company, L.P. BA Residual Tranche	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...06/28/2024 ...	.....	.....0	3,824,074	0	0.000
43739K-AF-0	7221 HOMEE 2024-1 BARCLAYS LN-CL R SUB NT 144A	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...11/26/2024 ...	.....	.....0	269,249	0	0.000
4699999. Residual Tranches or Interests with Underlying Assets Having Characteristics of Fixed Income Instruments - Unaffiliated							8,893,185	58,225,606	0	XXX
US0561-6M-A	7111 Barings Clo Ltd 2015-II	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...05/09/2014 ...	3	0	369,928	0	0.000
US0676-3C-A	7155 Barings Clo Ltd 2023-I	Springfield	MA.....	Massachusetts Mutual Life Ins Co	...05/09/2014 ...	3	0	5,528,319	0	0.000
4799999. Residual Tranches or Interests with Underlying Assets Having Characteristics of Fixed Income Instruments - Affiliated							0	5,898,247	0	XXX
6099999. Total - Unaffiliated							126,226,454	129,660,018	0	XXX
6199999. Total - Affiliated							1,260,647,588	77,986,578	38,122,403	XXX
6299999 - Totals							1,386,874,043	207,646,596	38,122,403	XXX

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE BA - PART 3

Showing Other Long-Term Invested Assets DISPOSED, Transferred or Repaid During the Current Year

1	2	Location		5	6	7	8	Change in Book/Adjusted Carrying Value						15	16	17	18	19	20
		3	4					9	10	11	12	13	14						
CUSIP Identification	Name or Description	City	State	Name of Purchaser or Nature of Disposal	Date Originally Acquired	Disposal Date	Book/ Adjusted Carrying Value Less Encumbrances, Prior Year	Unrealized Valuation Increase/ (Decrease)	Current Year's (Depreciation) or (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Capital-ized Deferred Interest and Other	Total Change in Book/ Adjusted Carrying Value (9+10-11+12)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value Less Encumbrances on Disposal	Consid-eration	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Invest-ment Income
000000-00-0	2725 Sprott Private Resource Lending Fund III LP	Toronto	CAN.....	Distribution	11/29/2022 ..	09/26/2024 ..	0	0	0	0	0	0	0	0	10,335	0	0	0	0
1399999. Non-Registered Private Funds - Other Fixed Income Instruments - Unaffiliated								0	0	0	0	0	0	0	10,335	0	0	0	0
000000-00-0	2781 FIRST EAGLE DCF A FUNDING LLC	Boston	MA.....	Distribution	07/06/2023 ..	11/20/2024 ..	0	0	0	0	0	0	0	0	345,978	0	0	0	0
000000-00-0	6116 Sierra Senior Loan Strategy JV I LLC ..	New York	NY.....	Distribution	07/16/2015 ..	07/01/2024 ..	0	0	0	0	0	0	0	0	659,400	0	0	0	0
000000-00-0	6117 Monarch Capital Partners III LP	New York	NY.....	Distribution	01/12/2015 ..	12/03/2024 ..	0	0	0	0	0	0	0	0	1,254,911	0	0	0	0
000000-00-0	6118 Yukon Capital Partners II LP	Minneapolis ..	MN.....	Distribution	07/17/2014 ..	10/01/2024 ..	0	0	0	0	0	0	0	0	856,251	0	0	0	0
000000-00-0	6123 NB Private Equity Credit Opportunities Fund LP	New York	NY.....	Distribution	06/07/2017 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	2,500,140	0	0	0	0
000000-00-0	6124 Yukon Capital Partners III LP	Minneapolis ..	MN.....	Distribution	07/18/2017 ..	04/03/2024 ..	0	0	0	0	0	0	0	0	7,130	0	0	0	0
000000-00-0	6125 Monarch Capital Partners IV LP	New York	NY.....	Distribution	10/30/2017 ..	12/03/2024 ..	0	0	0	0	0	0	0	0	2,834,010	0	0	0	0
000000-00-0	6126 Gryphon Mezzanine Partners LP	San Francisco ..	CA.....	Distribution	11/30/2017 ..	10/11/2024 ..	0	0	0	0	0	0	0	0	2,278,257	0	0	0	0
000000-00-0	6131 Great American Capital Partners Fund II LP	Los Angeles	CA.....	Liquidation	01/12/2018 ..	12/31/2024 ..	4,365,796	(1,954,830)	0	2,361,755	0	(4,316,585)	0	(49,211)	49,211	0	0	0	0
000000-00-0	6132 Sagard Credit Partners LP	Toronto	CAN.....	Distribution	10/09/2018 ..	11/28/2024 ..	0	0	0	0	0	0	0	0	1,381,132	0	0	0	0
000000-00-0	6133 PineBridge Private Credit Feeder LP ..	WESTPORT	CT.....	Distribution	11/28/2018 ..	12/17/2024 ..	0	0	0	0	0	0	0	0	1,173,035	0	0	0	0
000000-00-0	6134 Gryphon Mezzanine Partners II Feeder Fund LP	San Francisco ..	CA.....	Distribution	12/20/2019 ..	10/11/2024 ..	0	0	0	0	0	0	0	0	624,554	0	0	0	0
000000-00-0	6135 NB Direct Access Insurance SPV LLC	Wilmington	DE.....	Distribution	08/21/2020 ..	02/23/2024 ..	0	0	0	0	0	0	0	0	8,645	0	0	0	0
000000-00-0	6137 Cyprum Parallel Investors V LP	Cleveland	OH.....	Distribution	08/15/2019 ..	10/31/2024 ..	0	0	0	0	0	0	0	0	134,331	0	0	0	0
000000-00-0	6148 TTGA SBIC Pioneer Feeder Fund LP	Purchase	NY.....	Distribution	05/25/2021 ..	12/01/2024 ..	0	0	0	0	0	0	0	0	2,045,628	0	0	0	0
1799999. Joint Venture Interests - Fixed Income - NAIC Designation Not Assigned by the SVO - Unaffiliated								4,365,796	(1,954,830)	0	2,361,755	0	(4,316,585)	0	(49,211)	16,152,613	0	0	0
000000-00-0	6151 Quibi Holdings LLC (Class A)	Beverly Hills ..	CA.....	Liquidation	08/24/2018 ..	01/01/2022 ..	0	0	0	0	0	0	0	0	0	0	0	0	189,619
000000-00-0	2192 A&M Capital Opportunities Fund LP	Greenwich	CT.....	Distribution	09/08/2017 ..	08/26/2024 ..	0	0	0	0	0	0	0	0	2,118,062	0	0	0	0
000000-00-0	2416 Gryphon Partners VI LP	San Francisco ..	CA.....	Distribution	11/26/2021 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	2,221,147	0	(151,003)	(151,003)	0
000000-00-0	2518 MidOcean Partners VI LP	New York	NY.....	Distribution	11/09/2021 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	924,737	0	(3,717)	(3,717)	0
000000-00-0	2581 Energy Impact Fund II LP	New York	NY.....	Distribution	11/12/2021 ..	12/04/2024 ..	0	0	0	0	0	0	0	0	150,959	0	0	0	0
000000-00-0	2584 One Equity Partners VIII LP	New York	NY.....	Distribution	01/26/2022 ..	11/26/2024 ..	0	0	0	0	0	0	0	0	623,005	0	0	0	0
000000-00-0	2589 Hidden Harbor Capital Partners II L P ..	Boca Raton	FL.....	Distribution	09/07/2022 ..	10/25/2024 ..	0	0	0	0	0	0	0	0	297,453	0	0	0	0
000000-00-0	2591 VSC Polara LLC	Los Angeles	CA.....	Distribution	12/02/2021 ..	10/29/2024 ..	0	0	0	0	0	0	0	0	3,564	0	0	0	0
000000-00-0	2619 OSP Hamilton Equity Aggregator LP	Wilmington	DE.....	Distribution	07/22/2022 ..	07/23/2024 ..	0	0	0	0	0	0	0	0	21,205	0	0	0	0
000000-00-0	2622 OceanSound Partners Fund LP	New York	NY.....	Distribution	12/27/2021 ..	07/29/2024 ..	0	0	0	0	0	0	0	0	1,598,347	0	0	0	0
000000-00-0	2624 KLOP Domestic Fund III LP	New York	NY.....	Distribution	12/27/2021 ..	12/06/2024 ..	0	0	0	0	0	0	0	0	5,655,647	0	0	0	0
000000-00-0	2633 Weatherby Parent Holdings LLC	Boston	MA.....	Distribution	02/07/2022 ..	04/16/2024 ..	0	0	0	0	0	0	0	0	31	0	0	0	0
000000-00-0	2656 Trident IX LP	Greenwich	CT.....	Distribution	06/24/2022 ..	03/21/2024 ..	0	0	0	0	0	0	0	0	11,576	0	0	0	0
000000-00-0	2662 Gallant Capital Partners II LP	Los Angeles	CA.....	Distribution	11/02/2022 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	97,352	0	0	0	0
000000-00-0	2665 AEA Growth Equity Fund LP	San Francisco ..	CA.....	Distribution	04/29/2022 ..	06/28/2024 ..	0	0	0	0	0	0	0	0	411,847	0	0	0	0
000000-00-0	2686 SER Capital Partners I LP	Houston	TX.....	Distribution	07/31/2021 ..	05/06/2024 ..	0	0	0	0	0	0	0	0	335	0	0	0	0
000000-00-0	2705 Energy Acquisition Vehicle LP	New York	NY.....	Distribution	09/22/2022 ..	12/02/2024 ..	0	0	0	0	0	0	0	0	1,484,442	0	0	0	0
000000-00-0	2713 Rockland Power Partners IV LP	The Woodlands ..	TX.....	Distribution	10/20/2022 ..	02/15/2024 ..	0	0	0	0	0	0	0	0	281,850	0	0	0	0
000000-00-0	2733 Capital Z Partners (MGA) L.P.	New York	NY.....	Distribution	12/14/2022 ..	11/01/2024 ..	0	0	0	0	0	0	0	0	2,031,119	0	0	0	0
000000-00-0	2755 Bertram Capital V LP	Foster City	CA.....	Distribution	06/09/2023 ..	05/14/2024 ..	0	0	0	0	0	0	0	0	108,044	0	0	0	0
000000-00-0	2756 IPOC Fund LP	Wilmington	DE.....	Distribution	05/25/2023 ..	12/13/2024 ..	0	0	0	0	0	0	0	0	462,579	0	0	0	0
000000-00-0	2762 IPOC Advisor LP	Wilmington	DE.....	Distribution	05/25/2023 ..	12/20/2024 ..	0	0	0	0	0	0	0	0	459	0	0	0	0
000000-00-0	2771 LS Power Fund V Feeder 1 LP	New Castle County	DE.....	Distribution	12/04/2023 ..	11/12/2024 ..	0	0	0	0	0	0	0	0	417,173	0	0	0	0
000000-00-0	2776 JFL Equity Investors VI LP	New York	NY.....	Distribution	09/05/2023 ..	12/23/2024 ..	0	0	0	0	0	0	0	0	493,632	0	0	0	0
000000-00-0	2780 Amulet Capital Fund III LP	Greenwich	CT.....	Distribution	08/01/2023 ..	11/01/2024 ..	0	0	0	0	0	0	0	0	540,171	0	0	0	0
000000-00-0	2791 Eurazeo Transition Infrastructure Fund SLP	Paris	FRA.....	Distribution	10/03/2023 ..	03/28/2024 ..	0	0	0	0	0	0	0	0	6,240	0	0	0	0
000000-00-0	2802 Ara USDCF US Co Invest LP	Houston	TX.....	Distribution	02/16/2024 ..	10/11/2024 ..	0	0	0	0	0	0	0	0	1,183,948	0	0	0	0
000000-00-0	2811 Preservation Capital Partners Fund II LP	London	GBR.....	Distribution	01/17/2024 ..	12/24/2024 ..	0	0	0	0	0	0	0	0	91,632	0	0	0	0
000000-00-0	2828 KLAR Partners II SCSp	London	GBR.....	Distribution	05/21/2024 ..	11/20/2024 ..	0	0	0	0	0	0	0	0	10,035	0	0	0	0
000000-00-0	6002 A&M Capital Partners II LP	Greenwich	CT.....	Distribution	05/25/2018 ..	07/03/2024 ..	0	0	0	0	0	0	0	0	233,476	0	0	0	0
000000-00-0	6009 LLR Equity Partners IV LP	Philadelphia	PA.....	Distribution	03/14/2014 ..	11/06/2024 ..	0	0	0	0	0	0	0	0	1,753,866	0	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE BA - PART 3

Showing Other Long-Term Invested Assets DISPOSED, Transferred or Repaid During the Current Year

1	2	Location		5	6	7	8	Change in Book/Adjusted Carrying Value						15	16	17	18	19	20
		3	4					9	10	11	12	13	14						
CUSIP Identification	Name or Description	City	State	Name of Purchaser or Nature of Disposal	Date Originally Acquired	Disposal Date	Book/ Adjusted Carrying Value Less Encumbrances, Prior Year	Unrealized Valuation Increase/ (Decrease)	Current Year's (Depreciation) or (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Capitalized Deferred Interest and Other	Total Change in Book/ Adjusted Carrying Value (9+10-11+12)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value Less Encumbrances on Disposal	Consideration	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Investment Income
000000-00-0	6010 NB Secondary Opportunities Fund III LP	New York	NY	Distribution	05/23/2013	12/20/2024	0	0	0	0	0	0	0	0	616,991	0	0	0	0
000000-00-0	6011 NB Strategic Co-Investment Partners II LP	New York	NY	Distribution	10/01/2012	12/12/2024	0	0	0	0	0	0	0	0	29,439	0	0	0	0
000000-00-0	6012 NB Strategic Co-Investment Partners III LP	New York	NY	Distribution	01/28/2016	12/30/2024	0	0	0	0	0	0	0	0	1,438,099	0	0	0	0
000000-00-0	6013 NB Secondary Opportunities Fund IV LP	New York	NY	Distribution	04/19/2017	12/27/2024	0	0	0	0	0	0	0	0	1,323,640	0	0	0	0
000000-00-0	6014 OLG Investment Partners LP	Cincinnati	OH	Distribution	09/27/2013	02/20/2024	0	0	0	0	0	0	0	0	129,684	0	0	0	0
000000-00-0	6015 Bridge Growth Partners LP	New York	NY	Distribution	07/15/2014	12/10/2024	0	0	0	0	0	0	0	0	7,178,453	0	0	0	0
000000-00-0	6016 Channel 51 LLC	MIAMI	FL	Distribution	04/29/2016	08/07/2024	0	0	0	0	0	0	0	0	4,661,508	0	0	0	0
000000-00-0	6018 StepStone VC Opportunities IV, L.P	Owing Mills	MD	Distribution	04/25/2016	12/23/2024	0	0	0	0	0	0	0	0	1,198,750	0	0	0	0
000000-00-0	6022 Patriot Financial Partners II LP	Radnor	PA	Distribution	04/30/2014	10/30/2024	0	0	0	0	0	0	0	0	440,387	0	0	0	0
000000-00-0	6023 Patriot Financial Partners III, L.P.	Radnor	PA	Distribution	07/21/2017	12/05/2024	0	0	0	0	0	0	0	0	1,500,000	0	0	0	0
000000-00-0	6026 River Cities Capital Fund IV LP	Cincinnati	OH	Distribution	09/30/2012	09/30/2024	0	0	0	0	0	0	0	0	349,259	0	0	0	0
000000-00-0	6027 River Cities Capital Fund V LP	CINCINNATI	OH	Distribution	12/31/2012	10/31/2024	0	0	0	0	0	0	0	0	1,130,081	0	0	0	0
000000-00-0	6031 Snow Phipps III LP	New York	NY	Distribution	06/08/2016	10/01/2024	0	0	0	0	0	0	0	0	167,447	0	0	0	0
000000-00-0	6032 Snow Phipps LP	New York	NY	Distribution	02/06/2007	06/03/2024	0	0	0	0	0	0	0	0	467,715	0	0	0	0
000000-00-0	6033 Solamere Capital Fund II LP	Boston	MA	Distribution	08/19/2013	12/31/2024	0	0	0	0	0	0	0	0	2,535,946	0	0	0	0
000000-00-0	6034 Solamere Capital Fund II-A LP	Cincinnati	OH	Distribution	08/19/2013	10/08/2024	0	0	0	0	0	0	0	0	1,136,157	0	0	0	0
000000-00-0	6039 Tritium Partners LLC	Austin	TX	Distribution	06/26/2015	12/30/2024	0	0	0	0	0	0	0	0	29,085	0	0	0	0
000000-00-0	6040 Vida Longevity Fund LP	Austin	TX	Distribution	04/01/2015	05/15/2024	0	0	0	0	0	0	0	0	428,794	0	0	0	0
000000-00-0	6041 L-A Saturn Acquisition LP	Philadelphia	PA	Liquidation	01/16/2015	02/28/2024	0	3,417,330	0	3,417,330	0	0	0	0	0	0	0	0	0
000000-00-0	6047 Gryphon Partners IV LP	San Francisco	CA	Distribution	12/06/2016	12/10/2024	0	0	0	0	0	0	0	0	451,015	0	0	0	0
000000-00-0	6048 Gryphon Partners V LP	San Francisco	CA	Distribution	08/29/2018	12/31/2024	0	0	0	0	0	0	0	0	3,562,309	0	(336,301)	(336,301)	0
000000-00-0	6049 A&M Capital Opportunities Fund LP	Greenwich	CT	Liquidation	10/01/2021	08/26/2024	3,981,727	2,071,578	0	2,118,062	0	(46,484)	0	0	6,588,814	0	0	0	(6,659)
000000-00-0	6050 ManchesterStory Venture Fund LP	West Des Moines	IA	Distribution	03/23/2017	07/24/2024	0	0	0	0	0	0	0	0	225,313	0	0	0	0
000000-00-0	6054 Greenspring Global Partners VIII LP	Owing Mills	MD	Distribution	07/14/2017	09/09/2024	0	0	0	0	0	0	0	0	336,431	0	0	0	0
000000-00-0	6055 Greenspring Opportunities V LP	Owing Mills	MD	Distribution	01/22/2018	10/01/2024	0	0	0	0	0	0	0	0	201,250	0	0	0	0
000000-00-0	6057 LLR Equity Partners V LP	Philadelphia	PA	Distribution	03/31/2017	03/06/2024	0	0	0	0	0	0	0	0	1,143,114	0	0	0	0
000000-00-0	6060 Bridge Growth Partners Aggregator LLC	New York	NY	Distribution	09/29/2017	12/31/2024	0	0	0	0	0	0	0	0	22,496,651	0	0	0	0
000000-00-0	6063 Rivercrest Capital Partners LP	Fort Worth	TX	Distribution	04/02/2018	12/30/2024	0	0	0	0	0	0	0	0	651,443	0	0	0	0
000000-00-0	6066 Corsair V Financial Services Capital Partners LP	New York	NY	Distribution	06/25/2018	01/12/2024	0	0	0	0	0	0	0	0	154,170	0	0	0	0
000000-00-0	6067 NB Dyal IV US Investors LP	New York	NY	Distribution	06/11/2018	11/27/2024	0	0	0	0	0	0	0	0	1,736,459	0	0	0	0
000000-00-0	6068 Trilantic Capital Partners VI LP	New York	NY	Distribution	07/25/2018	04/26/2024	0	0	0	0	0	0	0	0	1,480,729	0	0	0	0
000000-00-0	6073 Roark Capital Partners Fund V LP	Atlanta	GA	Distribution	11/01/2018	12/13/2024	0	0	0	0	0	0	0	0	100,405	0	0	0	0
000000-00-0	6075 Greenspring Global Partners IX-B LP	Owing Mills	MD	Distribution	02/08/2019	12/13/2024	0	0	0	0	0	0	0	0	99,032	0	0	0	0
000000-00-0	6076 Blackstone Tactical Opportunities Fund III LP	New York	NY	Distribution	02/08/2019	12/11/2024	0	0	0	0	0	0	0	0	425,276	0	0	0	0
000000-00-0	6079 Goldner Hawn Fund VII LP	Minneapolis	MN	Distribution	04/29/2019	09/11/2024	0	0	0	0	0	0	0	0	2,510,599	0	0	0	0
000000-00-0	6083 Tritium Partners II LLC	Austin	TX	Distribution	11/13/2019	12/30/2024	0	0	0	0	0	0	0	0	14,766	0	0	0	0
000000-00-0	6086 Gallant Capital Partners I LP	Los Angeles	CA	Distribution	05/29/2020	12/23/2024	0	0	0	0	0	0	0	0	1,219,923	0	0	0	0
000000-00-0	6089 Bridge Growth Partners II LP	New York	NY	Distribution	10/01/2021	12/10/2024	0	0	0	0	0	0	0	0	5,858,329	0	0	0	0
000000-00-0	6091 CCA Life Settlements Fund II LP	Dublin	IRL	Distribution	12/16/2019	07/24/2024	0	0	0	0	0	0	0	0	198,730	0	0	0	0
000000-00-0	6093 Foresite Capital Fund V LP	LARKSPUR	CA	Distribution	06/08/2020	04/29/2024	0	0	0	0	0	0	0	0	22,465	0	0	0	0
000000-00-0	6096 LLR Equity Partners VI LP	Philadelphia	PA	Distribution	05/13/2021	11/04/2024	0	0	0	0	0	0	0	0	428,908	0	0	0	0
000000-00-0	6098 Dyal V US Investors LP	New York	NY	Distribution	10/01/2021	12/02/2024	0	0	0	0	0	0	0	0	312,331	0	0	0	0
000000-00-0	6099 NB Strategic Capital LP	New York	NY	Distribution	03/05/2020	11/08/2024	0	0	0	0	0	0	0	0	984,634	0	0	0	0
000000-00-0	6100 NB Strategic Co-Investment Partners IV LP	New York	NY	Distribution	01/29/2020	09/26/2024	0	0	0	0	0	0	0	0	152,653	0	0	0	0
000000-00-0	6102 Riverwood Capital Partners III LP	Menlo Park	CA	Distribution	03/27/2020	12/19/2024	0	0	0	0	0	0	0	0	300,734	0	0	0	0
000000-00-0	6104 Vivo Capital Fund IX LP	Palo Alto	CA	Distribution	09/09/2019	12/30/2024	0	0	0	0	0	0	0	0	1,014,106	0	0	0	0
000000-00-0	6139 GreyLion Capital LP	New York	NY	Distribution	08/20/2014	01/04/2024	0	0	0	0	0	0	0	0	27,299	0	0	0	0
000000-00-0	6140 GreyLion Capital II LP	New York	NY	Distribution	02/28/2018	12/01/2024	0	0	0	0	0	0	0	0	3,818,565	0	0	0	0
000000-00-0	6143 Private Equity Solutions SCSP	Luxembourg	LUX	Distribution	12/16/2019	03/04/2024	0	0	0	0	0	0	0	0	29,753	0	0	0	0
1999999. Joint Venture Interests - Common Stock - Unaffiliated							3,981,727	5,488,908	0	5,535,392	0	(46,484)	0	0	104,541,573	0	(491,022)	(491,022)	182,960

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Showing Other Long-Term Invested Assets DISPOSED, Transferred or Repaid During the Current Year

1	2	Location		5	6	7	8	Change in Book/Adjusted Carrying Value						15	16	17	18	19	20
		3	4					9	10	11	12	13	14						
CUSIP Identification	Name or Description	City	State	Name of Purchaser or Nature of Disposal	Date Originally Acquired	Disposal Date	Book/ Adjusted Carrying Value Less Encumbrances, Prior Year	Unrealized Valuation Increase/ (Decrease)	Current Year's (Depreciation) or (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Capital-ized Deferred Interest and Other	Total Change in Book/ Adjusted Carrying Value (9+10-11+12)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value Less Encumbrances on Disposal	Consid-eration	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Invest-ment Income
000000-00-0	2792 Hayfin Maritime Yield Fund LP	George Town	CYM.....	Distribution	10/25/2023	12/16/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	1,274,032	0.....	0.....	0.....	0.....
000000-00-0	6106 Lubert-Adler Real Estate Fund VII LP ..	Philadelphia	PA.....	Distribution	10/15/2013	12/23/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	1,913,019	0.....	0.....	0.....	0.....
000000-00-0	6107 Lubert-Adler Real Estate Fund VII-B LP ..	Philadelphia	PA.....	Distribution	04/07/2017	12/23/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	1,811,696	0.....	0.....	0.....	0.....
000000-00-0	6108 NB Real Estate Secondary Opportunities Fund LP	New York	NY.....	Distribution	12/05/2018	04/19/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	1,454,326	0.....	0.....	0.....	0.....
000000-00-0	6111 Hillpointe Workforce Housing Partnership I LP	Winter Park	FL.....	Distribution	03/17/2020	09/25/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	597,940	0.....	0.....	0.....	0.....
000000-00-0	6112 Hillpointe Workforce Housing Partnership II LP	Winter Park	FL.....	Distribution	11/03/2020	09/16/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	1,493,421	0.....	0.....	0.....	0.....
2199999. Joint Venture Interests - Real Estate - Unaffiliated								0	0	0	0	0	0	0	8,544,433	0	0	0	0
000000-00-0	2458 Barings Innovations & Growth Real Estate Fund	Springfield	MA.....	Distribution	10/06/2021	12/24/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	715,326	0.....	0.....	0.....	0.....
000000-00-0	2525 MM BIG Peninsula Co-Invest Member LLC ..	Hartford	CT.....	Distribution	06/30/2021	12/24/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	29,940	0.....	0.....	0.....	0.....
000000-00-0	2530 MM Horizon Savannah Member LLC	CHARLOTTE	NC.....	Distribution	10/25/2021	07/17/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	3,851,361	0.....	0.....	0.....	0.....
000000-00-0	2530A MM Horizon Savannah Member II LLC	Springfield	MA.....	Distribution	03/15/2024	09/01/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	203,945	0.....	0.....	0.....	0.....
000000-00-0	2895A Barings Construction Lending Fund LP ..	Springfield	MA.....	Distribution	12/12/2024	12/31/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	3,334	0.....	0.....	0.....	0.....
2299999. Joint Venture Interests - Real Estate - Affiliated								0	0	0	0	0	0	0	4,803,907	0	0	0	0
000000-00-0	6114 Pretium Mortgage Credit Partners I LP ..	New York	NY.....	Liquidation	12/04/2014	03/31/2024	63,180	(573,137)	0.....	0.....	0.....	(573,137)	0.....	(13,890)	13,890	0.....	523,847	523,847	13,890
000000-00-0	6115 SHARB Investors LP	New York	NY.....	Distribution	11/24/2020	01/01/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	237,200	0.....	0.....	0.....	0.....
2399999. Joint Venture Interests - Mortgage Loans - Unaffiliated								63,180	(573,137)	0	0	(573,137)	0	(13,890)	251,090	0	523,847	523,847	13,890
000000-00-0	2461 Barings Real Estate Debt Income Fund LP ..	Hartford	CT.....	Distribution	03/24/2021	12/31/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	5,892,646	0.....	0.....	0.....	0.....
000000-00-0	2461A Barings Real Estate Debt Income Fund LP ..	Hartford	CT.....	Distribution	12/09/2021	12/31/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	17,044,778	0.....	0.....	0.....	0.....
2499999. Joint Venture Interests - Mortgage Loans - Affiliated								0	0	0	0	0	0	0	22,937,424	0	0	0	0
000000-00-0	2616A Stork SPV LP	Greenwich	CT.....	Distribution	12/20/2021	04/19/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	99,125	0.....	0.....	0.....	0.....
000000-00-0	2673 KSL Capital Partners CV I LP	Denver	CO.....	Distribution	05/25/2022	05/21/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	73,602	0.....	0.....	0.....	0.....
000000-00-0	2698 Exos Collateralized SPAC Holdings Fund LP ..	New York	NY.....	Distribution	11/14/2022	10/01/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	2,800,000	0.....	0.....	0.....	0.....
000000-00-0	2707 TSS Co-Invest Holdings LP	Beverly Hills	CA.....	Distribution	09/09/2022	12/27/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	30,892	0.....	0.....	0.....	0.....
000000-00-0	2709 Low Carbon Renewables Fund SCSp	Luxembourg	LUX.....	Distribution	02/09/2023	02/05/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	14,417	0.....	0.....	0.....	0.....
000000-00-0	2720 AASC Holdings LP	Greenwich	CT.....	Distribution	12/01/2022	10/01/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	38,883	0.....	0.....	0.....	0.....
000000-00-0	2729 TSYL TA Aggregator LP	Boston	MA.....	Distribution	12/19/2022	12/06/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	3,531	0.....	0.....	0.....	0.....
000000-00-0	2765 Energy Acquisition Vehicle II LP	Wilmington	DE.....	Distribution	06/01/2023	12/31/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	4,810,276	0.....	0.....	0.....	0.....
000000-00-0	2782 Q-Energy V FCR	Madrid	ESP.....	Distribution	08/18/2023	05/09/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	47,750	(2,212)	0.....	(2,212)	0.....
000000-00-0	2786 Rock Labor Holdings LLC	West Palm Beach	FL.....	Distribution	09/14/2023	10/15/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	100	0.....	0.....	0.....	0.....
000000-00-0	2787 NAW HOLDINGS LLC	Radnor	PA.....	Distribution	09/13/2023	08/01/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	169	0.....	0.....	0.....	0.....
000000-00-0	2790 BharCap Acquisition II LP	Greenwich	CT.....	Distribution	09/08/2023	10/24/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	381,502	0.....	0.....	0.....	0.....
000000-00-0	2824 FOREST ULTIMATE HOLDINGS LLC	Chicago	IL.....	Distribution	04/30/2024	09/06/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	15,499	0.....	0.....	0.....	0.....
000000-00-0	6147 Monza Energy LLC	Houston	TX.....	Distribution	04/17/2018	03/12/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	196,845	0.....	0.....	0.....	0.....
2599999. Joint Venture Interests - Other - Unaffiliated								0	0	0	0	0	0	0	8,512,591	(2,212)	0	(2,212)	0
878091-BG-0	8005 Teachers Insurance & Annuity	Springfield	MA.....	Distribution	03/31/2010	12/31/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	6,082,785	0.....	0.....	0.....	0.....
677412-AF-5	8007 Ohio National Life Ins	Springfield	MA.....	Distribution	06/06/2012	12/31/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....
878091-BD-8	8008 Teachers Insurance & Annuity	Springfield	MA.....	Distribution	07/15/2021	12/31/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	(6,082,919)	0.....	0.....	0.....	0.....
638671-AK-3	8012 Nationwide Mutual Ins Co	Springfield	MA.....	Distribution	07/21/2016	12/31/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	4,354	0.....	0.....	0.....	0.....
309601-AE-2	8516 Farmers Ins Exch 4.747 11/01/2057	Springfield	MA.....	Distribution	10/10/2017	12/31/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	8	0.....	0.....	0.....	0.....
2799999. Surplus Debentures, etc - Unaffiliated								0	0	0	0	0	0	0	4,227	0	0	0	0
00BGRQ-BK-9	7135 AMMC CLO XI Ltd	Springfield	MA.....	Distribution	10/17/2012	12/31/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	1,019,851	0.....	0.....	0.....	0.....
US0017-7C-A	7136 Ammc Clo 20 Ltd	Springfield	MA.....	Distribution	03/08/2017	12/31/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	552,544	0.....	0.....	0.....	0.....
US0017-48-A	7137 AMMC CLO XIV Ltd	Springfield	MA.....	Distribution	06/12/2014	12/31/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	2,401,308	0.....	0.....	0.....	0.....
US0017-6N-A	7140 AMMC CLO 22 Ltd	Springfield	MA.....	Distribution	03/08/2018	12/31/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	3,371,519	0.....	0.....	0.....	0.....
US2682-9D-A	7146 Man GLG US CLO	Springfield	MA.....	Distribution	08/03/2018	12/31/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	1,421,571	0.....	0.....	0.....	0.....
US5595-3P-A	7147 Magnetite XVI Ltd	Springfield	MA.....	Distribution	02/02/2018	12/31/2024	0.....	0.....	0.....	0.....	0.....	0.....	0.....	0.....	3,646	0.....	0.....	0.....	0.....

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Showing Other Long-Term Invested Assets DISPOSED, Transferred or Repaid During the Current Year

1	2	Location		5	6	7	8	Change in Book/Adjusted Carrying Value						15	16	17	18	19	20	
		3	4					9	10	11	12	13	14							
CUSIP Identification	Name or Description	City	State	Name of Purchaser or Nature of Disposal	Date Originally Acquired	Disposal Date	Book/ Adjusted Carrying Value Less Encumbrances, Prior Year	Unrealized Valuation Increase/ (Decrease)	Current Year's (Depreciation) or (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Capitalized Deferred Interest and Other	Total Change in Book/ Adjusted Carrying Value (9+10-11+12)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value Less Encumbrances on Disposal	Consideration	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Investment Income	
US3631-9W-A	7161 Galaxy XXIII CLO Ltd	Springfield	MA.....	Distribution	06/22/2022 ..	03/31/2024 ..	0	0	0	0	0	0	0	0	195,662	0	0	0	0	
46655H-AK-9	7164 JCP Direct Lending CLO 2022 LLC	Springfield	MA.....	Distribution	06/01/2022 ..	08/31/2024 ..	0	0	0	0	0	0	0	0	2,267,066	0	0	0	0	
53950T-10-5	7165 LOAN ASSET ISSUER LLC SER 2021 M-2	Springfield	MA.....	Distribution	11/04/2021 ..	07/31/2024 ..	0	0	0	0	0	0	0	0	7,213,820	0	0	0	0	
	7166 Loan Asset Issuer LLC Series 2022 NG-1																			
53950X-10-6		Springfield	MA.....	Distribution	02/28/2022 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	7,593,502	0	0	0	0	
US0017-6K-A	7167 AMMC CLO 16 Ltd	Springfield	MA.....	Distribution	04/10/2015 ..	04/30/2024 ..	0	0	0	0	0	0	0	0	4,589,190	0	0	0	0	
000000-00-0	7170 RT Balancing	Springfield	MA.....	Distribution	01/01/2023 ..	06/30/2024 ..	0	0	0	0	0	0	0	0	22,344,958	0	0	0	0	
	7171 Affirm Asset Securitization Trust 2022-																			
00834H-10-4	X1	Springfield	MA.....	Distribution	02/04/2022 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	(717,094)	0	0	0	0	
	7174 Loan Asset Issuer LLC Series 2021 NG-1																			
53948W-10-3		Springfield	MA.....	Distribution	08/30/2021 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	932,422	0	0	0	0	
US9291-7T-A	7177 Voya CLO 2018-2 Ltd	Springfield	MA.....	Distribution	12/06/2022 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	(2,407,086)	0	0	0	0	
US4493-1B-A	7182 ICG US CLO 2015-1 Ltd	Springfield	MA.....	Distribution	06/24/2022 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	829,300	0	91,728	91,728	0	
US5018-8R-A	7183 LCM XVIII LP	Springfield	MA.....	Distribution	12/08/2022 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	143,778	0	0	0	0	
US6759-23-A	7184 Octagon Investment Partners 34 Ltd	Springfield	MA.....	Distribution	06/27/2022 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	349,939	0	0	0	0	
	7202 TOV DIRECT LENDING STRUCTURED SOLUTIONS																			
87251F-AF-6	2022 LLC	Springfield	MA.....	Distribution	03/13/2014 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	68	0	0	0	0	
	7203 Structured Carbon Level Mitigation																			
863931-10-1	Trust III 2023-1	Springfield	MA.....	Distribution	11/30/2023 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	11,550	0	0	0	0	
	7206 Velocity Commercial Capital Loan Trust																			
92259U-AG-3	2022-2	Springfield	MA.....	Distribution	04/05/2022 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	1,350,438	0	0	0	0	
008036-70-4	7207 Thunderbolt II Aircraft Lease Ltd	Springfield	MA.....	Distribution	07/20/2018 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	0	0	0	0	0	
US8860-7B-A	7208 Thunderbolt III Aircraft Lease Ltd	Springfield	MA.....	Distribution	10/31/2019 ..	08/31/2024 ..	0	0	0	0	0	0	0	0	11,398,947	0	1,068,451	1,068,451	0	
	7220 Apollo Asset-Backed Finance Lending																			
000000-00-0	Company, L.P. BA Residual Tranche	Springfield	MA.....	Distribution	06/28/2024 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7221 HOMEE 2024-1 BARCLAYS LN-QL R SUB NT																			
000000-00-0	144A	Springfield	MA.....	Distribution	11/26/2024 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	0	0	0	0	0	
4699999. Residual Tranches or Interests with Underlying Assets Having Characteristics of Fixed Income Instruments - Unaffiliated								0	0	0	0	0	0	0	64,866,898	0	1,160,179	1,160,179	0	
US0561-6M-A	7111 Barings Clo Ltd 2015-II	Springfield	MA.....	Distribution	07/23/2015 ..	12/31/2024 ..	0	0	0	0	0	0	0	0	1,126,398	0	0	0	0	
4799999. Residual Tranches or Interests with Underlying Assets Having Characteristics of Fixed Income Instruments - Affiliated								0	0	0	0	0	0	0	1,126,398	0	0	0	0	
6099999. Total - Unaffiliated								8,410,703	2,960,940	0	7,897,147	0	(4,936,207)	0	(63,101)	202,883,760	(2,212)	1,193,005	1,190,794	196,850
6199999. Total - Affiliated								0	0	0	0	0	0	0	28,867,728	0	0	0	0	
6299999 - Totals								8,410,703	2,960,940	0	7,897,147	0	(4,936,207)	0	(63,101)	231,751,488	(2,212)	1,193,005	1,190,794	196,850

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
91282C-MA-6	United States Treasury N-UNSECURED	..SD..			.. 1.A	600,867	..98.8981	593,388	600,000	600,847	..0	..(20)	..0	..0	..4.125	..4.092	MM	..2,176	..0	12/10/2024	..11/30/2029
0019999999	Subtotal - Bonds - U.S. Governments - Issuer Obligations					600,867	XXX	593,388	600,000	600,847	0	(20)	0	0	XXX	XXX	XXX	2,176	0	XXX	XXX
83190A-AB-9	Small Business Administr-SBA 523402				.. 1.A	291,336	..100.5307	263,376	261,986	286,915	..0	..(2,787)	..0	..0	..6.550	..5.252	MON	..1,430	..36,547	10/01/2010	..01/01/2035
36179X-NF-9	Ginnie Mae II Pool-POOL #MA8490			4	.. 1.A	21,333,312	..97.3287	20,734,275	21,303,354	21,332,266	..0	..875	..0	..0	..5.000	..4.981	MON	..454,210	..799,412	12/19/2022	..12/01/2052
36179X-QW-9	Ginnie Mae II Pool-POOL #MA8569			4	.. 1.A	21,488,241	..96.9453	20,683,182	21,334,897	21,483,648	..0	..4,755	..0	..0	..5.000	..4.902	MON	..457,646	..800,657	01/18/2023	..01/01/2053
36179Y-AS-3	Ginnie Mae II Pool-POOL #MA9017			4	.. 1.A	21,351,957	..99.4271	21,435,610	21,559,126	21,353,989	..0	..(4,214)	..0	..0	..5.500	..5.646	MON	..98,813	..1,583,821	08/01/2023	..07/01/2053
36179Y-DK-7	Ginnie Mae II Pool-POOL #MA9106			4	.. 1.A	38,549,915	..99.4717	38,694,416	38,899,913	38,553,529	..0	..(7,606)	..0	..0	..5.500	..5.636	MON	..743,280	..1,604,558	08/09/2023	..08/01/2053
38375B-4Z-2	Government National Mort-GNR 2013-H16 FI			4	.. 1.A	287,785	..2.4170	54,132	2,239,675	697,928	..0	..0	..0	..0	..1.462	..39.712	MON	..2,729	..33,388	01/28/2014	..07/01/2063
38375U-BQ-2	Government National Mort-GNR 2013-H24 BI			4	.. 1.A	87,140	..3.7321	32,042	858,547	647,659	..0	..0	..0	..0	..1.248	..27.862	MON	..893	..17,487	02/26/2014	..09/01/2063
38375U-CG-3	Government National Mort-GNR 2014-H02 AI			4	.. 1.A	412,428	..2.1262	77,672	3,653,028	819,974	..0	..0	..0	..0	..1.289	..33.015	MON	..3,925	..47,579	03/27/2014	..12/01/2063
38375U-DC-1	Government National Mort-GNR 2014-H01 AI			4	.. 1.A	1,618,198	..2.3602	331,146	14,030,231	1,836,906	..0	..0	..0	..0	..1.402	..15.706	MON	..16,392	..242,278	01/29/2014	..01/01/2064
38375U-EF-3	Government National Mort-GNR 2014-H03 IS			4	.. 1.A	645,877	..3.7154	609,154	609,305	609,305	..0	..0	..0	..0	..1.598	..8.507	MON	..5,537	..87,722	02/10/2014	..02/01/2064
38375U-IV-9	Government National Mort-GNR 2014-H16 BI			4	.. 1.A	3,510,233	..2.3770	561,801	23,635,173	2,189,004	..0	..0	..0	..0	..1.547	..13.767	MON	..30,463	..416,614	03/03/2015	..07/01/2064
38375U-NQ-9	Government National Mort-GNR 2014-H17 DI			4	.. 1.A	2,237,665	..2.0792	297,273	14,297,834	1,507,326	..0	..0	..0	..0	..1.537	..14.731	MON	..18,313	..252,351	08/27/2014	..08/01/2064
38375U-PT-1	Government National Mort-GNR 2014-H19 EI			4	.. 1.A	1,696,869	..2.5949	294,872	11,363,390	1,381,545	..0	..0	..0	..0	..1.745	..16.990	MON	..16,528	..211,367	01/10/2014	..09/01/2064
38375U-RD-4	Government National Mort-GNR 2014-H23 AI			4	.. 1.A	3,187,978	..2.9763	668,474	22,460,046	3,721,448	..0	..0	..0	..0	..1.219	..13.771	MON	..22,808	..78,627	05/06/2015	..11/01/2064
38375U-UY-4	Government National Mort-GNR 2015-H08 BI			4	.. 1.A	1,379,888	..3.0714	290,049	9,443,708	1,974,129	..0	..0	..0	..0	..1.120	..20.551	MON	..8,815	..71,627	04/27/2015	..03/01/2065
38382A-3P-8	Government National Mort-GNR 2019-140 SE			4	.. 1.A	1,070,883	..9.6590	652,854	6,759,022	1,588,779	..0	..0	..0	..0	..1.565	..(5.519)	MON	..3,233	..50,138	05/21/2020	..11/20/2049
38382C-K5-9	Government National Mort-GNR 2020-17 PS			4	.. 1.A	2,031,911	..8.6461	1,070,818	12,384,983	2,667,808	..0	..0	..0	..0	..1.565	..(4.528)	MON	..5,923	..91,867	05/15/2020	..01/20/2050
38382C-M3-2	Government National Mort-GNR 2020-17 QS			4	.. 1.A	941,098	..9.6647	554,387	5,736,217	1,180,008	..0	..0	..0	..0	..1.565	..(3.349)	MON	..2,743	..42,550	05/15/2020	..01/20/2050
38382C-YR-6	Government National Mort-GNR 2020-18 SW			4	.. 1.A	4,750,180	..9.6781	2,395,967	24,756,637	6,803,549	..0	..0	..0	..0	..1.615	..(5.871)	MON	..12,219	..196,017	05/13/2020	..02/20/2050
38382D-UT-4	Government National Mort-GNR 2020-31 ST			4	.. 1.A	1,546,245	..6.6093	550,547	8,329,937	2,182,038	..0	..0	..0	..0	..1.565	..(5.300)	MON	..3,984	..61,792	06/04/2020	..03/20/2050
38382D-VF-3	Government National Mort-GNR 2020-31 HS			4	.. 1.A	448,249	..5.0500	180,192	3,568,150	185,629	..0	..0	..0	..0	..1.415	..(28.674)	MON	..1,543	..21,115	05/21/2020	..05/20/2046
38382F-BU-7	Government National Mort-GNR 2020-77 SU			4	.. 1.A	1,648,349	..8.2923	607,492	7,325,996	1,570,761	..0	..0	..0	..0	..1.615	..(10.913)	MON	..3,616	..58,005	06/18/2020	..09/20/2047
38382F-BW-3	Government National Mort-GNR 2020-77 SQ			4	.. 1.A	1,378,900	..8.4725	667,581	7,879,429	2,375,709	..0	..0	..0	..0	..1.565	..(14.204)	MON	..3,769	..58,448	05/07/2020	..08/20/2049
38382F-NZ-3	Government National Mort-GNR 2020-62 JS			4	.. 1.A	3,515,272	..8.9834	1,165,554	12,974,474	3,134,814	..0	..0	..0	..0	..1.665	..(7.978)	MON	..6,602	..109,219	06/08/2020	..05/20/2050
38382G-BE-9	Government National Mort-GNR 2020-86 US			4	.. 1.A	1,689,768	..8.1085	883,969	10,901,730	3,130,709	..0	..0	..0	..0	..1.615	..(13.220)	MON	..5,381	..86,317	06/16/2020	..01/20/2050
38382G-BH-4	Government National Mort-GNR 2020-86 KS			4	.. 1.A	2,716,061	..3.7411	475,374	12,706,720	2,861,434	..0	..0	..0	..0	..0.515	..0.515	MON	..2,001	..4,296	06/08/2020	..06/20/2050
38382G-CT-7	Government National Mort-GNR 2020-86 SK			4	.. 1.A	3,608,264	..9.4917	1,301,601	13,713,116	3,889,669	..0	..0	..0	..0	..1.665	..(11.058)	MON	..6,978	..115,411	07/24/2020	..06/20/2050
38382H-YB-0	Government National Mort-GNR 2020-116 EI			4	.. 1.A	2,424,179	..11.7725	2,052,216	17,432,298	2,057,604	..0	..0	..0	..0	..2.500	..12.773	MON	..36,317	..435,780	01/15/2021	..08/01/2050
38382K-WV-1	Government National Mort-GNR 2020-146 LI			4	.. 1.A	3,808,532	..11.3079	3,948,794	34,920,633	3,258,400	..0	..0	..0	..0	..2.000	..10.025	MON	..58,201	..698,366	10/22/2020	..10/01/2050
38382L-JB-8	Government National Mort-GNR 2020-176 SQ			4	.. 1.A	1,568,745	..11.5124	689,640	5,990,434	1,384,116	..0	..0	..0	..0	..1.815	..(9.093)	MON	..3,323	..59,414	11/13/2020	..11/20/2050
38382L-R7-8	Government National Mort-GNR 2020-185 YI			4	.. 1.A	5,008,682	..11.3054	4,718,767	41,739,018	4,075,030	..0	..0	..0	..0	..2.000	..12.327	MON	..69,565	..834,769	01/05/2021	..10/01/2050
38382M-CJ-6	Government National Mort-GNR 2020-189 SN			4	.. 1.A	1,677,778	..4.1239	301,648	7,314,564	1,650,602	..0	..0	..0	..0	..0.515	..0.515	MON	..1,152	..2,473	12/02/2020	..12/20/2050
38382M-E8-8	Government National Mort-GNR 2021-9 DI			4	.. 1.A	3,901,107	..12.4872	3,403,589	27,256,643	3,172,400	..0	..0	..0	..0	..2.500	..13.227	MON	..56,785	..681,387	01/14/2021	..01/01/2051
38382M-Z6-9	Government National Mort-GNR 2021-15 SQ			4	.. 1.A	2,539,646	..4.1162	452,662	10,997,115	2,464,529	..0	..0	..0	..0	..0.515	..0.515	MON	..1,731	..3,718	01/08/2021	..10/20/2050
0029999999	Subtotal - Bonds - U.S. Governments - Residential Mortgage-Backed Securities					164,352,668	XXX	130,646,425	482,185,155	168,029,159	0	(8,977)	0	0	XXX	XXX	XXX	2,166,848	9,895,117	XXX	XXX
0109999999	Total - U.S. Government Bonds					164,953,535	XXX	131,239,813	482,785,155	168,630,006	0	(8,997)	0	0	XXX	XXX	XXX	2,169,024	9,895,117	XXX	XXX
04317N-A#-6	ARUBA GOVERNMENT Senior Unsecured Notes		D		.. 2.B FE	4,643,000	..97.6914	4,535,812	4,643,000	4,643,000	..0	..0	..0	..0	..0.000	..0.000	MS	..0	..0	08/15/2024	..09/10/2030
085209-AG-9	Bermuda Government Inter-SENIOR UNSECURE		D	1,2	.. 1.F FE	997,920	..84.8613	916,502	1,080,000	1,022,246	..0	..9,138	..0	..0	..2.375	..3.426	FA	..9,334	..25,650	03/31/2022	..08/20/2030
30216J-AE-5	Export-Import Bank of In-SENIOR UNSECURE		D		.. 2.C FE	736,416	..91.3068	716,758	785,000	751,782	..0	..5,805	..0	..0	..3.250	..4.190	JJ	..11,764	..25,513	04/01/2022	..01/15/2030
445545-AF-3	HUNGARY-SR UNSECURED		D		.. 2.B FE	743,631	..110.7818	564,987	510,000	719,948	..0	..(8,929)	..0	..0	..7.625	..4.122	MS	..9,938	..38,888	03/31/2022	..03/29/2041
465410-BY-3	Republic of Italy Govern-SENIOR UNSECURE		D		.. 2.C FE	1,482,000	..90.6177	1,413,637	1,580,000	1,507,917	..0	..9,765	..0	..0	..2.875	..3.639	AO	..9,219	..44,850	03/31/2022	..10/17/2029
698299-AW-4	Panama Government Intern-SENIOR UNSECURE		D		.. 2.C FE	744,000	..92.9014	557,408	600,000	721,827	..0	..(8,402)	..0	..0	..6.700	..4.367	JJ	..17,308	..40,200	03/31/2022	..01/26/2036

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
698299-BF-0	Panama Government Intern-SENIOR UNSECURE	D.....	1,2 .....	.....	.. 2.C FE	1,049,580	..92.3515	..941,985	1,020,000	1,036,036	0	(5,072)	0	0	...3.875	...3.313	MS	11,418	39,525	03/31/2022	03/17/2028
715638-DF-6	Peruvian Government Inte-SENIOR UNSECURE	D.....	1,2 .....	.....	.. 2.B FE	891,966	..85.4448	803,181	940,000	905,410	0	5,045	0	0	...2.783	...3.461	JJ	11,481	26,160	03/31/2022	01/23/2031
715638-DU-3	Peruvian Government Inte-SENIOR UNSECURE	D.....	1,2 .....	.....	.. 2.B FE	885,480	..80.5004	756,704	940,000	896,261	0	4,026	0	0	...3.000	...3.608	JJ	13,003	28,200	03/31/2022	01/15/2034
91087B-AK-6	Mexico Government Intern-SENIOR UNSECURE	D.....	1,2 .....	.....	.. 2.B FE	1,666,398	..90.8722	1,426,693	1,570,000	1,643,080	0	(8,782)	0	0	...4.750	...3.988	AO	13,258	74,575	03/31/2022	04/27/2032
917288-BA-9	REPUBLICA ORIENT URUGUAY-SENIOR UNSECURE	D.....	.....	.....	.. 2.B FE	987,965	116.1228	824,472	710,000	926,802	0	(22,998)	0	0	...7.875	...3.486	JJ	25,782	55,913	03/31/2022	01/15/2033
0219999999	Subtotal - Bonds - All Other Governments - Issuer Obligations					14,828,356	XXX	13,458,139	14,358,000	14,774,309	0	(20,404)	0	0	XXX	XXX	XXX	132,505	399,474	XXX	XXX
0309999999	Total - All Other Government Bonds					14,828,356	XXX	13,458,139	14,358,000	14,774,309	0	(20,404)	0	0	XXX	XXX	XXX	132,505	399,474	XXX	XXX
041042-IW-4	State of Arkansas-GENERAL OBLIGATION UNL			2	.. 1.C FE	4,000,000	..94.4690	3,778,760	4,000,000	4,000,000	0	0	0	0	...4.111	...4.111	JJ	82,220	164,440	06/30/2014	07/01/2034
207726-E7-9	State of Connecticut-GENERAL OBLIGATION .....			.....	.. 1.D FE	2,522,520	100.0990	2,312,287	2,310,000	2,314,041	0	(20,001)	0	0	...5.770	...4.864	MS	39,246	133,287	12/07/2010	03/15/2025
246380-7R-4	State of Delaware-GENERAL OBLIGATION UNL .....			.....	.. 1.A FE	15,110,920	..99.6330	12,952,290	13,000,000	13,690,600	0	(140,255)	0	0	...4.550	...3.271	JJ	295,750	591,500	12/13/2012	07/01/2029
373384-M2-9	State of Georgia-GENERAL OBLIGATION UNLTD		2 .....	.....	.. 1.A FE	3,985,000	..97.8880	3,915,520	4,000,000	3,994,230	0	964	0	0	...4.500	...4.531	FA	75,000	180,000	11/13/2013	02/01/2030
373384-ST-4	State of Georgia-GENERAL OBLIGATION UNLT .....		.....	.....	.. 1.A FE	8,606,797	..98.6570	8,449,972	8,565,000	8,575,242	0	(3,604)	0	0	...4.370	...4.321	AO	93,573	374,291	09/05/2013	10/01/2027
574192-5F-3	State of Maryland-GENERAL OBLIGATION UNL .....			.....	.. 1.A FE	3,418,060	..99.9840	3,444,449	3,445,000	3,444,390	0	2,372	0	0	...4.600	...4.672	MS	52,823	158,470	11/19/2010	03/01/2025
574192-6N-5	State of Maryland-GENERAL OBLIGATION UNL .....			.....	.. 1.A FE	3,503,780	..99.5940	3,485,790	3,500,000	3,500,114	0	(377)	0	0	...4.350	...4.339	FA	63,438	152,250	07/29/2010	08/01/2025
605580-50-8	State of Mississippi-GENERAL OBLIGATION		1 .....	.....	.. 1.C FE	31,595,521	101.7930	28,907,176	28,398,000	29,135,058	0	(691,345)	0	0	...5.539	...4.040	AO	393,241	1,572,965	11/12/2013	10/01/2029
677521-CW-4	State of Ohio-GENERAL OBLIGATION UNLTD .....			.....	.. 1.A FE	6,078,848	100.2150	4,975,675	4,965,000	5,381,390	0	(80,888)	0	0	...5.442	...3.478	MS	225,163	135,098	12/16/2014	09/01/2029
677521-HX-7	State of Ohio-GENERAL OBLIGATION UNLTD .....			.....	.. 1.A FE	21,650,600	101.4830	20,296,600	20,000,000	20,695,944	0	(107,294)	0	0	...5.278	...4.564	FA	439,833	1,055,600	11/20/2013	08/01/2030
68583R-BA-9	Oregon Community College-GENERAL OBLIGAT .....			.....	.. 1.C FE	16,472,211	100.7500	15,102,425	14,990,000	15,430,771	0	(113,480)	0	0	...5.600	...4.679	JD	2,332	1,259,160	12/20/2013	06/30/2028
686053-G0-8	Oregon School Boards Ass-GENERAL OBLIGAT .....			.....	.. 1.C FE	7,352,489	100.0310	6,647,237	6,645,177	6,863,116	0	(57,289)	0	0	...4.759	...3.750	JD	878	474,366	12/03/2014	06/30/2028
70914P-ME-9	PENNSYLVANIA ST-BUILD AMERICA GEN OBLIG		1 .....	.....	.. 1.C FE	1,994,183	..99.9020	1,898,138	1,900,000	1,910,503	0	(9,032)	0	0	...4.650	...4.137	FA	33,377	88,350	07/31/2013	02/15/2026
882722-VP-3	State of Texas-GENERAL OBLIGATION UNLTD .....			.....	.. 1.A FE	41,079,751	..98.8920	35,378,613	35,775,000	38,575,058	0	(288,110)	0	0	...4.631	...3.528	AO	414,185	1,656,740	04/13/2016	04/01/2033
0419999999	Subtotal - Bonds - U.S. States, Territories and Possessions - Issuer Obligations					167,370,681	XXX	151,544,932	151,493,177	157,510,457	0	(1,508,339)	0	0	XXX	XXX	XXX	2,211,059	7,996,517	XXX	XXX
0509999999	Total - U.S. States, Territories and Possessions Bonds					167,370,681	XXX	151,544,932	151,493,177	157,510,457	0	(1,508,339)	0	0	XXX	XXX	XXX	2,211,059	7,996,517	XXX	XXX
718814-ZZ-2	PHOENIX AZ-BUILD AMERICA GENERAL OBLIGAT		1 .....	.....	.. 1.B FE	22,313,800	..99.2690	18,657,609	18,795,000	20,289,501	0	(360,505)	0	0	...5.269	...3.063	JJ	495,154	990,309	12/11/2014	07/01/2034
057507-HU-2	Bakersfield City School -GENERAL OBLIGAT		2 .....	.....	.. 1.E FE	290,000	100.4210	291,221	290,000	290,000	0	0	0	0	...4.390	...4.388	MN	2,122	12,731	06/28/2012	05/01/2026
057507-HV-0	Bakersfield City School -GENERAL OBLIGAT		2 .....	.....	.. 1.E FE	2,775,420	..96.1250	2,883,750	3,000,000	2,882,649	0	11,106	0	0	...4.390	...4.968	MN	21,950	131,700	06/28/2012	05/01/2033
134141-ZE-3	Campbell Union School DI-GENERAL OBLIGAT .....		.....	.....	.. 1.B FE	2,215,000	100.1370	2,218,035	2,215,000	2,214,999	0	0	0	0	...5.406	...5.404	FA	49,893	119,743	07/01/2011	08/01/2027
142665-DJ-4	Carlsbad Unified School -GENERAL OBLIGAT .....			.....	.. 1.C FE	4,000,000	101.0680	4,042,720	4,000,000	4,000,000	0	0	0	0	...5.234	...5.233	FA	87,233	209,360	06/08/2011	08/01/2026
399262-HD-9	Grossmont Union High Sch-GENERAL OBLIGAT .....			.....	.. 1.D FE	10,875,390	100.1960	10,520,580	10,500,000	10,500,000	0	0	0	0	...5.479	...5.477	FA	239,706	575,295	12/21/2011	08/01/2025
54438C-PC-0	LOS ANGELES CA CMNTY CLG-GENERAL OBLIGAT .....		.....	.....	.. 1.B FE	22,448,558	111.8710	18,978,915	16,965,000	20,417,401	0	(224,637)	0	0	...6.680	...4.414	FA	472,193	1,133,262	04/08/2015	08/01/2036
797646-NC-6	City & County of San Fra-GENERAL OBLIGAT .....		.....	.....	.. 1.B FE	5,796,900	100.4200	5,021,000	5,000,000	5,037,433	0	(80,188)	0	0	...5.450	...3.772	JD	148,361	272,500	07/18/2013	06/15/2025
797646-NE-2	City & County of San Fra-GENERAL OBLIGAT .....		.....	.....	.. 1.B FE	10,397,041	100.4880	8,315,382	8,275,000	8,707,783	0	(165,991)	0	0	...5.750	...3.508	JD	259,053	475,813	09/05/2012	06/15/2027
797646-NF-9	City & County of San Fra-GENERAL OBLIGAT .....		.....	.....	.. 1.B FE	13,135,200	102.5670	10,666,968	10,400,000	11,139,799	0	(197,166)	0	0	...5.930	...3.717	JD	187,520	616,720	08/09/2012	06/15/2028
801546-NN-8	County of Santa Clara CA-GENERAL OBLIGAT		2 .....	.....	.. 1.A FE	5,697,549	..97.0310	7,272,473	7,495,000	6,643,388	0	106,579	0	0	...3.000	...5.050	FA	93,688	224,850	08/28/2013	08/01/2031
801546-NS-7	County of Santa Clara CA-GENERAL OBLIGAT .....		.....	.....	.. 1.A FE	6,606,630	..91.7170	8,254,530	9,000,000	7,507,125	0	0	0	0	...3.250	...5.320	FA	121,875	292,500	09/03/2013	08/01/2035
801546-NU-2	County of Santa Clara CA-GENERAL OBLIGAT		2 .....	.....	.. 1.A FE	1,599,660	94.1960	1,883,920	2,000,000	1,733,132	0	15,140	0	0	...3.375	...4.800	FA	28,125	67,500	12/09/2013	08/01/2037
249218-AJ-7	Denver City & County Sch-CERTIFICATE PAR .....		.....	.....	.. 1.D FE	855,321	101.2490	866,004	855,321	855,321	0	0	0	0	...6.220	...6.218	JD	2,364	53,201	04/05/2011	12/15/2026
696550-IIS-7	Palm Beach County School-CERTIFICATE PAR .....		.....	.....	.. 1.D FE	4,841,800	100.8370	5,041,850	5,000,000	4,990,700	0	14,814	0	0	...5.400	...5.719	FA	112,500	270,000	11/04/2010	08/01/2025
04778C-AF-2	Atlanta Independent Scho-CERTIFICATE PAR .....		.....	.....	.. 1.D FE	2,000,000	101.0060	2,020,120	2,000,000	2,000,000	0	0	0	0	...5.557	...5.555	MS	37,047	111,140	06/09/2011	03/01/2026
04778C-AG-0	Atlanta Independent Scho-CERTIFICATE PAR .....		.....	.....	.. 1.D FE	7,092,692	100.0940	6,956,533	6,950,000	6,952,162	0	(14,117)	0	0	...5.457	...5.243	MS	126,421	379,262	08/09/2011	03/01/2025
04778C-AH-8	Atlanta Independent Scho-CERTIFICATE PAR .....		.....	.....	.. 1.D FE	1,000,000	101.7510	1,017,510	1,000,000	1,000,000	0	0	0	0	...5.657	...5.655	MS	18,857	56,570	06/09/2011	03/01/2027
47407M-BG-5	Jefferson City School DI-GENERAL OBLIGAT .....		.....	.....	.. 1.B FE	3,100,000	3.107,099	3,107,099	3,100,000	3,100,000	0	0	0	0	...5.270	68,071	FA	68,071	163,370	07/08/2011	02/01/2028
167505-KK-1	Chicago Board of Educati-GENERAL OBLIGAT .....		.....	.....	.. 3.A FE	6,476,800	..96.9500	9,695,000	10,000,000	9,659,572	0	337,922	0	0	...1.750	...5.429	MJSD	7,778	175,000	05/03/2012	12/15/2025
777543-UK-3	Village of Rosemont IL-GENERAL OBLIGATIO .....		.....	.....	.. 1.E FE	4,958,904	..98.3530	4,829,132	4,910,000	4,955,694	0	(3,006)	0	0	...5.500	...5.386	JD	22,504	270,050	12/15/2023	12/01/2035

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
815626-G0-3	Sedgwick County Unified -GENERAL OBLIGAT				.. 1.C FE	6,566,904	101.9300	5,682,598	5,575,000	5,887,236	0	(74,816)	0	0	6.220	4.575	AO	86,691	346,765	08/07/2013	10/01/2028
100853-RV-4	City of Boston MA-GENERAL OBLIGATION UNL	2			.. 1.A FE	839,394	97.2870	1,011,785	1,040,000	954,319	0	12,718	0	0	3.000	4.648	AO	7,800	31,200	09/04/2013	10/01/2030
05914F-E7-1	County of Baltimore MD-GENERAL OBLIGATIO				.. 1.A FE	4,000,000	78.1320	3,125,280	4,000,000	4,000,618	0	(19)	0	0	3.303	3.302	JJ	66,060	132,120	07/19/2016	07/01/2046
741701-H8-2	County of Prince George-GENERAL OBLIGAT				.. 1.A FE	4,000,000	100.2040	4,008,160	4,000,000	4,000,000	0	0	0	0	4.750	4.748	MS	63,333	190,000	03/10/2011	03/01/2026
60374Y-8A-8	City of Minneapolis MN-GENERAL OBLIGATIO	2			.. 1.A FE	3,000,000	94.6120	2,838,360	3,000,000	3,000,000	0	0	0	0	4.379	4.377	MS	43,790	131,370	02/13/2014	03/01/2034
584002-QB-8	County of Mecklenburg NC-GENERAL OBLIGAT	2			.. 1.A FE	3,000,000	96.4000	2,892,000	3,000,000	3,000,000	0	0	0	0	4.349	4.347	AO	32,618	130,470	10/13/2011	10/01/2030
631294-4C-6	City of Nashua NH-GENERAL OBLIGATION UNL				.. 1.B FE	3,241,320	97.7430	2,932,290	3,000,000	3,104,626	0	(12,819)	0	0	4.226	3.659	JJ	58,460	126,780	04/11/2013	01/15/2032
084203-UQ-9	Berkeley County School D-GENERAL OBLIGAT				.. 1.C FE	4,151,765	100.0130	4,130,537	4,130,000	4,130,108	0	(2,132)	0	0	4.790	4.736	MS	65,942	197,827	08/27/2010	03/01/2025
570799-GG-5	Marlboro County School D-GENERAL OBLIGAT				.. 1.B FE	3,024,150	100.1960	3,005,880	3,000,000	3,000,839	0	(2,285)	0	0	5.440	5.359	JD	13,600	163,200	07/15/2010	06/01/2025
038573-DG-3	Aransas County Independe-GENERAL OBLIGAT	2			.. 1.A FE	2,725,000	100.5660	2,740,424	2,725,000	2,725,000	0	0	0	0	4.430	4.428	FA	45,604	120,718	07/13/2011	02/15/2026
142527-DY-3	Carlisle Independent Sch-GENERAL OBLIGAT	1,2			.. 1.A FE	5,115,000	100.6710	5,149,322	5,115,000	5,115,000	0	0	0	0	4.380	4.378	FA	84,636	224,037	07/13/2011	02/15/2026
235308-UL-5	Dallas Independent Schoo-GENERAL OBLIGAT	..SD..	2		.. 1.B FE	4,490,000	100.2300	4,500,328	4,490,000	4,490,000	0	0	0	0	5.049	5.047	FA	85,642	232,128	12/06/2013	08/15/2033
283734-TF-8	City of El Paso TX-GENERAL OBLIGATION LT	2			.. 1.C FE	11,410,000	98.5570	11,245,354	11,410,000	11,410,000	0	0	0	0	5.177	5.175	FA	223,152	590,696	12/18/2013	08/15/2034
442331-QM-9	HOUSTON TX-GENERAL OBLIGATION LTD	1			.. 1.D FE	14,420,915	105.1730	12,373,603	11,765,000	13,025,485	0	(146,034)	0	0	6.290	4.522	MS	246,673	740,019	05/05/2015	03/01/2032
448492-VJ-4	Hutto Independent School-GENERAL OBLIGAT	2			.. 1.A FE	1,995,664	91.6990	2,388,759	2,605,000	2,249,287	0	28,424	0	0	3.125	4.930	FA	33,919	81,406	08/29/2013	08/01/2034
796269-VA-3	San Antonio Independent -GENERAL OBLIGAT	2			.. 1.A FE	2,115,000	97.9640	2,071,939	2,115,000	2,115,000	0	0	0	0	4.006	4.005	FA	32,008	84,727	08/24/2011	08/15/2028
954838-MV-7	West Orange-Cove Consoli-GENERAL OBLIGAT	2			.. 1.A FE	6,083,323	101.0760	6,140,367	6,075,000	6,075,000	0	0	0	0	4.690	4.688	FA	107,636	284,918	07/12/2011	02/15/2028
259579-KL-3	Douglas County School Di-GENERAL OBLIGAT				.. 1.A FE	5,052,350	100.2080	5,010,400	5,000,000	5,000,000	0	0	0	0	4.700	4.699	JD	19,583	235,000	05/20/2011	12/01/2025
602245-UM-2	County of Milwaukee WI-GENERAL OBLIGATIO				.. 1.C FE	4,531,022	103.4800	3,382,779	3,269,018	3,648,556	0	(88,662)	0	0	6.840	3.632	JD	18,633	342,161	12/06/2012	12/01/2028
0619999999	Subtotal - Bonds - U.S. Political Subdivisions - Issuer Obligations					228,238,472	XXX	217,170,516	217,064,339	221,807,733	0	(742,932)	0	0	XXX	XXX	XXX	3,938,195	10,986,418	XXX	XXX
0709999999	Total - U.S. Political Subdivisions Bonds					228,238,472	XXX	217,170,516	217,064,339	221,807,733	0	(742,932)	0	0	XXX	XXX	XXX	3,938,195	10,986,418	XXX	XXX
13057P-AA-7	CALIFORNIA PUB FIN AUTH SOLID WASTE DISP				.. 3.A PL	7,000,000	106.9873	7,489,111	7,000,000	7,000,000	0	0	0	0	9.000	9.005	JD	28,000	630,000	03/23/2023	12/15/2028
010608-SM-5	Alabama Public School an-REVENUE BONDS	..SD..			.. 1.C FE	80,372,579	101.6300	71,445,891	70,300,000	72,748,720	0	(859,223)	0	0	5.150	3.623	MS	1,215,696	3,614,528	10/30/2014	09/01/2027
040507-NB-7	Arizona Health Facilitie-REVENUE BONDS				.. 1.D FE	4,000,000	96.7940	3,871,760	4,000,000	4,000,000	0	0	0	0	4.162	4.162	JJ	83,240	166,480	10/18/2012	01/01/2030
040627-DX-6	Arizona Power Authority-REVENUE BONDS				.. 1.C FE	7,500,000	93.0470	6,978,525	7,500,000	7,500,000	0	0	0	0	4.918	4.917	AO	92,213	368,850	03/19/2014	10/01/2045
13077C-TL-8	CALIFORNIA ST UNIV REV BUILD AMER BDS				.. 1.D FE	19,665,881	104.9010	15,483,388	14,760,000	18,457,033	0	(147,503)	0	0	6.484	4.360	MN	159,506	957,038	04/14/2015	11/01/2041
130795-Z6-7	California Statewide Com-REVENUE BONDS	1			.. 1.C FE	9,617,063	112.5280	7,820,696	6,950,000	8,931,475	0	(84,870)	0	0	7.550	4.889	MN	67,048	524,725	01/08/2015	05/15/2040
358266-CC-6	County of Fresno CA-REVENUE BONDS	..@..			.. 1.D FE	2,809,500	97.0850	5,825,100	6,000,000	5,784,744	0	329,886	0	0	0.000	5.959	N/A	0	0	09/11/2012	08/15/2025
463632-4P-1	Irvine Ranch Water Distr-SPECIAL ASSESSM				.. 1.A FE	18,846,056	108.2190	14,717,784	13,600,000	17,394,536	0	(174,340)	0	0	6.622	4.144	MN	150,099	900,592	03/30/2015	05/01/2040
567830-BU-7	County of Marin CA-REVENUE BONDS				.. 1.A FE	2,695,529	100.6270	2,565,989	2,550,000	2,553,334	0	(18,447)	0	0	5.410	4.655	FA	57,481	137,955	08/11/2011	08/01/2026
684273-HC-2	ORANGE CNTY CA LCL TRANSPRTN-BUILD AMERI	1			.. 1.B FE	65,706,599	108.2630	51,479,057	47,550,000	61,211,637	0	(572,752)	0	0	6.908	4.399	FA	1,240,907	3,284,754	12/15/2015	02/15/2041
768874-SG-5	City of Riverside CA Ele-REVENUE BONDS				.. 1.D FE	7,472,962	118.6750	6,004,955	5,060,000	6,842,208	0	(76,643)	0	0	7.605	4.466	AO	96,203	384,813	01/07/2015	10/01/2040
79765R-SV-2	SAN FRANCISCO CITY & CNTY CA-BUILD AMERI	1			.. 1.D FE	3,196,062	102.6580	2,581,849	2,515,000	2,999,109	0	(20,965)	0	0	6.000	4.310	MN	25,150	150,900	04/12/2013	11/01/2040
79768H-AK-4	San Francisco City & Cou-REVENUE BONDS				.. 1.C FE	4,192,960	100.2140	4,008,560	4,000,000	4,121,794	0	(8,213)	0	0	5.750	5.372	AO	57,500	230,000	08/14/2013	10/01/2035
835574-CB-8	County of Sonoma CA-REVENUE BONDS	1			.. 1.B FE	21,821,939	102.8430	21,519,898	20,925,000	21,764,267	0	(57,672)	0	0	6.000	5.067	JD	104,625	627,750	08/15/2024	12/01/2041
913366-DG-2	Regents of the Universit-REVENUE BONDS	1			.. 1.D FE	4,156,298	102.9490	3,453,939	3,355,000	3,624,666	0	(54,819)	0	0	6.458	4.415	MN	27,685	216,666	03/21/2013	05/15/2029
913366-EQ-9	Regents of the Universit-REVENUE BONDS				.. 1.D FE	8,534,313	103.9410	7,359,023	7,080,000	7,679,281	0	(78,642)	0	0	6.398	4.837	MN	57,881	452,978	09/02/2015	05/15/2031
19633S-AB-9	COLORADO ST BRIDGE ENTERPRISE REVENUE				.. 1.B FE	15,031,140	104.4150	12,529,800	12,000,000	14,037,859	0	(85,587)	0	0	6.078	4.565	JD	60,780	729,360	05/28/2013	12/01/2040
196479-F9-5	Colorado Housing and Fin-REVENUE BONDS	2			.. 1.A FE	2,554,481	87.9670	2,182,117	2,480,608	2,502,201	0	(8,756)	0	0	3.700	3.312	MON	7,649	107,080	02/14/2018	03/01/2048
196479-UX-5	Colorado Housing and Fin-REVENUE BONDS	2			.. 1.A FE	900,000	97.2300	972,300	1,000,000	923,661	0	2,663	0	0	4.200	4.846	AO	10,500	42,000	11/08/2013	10/01/2042
196479-V4-8	Colorado Housing and Fin-REVENUE BONDS	2			.. 1.A FE	4,195,782	100.1180	4,080,957	4,076,148	4,119,887	0	(13,502)	0	0	4.200	3.821	MON	57,066	142,669	10/19/2018	11/01/2048
196479-XM-6	Colorado Housing and Fin-REVENUE BONDS	2			.. 1.A FE	615,000	96.3760	592,712	615,000	615,000	0	0	0	0	3.193	3.192	MN	3,273	19,637	01/16/2015	11/01/2027
196480-EK-1	Colorado Housing and Fin-REVENUE BONDS	2			.. 1.A FE	1,785,058	90.8920	1,622,475	1,785,058	1,785,058	0	0	0	0	2.907	2.907	MON	17,297	43,248	11/21/2019	01/01/2050
20775C-6L-3	Connecticut Housing Fina-REVENUE BONDS	2			.. 1.A FE	2,205,000	81.2760	1,792,136	2,205,000	2,205,000	0	0	0	0	2.300	2.300	MN	6,480	50,715	01/30/2020	11/15/2035
20775C-YE-8	Connecticut Housing Fina-REVENUE BONDS	2			.. 1.A FE	485,000	97.0920	470,896	485,000	485,000	0	0	0	0	3.500	3.500	MN	2,169	16,975	02/07/2018	05/15/2033

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
20775C-YF-5	Connecticut Housing Fina-REVENUE BONDS .....	.....	.....	2	.. 1.A FE	1,355,000	95.8920	1,299,337	1,355,000	1,355,000	0	0	0	0	3.625	3.624	MN	6,276	49,119	02/07/2018	05/15/2035
254768-SQ-8	District of Columbia Hou-REVENUE BONDS .....	.....	.....	2	.. 1.C FE	5,000,000	99.0850	4,954,250	5,000,000	5,000,000	0	0	0	0	4.100	4.099	MS	69,333	205,000	09/26/2018	09/01/2039
25477P-NF-8	District of Columbia Hou-REVENUE BONDS .....	.....	.....	.....	..... 1.B FE	4,933,665	95.6290	4,718,015	4,933,665	4,933,665	0	0	0	0	3.875	3.875	MON	56,292	159,315	05/19/2014	06/15/2045
296122-UT-9	Escambia County Housing -REVENUE BONDS .....	.....	.....	2	.. 1.A FE	1,135,124	90.9130	1,031,975	1,135,124	1,135,124	0	0	0	0	2.850	2.850	MON	10,784	26,959	04/08/2016	11/01/2038
34074M-ND-9	Florida Housing Finance -REVENUE BONDS .....	.....	.....	2	.. 1.A FE	2,887,252	89.2760	2,577,623	2,887,252	2,887,252	0	0	0	0	3.125	3.125	MON	30,076	74,745	03/23/2016	07/01/2037
34074M-PF-2	Florida Housing Finance -REVENUE BONDS .....	.....	.....	2	.. 1.A FE	314,358	90.8650	285,642	314,358	314,363	0	(3)	0	0	2.450	2.449	MON	2,567	6,421	08/25/2016	01/01/2043
46615M-AS-0	JEA District Energy Syst-REVENUE BONDS .....	.....	.....	2	.. 1.C FE	2,000,000	95.3430	1,906,860	2,000,000	2,000,000	0	0	0	0	4.238	4.236	AO	21,190	84,760	06/07/2013	10/01/2030
59334H-FU-4	Miami-Dade County Housin-REVENUE BONDS .....	.....	.....	2	.. 1.A FE	778,630	91.0830	709,199	778,630	778,630	0	0	0	0	2.875	2.875	MON	1,865	22,321	06/09/2016	11/01/2038
875124-ER-6	Tampa Bay Water-REVENUE BONDS .....	.....	.....	.....	..... 1.B FE	1,500,000	98.3920	1,475,880	1,500,000	1,500,000	0	0	0	0	2.612	2.611	AO	9,795	39,180	02/04/2015	10/01/2025
875124-ES-4	Tampa Bay Water-REVENUE BONDS .....	.....	.....	2	.. 1.B FE	3,000,000	98.5330	2,955,990	3,000,000	3,000,000	0	0	0	0	2.782	2.781	AO	20,865	83,460	02/04/2015	10/01/2026
875124-GX-1	Tampa Bay Water-REVENUE BONDS .....	.....	.....	2	.. 1.B FE	2,000,000	98.3290	1,966,580	2,000,000	2,000,000	0	0	0	0	3.507	3.506	AO	17,535	70,140	01/13/2016	10/01/2030
875124-GY-9	Tampa Bay Water-REVENUE BONDS .....	.....	.....	2	.. 1.B FE	1,500,000	98.5890	1,478,835	1,500,000	1,500,000	0	0	0	0	3.607	3.606	AO	13,526	54,105	01/13/2016	10/01/2031
37353P-AH-2	Georgia Housing & Financ-REVENUE BONDS .....	.....	.....	2	.. 1.A FE	8,470,000	93.7150	7,965,775	8,500,000	8,477,703	0	1,215	0	0	3.500	3.500	JD	24,792	446,250	12/19/2017	12/01/2038
905664-AA-6	City of Union City GA-REVENUE BONDS .....	.....	.....	.....	..... 1.B FE	10,000,000	100.1220	10,012,200	10,000,000	10,000,000	0	0	0	0	4.730	4.730	JJ	236,500	473,000	07/20/2011	01/01/2027
41980U-AB-7	State of Hawaii Departme-REVENUE BONDS .....	.....	.....	.....	..... 1.A FE	2,195,801	96.1280	2,110,885	2,195,911	2,195,911	0	0	0	0	3.242	3.242	JJ	35,596	106,787	11/05/2014	01/01/2031
438701-XD-1	City & County Honolulu H-REVENUE BONDS .....	.....	1,2 .....	.....	.. 1.C FE	3,250,000	100.0060	3,250,195	3,250,000	3,249,985	0	28	0	0	4.411	4.412	JJ	71,679	143,358	07/23/2015	07/01/2035
45129W-KB-5	Idaho Housing & Finance -REVENUE BONDS .....	.....	.....	.....	..... 1.E FE	9,146,729	103.5810	7,519,981	7,260,000	7,744,831	0	(163,251)	0	0	6.348	3.783	JJ	212,510	460,865	05/23/2013	07/15/2028
167736-VY-3	City of Chicago IL Water-REVENUE BONDS .....	.....	.....	.....	..... 1.E FE	7,586,527	103.3810	6,936,865	6,710,000	7,062,396	0	(62,383)	0	0	6.642	5.391	MN	74,280	445,678	03/12/2014	11/01/2029
213248-BB-2	County of Cook IL Sales -REVENUE BONDS .....	.....	.....	2	.. 1.D FE	6,500,000	100.0060	6,500,390	6,500,000	6,500,000	0	0	0	0	5.354	5.352	MN	44,468	348,010	07/12/2013	11/15/2035
45201Y-X6-9	Illinois Housing Develop-REVENUE BONDS .....	.....	.....	2	.. 1.A FE	245,000	97.8100	239,635	245,000	245,000	0	0	0	0	4.125	4.124	AO	2,527	10,106	10/18/2018	10/01/2038
45203L-CT-8	Illinois Housing Develop-REVENUE BONDS .....	.....	.....	2	.. 1.A FE	9,210,566	93.4240	8,604,879	9,210,566	9,203,966	0	641	0	0	3.500	3.509	MON	137,007	245,177	08/24/2018	09/01/2034
452227-JN-2	State of Illinois-REVENUE BONDS .....	.....	.....	.....	..... 1.F FE	29,134,556	96.4330	27,028,241	28,028,000	28,659,750	0	(34,339)	0	0	4.620	4.394	JD	57,551	1,294,894	02/24/2017	06/15/2038
79467B-JJ-5	Sales Tax Securitization-REVENUE BONDS .....	.....	.....	.....	..... 1.B FE	5,000,000	99.0310	4,951,550	5,000,000	5,000,000	0	0	0	0	4.581	4.581	JJ	7,635	0	12/06/2024	01/01/2029
45462T-GC-0	Indiana Bond Bank-REVENUE BONDS .....	.....	.....	2	.. 1.B FE	1,000,000	90.6310	906,310	1,000,000	1,000,000	0	0	0	0	3.366	3.366	FA	14,025	33,660	06/21/2017	08/01/2031
45528S-SR-3	Indianapolis Local Publi-REVENUE BONDS .....	.....	.....	.....	..... 1.D FE	12,453,547	101.4650	10,300,633	10,151,907	10,976,761	0	(144,345)	0	0	5.966	4.161	JJ	279,278	599,265	01/18/2012	01/15/2030
641667-NZ-9	New Albany-Floyd County -REVENUE BONDS .....	.....	.....	2	.. 1.B FE	2,655,000	98.5830	2,617,379	2,655,000	2,655,000	0	0	0	0	3.110	3.110	JJ	38,075	77,729	04/11/2013	01/15/2027
472904-P3-9	Jefferson County School -REVENUE BONDS .....	.....	.....	2	.. 1.D FE	11,706,700	100.0100	11,826,183	11,825,000	11,809,940	0	9,858	0	0	4.650	4.649	JD	45,822	824,794	05/18/2011	06/01/2026
49130T-UP-9	Kentucky Housing Corp-REVENUE BONDS .....	.....	.....	2	.. 1.A FE	800,000	93.8400	750,720	800,000	800,004	0	(8)	0	0	3.499	3.498	JJ	13,996	27,992	06/09/2016	07/01/2031
575832-R2-8	Massachusetts State Coll-REVENUE BONDS .....	.....	.....	.....	..... 1.C FE	555,000	100.0870	555,483	555,000	555,000	0	0	0	0	5.788	5.785	MN	5,354	32,123	12/10/2010	05/01/2025
57583R-R9-8	Massachusetts Development-REVENUE BONDS .....	.....	.....	.....	..... 1.A	1,163,288	101.2330	1,017,392	1,055,000	1,052,058	0	(13,621)	0	0	5.861	4.262	MS	19,634	58,903	12/20/2015	06/01/2028
57583U-XX-1	Massachusetts Development-REVENUE BONDS .....	.....	.....	.....	..... 1.F FE	3,000,000	101.3060	3,039,180	3,000,000	3,000,000	0	0	0	0	5.353	5.352	JD	13,383	160,590	07/31/2013	12/01/2028
57586N-MM-8	Massachusetts Housing FI-REVENUE BONDS .....	.....	.....	2	.. 1.C FE	105,000	99.5870	104,566	105,000	105,000	0	0	0	0	4.029	4.028	JD	353	4,230	09/14/2012	12/01/2027
57587A-YF-9	Massachusetts Housing FI-REVENUE BONDS .....	.....	.....	2	.. 1.C FE	3,749,845	90.8010	3,368,717	3,710,000	3,723,295	0	(4,275)	0	0	3.750	3.619	JD	11,594	208,688	12/21/2017	12/01/2042
57587A-XH-6	Massachusetts Housing FI-REVENUE BONDS .....	.....	.....	2	.. 1.C FE	7,528,636	88.8630	6,753,588	7,600,000	7,536,423	0	1,218	0	0	3.950	4.000	JD	25,017	450,300	12/20/2017	12/01/2052
575898-CS-8	Massachusetts Port Autho-REVENUE BONDS .....	.....	.....	1	.. 1.F FE	1,876,710	102.9730	1,868,960	1,815,000	1,867,344	0	(9,364)	0	0	6.202	5.211	JJ	56,283	56,283	05/08/2024	07/01/2031
576000-KW-2	MASSACHUSETTS ST SCH BLD-REVENUE BONDS .....	.....	.....	.....	..... 1.C FE	15,276,000	101.8400	15,276,000	15,000,000	15,568,725	0	(216,951)	0	0	5.468	5.272	JD	36,453	1,230,300	06/27/2014	06/15/2027
576000-LA-9	MASSACHUSETTS ST SCH BLD-REVENUE BONDS .....	.....	.....	1	.. 1.C FE	10,000,000	100.7960	10,079,600	10,000,000	10,000,000	0	0	0	0	4.885	4.885	JJ	225,253	488,500	07/21/2011	07/15/2028
57604P-5P-5	Massachusetts Clean Wate-REVENUE BONDS .....	.....	.....	.....	..... 1.A FE	4,313,589	99.3670	3,587,149	3,610,000	3,905,081	0	(97,032)	0	0	5.192	2.272	FA	78,096	187,431	05/07/2015	08/01/2040
57604T-AB-2	Commonwealth of Massachu-REVENUE BONDS .....	.....	.....	.....	..... 1.A FE	6,500,000	100.2200	6,514,300	6,500,000	6,500,000	0	0	0	0	5.203	5.202	JD	197,280	338,195	12/16/2010	06/01/2025
57604T-AC-0	Commonwealth of Massachu-REVENUE BONDS .....	.....	.....	.....	..... 1.A FE	16,308,230	101.1270	14,628,021	14,465,000	15,181,288	0	(114,158)	0	0	5.631	4.587	JD	475,139	814,524	01/03/2014	06/01/2030
898365-AP-6	Trustees of Boston Colle-REVENUE BONDS .....	.....	.....	.....	..... 1.D FE	11,000,000	98.2460	10,807,060	11,000,000	11,000,000	0	0	0	0	4.519	4.519	JJ	248,545	497,090	08/14/2013	07/01/2028
183596-CY-9	Baltimore Board of Schoo-REVENUE BONDS .....	.....	.....	.....	..... 1.B FE	6,513,725	100.6360	6,541,340	6,500,000	6,501,312	0	(1,380)	0	0	5.692	5.668	JD	16,444	369,980	02/07/2011	12/15/2025
57419R-D5-1	Maryland Community Devel-REVENUE BONDS .....	.....	.....	.....	..... 1.B FE	19,200,000	91.4100	17,550,720	19,200,000	19,199,280	0	125	0	0	3.463	3.464	MS	221,632	664,896	08/25/2016	09/01/2031
57419R-D6-9	Maryland Community Devel-REVENUE BONDS .....	.....	.....	2	.. 1.B FE	994,090	98.3050	943,728	960,000	961,741	0	(2,587)	0	0	3.500	3.218	MS	11,200	33,600	08/25/2016	09/01/2047
57419R-L6-0	Maryland Community Devel-REVENUE BONDS .....	.....	.....	2	.. 1.B FE	24,775,000	91.9930	22,791,266	24,775,000	24,775,000	0	0	0	0	4.103	4.102	MS	338,839	1,016,518	04/07/2017	09/01/2032

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
57419T-GS-4	Maryland Community Devel-REVENUE BONDS			2	.. 1.B FE	3,000,000	..80.2300	2,406,900	3,000,000	3,000,000	..0	..0	..0	..0	..2.300	..2.300	MS	23,000	69,000	02/05/2020	09/01/2035
574218-X4-0	Maryland Health & Higher-REVENUE BONDS				.. 1.F FE	3,500,000	..96.9540	3,393,390	3,500,000	3,499,968	..0	..8	..0	..0	..4.068	..4.068	JJ	71,190	142,380	01/20/2017	07/01/2028
574218-X5-7	Maryland Health & Higher-REVENUE BONDS				.. 1.F FE	4,000,000	..96.9470	3,877,880	4,000,000	3,999,954	..0	..9	..0	..0	..4.168	..4.168	JJ	83,360	166,720	01/20/2017	07/01/2029
59447T-XI-8	Michigan Finance Authori-REVENUE BONDS				.. 1.D FE	4,500,000	..86.2560	3,881,520	4,500,000	4,500,000	..0	..0	..0	..0	..3.084	..3.084	JD	11,565	138,780	12/05/2019	12/01/2034
594712-PP-0	MICHIGAN ST UNIV REVENUE-REVENUE BONDS			1,2	.. 1.C FE	38,924,154	102.2170	32,632,777	31,925,000	34,845,614	..0	..(502,926)	..0	..0	..6.173	..4.167	FA	744,498	1,970,730	11/02/2015	02/15/2050
914455-JZ-4	University of Michigan-REVENUE BONDS				.. 1.A FE	5,510,027	100.9210	4,405,202	4,365,000	4,785,127	..0	..(71,774)	..0	..0	..5.513	..3.489	AO	60,161	240,642	10/24/2012	04/01/2030
60416Q-FI-9	Minnesota Housing Financ-REVENUE BONDS			2	.. 1.A FE	1,122,836	..84.9240	978,008	1,151,627	1,130,389	..0	..983	..0	..0	..2.700	..2.839	MON	10,365	25,902	05/07/2015	09/01/2041
60416Q-GK-4	Minnesota Housing Financ-REVENUE BONDS			2	.. 1.A FE	1,207,023	..87.0580	1,050,810	1,207,023	1,207,023	..0	..0	..0	..0	..2.730	..2.730	MON	8,238	30,156	07/15/2016	08/01/2046
60416Q-GM-0	Minnesota Housing Financ-REVENUE BONDS			2	.. 1.A FE	332,652	..81.9130	312,483	381,481	339,116	..0	..1,353	..0	..0	..2.350	..3.049	MON	747	8,964	10/23/2018	10/01/2046
60416Q-HA-5	Minnesota Housing Financ-REVENUE BONDS			2	.. 1.A FE	4,276,607	..91.7870	3,925,369	4,276,607	4,276,607	..0	..0	..0	..0	..3.300	..3.300	MON	58,803	105,848	02/14/2018	03/01/2048
60416Q-HE-7	Minnesota Housing Financ-REVENUE BONDS			2	.. 1.A FE	3,297,454	..91.3420	3,027,231	3,314,172	3,299,649	..0	..382	..0	..0	..3.450	..3.450	MON	47,642	85,758	08/17/2018	09/01/2048
60416Q-HG-2	Minnesota Housing Financ-REVENUE BONDS			2	.. 1.A FE	3,405,542	..95.5050	3,252,463	3,405,542	3,405,542	..0	..0	..0	..0	..3.750	..3.750	MON	53,212	95,783	10/18/2018	11/01/2048
60416Q-HJ-6	Minnesota Housing Financ-REVENUE BONDS			2	.. 1.A FE	2,022,396	..95.7150	1,935,737	2,022,396	2,022,396	..0	..0	..0	..0	..3.600	..3.600	MON	30,336	54,607	12/14/2018	01/01/2049
60416Q-HL-1	Minnesota Housing Financ-REVENUE BONDS			2	.. 1.A FE	2,807,992	..90.5860	2,543,648	2,807,992	2,807,992	..0	..0	..0	..0	..3.450	..3.450	MON	40,365	72,660	02/08/2019	03/01/2049
60416Q-HN-7	Minnesota Housing Financ-REVENUE BONDS			2	.. 1.A FE	354,297	..86.8460	307,692	354,297	354,297	..0	..0	..0	..0	..3.150	..3.150	MON	930	11,160	05/15/2019	06/01/2049
60416Q-HS-6	Minnesota Housing Financ-REVENUE BONDS			2	.. 1.A FE	3,695,713	..82.6310	3,053,805	3,695,713	3,695,713	..0	..0	..0	..0	..3.020	..3.020	MON	256,249	(35,428)	11/14/2019	12/01/2049
60416S-5C-0	Minnesota Housing Financ-REVENUE BONDS			2	.. 1.B FE	995,000	..84.3680	839,462	995,000	995,000	..0	..0	..0	..0	..2.941	..2.941	JJ	14,631	29,263	01/24/2020	01/01/2035
231266-FD-4	CURATORS OF THE UNIV OF -REVENUE BONDS				.. 1.B FE	17,498,022	103.0840	14,055,503	13,635,000	16,284,807	..0	..166,837	..0	..0	..5.960	..4.187	MN	135,441	812,646	03/20/2013	11/01/2039
60636Y-HL-8	Missouri Housing Develop-REVENUE BONDS			2	.. 1.B FE	235,000	..98.9930	232,634	235,000	235,000	..0	..0	..0	..0	..3.723	..3.723	JJ	4,375	10,388	10/17/2012	07/01/2028
60636Y-HM-6	Missouri Housing Develop-REVENUE BONDS			2	.. 1.B FE	165,000	..95.8200	158,103	165,000	165,000	..0	..0	..0	..0	..4.156	..4.156	JJ	3,429	6,857	10/17/2012	07/01/2033
60636Y-MJ-7	Missouri Housing Develop-REVENUE BONDS			2	.. 1.B FE	392,923	..86.9070	341,477	392,923	392,923	..0	..0	..0	..0	..4.200	..4.200	MON	6,876	14,769	04/16/2014	01/01/2040
60637B-FA-3	MISSOURI ST HSG DEV COMM-TAXABLE-REF-SPL			2	.. 1.B FE	413,267	..92.0040	380,222	413,267	413,267	..0	..0	..0	..0	..2.970	..2.970	MON	1,023	16,020	11/20/2014	08/01/2036
60637B-ML-1	Missouri Housing Develop-REVENUE BONDS			2	.. 1.B FE	4,506,888	..82.8490	3,859,340	4,658,282	4,544,330	..0	..4,474	..0	..0	..2.400	..2.560	MON	46,583	83,840	09/29/2017	06/01/2044
40173P-AA-3	Guilford County Public F-REVENUE BONDS			2	.. 1.B FE	2,250,000	..96.6090	2,173,703	2,250,000	2,250,000	..0	..0	..0	..0	..4.564	..4.562	AO	25,673	102,690	03/15/2012	04/01/2032
658289-B7-7	North Carolina State Uni-REVENUE BONDS				.. 1.C FE	2,500,000	..92.1630	2,304,075	2,500,000	2,500,000	..0	..0	..0	..0	..3.825	..3.825	AO	23,906	95,625	02/13/2013	10/01/2033
658909-SU-1	North Dakota Housing Fin-REVENUE BONDS				.. 1.B FE	1,475,856	..94.9450	1,405,186	1,480,000	1,476,857	..0	..174	..0	..0	..3.850	..3.870	JJ	28,490	56,980	08/15/2018	07/01/2038
646136-TM-3	New Jersey Transportatio-REVENUE BONDS			0	.. 1.B FE	3,414,670	..90.4110	6,328,770	7,000,000	6,032,789	..0	..296,015	..0	..0	..0.000	..5.095	N/A	0	0	09/04/2013	12/15/2027
64613A-BC-5	New Jersey Housing & Mor-REVENUE BONDS			2	.. 1.C FE	2,685,000	..97.3050	2,612,639	2,685,000	2,685,000	..0	..(19)	..0	..0	..3.800	..3.799	AO	25,508	102,030	06/15/2018	10/01/2032
783186-NH-8	Rutgers The State Univer-REVENUE BONDS				.. 1.E FE	10,634,445	100.5580	8,502,179	8,455,000	9,960,475	..0	..(69,451)	..0	..0	..5.665	..4.090	MN	79,829	478,976	12/13/2012	05/01/2040
783186-NJ-4	Rutgers The State Univer-REVENUE BONDS				.. 1.E FE	3,370,757	100.6470	2,811,698	2,793,623	2,980,426	..0	..(38,929)	..0	..0	..5.545	..3.853	MN	103,271	74,567	08/20/2012	05/01/2029
783186-RC-5	Rutgers The State Univer-REVENUE BONDS				.. 1.E FE	5,000,000	..97.8760	4,893,800	5,000,000	5,000,000	..0	..0	..0	..0	..4.712	..4.711	MN	39,267	235,600	06/14/2013	05/01/2033
783186-UV-9	Rutgers The State Univer-REVENUE BONDS				.. 1.E FE	3,516,240	..68.1160	2,724,640	4,000,000	3,554,458	..0	..13,990	..0	..0	..2.681	..3.421	MN	17,873	107,240	03/03/2022	05/01/2046
647200-2G-8	New Mexico Mortgage Fina-REVENUE BONDS			2	.. 1.A FE	924,868	..87.1840	806,336	924,867	924,867	..0	..0	..0	..0	..2.750	..2.750	MON	10,597	19,079	06/13/2014	08/01/2035
647200-4S-0	New Mexico Mortgage Fina-REVENUE BONDS			2	.. 1.B FE	2,235,000	..86.0740	1,923,754	2,235,000	2,235,000	..0	..0	..0	..0	..2.600	..2.600	MON	9,685	58,110	08/03/2016	09/01/2040
610730-AA-1	Monroe County Industrial-REVENUE BONDS			1	.. 1.C FE	10,000,000	..97.2550	9,725,500	10,000,000	10,000,000	..0	..0	..0	..0	..4.176	..4.175	MN	69,600	417,600	06/14/2012	05/01/2028
61075T-GO-5	Monroe County Industrial-REVENUE BONDS				.. 1.D FE	1,745,000	..100.1520	1,747,652	1,745,000	1,745,000	..0	..0	..0	..0	..5.046	..5.046	JJ	44,026	88,053	09/11/2013	07/01/2028
61075T-GR-3	Monroe County Industrial-REVENUE BONDS				.. 1.D FE	3,255,000	..97.6370	3,178,084	3,255,000	3,255,000	..0	..0	..0	..0	..5.311	..5.311	JJ	86,437	172,873	09/11/2013	07/01/2033
61075T-LJ-5	Monroe County Industrial-REVENUE BONDS				.. 1.D FE	3,250,000	..96.2180	3,127,085	3,250,000	3,250,030	..0	..(2)	..0	..0	..4.631	..4.631	JJ	75,254	150,508	06/	

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
64972B-R4-9	New York City Housing De-REVENUE BONDS				1.C FE	7,246,675	.97.3080	7,030,503	7,225,000	7,231,405	.0	(1,850)	.0	.0	3.780	3.750	MN	45,518	273,105	08/21/2014	05/01/2028
64972C-BD-4	New York City Housing De-REVENUE BONDS				1.C FE	.1	.97.5530	.1	.1	.1	.0	.0	.0	.0	3.050	3.050	MON	6,441	.0	06/19/2014	06/15/2036
64972C-FR-9	New York City Housing De-REVENUE BONDS		2		1.C FE	7,000,000	.97.5840	6,830,880	7,000,000	7,000,000	.0	.0	.0	.0	3.890	3.889	MN	45,383	272,300	12/11/2014	11/01/2029
64972C-M6-7	New York City Housing De-REVENUE BONDS				1.B FE	11,907,686	.86.9590	10,354,804	11,907,686	11,920,876	.0	(419)	.0	.0	3.098	3.091	MON	153,708	276,680	09/29/2017	10/01/2046
64972E-ME-6	New York City Housing De-REVENUE BONDS		2		1.C FE	10,000,000	.86.8770	8,687,700	10,000,000	10,000,000	.0	.0	.0	.0	3.242	3.242	MN	54,033	324,200	12/06/2019	11/01/2034
649883-3Y-9	State of New York Mortga-REVENUE BONDS		2		1.B FE	530,000	.98.4770	521,928	530,000	530,000	.0	.0	.0	.0	3.350	3.349	AO	4,439	17,755	02/28/2018	04/01/2029
649902-T4-5	NEW YORK ST DORM AUTH REVENUE BOND				1.B FE	11,757,000	100.5320	10,053,200	10,000,000	10,444,369	.0	(154,659)	.0	.0	5.051	3.318	MS	148,724	505,100	03/20/2015	09/15/2027
649907-YA-4	New York State Dormitory-REVENUE BONDS				1.A FE	24,398,100	.98.7160	23,973,181	24,285,000	24,349,225	.0	(5,013)	.0	.0	4.802	4.768	JD	97,180	1,166,166	01/07/2014	12/01/2034
64990F-MT-8	New York State Dormitory-REVENUE BONDS				1.B FE	6,955,536	100.4380	6,131,740	6,105,000	6,623,677	.0	(25,018)	.0	.0	5.628	4.796	MS	101,168	343,589	06/20/2013	03/15/2039
64990F-MV-3	New York State Dormitory-REVENUE BONDS				1.B FE	2,378,440	.99.0700	1,981,400	2,000,000	2,255,272	.0	(12,897)	.0	.0	5.427	4.222	MS	31,959	108,540	01/31/2013	03/15/2039
73358W-EK-6	PORT AUTH OF NEW YORK & -REVENUE BONDS				1.D FE	582,265	.94.1600	470,800	500,000	568,480	.0	(1,394)	.0	.0	4.926	4.080	AO	6,158	24,630	08/31/2012	10/01/2051
73358W-TZ-7	Port Authority of New Yo-REVENUE BONDS		2		1.D FE	9,000,000	.94.6530	8,518,770	9,000,000	9,000,000	.0	.0	.0	.0	4.426	4.424	AO	84,094	398,340	10/08/2014	10/15/2034
871683-CF-3	Syracuse Industrial Deve-REVENUE BONDS				1.C FE	3,500,000	100.5810	3,520,335	3,500,000	3,500,000	.0	.0	.0	.0	5.428	5.426	MN	31,663	189,980	06/29/2011	05/01/2027
40727T-DJ-0	County of Hamilton OH-REVENUE BONDS				1.E FE	5,280,000	.86.1750	4,550,040	5,280,000	5,280,000	.0	.0	.0	.0	3.374	3.374	JD	14,846	178,147	12/19/2019	06/01/2034
47770V-AY-6	JobsOhio Beverage System-REVENUE BONDS		1		1.C FE	3,927,609	.98.8050	4,001,603	4,050,000	3,982,919	.0	47,801	.0	.0	3.985	5.117	JJ	80,696	161,393	08/17/2023	01/01/2029
677377-2P-7	Ohio Housing Finance Age-REVENUE BONDS		2		1.A FE	6,850,000	.86.2540	5,908,399	6,850,000	6,850,001	.0	.0	.0	.0	2.650	2.650	MON	30,254	180,292	07/15/2016	11/01/2041
67756Q-KX-8	Ohio Housing Finance Age-REVENUE BONDS		2		1.A FE	745,000	.92.7800	691,211	745,000	745,000	.0	.0	.0	.0	3.800	3.799	MS	9,437	28,310	09/12/2018	09/01/2038
91476Q-BE-6	University of Oklahoma/T-REVENUE BONDS		2		1.C FE	1,000,000	.90.8940	908,940	1,000,000	999,986	.0	.5	.0	.0	4.029	4.030	JJ	20,145	40,290	07/12/2017	07/01/2036
91476P-GP-7	University of Oklahoma/T-REVENUE BONDS		2		1.E FE	2,535,000	.99.3060	2,517,407	2,535,000	2,535,000	.0	.0	.0	.0	4.380	4.380	JJ	55,517	111,033	09/26/2013	07/01/2026
686087-ZL-4	State of Oregon Housing -REVENUE BONDS		2		1.C FE	2,470,000	.96.8040	2,391,059	2,470,000	2,469,972	.0	11	.0	.0	3.900	3.900	JJ	48,165	96,330	08/14/2018	07/01/2038
20281P-BQ-4	Commonwealth Financing A-REVENUE BONDS				1.D FE	2,313,855	100.5950	1,996,811	1,985,000	2,054,087	.0	(26,647)	.0	.0	5.740	4.208	JD	9,495	113,794	10/17/2012	06/01/2027
708797-AN-5	Pennsylvania Housing Fin-REVENUE BONDS				1.A FE	7,392,898	.95.1360	7,033,308	7,392,898	7,389,417	.0	274	.0	.0	3.600	3.605	MON	113,111	202,351	07/30/2018	08/01/2035
70879Q-DB-6	Pennsylvania Housing Fin-REVENUE BONDS		2		1.B FE	1,000,000	.95.0100	950,100	1,000,000	1,000,000	.0	.0	.0	.0	3.650	3.649	AO	9,125	36,500	01/16/2019	10/01/2032
70879Q-EW-9	Pennsylvania Housing Fin-REVENUE BONDS		2		1.B FE	7,458,075	.79.8460	6,084,265	7,620,000	7,506,839	.0	10,020	.0	.0	2.500	2.674	AO	47,625	190,500	11/13/2019	10/01/2034
85732P-CC-2	State Public School Buil-REVENUE BONDS				1.D FE	1,000,000	101.0930	1,010,930	1,000,000	1,000,000	.0	.0	.0	.0	5.426	5.424	MS	15,977	54,260	06/02/2011	09/15/2026
85732P-CD-0	State Public School Buil-REVENUE BONDS				1.D FE	1,500,000	101.3970	1,520,955	1,500,000	1,500,000	.0	.0	.0	.0	5.426	5.424	MS	23,965	81,390	06/02/2011	09/15/2026
85732P-CF-5	State Public School Buil-REVENUE BONDS				1.D FE	5,260,800	.99.9960	4,999,800	5,000,000	5,091,391	.0	(17,047)	.0	.0	5.138	4.699	MS	75,643	256,900	12/28/2011	09/15/2029
74529J-PX-7	Puerto Rico Sales Tax Fi-REVENUE BONDS				5.B	995,080	.99.0000	990,000	1,000,000	995,158	.0	78	.0	.0	5.000	5.030	JJ	25,000	25,000	01/12/2024	07/01/2058
76221T-KB-4	Rhode Island Housing and-REVENUE BONDS		2		1.C FE	4,525,652	.94.8790	4,241,091	4,470,000	4,485,209	.0	(6,454)	.0	.0	3.800	3.639	AO	42,465	169,860	12/20/2017	10/01/2037
76221T-PC-7	Rhode Island Housing and-REVENUE BONDS		2		1.C FE	2,000,000	.71.8740	1,437,480	2,000,000	2,000,000	.0	.0	.0	.0	3.032	3.032	AO	15,160	60,640	01/14/2021	10/01/2040
83755N-EY-4	South Dakota Housing Dev-REVENUE BONDS		2		1.B FE	1,075,000	.92.7940	997,536	1,075,000	1,075,000	.0	.0	.0	.0	3.434	3.433	MN	6,153	36,916	10/14/2016	11/01/2031
592041-WJ-2	Metropolitan Government -REVENUE BONDS		1,2		1.F FE	8,000,000	.99.1350	7,930,800	8,000,000	8,000,000	.0	.0	.0	.0	4.053	4.053	JJ	162,120	324,240	03/18/2016	07/01/2026
592041-XW-2	Metropolitan Government -REVENUE BONDS				1.A FE	8,000,000	.80.2220	6,417,760	8,000,000	8,000,069	.0	(11)	.0	.0	3.437	3.397	AO	68,740	274,960	10/27/2016	10/01/2046
67178K-AA-8	Oak Ridge Industrial Dev-REVENUE BONDS				1.D FE	898,754	.99.9710	957,678	957,955	936,648	.0	12,654	.0	.0	5.780	6.627	JD	2,461	55,370	01/28/2010	12/15/2032
880557-3E-1	TENNESSEE ST SCH BOND AU-REVENUE BONDS				1.B FE	3,866,940	.94.0640	5,173,520	5,500,000	5,229,489	.0	149,201	.0	.0	1.515	4.528	MJSD	3,703	83,325	07/25/2013	09/15/2026
088518-CL-7	County of Bexar TX-REVENUE BONDS				1.B FE	1,823,089	106.7790	1,639,058	1,535,000	1,655,157	.0	(48,974)	.0	.0	6.980	4.762	FA	40,476	107,143	02/07/2014	08/15/2032
19625A-AG-7	Colony Local Development-REVENUE BONDS				1.B FE	12,154,010	.93.5760	10,293,360	11,000,000	11,970,287	.0	(24,874)	.0	.0	4.881	4.271	AO	134,228	536,910	04/19/2016	10/01/2047
19625A-AR-3	Colony Local Development-REVENUE BONDS				1.B FE	1,000,000	.97.9450	979,450	1,000,000	1,000,000	.0	.0	.0	.0	3.666	3.665	AO	9,165	36,860	02/07/2013	10/01/2026
19625A-AS-1	Colony Local Development-REVENUE BONDS				1.B FE	1,210,000	.97.0350	1,174,124	1,210,000	1,210,000	.0	.0	.0	.0	3.766	3.766	AO	11,392	45,569	02/07/2013	10/01/2027
19625A-AT-9	Colony Local Development-REVENUE BONDS				1.B FE	1,180,000	.96.0930	1,133,897	1,180,000	1,180,000	.0	.0	.0	.0	3.866	3.865	AO	11,405	45,619	02/07/2013	10/01/2028
30767E-AE-9	Farm Credit Bank of Texa-FARMCB 7 3/4 PE		2		2.B FE	33,663,855	104.6250	34,392,330	32,872,000	33,630,170	.0	(33,684)	.0	.0	7.750	7.137	JAJO	113,226	1,200,420	11/13/2024	01/01/9999
845040-JP-0	Southwest Higher Educati-REVENUE BONDS		2		1.D FE	2,250,000	.93.8820	2,112,345	2,250,000	2,250,000	.0	.0	.0	.0	4.156	4.154	AO	23,378	93,510	03/20/2013	10/01/2033
88275F-NU-9	Texas Department of Hous-REVENUE BONDS		2		1.B FE	985,000	.87.8490	865,313	985,000	985,173	.0	(71)	.0	.0	3.200	3.169	MS	10,507	31,520	10/15/2015	09/01/2039
88275F-PA-1	Texas Department of Hous-REVENUE BONDS		2		1.B FE	895,609	.91.9770	873,431	949,619	904,202	.0	1,308	.0	.0	3.100	3.403	MON	12,266	22,256	06/15/2018	09/01/2047
882806-GD-8	Texas Tech University Sy-REVENUE BONDS		2		1.B FE	3,000,000	.88.5260	2,655,780	3,000,000	3,000,000	.0	.0	.0	.0	4.000	3.999	FA	45,333	120,000	01/31/2017	02/15/2038

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
88283L-HU-3	TEXAS ST TRANSPRTN COMM-BUILD AMERICA RE	1			1.A FE	42,897,948	101.0590	36,340,816	35,960,000	38,553,706	0	(440,958)	0	0	5.178	3.654	AO	465,502	1,862,009	10/29/2014	04/01/2030
914729-SU-3	University of North Texa-REVENUE BONDS	2			1.C FE	2,000,000	86.5470	1,730,940	2,000,000	1,999,827	0	29	0	0	4.122	4.124	AO	17,404	82,440	01/06/2017	04/15/2040
914729-SV-1	University of North Texa-REVENUE BONDS	2			1.C FE	4,000,000	92.4640	3,698,560	4,000,000	3,999,696	0	45	0	0	4.022	4.023	AO	33,964	160,880	01/06/2017	04/15/2036
795681-GM-1	Salt Lake County Municip-REVENUE BONDS	1			1.B FE	2,071,280	101.3610	1,723,137	1,700,000	1,831,505	0	(23,719)	0	0	5.820	4.067	JD	8,245	98,940	05/01/2012	12/01/2029
91743P-DD-4	Utah Housing Corp-REVENUE BONDS				1.B FE	1,100,210	93.8290	988,903	1,053,942	1,095,440	0	(1,048)	0	0	3.500	3.270	MON	15,370	27,513	02/07/2020	02/21/2050
91743P-DE-2	Utah Housing Corp-REVENUE BONDS	1			1.B FE	1,212,732	93.5790	1,094,339	1,169,428	1,208,419	0	(975)	0	0	3.500	3.305	MON	3,411	40,855	03/13/2020	03/21/2050
91754R-PR-2	Utah State Board of Rege-REVENUE BONDS				1.C FE	5,547,600	102.0400	4,224,456	4,140,000	4,581,413	0	(94,670)	0	0	6.279	3.552	AO	64,988	259,951	08/09/2012	04/01/2029
927781-UZ-5	Virginia College Buildin-REVENUE BONDS				1.B FE	3,665,205	99.9560	3,948,262	3,950,000	3,947,540	0	27,074	0	0	4.250	4.964	FA	69,948	167,875	01/03/2011	02/01/2025
92812Q-3V-7	Virginia Housing Develop-REVENUE BONDS	2			1.B FE	2,000,000	98.0180	1,960,360	2,000,000	2,000,000	0	0	0	0	3.418	3.417	AO	17,090	68,360	09/25/2012	10/01/2025
92812U-Q3-5	Virginia Housing Develop-REVENUE BONDS				1.A FE	2,083,232	96.7180	2,014,860	2,083,232	2,081,952	0	43	0	0	4.300	4.305	MON	37,325	66,636	12/04/2013	12/25/2043
92812U-Q4-3	Virginia Housing Develop-REVENUE BONDS				1.A FE	4,308,570	92.7340	3,995,509	4,308,570	4,308,570	0	0	0	0	3.500	3.500	MON	62,833	111,968	11/21/2014	10/25/2037
92812U-Q6-8	Virginia Housing Develop-REVENUE BONDS				1.A FE	2,654,133	87.8990	2,332,956	2,654,133	2,653,665	0	21	0	0	3.100	3.101	MON	34,283	61,295	05/25/2016	06/25/2041
92812U-Q7-6	Virginia Housing Develop-REVENUE BONDS	..SD.			1.A FE	5,405,380	84.2530	4,554,195	5,405,380	5,405,380	0	0	0	0	2.950	2.950	MON	55,811	119,598	10/22/2019	10/25/2049
92812U-Q8-4	Virginia Housing Develop-REVENUE BONDS	2			1.A FE	9,434,431	85.9920	8,112,856	9,434,431	9,434,431	0	0	0	0	2.850	2.850	MON	112,034	200,413	01/29/2020	12/25/2049
92812V-CE-4	Virginia Housing Develop-REVENUE BONDS	2			1.B FE	13,225,000	95.1840	12,588,084	13,225,000	13,225,000	0	0	0	0	3.846	3.845	MM	84,772	508,634	10/29/2014	11/01/2029
92813T-EE-6	Virginia Housing Develop-REVENUE BONDS				1.B FE	6,651,548	93.6220	6,230,817	6,655,292	6,649,490	0	239	0	0	3.250	3.256	MON	90,124	161,373	03/21/2013	08/25/2042
92817S-D6-2	Virginia Public School A-REVENUE BONDS				1.B FE	8,000,000	88.8970	7,111,760	8,000,000	8,000,000	0	0	0	0	3.840	3.840	JD	13,653	307,200	10/12/2012	12/15/2034
92817S-TB-4	Virginia Public School A-REVENUE BONDS				1.B FE	6,492,420	101.0480	6,062,880	6,000,000	6,207,082	0	(31,681)	0	0	5.512	4.799	FA	137,800	330,720	06/29/2012	06/01/2030
92817S-WW-4	Virginia Public School A-REVENUE BONDS				1.B FE	7,000,000	98.4860	6,894,020	7,000,000	7,000,000	0	0	0	0	4.500	4.500	JD	14,000	315,000	06/16/2011	06/15/2027
812631-HS-1	City of Seattle WA Drain-REVENUE BONDS				1.B FE	3,092,500	99.2040	2,480,100	2,500,000	2,903,585	0	(19,466)	0	0	5.550	4.087	MM	23,125	138,750	12/13/2012	11/01/2039
812643-HE-7	City of Seattle WA Munic-REVENUE BONDS				1.C FE	4,237,962	94.8190	4,267,735	4,290,000	4,276,225	0	3,709	0	0	3.400	3.500	JD	12,155	145,860	06/29/2012	06/01/2028
812643-HF-4	City of Seattle WA Munic-REVENUE BONDS				1.C FE	5,583,747	93.8530	5,307,387	5,655,000	5,631,985	0	4,701	0	0	3.500	3.600	JD	16,494	197,925	06/29/2012	06/01/2029
93976B-AG-5	Washington Economic Deve Senior Secured				2.C FE	8,000,000	99.0732	7,925,856	8,000,000	8,000,000	0	0	0	0	7.220	7.220	MM	25,671	869,609	06/13/2023	05/15/2053
93978X-EQ-9	Washington State Housing-REVENUE BONDS	2			1.A FE	920,000	86.4000	794,880	920,000	919,515	0	205	0	0	3.000	3.212	MON	2,300	29,995	05/15/2015	09/01/2040
93978X-ER-7	Washington State Housing-REVENUE BONDS	2			1.A FE	2,329,470	89.6960	2,098,886	2,340,000	2,340,000	0	0	0	0	3.150	3.150	MON	30,713	55,283	05/20/2015	05/01/2041
940093-R4-1	Washington State Univers-REVENUE BONDS	1			1.E FE	6,127,196	100.8380	4,779,721	4,740,000	4,740,000	0	(196,484)	0	0	5.990	1.365	AO	70,982	283,926	11/29/2012	10/01/2027
97689Q-EL-6	Wisconsin Housing & Econ-REVENUE BONDS	2			1.C FE	782,105	97.9340	773,679	790,000	783,000	0	(34)	0	0	3.500	3.559	MS	23,042	13,825	03/20/2020	09/01/2046
95639D-DV-9	West Virginia State Scho-REVENUE BONDS	..0.			1.D FE	2,592,650	93.4500	4,672,500	5,000,000	4,671,318	0	213,203	0	0	0.000	4.699	N/A	0	0	05/21/2012	06/15/2026
0819999999	Subtotal - Bonds - U.S. Special Revenues - Issuer Obligations					1,184,624,560	XXX	1,077,053,905	1,102,456,605	1,150,431,553	0	(3,695,547)	0	0	XXX	XXX	XXX	13,548,893	50,730,964	XXX	XXX
31392C-EM-2	Fannie Mae REMIC Trust 2-FN 2002-W2 AF5				1.A	59,505	101.6764	62,999	61,961	59,861	0	363	0	0	6.000	7.858	MON	(737)	3,511	03/12/2002	06/01/2032
31359N-2W-0	Fannie Mae REMICS-FNR 1997-19 PG	4			1.A	6,852	101.0989	6,429	6,359	6,373	0	(8)	0	0	7.000	6.635	MON	37	442	04/01/2004	04/01/2027
31359V-GF-4	Fannie Mae REMICS-FNR 1999-1 PJ	4			1.A	64,267	101.8748	61,564	60,431	61,068	0	(167)	0	0	6.500	5.722	MON	327	3,925	04/01/2004	02/01/2029
3136AC-FK-2	Fannie Mae REMICS-FNR 2013-4 GI	4			1.A	345,833	4.7064	47,994	1,019,750	56,383	0	(29,513)	0	0	3.000	3.603	MON	2,549	30,575	04/29/2013	02/01/2043
31371K-LU-3	Fannie Mae Pool-POOL #254239	4			1.A	2,094	103.4533	1,872	1,809	1,915	0	(31)	0	0	6.500	3.660	MON	10	118	08/31/2012	03/01/2032
31388T-QZ-9	Fannie Mae Pool-POOL #614372	4			1.A	17,631	102.4479	15,786	15,409	16,135	0	(183)	0	0	7.000	4.826	MON	90	1,079	08/31/2012	01/01/2032
313921-JK-5	Fannie Mae REMICS-FNR 2001-57 PD	4			1.A	30,395	102.8177	29,637	28,824	29,288	0	(45)	0	0	6.500	5.751	MON	156	1,871	04/01/2004	10/01/2031
31392B-SC-1	Fannie Mae REMICS-FNR 2002-6 L	4			1.A	9,960	100.7081	9,646	9,578	9,702	0	(26)	0	0	6.000	5.425	MON	48	575	04/01/2004	02/01/2032
31392E-PC-8	Fannie Mae REMICS-FNR 2002-58 PG	4			1.A	162,334	102.0893	157,241	154,023	156,483	0	(316)	0	0	6.000	5.350	MON	770	9,240	04/01/2004	09/01/2032
31392H-FC-2	Fannie Mae REMICS-FNR 2002-97 SR	4			1.A	635,368	7.2882	5,074	69,617	0	0	(18,299)	0	0	2.317	0.000	MON	27	1,145	03/13/2003	01/25/2033
31393Y-ED-3	Fannie Mae REMICS-FNR 2004-28 SB	4			1.A	189,001	7.8551	25,579	325,643	34,420	0	(12,872)	0	0	2.467	(4.399)	MON	134	5,842	05/28/2013	05/25/2034
31396W-BR-6	Fannie Mae REMICS-FNR 2007-56 SN	4			1.A	1,186,906	2.7903	9,878	354,006	0	0	(4,903)	0	0	1.447	0.000	MON	85	2,745	03/04/2008	06/25/2037
31398M-EL-6	Fannie Mae REMICS-FNR 2010-14 SJ	4			1.A	409,217	2.8851	6,196	214,755	11,335	0	(30,024)	0	0	1.717	(33.453)	MON	61	2,242	08/27/2010	03/25/2040
3140HN-LY-6	Fannie Mae Pool-POOL #BK8442	4			1.A	20,689,283	76.1745	15,720,664	20,637,688	20,679,607	0	(3,941)	0	0	2.000	1.973	MON	34,396	412,754	03/04/2021	01/01/2051
3140JUS-EP-0	Fannie Mae Pool-POOL #BN9141	4			1.A	23,322,944	76.1745	17,827,427	23,403,393	23,332,387	0	3,958	0	0	2.000	2.035	MON	39,006	468,068	04/12/2021	04/01/2051
3140JUX-EE-4	Fannie Mae Pool-POOL #BQ2832	4			1.A	907,193	85.6098	760,485	888,316	894,866	0	(7,136)	0	0	3.000	2.602	MON	6,677	24,434	02/28/2020	09/01/2049

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
3140K0-EL-8	Fannie Mae Pool-POOL #B04638		4		1.A	2,467,359	.85.6098	2,108,676	2,463,125	2,464,561	.0	(895)	.0	.0	3.000	2.980	MON	12,328	73,906	11/07/2019	11/01/2049
3140K2-LK-8	Fannie Mae Pool-POOL #B06829		4		1.A	41,401,298	.76.0763	31,344,742	41,201,728	41,372,470	.0	(7,485)	.0	.0	2.000	1.956	MON	68,670	824,035	04/23/2021	04/01/2051
3140K2-PV-0	Fannie Mae Pool-POOL #B06735		4		1.A	40,544,193	.76.0763	30,774,790	40,452,543	40,528,465	.0	(3,098)	.0	.0	2.000	1.980	MON	67,421	809,051	04/26/2021	05/01/2051
3140OB-N5-3	Fannie Mae Pool-POOL #CA4011		4		1.A	1,120,035	.87.4656	.964,441	1,102,652	1,109,194	.0	(9,183)	.0	.0	3.500	3.114	MON	6,440	38,600	10/16/2019	08/01/2049
3140QC-DT-0	Fannie Mae Pool-POOL #CA4613		4		1.A	1,621,548	.87.4036	1,395,201	1,596,274	1,606,559	.0	(13,347)	.0	.0	3.500	3.100	MON	14,082	51,224	11/07/2019	11/01/2049
3140QC-PN-0	Fannie Mae Pool-POOL #CA4928		4		1.A	1,984,969	.85.6098	1,662,950	1,942,477	1,963,086	.0	(21,048)	.0	.0	3.000	2.487	MON	14,613	53,429	02/28/2020	01/01/2050
3140QH-NJ-0	Fannie Mae Pool-POOL #CA9392		4		1.A	55,114,667	.76.1745	41,580,533	54,585,866	55,027,614	.0	(23,500)	.0	.0	2.000	1.906	MON	90,976	1,091,717	03/03/2021	03/01/2051
3140QM-4N-1	Fannie Mae Pool-POOL #CB2628		4		1.A	9,116,667	.82.3290	8,862,776	10,765,068	9,162,888	.0	(15,910)	.0	.0	2.500	4.448	MON	67,961	224,272	05/25/2023	01/01/2052
3140QR-EJ-8	Fannie Mae Pool-POOL #CB5536		4		1.A	22,736,212	.96.6649	21,730,066	22,479,802	22,728,052	.0	(224)	.0	.0	5.000	4.869	MON	379,550	936,961	01/18/2023	01/01/2053
3140QS-QC-8	Fannie Mae Pool-POOL #CB6750		4		1.A	49,063,368	.98.6974	50,061,293	50,721,982	49,123,747	.0	43,077	.0	.0	5.500	5.713	MON	707,013	2,324,758	08/22/2023	07/01/2053
3140QS-TZ-4	Fannie Mae Pool-POOL #CB6867		4		1.A	41,038,735	.98.6857	41,890,975	42,448,876	41,098,059	.0	46,549	.0	.0	5.500	6.237	MON	591,380	1,945,574	10/18/2023	08/01/2053
3140XL-W6-1	Fannie Mae Pool-POOL #FS5168		4		1.A	13,002,355	.99.3218	13,148,383	13,238,159	13,010,738	.0	4,415	.0	.0	5.500	5.776	MON	184,005	606,749	08/22/2023	06/01/2053
31416K-WP-9	Fannie Mae Pool-POOL #AA2453		4		1.A	.7,288	.96.2718	6,922	7,191	7,240	.0	(25)	.0	.0	4.500	4.213	MON	27	324	03/17/2009	02/01/2039
3141BD-JW-3	Fannie Mae Pool-POOL #MA3876		4		1.A	1,803,358	.85.6098	1,540,001	1,798,861	1,800,373	.0	(1,486)	.0	.0	3.000	2.958	MON	9,025	53,976	10/25/2019	12/01/2049
3141BD-YS-5	Fannie Mae Pool-POOL #MA4930		4		1.A	14,188,986	.80.0782	11,146,324	13,919,300	14,147,539	.0	(23,736)	.0	.0	2.500	2.262	MON	28,999	347,982	03/19/2021	04/01/2051
3141BE-T6-7	Fannie Mae Pool-POOL #MA5072		4		1.A	21,784,244	.98.6974	21,657,847	21,943,679	21,792,246	.0	7,032	.0	.0	5.500	5.607	MON	513,962	804,602	12/05/2023	07/01/2053
3141BE-XU-9	Fannie Mae Pool-POOL #MA5190		4		1.A	22,625,732	.98.6547	22,462,614	22,768,927	22,632,190	.0	5,587	.0	.0	5.500	5.586	MON	426,496	939,218	12/05/2023	11/01/2053
312931-A6-5	Freddie Mac Gold Pool-FG A84529		4		1.A	10,631	.96.8940	10,166	10,492	10,543	.0	(15)	.0	.0	4.500	4.307	MON	39	472	03/17/2009	02/01/2039
3132DQ-AG-1	Freddie Mac Pool-FR SD2707		4		1.A	22,942,367	.96.5447	22,511,936	23,317,635	22,955,411	.0	11,317	.0	.0	5.000	5.276	MON	295,968	971,568	06/08/2023	04/01/2053
3132DQ-B9-6	Freddie Mac Pool-FR SD2764		4		1.A	17,418,781	.96.5447	17,111,002	17,723,402	17,429,253	.0	5,804	.0	.0	5.000	5.241	MON	224,061	738,475	06/07/2023	04/01/2053
313398-P7-8	Freddie Mac REMICS-FHR 2334 TD		4		1.A	38,750	.102.4779	37,958	37,040	37,283	.0	(44)	.0	.0	6.500	6.187	MON	201	2,407	04/01/2004	07/01/2031
313399-B9-7	Freddie Mac REMICS-FHR 2344 SN		4		1.A	255,777	.8.2041	410	4,999	0	.0	(3,714)	.0	.0	3.238	0.000	MON	.7	128	01/14/2002	08/15/2031
31339G-HQ-7	Freddie Mac REMICS-FHR 2367 SA		4		1.A	355,809	.8.2280	1,285	15,621	0	.0	(11,893)	.0	.0	3.263	0.000	MON	23	405	01/14/2002	06/15/2031
3133JL-UE-7	Freddie Mac Pool-FREDDIE MAC POOL-FR QU7		4		1.A	28,815,445	.76.5547	21,888,573	28,592,070	28,776,526	.0	(5,411)	.0	.0	2.000	1.932	MON	47,653	571,841	03/04/2021	03/01/2051
3133KP-Q2-7	Freddie Mac Pool-FR RA7673		4		1.A	21,292,085	.94.1925	20,442,036	21,702,396	21,312,347	.0	8,025	.0	.0	4.500	4.731	MON	328,352	814,164	12/19/2022	07/01/2052
3133KQ-VY-9	Freddie Mac Pool-FR RA8731		4		1.A	26,317,706	.96.5447	25,903,479	26,830,561	26,330,702	.0	2,064	.0	.0	5.000	5.217	MON	458,182	1,006,146	06/07/2023	04/01/2053
3133KR-BN-3	Freddie Mac Pool-FR RA9045		4		1.A	24,208,007	.96.5450	23,742,593	24,592,261	24,224,292	.0	11,075	.0	.0	5.000	5.230	MON	310,436	1,024,678	06/08/2023	05/01/2053
3133KR-MX-9	Freddie Mac Pool-FR RA9374		4		1.A	21,409,815	.98.6974	21,572,499	21,857,204	21,424,924	.0	8,125	.0	.0	5.500	5.834	MON	406,390	901,610	08/22/2023	07/01/2053
3133KS-C6-7	Freddie Mac Pool-FR RA9993		4		1.A	35,915,338	.101.5382	37,105,554	36,543,428	35,940,882	.0	15,655	.0	.0	6.000	6.233	MON	744,105	1,671,627	10/03/2023	10/01/2053
3133N3-U9-3	Freddie Mac Pool-FREDDIE MAC POOL-FR RE6		4		1.A	3,000,335	.88.3308	2,606,811	2,951,193	2,971,651	.0	(23,643)	.0	.0	3.500	3.109	MON	8,608	103,292	11/08/2019	10/01/2049
3133N3-VG-6	Freddie Mac Pool-FREDDIE MAC POOL-FR RE6		4		1.A	2,225,810	.88.3928	1,939,275	2,193,930	2,208,049	.0	(17,305)	.0	.0	3.500	3.128	MON	6,399	76,788	10/18/2019	09/01/2049
3133N3-X3-3	Freddie Mac Pool-FREDDIE MAC POOL-FR RE6		4		1.A	17,906,861	.79.3907	13,882,331	17,486,101	17,836,537	.0	(62,546)	.0	.0	2.500	2.170	MON	36,429	437,153	04/09/2021	05/01/2051
3133TB-AG-2	Freddie Mac REMICS-FHR 1991 PG		4		1.A	5,873	.100.2628	5,679	5,664	5,671	.0	(8)	.0	.0	6.000	5.675	MON	28	338	09/01/2004	09/01/2027
3133TC-HE-1	Freddie Mac REMICS-FHR 2018 PG		4		1.A	6,875	.101.3501	6,603	6,515	6,563	.0	(19)	.0	.0	6.350	5.609	MON	34	413	04/01/2004	01/01/2028
3133TD-3A-2	Freddie Mac REMICS-FHR 2037 HB		4		1.A	16,332	.102.9694	15,376	14,933	15,136	.0	(77)	.0	.0	9.000	7.658	MON	112	1,342	04/01/2004	03/01/2028
3133TH-SB-1	Freddie Mac REMICS-FHR 2118 PE		4		1.A	67,330	.101.9705	65,393	64,130	64,636	.0	(139)	.0	.0	6.500	5.924	MON	347	4,166	04/01/2004	01/01/2029
3133TK-EB-2	Freddie Mac REMICS-FHR 2145 S		4		1.A	496,757	.5.2865	1,724	32,611	0	.0	(17,774)	.0	.0	2.888	0.000	MON	42	724	02/23/2001	04/15/2029
3133TR-YA-7	Freddie Mac REMICS-FHR 2292 S1		4		1.A	276,757	.6.8025	415	6,106	0	.0	(4,940)	.0	.0	3.288	0.000	MON	9	160	03/01/2001	11/15/2030
3133TS-F2-4	Freddie Mac REMICS-FHR 2303 CK		4		1.A	54,754	.101.7650	53,957	53,021	53,417	.0	(81)	.0	.0	6.000	5.651	MON	265	3,181	04/01/2004	04/01/2031
3133TU-HJ-0	Freddie Mac REMICS-FHR 2322 SC		4		1.A	160,878	.9.2029	1,862	20,237	0	.0	(3,120)	.0	.0	3.888	0.000	MON	35	652	10/29/2003	05/15/2031
3133TU-S7-4	Freddie Mac REMICS-FHR 2357 QH		4		1.A	27,088	.103.2622	26,673	25,830	26,197	.0	(65)	.0	.0	6.500	5.882	MON	140	1,679	04/01/2004	09/01/2031
3137A9-6Y-7	Freddie Mac REMICS-FHR 3850 LS		4		1.A	1,089,244	.4.9006	1,022,352	2,088,548	101,231	.0	(396)	.0	.0	1.514	10.112	MON	4,640	4,832	10/07/2011	05/01/2039
3137AC-TN-9	Freddie Mac REMICS-FHR 3897 LI		4		1.A	701,498	.4.4071	105,230	2,387,758	239,312	.0	(11,279)	.0	.0	1.706	1.706	MON	6,094	7,019	08/11/2011	01/01/2037
3137FA-NH-7	Freddie Mac REMICS-FHR 4709 WI		4		1.A	401,486	.4.8838	244,547	5,007,282	530,808	.0	(31,236)	.0	.0	1.600	1.600	MON	11,883	20,010	03/02/2018	10/01/2038
3137FW-WC-0	Freddie Mac REMICS-FHR 5020 AI		4		1.A	1,334,523	.11.2124	1,760,371	15,700,273	1,096,766	.0	(110,207)	.0	.0	2.000	20.329	MON	26,167	313,998	09/15/2020	09/01/2050

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
31392K-5C-6	Freddie Mac REMICS-FHR 2455 GK .....	.....	.....	4	 1.A	147,981	103.3860	143,868	139,156	142,001	0	(271)	0	0	6.500	5.664	MON	754	9,036	04/01/2004	05/01/2032
31392M-5R-9	Freddie Mac REMICS-FHR 2448 TX .....	.....	.....	4	 1.A	157,089	102.2030	152,844	149,549	151,686	0	(219)	0	0	6.000	5.326	MON	748	8,970	04/01/2004	05/01/2032
31397W-F3-4	Freddie Mac REMICS-FHR 3457 ES .....	.....	.....	4	 1.A	219,678	2.9074	1,055	36,284	0	0	(1,066)	0	0	1.288	0.000	MON	21	226	12/03/2008	06/15/2038
0829999999. Subtotal - Bonds - U.S. Special Revenues - Residential Mortgage-Backed Securities						614,937,456	XXX	548,530,862	640,284,300	608,816,668	0	(359,823)	0	0	XXX	XXX	XXX	6,184,756	20,792,444	XXX	XXX
0909999999. Total - U.S. Special Revenues Bonds						1,799,562,016	XXX	1,625,584,767	1,742,740,904	1,759,248,221	0	(4,055,370)	0	0	XXX	XXX	XXX	19,733,649	71,523,408	XXX	XXX
00182Y-AA-3	ANZ Bank New Zealand Ltd-SUBORDINATED .....	.....	D	2	 1.G FE	7,874,000	100.1689	7,887,298	7,874,000	7,874,000	0	0	0	0	5.548	5.548	FA	169,886	436,850	08/02/2022	08/11/2032
00184@-AA-4	Amazon (Euclid Oh) Trust Certificate .....	.....	.....	.....	..... 1.D	3,766,395	91.1186	3,431,886	3,766,395	3,764,654	0	81	0	0	4.095	4.099	MON	13,323	153,575	09/15/2018	06/30/2039
00191#-AA-3	Amazon (Tucson Az) Trust Certificate .....	.....	.....	.....	..... 1.D	4,208,846	91.0124	3,830,572	4,208,846	4,205,539	0	151	0	0	4.095	4.102	MON	30,776	172,347	10/16/2018	08/31/2039
00191@-AA-5	Amazon (Oklahoma City Ok Trust Certifica .....	.....	.....	.....	..... 1.E	8,215,209	91.8359	7,544,511	8,215,209	8,214,322	0	40	0	0	4.233	4.234	MON	30,036	347,740	11/01/2018	09/30/2039
00193*-AA-5	Amazon (Tulsa Ok) Trust Certificate .....	.....	.....	.....	..... 1.D	8,589,962	91.8356	7,888,644	8,589,962	8,589,564	0	18	0	0	4.233	4.233	MON	31,407	363,597	11/01/2018	09/30/2039
00195*-AA-9	Amazon (Toledo Oh) Trust Certificate .....	.....	.....	.....	..... 1.D	14,647,331	86.7721	12,709,710	14,647,231	14,647,231	0	0	0	0	3.570	3.570	MON	86,721	567,618	12/15/2019	10/31/2040
00225#-AA-3	Amazon (Grand Rapids, M Trust Certifica .....	.....	.....	.....	..... 1.D	3,962,576	90.9594	3,604,335	3,962,576	3,959,743	0	128	0	0	4.095	4.101	MON	28,962	162,260	11/16/2018	09/30/2039
00262@-AA-9	AIP ITALY LP Senior Secured Notes Class .....	.....	.....	.....	..... 1.G PL	20,000,000	97.5427	19,508,540	20,000,000	20,000,000	0	0	0	0	6.072	6.072	FMAN	462,170	0	08/08/2024	08/14/2036
00401M-AB-2	Abu Dhabi Crude Oil Pipe-FIRST LIEN .....	.....	D .....	.....	..... 1.C FE	887,576	88.5270	738,315	834,000	884,210	0	(1,292)	0	0	4.600	4.188	MN	19,289	38,364	04/01/2022	11/02/2047
00511B-AA-5	Acuris Finance Us Inc / -SECURED .....	.....	.....	1,2	 4.B FE	4,100,000	90.3982	3,706,327	4,100,000	4,100,001	0	0	0	0	5.000	4.998	MN	34,167	205,000	06/16/2021	05/01/2028
00652M-AG-7	Adani Ports & Special Eco-SENIOR UNSECURE .....	.....	D	1,2	 2.C FE	1,032,134	90.0459	950,884	1,056,000	1,043,653	0	4,368	0	0	4.200	4.683	FA	18,110	44,352	04/01/2022	08/04/2027
00652X-AB-4	Adani Transmission Ltd-FIRST LIEN .....	.....	D .....	.....	..... 2.C FE	735,085	77.7006	626,422	806,200	745,203	0	3,856	0	0	4.250	5.135	MN	3,807	34,264	04/01/2022	05/21/2036
00774M-AE-5	AerCap Ireland Capital D-SENIOR UNSECURE .....	.....	D	1,2	 2.A FE	9,061,257	96.7903	9,679,033	10,000,000	9,405,641	0	171,800	0	0	3.875	6.029	JJ	170,069	387,500	12/05/2022	01/23/2028
00774M-BG-9	AerCap Ireland Capital D-SENIOR UNSECURE .....	.....	D	1,2	 2.B FE	18,434,347	103.1155	18,429,833	17,873,000	18,348,071	0	(86,275)	0	0	6.450	5.157	AO	243,371	576,404	07/26/2024	04/15/2027
00830Y-AC-5	Africa Finance Corp-SENIOR UNSECURED .....	.....	D .....	.....	..... 1.G FE	3,790,000	98.2115	3,928,460	4,000,000	3,913,060	0	62,424	0	0	4.375	6.141	AO	35,972	175,000	12/15/2022	04/17/2026
00830Y-AD-3	Africa Finance Corp-SENIOR UNSECURED .....	.....	D .....	.....	..... 1.G FE	1,189,305	91.3450	1,172,870	1,284,000	1,229,058	0	15,058	0	0	2.875	4.268	AO	6,460	36,915	04/01/2022	04/28/2028
00910G-A*-4	Air Cargo Logistics Ctl Trust Certificat .....	.....	.....	.....	..... 1.E	5,935,594	93.1583	5,529,498	5,935,594	5,935,594	0	0	0	0	4.533	4.533	MON	61,821	255,558	01/09/2020	02/10/2041
00910G-AB-2	Air Cargo Logistics Ctl Trust Certificat .....	.....	.....	.....	..... 1.D	7,460,973	91.8418	6,852,292	7,460,973	7,460,973	0	0	0	0	5.039	5.039	MON	53,261	344,629	01/09/2020	02/10/2041
023945-AA-6	AMERICAN AIRLRS PASS THRU TR 2024-1B(R) T .....	.....	.....	.....	..... 2.C FE	29,000,000	100.0965	29,027,985	29,000,000	29,000,000	0	0	0	0	7.150	7.153	JD	564,453	0	08/15/2024	12/22/2029
03512T-AF-8	AngloGold Ashanti Holdin-SENIOR UNSECURE .....	.....	D	1,2	 2.C FE	1,232,340	92.0768	1,207,126	1,311,000	1,262,357	0	11,387	0	0	3.375	4.437	MN	7,374	44,246	04/01/2022	11/01/2028
03522A-AH-3	Anheuser-Busch Cos LLC /-SENIOR UNSECURE .....	.....	.....	.....	..... 2.C FE	20,072,256	94.9551	15,809,068	16,649,000	19,338,846	0	(214,163)	0	0	4.700	2.915	FA	326,043	782,503	06/09/2021	02/01/2036
03937L-AA-3	ARCH CAPITAL GROUP LTD-SENIOR UNSECURED .....	.....	D .....	.....	..... 1.G FE	14,728,045	113.1198	11,842,516	10,469,000	13,855,942	0	(305,406)	0	0	7.350	3.294	MN	128,245	769,472	01/19/2022	05/01/2034
03969Y-AB-4	Ardagh Metal Packaging F-SENIOR UNSECURE .....	.....	C	1,2	 5.B FE	1,979,368	85.7410	1,710,532	1,995,000	1,985,428	0	1,829	0	0	4.000	4.114	MS	10,197	79,800	07/19/2021	09/01/2029
04015K-AB-6	Ares Finance Co II LLC-SENIOR UNSECURED .....	.....	.....	1,2	 2.A FE	4,375,463	90.4981	4,027,165	4,450,000	4,398,677	0	8,395	0	0	3.250	3.484	JD	6,428	144,625	02/24/2022	06/15/2030
04016*-AA-2	Arglass Yamamura SE Senior Secured Notes .....	.....	.....	.....	..... 2.B PL	14,285,500	96.8297	13,832,607	14,285,500	14,285,500	0	0	0	0	6.100	6.099	JD	438,128	953,716	05/26/2023	06/30/2035
04016@-AA-0	Arglass V-F2 LLC Senior Secured Notes .....	.....	.....	.....	..... 2.C PL	22,321,450	108.8218	24,290,604	22,321,450	22,321,450	0	0	0	0	7.500	7.488	JJ	2,180,992	0	02/06/2024	01/31/2036
04342J-AA-5	ASB Bank Ltd-SUBORDINATED .....	.....	D	2	 1.F FE	10,714,000	99.3788	10,647,444	10,714,000	10,714,000	0	0	0	0	5.284	5.284	JD	22,016	566,128	06/08/2022	06/17/2032
04941#-MM-9	Securitized Products Management Holdings .....	.....	.....	.....	..... 1.D Z	2,466,305	82.2102	2,466,305	3,000,000	2,489,944	0	23,639	0	0	0.000	6.396	MAT	0	0	10/28/2024	02/28/2028
049463-AB-8	Atlas Warehouse Lending Company, L.P.-Se .....	.....	2 .....	.....	..... 2.C FE	25,000,000	98.7718	24,692,947	25,000,000	25,000,000	0	0	0	0	6.078	60.768	MN	257,471	0	10/28/2024	11/01/2029
049463-AC-6	Atlas Warehouse Lending Company, L.P.-Se .....	.....	2 .....	.....	..... 2.C FE	75,250,000	99.4176	74,811,760	75,250,000	75,250,000	0	0	0	0	5.811	5.811	MN	740,943	0	10/28/2024	11/01/2027
05401A-AG-6	Avolon Holdings Funding -SENIOR UNSECURE .....	.....	D	1,2	 2.C FE	15,389,550	98.9327	14,839,902	15,000,000	15,119,532	0	(98,494)	0	0	4.375	3.671	MN	109,375	656,250	02/25/2022	05/01/2026
05401A-AK-7	Avolon Holdings Funding -SENIOR UNSECURE .....	.....	D	1,2	 2.C FE	9,756,000	100.2097	10,020,970	10,000,000	9,921,031	0	71,081	0	0	5.500	6.294	JJ	253,611	550,000	07/26/2022	01/15/2026
05463*-AA-7	Axiom Hoya LLC Senior Unsecured Notes .....	.....	.....	.....	..... 2.C PL	21,419,375	72.7814	15,589,321	21,419,375	21,419,375	0	0	0	0	3.800	3.800	MJSD	194,440	813,939	07/01/2021	12/31/2050
05464H-AC-4	AXIS Specialty Finance P-SENIOR UNSECURE .....	.....	D	1,2	 2.A FE	6,455,189	97.4126	6,584,120	6,759,000	6,567,942	0	59,001	0	0	4.000	5.049	JD	18,775	270,360	01/13/2023	12/06/2027
05586*-AA-9	BGS Spartanburg 2017 Trust Certificate .....	.....	.....	.....	..... 2.A	8,427,168	93.1345	7,848,600	8,427,168	8,427,168	0	(1)	0	0	3.970	3.970	MON	14,869	362,424	07/15/2017	07/15/2032
05587*-AA-8	BGS Fedex Series 2017a Trust Certificate .....	.....	.....	.....	..... 1.E PL	7,364,578	92.4935	6,811,756	7,364,578	7,364,748	0	(29)	0	0	4.260	4.259	MON	13,944	340,208	09/15/2017	03/15/2037
05588*-AA-7	BGS Huntersville 2017 Trust Certificate .....	.....	.....	.....	..... 2.B	12,773,880	92.1955	11,776,942	12,773,880	12,773,888	0	(3)	0	0	4.430	4.430	MON	25,150	565,879	05/15/2018	05/15/2038
05590#-AA-9	BPHQ 2017 Trust Certificate BP Corp Nort .....	.....	.....	.....	..... 1.F	2,426,017	93.5478	2,269,486	2,426,017	2,426,016	0	0	0	0	3.540	3.540	MON	11,173	93,274	11/21/2017	11/15/2032
05593P-AA-4	BG BETA I LTD Class A-2 Senior Secured N .....	.....	C .....	.....	..... 1.F PL	10,000,000	100.1798	10,017,980	10,000,000	10,000,000	0	0	0	0	6.280	6.280	JAJO	157,000	130,833	07/01/2024	07/16/2054

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
05642*-AA-1	BWC TERMINALS INC Senior Secured Notes A				2.B PL	21,875,000	100.2968	21,939,925	21,875,000	21,875,000	0	0	0	0	6.160	6.160	MJSD	340,618	344,361	06/17/2024	06/28/2031
05682*-AE-4	Bain Capital Holdings LP Senior Notes Se				1.D PL	7,500,000	81.6679	6,125,093	7,500,000	7,500,000	0	0	0	0	3.180	3.180	AO	50,350	238,500	04/07/2022	04/15/2034
05682*-AF-1	Bain Capital Holdings LP Senior Notes Se				1.D PL	20,000,000	77.4778	15,495,560	20,000,000	20,000,000	0	0	0	0	3.330	3.330	AO	140,600	666,000	04/07/2022	04/15/2037
05723K-AF-7	Baker Hughes a GE Co LLC-SENIOR UNSECURE			1,2	1.G FE	77,439,710	78.4960	52,983,981	67,499,000	75,890,143	0	(272,655)	0	0	4.080	3.233	JD	122,398	2,753,959	01/20/2022	12/15/2047
05724B-AD-1	Baker Hughes Holdings LL-SENIOR UNSECURE			1,2	1.G FE	9,901,074	95.2666	10,191,617	10,698,000	10,105,202	0	0	0	0	2.061	5.070	JD	9,799	161,768	11/19/2024	12/15/2026
064227-AC-5	Bank of NT Butterfield &-SUBORDINATED	D		2	2.B FE	7,758,450	98.6500	7,457,940	7,560,000	7,590,798	0	(65,896)	0	0	5.250	4.332	JD	17,640	396,900	05/10/2022	06/15/2030
06424B-AA-1	Bank Of America (Houston Pass-Thru Certi				1.B	5,804,649	91.9905	5,307,120	5,769,204	5,784,365	0	(4,744)	0	0	3.460	3.369	MON	8,872	199,608	10/01/2019	12/31/2029
067316-AF-6	Bacardi Ltd-SENIOR UNSECURED	D		1,2	2.C FE	12,290,955	98.6589	12,395,502	12,564,000	12,363,703	0	52,679	0	0	4.700	5.219	MM	75,454	590,508	11/20/2023	05/15/2028
06738E-AE-5	Barclays PLC-SENIOR UNSECURED	D			2.A FE	14,870,050	99.7407	14,961,102	15,000,000	14,996,194	0	14,953	0	0	3.650	3.753	MS	159,688	547,500	05/05/2015	03/16/2025
09581B-AA-2	Blue Owl GP Stakes V Iss Senior Secured				1.D PL	26,197,500	102.9838	26,979,181	26,197,500	26,197,500	0	0	0	0	7.110	7.110	FA	667,447	1,785,032	09/07/2023	08/22/2043
09581B-AA-4	Blue Owl GP Stakes V Iss Senior Secured				1.D PL	26,302,500	102.9838	27,087,314	26,302,500	26,302,500	0	0	0	0	7.110	7.110	FA	670,122	1,792,187	09/07/2023	08/22/2043
10240B-AA-3	FERADYNE BOIHUNTER 14.00 07/17/2024				6. *	10,725,208	0.0000	0	10,725,208	0	0	0	9,040,600	0	14,000	0.000	MON	1,583,931	0	06/17/2023	07/17/2025
10334B-AT-9	BOYD WATTERSON GSA FUND Senior Notes				2.C PL	22,500,000	99.3708	22,358,430	22,500,000	22,500,000	0	0	0	0	6.180	6.180	JD	19,313	695,250	05/23/2024	06/26/2029
10554T-AE-5	Braskem Netherlands Fina-SENIOR UNSECURE	D			3.A FE	1,028,820	68.2000	709,280	1,040,000	1,029,331	0	180	0	0	5.875	5.954	JJ	25,628	61,100	04/01/2022	01/31/2050
11750*-AA-7	Bryan Health (Kearney NE Senior Secured				1.E	13,721,676	92.0322	12,628,361	13,721,676	13,721,676	0	0	0	0	3.810	3.810	MON	23,235	566,360	04/22/2022	12/15/2046
12585B-AA-4	CHP (Fresno Ca) Trust Certificate				1.D Z	5,533,228	97.2059	5,378,624	5,533,228	5,533,228	0	0	0	0	3.190	3.190	MON	7,845	176,429	10/21/2016	02/15/2028
12657N-AA-8	CQP Holdco LP / BIP-V Ch-FIRST LIEN			1,2	3.B FE	2,763,750	95.5120	2,865,360	3,000,000	2,817,193	0	21,994	0	0	5.500	6.677	JD	7,333	165,000	06/08/2022	06/15/2031
12661P-AA-7	CSL Finance Plc-SENIOR UNSECURED	D		1,2	1.G FE	14,778,818	97.6569	14,404,396	14,750,000	14,763,367	0	(5,717)	0	0	3.850	3.807	AO	100,956	567,875	04/25/2022	04/27/2027
12661P-AB-5	CSL Finance Plc-SENIOR UNSECURED	D		1,2	1.G FE	32,472,002	96.3566	32,117,572	33,332,000	32,710,721	0	124,760	0	0	4.050	4.527	AO	239,990	1,349,946	03/13/2024	04/27/2029
12661P-AC-3	CSL Finance Plc-SENIOR UNSECURED	D		1,2	1.G FE	8,072,332	94.1257	8,021,394	8,522,000	8,105,861	0	33,529	0	0	4.250	5.055	AO	64,388	362,185	04/09/2024	04/27/2032
12665V-AA-0	CVS Pass-Through Trust S-FIRST LIEN				2.B FE	1,840,489	92.9837	1,711,354	1,840,489	1,840,490	0	(2)	0	0	4.163	4.163	MON	95,210	63,235	07/14/2014	08/11/2036
12694*-AA-4	CVS (New Albany, IN) Trust Certificate				2.B	4,877,079	95.5603	4,660,551	4,877,079	4,877,078	0	(1)	0	0	5.140	5.140	MON	32,359	271,633	12/22/2015	01/15/2041
12697*-AA-7	Cric KY HQ LLC Senior Secured Note				1.D PL	7,116,636	91.8524	6,536,801	7,116,636	7,116,734	0	(9)	0	0	4.560	4.560	MON	71,363	296,165	12/29/2016	03/15/2042
12707*-AB-2	CVS (NC SC PA & VA) Con Trust Certifica				2.B	11,655,198	93.6655	10,916,899	11,655,198	11,655,204	0	(3)	0	0	4.880	4.880	MON	25,279	568,768	05/17/2018	01/15/2044
12724B-AA-6	CVS (Clawson & Richmond Trust Certificat				2.B	6,953,439	92.8683	6,395,954	6,887,123	6,923,509	0	(8,157)	0	0	4.050	3.910	MON	12,397	278,919	03/30/2020	01/15/2035
12733B-AA-3	CTL Pass-Thru Trust Seri Trust Certifica				1.F	11,732,445	74.3016	8,717,395	11,732,445	11,732,444	0	0	0	0	2.670	2.670	MON	13,923	339,888	02/17/2021	10/15/2043
12762*-AA-1	CDI Tuscany Intermediate Senior Secured				2.A PL	6,596,736	97.5026	6,431,989	6,596,736	6,596,736	0	0	0	0	5.830	5.831	MJSD	97,940	384,581	09/26/2022	06/30/2040
13005H-AA-8	California Buyer Ltd / A-SENIOR UNSECURE	D		1,2	3.C FE	4,891,375	99.6080	4,880,792	4,900,000	4,890,945	0	(430)	0	0	6.375	6.398	FA	47,724	0	10/30/2024	02/15/2032
13177*-AA-8	Camargo Investments I LL Senior Note				5.B FI	636,050	101.1401	643,302	636,050	636,050	0	0	0	0	10.250	10.250	MON	226,256	95,930	06/14/2019	05/31/2025
14155B-AA-0	CARDINAL STATUTORY TRST I L-240 9/15/34				1.F FE	7,050,000	97.2900	7,296,750	7,500,000	7,193,560	0	39,133	0	0	2.516	2.997	MJSD	610,043	305,427	01/02/2018	09/15/2034
14445L-AA-5	Carriage Purchaser Inc-SENIOR UNSECURED			1,2	5.A FE	497,951	94.6479	625,623	661,000	533,267	0	17,978	0	0	7.875	13.472	AO	10,989	52,054	11/17/2022	10/15/2029
14855W-AA-4	Castlelake Secured Aviat Notes Class A				1.F PL	27,832,046	101.0775	28,864,992	28,557,287	28,091,542	0	156,172	0	0	6.500	7.171	MON	82,499	2,483,208	03/30/2023	07/31/2036
14855W-AA-2	Castlelake Secured Aviat Notes Class B				2.B PL	5,503,646	94.5053	5,026,515	5,733,270	5,183,773	0	137,240	0	0	5.650	5.845	MON	146,329	464,329	03/30/2023	07/31/2036
18055B-CF-7	Clarion Lion Properties Senior Note Seri				2.A	13,000,000	101.9611	13,254,943	13,000,000	13,000,000	0	0	0	0	6.490	6.490	FA	351,542	421,850	02/01/2024	02/01/2029
18055B-CG-5	Clarion Lion Properties Senior Note Seri				2.A	7,000,000	102.6258	7,183,806	7,000,000	7,000,000	0	0	0	0	6.570	6.570	FA	191,625	229,950	02/01/2024	02/01/2031
18977W-2C-3	CNO Global Funding-SECURED				1.G FE	21,045,383	90.3109	22,512,704	24,928,000	22,217,403	0	584,275	0	0	2.650	5.717	JJ	321,121	660,592	01/06/2023	03/06/2029
18977W-2D-1	CNO 5 7/8 06/04/27				1.G FE	5,953,490	101.8736	5,985,075	5,875,000	5,942,710	0	(10,780)	0	0	5.875	5.360	JD	25,887	172,578	07/26/2024	06/04/2027
18977W-2F-6	CNO Global Funding-SECURED				1.G FE	6,057,788	99.1220	6,007,781	6,061,000	6,057,533	0	(255)	0	0	4.950	4.962	MS	93,339	0	09/04/2024	09/09/2029
192714-AD-5	Colburn SA-SENIOR UNSECURED	D		1,2	2.B FE	1,041,948	98.8750	998,955	1,124,000	1,067,271	0	9,582	0	0	3.150	4.245	MS	11,310	35,406	04/01/2022	03/06/2030
19828A-AA-5	Columbia Pipelines Holdi-SENIOR UNSECURE			1,2	2.B FE	5,033,223	101.4182	5,070,910	5,000,000	5,018,327	0	(11,092)	0	0	6.055	5.801	FA	114,372	308,637	08/24/2023	08/15/2026
19828A-AB-3	CPGX 6.042 08/15/28-SENIOR UNSECURED			1,2	2.B FE	42,025,108	102.3732	42,996,752	42,000,000	42,013,773	0	(4,251)	0	0	6.042	5.816	FA	958,664	2,586,983	08/07/2023	08/15/2028
19828T-AA-4	Columbia Pipelines Opera-SENIOR UNSECURE			1,2	2.A FE	4,987,900	102.6538	5,132,691	5,000,000	4,989,900	0	1,487	0	0	5.927	5.969	FA	111,954	302,112	08/17/2023	08/15/2030
20039F-AA-7	Cometa Energia SA de CV-SECURED	D		1,2	2.C FE	630,439	98.4360	607,815	617,472	628,406	0	(766)	0	0	6.375	6.136	AO	7,326	39,364	04/01/2022	04/24/2035
20752T-AB-0	Connect Finco SARL / Con-SECURED	C		1,2	4.A FE	2,574,438	91.0690	2,345,027	2,575,000	2,574,351	0	(86)	0	0	9.000	9.007	MS	61,800	0	09/13/2024	09/15/2029
20914U-AF-3	Consolidated Energy Fina-SENIOR UNSECURE	D		1,2	4.B FE	4,450,000	81.2500	4,062,500	5,000,000	4,622,558	0	81,577	0	0	5.625	7.958	AO	59,375	281,250	03/20/2023	10/15/2028

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost			Rate Used to Obtain Fair Value	Fair Value												Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
210314-AB-6	Consorcio Transmantino S-SENIOR UNSECURE	D.....			.. 2.C FE	1,019,060	..92.6750	..940,651	..1,015,000	..1,018,269	0	(281)	0	0	...4.700	...4.656	AO	9,939	47,705	...04/01/2022	...04/16/2034
21039C-AD-6	CTSM 6 3/8 08/15/32	D.....	1,2		.. 3.C FE	1,192,550	..97.0763	..1,184,331	..1,220,000	..1,193,094	0	544	0	0	...6.375	...6.748	FA	30,894	0	...10/24/2024	...08/15/2032
22160E-AA-6	Costco (Monterey Park C Trust Certifica				.. 1.E	6,742,602	..84.0676	..5,668,344	..6,742,602	..6,741,622	0	(13)	0	0	...3.910	...3.911	MON	8,056	307,710	...10/03/2017	...06/20/2043
22163F-AA-1	Costco (Oceanside NY) Le Trust Certifica				.. 1.E	15,300,279	..77.1895	..11,810,209	..15,300,279	..15,300,279	0	0	0	0	...3.140	...3.140	MON	21,352	480,427	...11/14/2019	...11/30/2041
22548Q-4C-6	Credit Suisse AG/Nassau-SENIOR UNSECURED	D.....			.. 1.E FE	4,944,350	..89.4400	..4,472,000	..5,000,000	..4,972,481	0	...3,709	0	0	...4.000	...4.099	AO	35,000	301,111	...04/25/2016	...04/28/2031
22970*-AA-8	BNSF (Dayton, Texas) Con Trust Certifica				.. 1.D PL	20,170,415	..92.3775	..18,632,925	..20,170,415	..20,170,924	0	(41)	0	0	...4.070	...4.070	MON	68,912	959,714	...03/12/2015	...05/15/2034
22977E-AA-9	CTL Pass-Thru Trust Seri Trust Certifica				.. 1.E	8,041,193	..86.6535	..6,967,975	..8,041,193	..8,041,196	0	(2)	0	0	...3.870	...3.870	MON	13,831	337,121	...12/15/2016	...12/15/2038
24703D-BJ-9	Dell International LLC /-SENIOR UNSECURE		1,2		.. 2.B FE	11,537,765	..101.0480	..11,642,752	..11,522,000	..11,532,679	0	(3,322)	0	0	...5.250	...5.260	FA	252,044	604,905	...01/09/2023	...02/01/2028
24703D-BP-5	Dell International LLC /-SENIOR UNSECURE		1,2		.. 2.B FE	9,988,300	..97.0057	..9,700,566	..10,000,000	..9,988,196	0	(104)	0	0	...4.350	...4.376	FA	100,292	0	...10/01/2024	...02/01/2030
24703T-AD-8	Dell International LLC /-FIRST LIEN		1,2		.. 2.B FE	8,922,012	..101.4608	..8,883,909	..8,756,000	..8,881,682	0	(34,060)	0	0	...6.020	...4.785	JD	23,427	351,749	...10/15/2024	...06/15/2026
24703T-AE-6	Dell International LLC /-SENIOR UNSECURE		1,2		.. 2.B FE	13,192,240	..100.3095	..13,475,580	..13,434,000	..13,287,771	0	76,644	0	0	...4.900	...5.555	AO	164,567	658,266	...10/06/2023	...10/01/2026
24703T-AG-1	Dell International LLC /-FIRST LIEN		1,2		.. 2.B FE	2,811,420	..100.8363	..3,025,088	..3,000,000	..2,861,395	0	...24,175	0	0	...5.300	...6.442	AO	39,750	159,000	...11/04/2022	...10/01/2029
24703T-AJ-5	Dell International LLC /-FIRST LIEN		1,2		.. 2.B FE	29,518,900	..118.7270	..23,745,408	..20,000,000	..27,866,787	0	(567,169)	0	0	...8.100	...3.721	JJ	747,000	1,620,000	...01/20/2022	...07/15/2036
25243Y-BD-0	Diageo Capital PLC-SENIOR UNSECURED	D.....	1,2		.. 1.G FE	4,028,350	..86.3452	..4,317,261	..5,000,000	..4,181,924	0	...128,488	0	0	...2.000	...5.593	AO	17,222	100,000	...10/16/2023	...04/29/2030
25243Y-BE-8	Diageo Capital PLC-SENIOR UNSECURED	D.....	1,2		.. 1.G FE	8,117,500	..81.5688	..8,156,884	..10,000,000	..8,257,371	0	...139,871	0	0	...2.125	...4.993	AO	36,597	212,500	...04/09/2024	...04/29/2032
25243Y-BG-3	Diageo Capital PLC-SENIOR UNSECURED	D.....	1,2		.. 1.G FE	12,277,194	..101.7368	..12,345,764	..12,135,000	..12,260,927	0	(16,759)	0	0	...5.300	...5.512	AO	119,699	379,480	...10/24/2023	...10/24/2027
25461L-AA-0	DTV 5 7/8 08/15/27-SECURED		1,2		.. 3.B FE	9,666,295	..97.2648	..9,726,483	..10,000,000	..9,689,333	0	...61,554	0	0	...5.875	...5.527	FA	221,944	416,890	...12/06/2021	...08/15/2027
255123-AA*-2	Diversified ABS Phase VIII Senior Secure				.. 1.F FE	22,338,000	..99.8087	..22,295,267	..22,338,000	..22,338,000	0	0	0	0	...7.076	...7.076	MON	926,429	0	...05/29/2024	...05/31/2044
26443E-AA-6	Dulles Discovery 1 Contr Pass-Thru Certi				.. 1.A	9,144,978	..84.8404	..7,758,636	..9,144,978	..9,144,978	0	0	0	0	...2.964	...2.964	MON	19,576	364,746	...11/07/2019	...06/05/2037
26746*-AA-2	Dyal Cap Partners III Is Senior Secured	C.....			.. 1.F PL	4,087,235	..92.1499	..3,766,383	..4,087,235	..4,087,622	0	(61)	0	0	...4.400	...4.398	JD	97,912	179,838	...06/23/2020	...06/15/2031
26746E-AA-0	Dyal Cap Partners III Is Senior Secured	C.....			.. 1.F PL	7,112,765	..92.1499	..6,554,405	..7,112,765	..7,112,765	0	0	0	0	...4.400	...4.400	JD	170,390	312,962	...06/23/2020	...06/15/2031
29135E-AA-4	Emirates Semb Corp Water-SECURED	D.....			.. 1.G FE	1,854,225	..95.3806	..1,725,435	..1,809,000	..1,846,889	0	(2,796)	0	0	...4.450	...4.202	FA	33,542	80,501	...04/05/2022	...08/01/2035
29278G-AW-8	Enel Finance Internation-SENIOR UNSECURE	D.....	1,2		.. 2.A FE	11,672,217	..99.1095	..11,893,136	..12,000,000	..11,822,014	0	65,804	0	0	...4.625	...5.274	JD	24,667	555,000	...09/30/2022	...06/15/2027
29359J-AB-5	Enstar Group Ltd-SENIOR UNSECURED	D.....	1,2		.. 2.B FE	11,407,820	..98.2523	..10,289,959	..10,473,000	..11,048,834	0	(126,127)	0	0	...4.950	...3.520	JD	43,201	518,414	...01/19/2022	...06/01/2029
29359J-AC-3	Enstar Group Ltd-SENIOR UNSECURED	D.....	1,2		.. 2.B FE	33,837,192	..85.4798	..30,877,017	..36,122,000	..34,367,212	0	213,996	0	0	...3.100	...3.906	MS	373,261	1,119,782	...07/28/2022	...09/01/2031
29449W-AL-1	Equitable Financial Life-SECURED				.. 1.E FE	8,772,300	..94.6198	..9,461,983	..10,000,000	..9,208,481	0	388,483	0	0	...1.700	...6.264	MM	23,139	170,000	...11/13/2023	...11/12/2026
30260L-AC-3	FEL Energy VI Sarl-SECURED	D.....	1,2		.. 2.C FE	884,356	..92.0500	..982,617	..982,617	..892,421	0	...3,101	0	0	...5.750	...6.696	JD	4,708	56,500	...04/01/2022	...12/01/2040
30290Y-AJ-0	FS Global Credit Opportu-FSGLBL 2.95 01/		1,2		.. 1.D FE	15,000,000	..94.7545	..14,213,175	..15,000,000	..15,000,000	0	0	0	0	...2.950	...2.950	JJ	185,604	443,729	...10/29/2021	...01/31/2027
30292*-AA-2	FBI Bronx Control Trust Pass-Thru Certif				.. 1.B PL	10,452,502	..93.5094	..9,774,071	..10,452,502	..10,452,502	0	0	0	0	...3.910	...3.910	MON	18,164	408,668	...02/02/2018	...07/15/2033
30607F-AA-8	Falabella SA-SENIOR UNSECURED	D.....	1,2		.. 3.A FE	1,029,214	..82.2079	..903,465	..1,099,000	..1,046,115	0	...6,341	0	0	...3.375	...4.171	JJ	17,103	37,091	...01/28/2022	...01/15/2032
31307F-AA-9	FDL-CC LLC Senior Note Tranche A-1				.. 1.A	1,813,157	..96.6295	..1,751,774	..1,812,877	..1,812,993	0	(28)	0	0	...4.537	...4.535	MON	3,656	89,098	...02/15/2015	...02/15/2035
31307F-AC-5	FDL-CC LLC Senior Note Tranche A-3				.. 1.A	1,983,962	..94.2054	..1,868,916	..1,983,874	..1,983,929	0	(7)	0	0	...4.537	...4.536	MON	4,000	97,533	...06/15/2017	...06/15/2037
31429F-AA-2	Fedex Chino Control Pass Trust Certifica				.. 2.B	17,069,692	..89.2562	..15,235,758	..17,069,692	..17,069,692	0	0	0	0	...3.490	...3.490	MON	26,477	595,704	...07/15/2020	...10/15/2035
31429F-AB-0	Fedex Chino Control Pass Trust Certifica				.. 1.G PL	6,000,000	..93.9779	..5,638,674	..6,000,000	..6,000,000 .....	.....										

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost			Rate Used to Obtain Fair Value	Fair Value												Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
36200#-AA-8	GE Huntsville 2020B Leas Trust Certifica				2.A	2,943,140	.88.2088	2,596,108	2,943,140	2,943,140	0	0	0	0	4.560	4.560	MON	5,965	134,206	12/30/2020	04/15/2046
36248#-AA-0	GSA (Anchorage AK) CTL P Pass-Thru Certi				1.A	9,748,928	.95.6380	9,240,515	9,661,970	9,682,050	0	(12,878)	0	0	3.500	3.364	MON	15,030	338,124	03/24/2016	11/15/2030
36249#-AA-1	GSA Gth l US Government Lease-Backed Pas				1.A	5,465,302	.95.1569	5,200,612	5,465,302	5,465,370	0	(5)	0	0	4.560	4.560	MON	11,173	290,876	06/13/2017	05/15/2038
36298G-AA-7	GSPA Monetization Trust-SECURED				2.A FE	6,797,215	.99.1883	6,648,986	6,703,398	6,733,449	0	4,847	0	0	6.422	6.313	MON	26,308	430,433	08/25/2010	10/09/2029
36321P-AE-0	Galaxy Pipeline Assets B-SECURED	D			1.C FE	939,470	.79.1315	820,910	1,037,400	950,159	0	(2,099)	0	0	2.940	3.646	MS	7,710	30,500	04/01/2022	09/30/2040
36440*-AA-0	Galveston Cruise Termina Senior Secured				4.C PL	7,000,000	.99.8045	6,986,315	7,000,000	7,000,001	0	0	0	0	5.890	5.890	MJSD	69,862	515,375	11/04/2022	12/09/2026
36830B-AD-7	GC Treasury Center Co Lt-SENIOR UNSECURE	D	1.2		2.C FE	986,464	.91.4934	897,550	981,000	985,054	0	(515)	0	0	4.400	4.328	MS	10,911	43,164	04/01/2022	03/30/2032
36850#-AA-9	Geisinger (Jenkins Towns Trust Certifica				1.F	7,761,344	.89.3752	6,936,717	7,761,344	7,761,344	0	0	0	0	3.352	3.352	MON	11,563	260,134	12/12/2019	12/15/2033
37892A-AA-8	Global Net Lease Inc / G-SENIOR UNSECURE		1.2		3.A FE	3,695,843	.91.3125	3,781,251	4,141,000	3,883,815	0	77,185	0	0	3.750	6.077	JD	6,902	155,288	06/09/2022	12/15/2027
37959G-AA-5	Global Atlantic Fin Co-SENIOR UNSECURED		1.2		2.B FE	33,139,350	.94.7495	31,267,326	33,000,000	33,094,636	0	(18,940)	0	0	4.400	4.219	AO	306,533	1,452,000	03/17/2022	10/15/2029
37959G-AB-3	Global Atlantic Fin Co-SENIOR UNSECURED		1.2		2.B FE	16,895,217	.85.9222	16,470,430	19,169,000	17,392,171	0	219,361	0	0	3.125	4.762	JD	26,624	599,031	01/06/2023	06/15/2031
38136*-AA-5	Golden Tree Asset Manage Senior Unsecure				1.F PL	20,000,000	.86.8601	17,372,020	20,000,000	20,000,000	0	0	0	0	3.140	3.139	MN	315,744	628,000	11/18/2021	11/18/2031
39843P-ZZ-8	GRIFOLS SA 1st Lien Secured	B			4.B Z	10,708,920	104.5143	10,816,188	10,000,000	10,205,878	0	12,739	0	(515,782)	7.500	7.813	AO	530,386	0	05/15/2024	04/30/2030
40054#-AA-5	Gryphon Mezzanine Partne Note				2.B PL	5,692,004	101.3493	5,768,806	5,692,004	5,692,004	0	0	0	0	6.500	5.665	MAT	1,862,065	0	07/28/2023	12/16/2028
404280-BK-4	HSBC HOLDINGS PLC-SENIOR UNSECURED	D	2		1.G FE	2,998,410	.97.8910	2,936,729	3,000,000	2,999,463	0	112	0	0	4.041	4.045	MS	36,369	121,230	03/14/2018	03/13/2028
40485#-AA-4	HC2 STATION GRP 10.50 11/30/202				5.B GI	30,680,435	.90.7000	27,827,155	30,680,435	30,680,433	0	0	0	0	10.500	9.959	MAT	1,580,229	8,871,573	12/13/2022	08/15/2025
42249#-AA-7	HealthPartners, Inc. Senior Note Series				1.F	5,918,162	.96.3650	5,703,037	5,918,162	5,918,222	0	(57)	0	0	4.610	4.609	MN	34,861	409,241	12/10/2013	05/15/2030
423012-AF-0	Heineken NV-HEIANA 3 1/2 01/29/28	D	1.2		2.A FE	62,128,309	.96.3091	62,027,850	64,405,000	62,379,509	0	251,200	0	0	3.500	4.606	JJ	951,763	0	08/02/2024	01/29/2028
43283Q-AC-4	Hilton Grand Vacations B-SECURED		1.2		3.A FE	3,759,375	100.2285	3,758,570	3,750,000	3,758,625	0	(750)	0	0	6.625	6.558	JJ	114,557	0	08/01/2024	01/15/2032
43284M-AB-4	Hilton Grand Vacations B-SENIOR UNSECURE		1.2		4.A FE	1,839,625	.89.1742	1,646,156	1,846,000	1,841,517	0	571	0	0	4.875	4.875	JJ	44,997	89,993	06/14/2021	07/01/2031
43722*-AA-1	Home Depot (Monterey Par Trust Certifica				1.F	8,618,208	.86.5242	7,456,836	8,618,208	8,618,208	0	0	0	0	3.710	3.710	MON	14,210	319,734	10/06/2017	06/15/2038
43722*-AA-5	Home Depot South Windsor Pass-Thru Certi				1.F	9,185,448	.81.5606	7,491,706	9,185,448	9,185,448	0	0	0	0	3.370	3.370	MON	13,758	309,548	08/15/2020	10/15/2040
43942#-AA-7	Hope Gas Holdings, LLC Senior Unsecured				2.C PL	23,000,000	.95.4098	21,944,254	23,000,000	23,000,000	0	0	0	0	4.950	4.946	JD	572,413	1,138,500	08/31/2022	12/31/2032
449276-AC-8	IDM International Capita-SENIOR UNSECURE	D	1.2		1.G FE	4,992,700	.99.0846	4,954,229	5,000,000	4,993,699	0	999	0	0	4.600	4.633	FA	93,278	115,000	01/29/2024	02/05/2029
449276-AD-6	IDM International Capita-SENIOR UNSECURE	D	1.2		1.G FE	4,988,500	.98.8888	4,944,440	5,000,000	4,989,566	0	1,066	0	0	4.750	4.789	FA	96,319	118,750	01/29/2024	02/05/2031
44961#-AA-1	iGPS Logistics LLC Senior Secured Note S				2.B PL	6,551,700	.99.8640	6,542,790	6,551,700	6,551,700	0	0	0	0	6.300	6.305	AO	207,525	82,551	04/18/2024	04/18/2029
44961#-AB-9	iGPS Logistics LLC Senior Secured Note S				2.B PL	12,718,750	.99.2976	12,629,414	12,718,750	12,718,750	0	0	0	0	6.400	6.404	AO	409,261	162,800	04/18/2024	04/18/2031
45082D-AA-5	Iberia, Lineas Aereas De Senior Secured	D			1.G PL	13,243,850	.93.8947	12,435,273	13,243,850	13,243,850	0	0	0	0	4.790	4.790	JAJO	133,925	636,112	06/21/2022	10/15/2037
45082E-AA-3	Iberia, Lineas Aereas De Senior Secured	D			2.A PL	3,952,659	.97.5066	3,854,103	3,952,659	3,952,659	0	0	0	0	5.880	5.880	JAJO	49,066	232,838	06/21/2022	04/15/2034
45824T-AA-8	Intelsat Jackson Holding-FIRST LIEN	D	1.2		4.A FE	905,000	.91.8710	918,710	1,000,000	925,457	0	11,027	0	0	6.500	8.288	MS	19,139	65,000	01/25/2023	03/15/2030
45853N-AA-0	Interconexion Electrica -SENIOR UNSECURE	D	1.2		2.B FE	1,225,625	.87.3833	1,157,829	1,325,000	1,244,453	0	7,146	0	0	3.825	4.667	MN	4,927	50,681	04/01/2022	11/26/2033
47216F-AA-5	Jazz Securities DAC-SECURED	D	1.2		3.A FE	1,010,800	.94.2716	976,654	1,036,000	1,020,221	0	3,456	0	0	4.375	4.794	JJ	20,900	45,325	03/14/2022	01/15/2029
47216Q-AB-9	JDE Peet's NV-SENIOR UNSECURED	D	1.2		2.C FE	19,229,397	.92.8113	20,062,082	21,616,000	19,895,601	0	611,269	0	0	1.375	5.556	JJ	137,051	173,250	08/01/2024	01/15/2027
47587*-AA-0	JEN HoldCo 24 LLC Senior Secured Notes				2.B PL	18,000,000	101.3791	18,248,238	18,000,000	18,000,000	0	0	0	0	4.370	4.370	MON	572,501	0	06/06/2024	03/16/2029
47837R-AD-2	Johnson Controls Interna-SENIOR UNSECURE	D	1.2		2.B FE	4,142,800	.82.4457	4,122,286	5,000,000	4,293,102	0	88,564	0	0	2.000	4.461	MS	29,167	100,000	04/05/2023	09/16/2031
48121#-AP-6	JRD Holdings LLC Senior Note Series 2021				2.B PL	7,000,000	.79.9637	5,597,459	7,000,000	7,000,000	0	0	0	0	2.830	2.830	AO	240,471	0	10/14/2024	10/14/2033
48121#-AS-0	JRD HOLDINGS LLC Senior Unsecured Notes				2.B PL	6,375,000	.97.1475	6,193,153	6,375,000	6,375,000	0	0	0	0	5.300	5.300	MN	39,419	0	10/09/2024	11/19/2031
48255B-AA-4	KKR Group Fin Co X LLC Sr Note 144A		1.2		1.F FE	19,722,180	.65.1378	14,330,309	22,000,000	19,844,422	0	44,136	0	0	3.250	3.832	JD	31,778	715,000	03/08/2022	12/15/2051
48281*-AA-7	KLCC FEEDER FUND I LP -Senior Class Tran				2.C PL	6,250,000	100.0000	6,250,000	6,250,000	6,250,000	0	0	0	0	5.000	5.000	MJSD	157,118	390,625	03/31/	

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
502438-AA-8	LVCVA (Las Vegas NV) Rec Trust Certifica				4 A	13,029,414	.94 8226	12,354,829	13,029,414	13,029,414	.0	.0	.0	.0	.4 920	.4 920	JD	356,519	201,642	03/15/2019	12/15/2039
50247V-AB-5	LYB INTL FINANCE BV-SENIOR UNSECURED BON	D	1		2 B FE	8,461,125	.90 5708	5,836,384	6,444,000	8,230,929	.0	(69,338)	.0	.0	.5 250	3.247	JJ	155,999	338,310	07/16/2021	07/15/2043
53229K-AA-7	Lightning Power LLC-SECURED		1,2		3 C FE	4,378,800	.102 8409	4,350,170	4,230,000	4,370,164	.0	(8,638)	.0	.0	.7 250	6.408	FA	115,003		09/06/2024	08/15/2032
58989V-2E-3	Met Tower Global Funding-SECURED				1 D FE	6,770,330	.99 6245	6,973,714	7,000,000	6,956,909	.0	92,022	.0	.0	.3 700	5.096	JD	12,950	259,000	11/29/2022	06/13/2025
58989V-2G-8	Met Tower Global Funding-SECURED				1 D FE	9,991,400	.100 4282	10,042,816	10,000,000	9,993,789	.0	.2 389	.0	.0	.4 850	4.881	JJ	222,292	242,500	01/10/2024	01/16/2027
58182*-AD-8	MetLife Core Property Ho Senior Green No				2 B	20,000,000	.80 4096	16,081,920	20,000,000	20,000,000	.0	.0	.0	.0	.2 620	2.620	MON	(17,467)	611,333	12/13/2021	12/13/2031
58284M-AC-8	Mexico City Airport Trus-FIRST LIEN	D	1,2		2 C FE	4,848,391	.94 0353	4,587,040	4,878,000	4,827,054	.0	13,906	.0	.0	.3 875	4.213	AO	32,029	189,023	09/13/2017	04/30/2028
59565J-AA-9	Midas OpCo Holdings LLC-SENIOR UNSECURED		1,2		4 B FE	2,591,000	.95 1760	2,466,010	2,591,000	2,591,000	.0	.0	.0	.0	.5 625	5.623	FA	55,059	145,744	08/12/2021	08/15/2029
59576*-AA-4	Middle Market Credit Fund II SPV, LLC-CI				1 A PL	42,725,903	.100 0000	42,725,903	42,725,903	42,725,903	.0	.0	.0	.0	.0 000	0.000	MAT	953,047	4,527,828	06/30/2022	11/03/2030
60688H-AA-3	MmcapS Funding XVIII Ltd-SECURED	D			1 A FE	3,746,883	.86 5055	4,212,766	4,869,942	3,816,599	.0	34,238	.0	.0	.4 878	7.624	MJSD	68,145	292,244	12/13/2016	12/26/2039
607120-FQ-0	Airbus SE Senior Secured Notes	C			1 F	25,087,947	.96 4047	24,185,960	25,087,947	25,087,947	.0	.0	.0	.0	.5 130	5.130	FIAN	185,902	1,287,012	01/31/2023	11/09/2042
62878H-AB-7	NATF AMERICA LLC Senior Notes Series 9				6 *	27,062,201	.55 0000	14,884,211	27,062,201	14,884,211	.0	10,493,382	.0	.0	.5 210	5.210	MJSD	62,664	1,762,426	07/15/2022	06/15/2029
62922L-AD-0	NGL Energy Operating LLC-SECURED		1,2		4 A FE	1,258,000	.100 6963	1,266,760	1,258,000	1,258,000	.0	.0	.0	.0	.8 375	8.374	FIAN	13,462	26,339	10/23/2024	02/15/2032
62934*-AC-1	NLC LOAN FUNDING LLC SER Corp Bond				1 B PL	30,000,000	.99 5478	29,864,340	30,000,000	30,000,000	.0	.0	.0	.0	.5 500	5.501	JAJO	288,750	.0	10/10/2024	10/30/2026
62954H-AW-8	NXP BV / NXP Funding LLC-SENIOR UNSECURE	D	1,2		2 A FE	16,653,303	.99 2516	16,205,805	16,328,000	16,356,929	.0	(114,657)	.0	.0	.2 700	1.984	MN	73,476	440,856	05/16/2022	05/01/2025
63946T-AA-9	NB Direct Access Insuran Senior Secured				2 A PL	3,120,318	.113 2892	3,534,983	3,120,318	3,120,318	.0	.0	.0	.0	.5 000	5.000	JAJO	37,176	375,219	03/24/2023	07/29/2025
652935-AA-5	Next.e.GO Mobile SE-SECURED	D			1 G PL	19,850,000	.79 8421	15,968,423	20,000,000	17,699,659	.0	17,298	.0	.0	.9 750	9.750	MJSD	.0	492,917	06/29/2023	06/30/2027
66415*-AA-8	Northeast Energy Center Senior Secured N				2 C YE	14,423,068	.83 8952	12,100,262	14,423,068	14,423,068	.0	.0	.0	.0	.3 440	3.440	MJSD	127,029	620,192	01/06/2022	12/31/2038
67078A-AD-5	nVent Finance Sarl-SENIOR UNSECURED	D	1,2		2 C FE	7,985,680	.99 0322	7,922,574	8,000,000	7,994,652	.0	1,336	.0	.0	.4 550	4.570	AO	76,844	364,000	03/12/2018	04/15/2028
693436-AA-5	PLP Trust 2020-1-PLP 2020-1A A				6 *	8,411,815	.30 4297	2,403,786	7,899,474	2,403,785	(5,954,204)	(53,825)	.0	.0	.5 015	4.510	MON	1,222,590	.0	12/02/2020	03/31/2041
69369E-AD-1	PERTAMINA PERSERO PT-SENIOR UNSECURED NO	D			2 B FE	729,800	.98 5300	646,357	723,533	723,533	.0	(2,381)	.0	.0	.6 000	5.098	MN	6,341	39,360	04/01/2022	05/03/2042
69370P-AF-8	Pertamina Persero PT-SENIOR UNSECURED	D	2		2 B FE	1,043,403	.90 3709	988,657	1,094,000	1,059,532	.0	6,074	.0	.0	.3 100	3.790	JJ	15,073	33,914	04/01/2022	01/21/2030
69371M-AF-4	PTTEP Treasury Center Co-SENIOR UNSECURE	D	1,2		2 A FE	3,440,704	.94 5929	3,783,714	4,000,000	3,684,005	.0	116,551	.0	.0	.2 587	6.118	JD	6,036	103,480	11/02/2022	06/10/2027
69375M-AA-1	Hutama Karya Persero PT-SENIOR UNSECURED	D	2		2 B FE	738,131	.92 5675	678,520	733,000	736,502	.0	(612)	.0	.0	.3 750	3.647	MN	3,818	27,488	04/01/2022	05/11/2030
70176*-AB-5	Parmer 3 1 Austin Tx Con Trust Certifica				1 D PL	15,112,500	.95 7246	14,358,690	15,000,000	15,064,013	.0	(7,492)	.0	.0	.4 800	4.729	MON	32,000	720,000	06/27/2017	01/15/2032
70215*-AA-8	Partstat (Varian 2020 I Pass-Thru Certif				1 E	8,794,767	.92 4719	8,132,688	8,794,767	8,794,767	.0	.0	.0	.0	.3 250	3.250	MJSD	86,634	214,372	03/17/2020	03/15/2030
70466W-AA-7	PEACHTREE FUNDING TRUST-SR UNSECURED		1		2 A FE	15,376,464	.99 8615	15,338,729	15,360,000	15,360,139	.0	(2,070)	.0	.0	.3 976	3.960	FA	230,714	610,714	05/05/2015	02/15/2025
71367*-AA-4	PERENfra Laguna LLC Senior Secured Notes				2 C PL	14,327,390	.74 3427	10,651,369	14,327,390	14,327,390	.0	.0	.0	.0	.3 580	3.581	OCT	108,283	1,033,858	12/28/2021	10/15/2049
71367*-AB-2	PERENfra Laguna LLC Senior Secured Notes				2 C PL	14,548,715	.96 2550	14,003,866	14,548,715	14,548,715	.0	.0	.0	.0	.6 220	6.222	OCT	191,041	904,930	12/16/2022	10/15/2050
71426A-AA-3	PERNOD RICARD SA-SENIOR UNSECURED	D	1,2		2 A FE	2,405,450	.98 0335	2,450,837	2,500,000	2,429,412	.0	23,962	.0	.0	.3 250	5.316	JD	5,191	40,625	06/25/2024	06/08/2026
71568P-AC-3	Perusahaan Perseroan Per-SENIOR UNSECURE	D			2 B FE	737,798	.97 7212	709,456	726,000	731,741	.0	(2,282)	.0	.0	.4 125	3.772	MN	3,827	29,948	04/01/2022	05/15/2027
716973-AB-8	Pfizer Investment Enterp-SENIOR UNSECURE	D	1,2		1 F FE	9,890,500	.99 8685	9,986,851	10,000,000	9,943,449	.0	38,270	.0	.0	.4 450	4.874	MN	51,917	445,000	08/08/2023	05/19/2026
716973-AD-4	Pfizer Investment Enterp-SENIOR UNSECURE	D	1,2		1 F FE	24,390,630	.99 1453	24,389,751	24,600,000	24,410,198	.0	13,178	.0	.0	.4 650	4.813	MN	133,455	678,900	12/19/2024	05/19/2030
71953*-AA-6	PIBB MEMBER LLC Senior Secured Note				2 B PL	9,000,000	.96 7559	8,708,031	9,000,000	9,000,000	.0	.0	.0	.0	.6 410	6.410	MJSD	6,410	.0	11/21/2024	12/27/2049
72303*-AA-7	Pinebridge Private Credi Term Loan FAC				1 E PL	17,609,910	.98 0627	17,294,011	17,635,667	17,615,426	.0	.2 448	.0	.0	.6 000	6.019	MJSD	1,623,748	584,798	05/30/2024	12/31/2031
74166M-AE-6	Prime Security Services -PRSESE 6 1/4 01		1,2		4 B FE	1,251,336	.99 4002	1,318,094	1,251,000	1,278,056	.0	11,099	.0	.0	.6 250	7.364	JJ	37,984	82,375	09/29/2022	01/15/2028
74338*-AA-6	Project Axis Garner NC C Trust Certificat				1 D	12,928,452	.90 4651	11,695,737	12,928,452	12,928,600	.0	(17)	.0	.0	.4 034	4.034	MON	66,779	478,068	12/15/2018	11/15/2039
74445P-AF-9	Indonesia Asahan Alumini-SENIOR UNSECURE	D	2		2 C FE	1,030,117	.99 7645	977,892	980,000	1,014,678	.0	(5,862)	.0	.0	.5 450	4.665	MN	6,825	53,410	04/01/2022	05/15/2030
74745*-AA-3	QTS IRVING DC3 LLC Senior Secured Notes				1 F PL	6,944,450	.100 8015	7,000,110	6,944,450	6,944,450	.0	.0	.0	.0	.5 960	5.960	JJ	196,597	.0	05/28/2024	07/09/2029
75625Q-AE-9	Reckitt Benckiser Treasu-SENIOR UNSECURE	D	1,2		1 G FE	33,345,000	.95 8433	33,545,152	35,000,000	33,512,480	.0	167,480	.0	.0	.3 000	4.835	JD	14,583	525,000	11/18/2024	06/26/2027
7757BJ-AB-4	Rolls-Royce PLC-SENIOR UNSECURED	D	1,2		2 C FE	11,871,250	.98 6100	11,833,200	12,000,000	11,987,537	.0	14,707	.0	.0	.3 625	3.755	AO	93,042	435,000	12/03/2015	10/14/2025
7846EL-AE-7	SPCM SA-SENIOR UNSECURED	D	1,2		3 A FE	4,000,000	.87 5000	3,500,000	4,000,000	4,000,000	.0	.0	.0	.0	.3 375	3.374	MS	39,750	135,000	09/09/2021	03/15/2030
806854-AJ-4	Schlumberger Investment -SENIOR UNSECURE	D	1,2		1 F FE	4,143,850	.89 1560	4,457,801	5,000,000	4,271,643	.0	109,902	.0	.0	.2 650	5.787	JD	1,840	132,500	10/30/2023	06/26/2030
806854-AK-1	Schlumberger Investment -SENIOR UNSECURE	D	1,2		1 F FE	14,042,901	.99 2048	14,293,430	14,408,000	14,138,098	.0	71,393	.0	.0	.4 500	5.110	MN	82,846	648,360	08/24/2023	05/15/2028
81254U-AK-2	Seaspan Corp-SENIOR UNSECURED	D	1,2		3 B FE	5,595,614	.93 2007	5,473,678	5,873,000	5,684,443	.0	34,015	.0	.0	.5 500	6.311	FA	134,590	323,015	04/19/2022	08/01/2029

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
82340*-AA-5	Shepherds Flat Funding T Trust A-1-A Cer			1	.. 2.C FE	1,908,252	104.3601	1,949,290	1,867,850	1,905,589	0	(2,662)	0	0	6.950	6.600	JAJO	88,022	0	05/02/2024	04/30/2032
82620K-AL-7	Siemens Financieringsmaa-SENIOR UNSECURE	D			.. 1.D FE	9,811,984	96.3363	10,018,974	10,400,000	10,085,712	0	165,796	0	0	2.350	4.118	AO	51,596	244,400	04/26/2023	10/15/2026
82650N-AA-0	Sigma Finance Netherland-SENIOR UNSECURE	D	1,2		.. 2.C FE	745,802	98.2000	708,022	721,000	734,655	0	(4,203)	0	0	4.875	4.194	MS	9,178	35,149	04/01/2022	03/27/2028
82817*-AA-9	Silver Spring Metro Cent Senior Note Tra				.. 1.A	2,287,128	96.5668	2,208,606	2,287,128	2,287,128	0	0	0	0	3.810	3.810	MON	6,293	87,115	11/18/2013	01/05/2029
82817@-AA-7	Silver Spring Metro Cent Senior Note Tra				.. 1.A	1,144,423	96.7183	1,106,880	1,144,437	1,144,431	0	1	0	0	3.890	3.890	MON	3,215	44,744	11/18/2013	01/07/2029
82817@-AB-5	Silver Spring Metro Cent Senior Note Tra				.. 1.A	8,000,000	102.2068	8,176,544	8,000,000	8,000,011	0	(4)	0	0	6.414	6.414	MON	37,059	513,120	11/18/2013	01/07/2029
833636-AH-6	Sociedad Quimica y Miner-SENIOR UNSECURE	D	1,2		.. 2.A FE	1,031,076	95.9875	954,116	994,000	1,017,308	0	(5,180)	0	0	4.250	3.629	MM	6,337	42,245	04/01/2022	05/07/2029
841215-AA-4	Southaven Combined Cycle-SECURED				.. 1.D FE	2,875,512	94.1361	2,706,894	2,875,512	2,875,561	0	(14)	0	0	3.846	3.845	FA	41,779	110,592	08/06/2013	08/15/2033
85208N-AD-2	Sprint Spectrum Co LLC -FIRST LIEN	1			.. 1.F FE	1,437,500	99.9366	1,436,589	1,437,500	1,437,500	0	0	0	0	4.738	4.738	MJSD	2,081	68,109	03/14/2018	03/20/2025
85235*-AA-6	St Louis County Control Trust Certificat				.. 1.F	25,358,016	91.7209	23,258,601	25,358,017	25,358,017	0	0	0	0	3.790	3.790	MON	42,714	1,372,614	12/28/2016	12/15/2036
853254-BK-5	Standard Chartered PLC-SUBORDINATED	D	2		.. 2.B FE	6,000,000	97.6160	5,856,959	6,000,000	6,000,000	0	0	0	0	4.866	4.866	MS	85,966	291,960	03/12/2018	03/15/2033
85917E-AA-0	STERLING CAPITAL TRUST IX L+140 10/01/37				.. 3.C	9,171,250	88.2300	9,705,300	11,000,000	9,575,768	0	59,597	0	0	6.255	7.858	JAJO	172,011	780,746	03/23/2018	10/01/2037
86669P-AA-3	Sun Country Pass Through Series 2022-1A				.. 1.G PL	18,678,543	96.7011	18,062,356	18,678,543	18,678,543	0	0	0	0	4.840	4.840	MS	266,190	904,041	09/15/2022	03/15/2031
86669Q-AA-1	Sun Country Pass Through Series 2022-1B				.. 2.B PL	4,900,670	96.0087	4,705,070	4,900,670	4,900,670	0	0	0	0	5.750	5.751	MS	82,971	281,789	09/15/2022	03/15/2029
86765K-AA-7	Sunoco LP / Sunoco Finan-SENIOR UNSECURE		1,2		.. 3.A FE	3,525,000	102.1000	3,599,025	3,525,000	3,525,000	0	0	0	0	7.000	7.000	MS	72,654	243,323	09/13/2023	09/15/2028
870674-AA-6	Sweihaan PV Power Co PJSC-SECURED	D			.. 2.A FE	998,622	81.4003	848,254	1,042,077	1,001,324	0	1,009	0	0	3.625	3.876	JJ	15,845	37,764	04/01/2022	01/31/2049
877409-A#-9	Taylor Wimpey PLC Senior Unsecured Notes	B			.. 2.C	19,178,250	107.3582	19,443,375	17,500,000	18,110,750	0	0	0	(1,067,500)	5.080	5.080	JD	10,223	1,432,757	06/27/2023	06/27/2030
88749*-AA-9	Ting Issuer LLC Notes Class A-2				.. 1.G PL	20,358,326	97.6776	20,865,401	21,361,500	20,378,264	0	12,172	0	0	5.950	6.299	MON	250,671	1,376,927	05/04/2023	04/20/2053
88749*-AB-7	Ting Issuer LLC Notes Class B				.. 2.B PL	8,728,593	97.0125	8,871,308	9,144,500	8,734,878	0	3,821	0	0	7.400	7.793	MON	133,459	733,084	05/04/2023	04/20/2053
88749*-AD-3	TING ISSUER LLC TING FUNDING LLC (TRANCH				.. 1.G PL	24,391,321	91.8796	22,414,028	24,395,000	24,391,276	0	(45)	0	0	5.630	5.631	MON	156,419	114,453	08/13/2024	08/20/2054
88749*-AE-1	TING ISSUER LLC TING FUNDING LLC (TRANCH				.. 2.B PL	1,999,877	88.0735	1,761,470	2,000,000	1,999,870	0	(7)	0	0	6.850	6.850	MON	15,603	11,417	08/13/2024	08/20/2054
89441#-AA-4	Traverse City Control Tr Trust Certifica				.. 1.A	8,805,239	94.7344	8,259,000	8,718,058	8,838,153	0	(15,187)	0	0	4.613	4.372	MON	51,859	435,790	09/18/2018	11/15/2039
89641U-AB-7	TRINITY ACQUISITION PLC-SENIOR UNSECURED	D			.. 2.B FE	3,282,608	98.6733	2,254,686	2,285,000	3,171,514	0	(33,950)	0	0	6.125	3.316	FA	52,872	139,956	08/03/2021	08/15/2043
898324-AB-4	TRUST F/1401-SENIOR UNSECURED 144A	D	1,2		.. 2.C FE	1,043,145	86.0000	835,060	971,000	1,038,339	0	(1,870)	0	0	6.950	6.310	JJ	28,306	67,485	04/01/2022	01/30/2044
90272*-AA-0	UHC (Senior Note) CTL Pa Trust Certifica				.. 1.F	2,961,126	93.1191	2,757,374	2,961,126	2,960,694	0	113	0	0	3.500	3.505	MON	4,606	130,404	05/21/2013	05/15/2033
90352J-AC-7	UBS GROUP FUNDING SWITZE-SENIOR UNSECURE	D	2		.. 1.G FE	3,030,240	97.2991	2,918,972	3,000,000	3,008,496	0	(3,638)	0	0	4.253	4.116	MS	34,733	127,590	03/14/2018	03/23/2028
90378@-AA-1	U.S. Department of Agric Trust Certifica				.. 1.B	3,363,386	87.2969	2,936,132	3,363,386	3,363,386	0	0	0	0	3.228	3.228	MON	4,825	108,568	07/07/2020	04/15/2038
90390K-AB-0	US Capital Funding II Lt-USCAP FLOAT 08/	D	2		.. 1.C FE	20,740	98.8283	21,241	21,492	20,732	0	54	0	0	6.259	6.758	FMAN	228	1,767	09/06/2019	08/01/2034
91845#-AA-2	VZ (Senior Note) CTL Pas Trust Certifica				.. 2.A	7,031,404	91.6681	6,445,554	7,031,404	7,031,524	0	(24)	0	0	3.812	3.812	MON	11,913	268,031	05/19/2015	05/15/2035
91854*-AA-4	VZ (Irving TX)(Senior No Trust Certifica				.. 2.A	7,504,994	89.6163	6,725,698	7,504,994	7,504,995	0	(2)	0	0	3.620	3.620	MON	12,075	294,311	08/17/2016	05/15/2036
91855*-AA-3	VA (Ponce, PR) CTL Trust Certificate				.. 1.A	11,866,809	89.7338	10,648,538	11,866,809	11,866,809	0	0	0	0	4.350	4.350	MON	22,943	602,305	03/29/2019	08/15/2042
91863@-AA-1	VHG Capital, L.P. Senior Notes Series A				.. 1.D PL	20,000,000	84.9325	16,986,500	20,000,000	20,000,000	0	0	0	0	3.110	3.110	AO	120,944	622,000	11/02/2021	10/21/2031
91863@-AB-9	VHG Capital, L.P. Senior Notes Series B				.. 1.D PL	10,000,000	81.5099	8,150,990	10,000,000	10,000,000	0	0	0	0	3.210	3.210	AO	62,417	321,000	11/02/2021	10/21/2033
92769X-AP-0	Virgin Media Secured Fin-SECURED	D	1,2		.. 3.C FE	2,475,000	93.7500	2,343,750	2,500,000	2,483,429	0	3,218	0	0	5.500	5.671	MM	17,569	137,500	03/30/2022	05/15/2029
92838*-AA-3	Vista Malta Finance P.L. Pass Through Ce	D			.. 1.G PL	29,749,225	101.4231	30,172,587	29,749,225	29,749,225	0	0	0	0	6.850	6.845	AO	486,813	2,037,822	08/18/2022	04/05/2032
92842@-AA-5	Vista Malta Finance P.L. Pass Through Ce	D			.. 3.A PL	4,789,649	104.5689	4,999,072	4,780,649	4,780,649	0	0	0	0	9.500	9					

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
929826-AA-5	Wec 2000B-CSF-11 LLC Senior Secured Note				2.B	992,516	96.6487	939,248	971,817	978,986	0	(4,028)	0	0	4.250	3.810	MON	1,836	41,297	09/25/2020	09/15/2030
929836-AA-6	WEC 99J-4 LLC Senior Secured Note				2.B	1,084,802	93.9447	997,859	1,062,177	1,074,865	0	(2,941)	0	0	4.250	3.924	MON	2,006	45,141	09/25/2020	09/15/2034
929836-AA-4	WEC 99J-72 LLC Senior Secured Note				2.B	1,752,415	82.3492	1,413,003	1,715,867	1,746,468	0	(1,488)	0	0	4.250	4.088	MON	9,318	72,789	09/25/2020	09/15/2039
960426-AA-4	Westkin Portfolio (LAS & Trust Certifica				1.D PL	8,188,160	99.9625	8,104,049	8,107,089	8,161,450	0	(7,145)	0	0	6.050	5.920	MON	21,799	490,473	12/06/2018	11/15/2038
96928*-DZ-7	William Blair & Company, Trust Certifica				1.E YE	5,333,893	99.7676	5,273,035	5,285,318	5,292,460	0	(6,070)	0	0	5.600	5.483	MON	13,155	295,933	04/28/2011	10/15/2029
96928*-FV-4	William Blair & Company, Trust Certifica				1.E	7,838,081	88.1387	6,908,378	7,838,076	7,838,086	0	(2)	0	0	4.090	4.090	MON	14,248	320,575	09/30/2014	09/15/2044
969306-AA-9	William Blair & Company Trust Certificat				3.A	3,818,514	67.8010	2,588,991	3,818,514	3,818,514	0	(1)	0	0	4.370	4.370	MON	7,416	166,864	09/11/2015	08/15/2035
984851-AF-2	Yara International ASA-SENIOR UNSECURED	D	1,2		2.B FE	5,471,970	98.5783	5,421,807	5,500,000	5,470,714	0	0	0	0	4.750	6.501	JD	21,771	261,250	09/30/2022	06/01/2028
984851-AG-0	Yara International ASA-SENIOR UNSECURED	D	1,2		2.B FE	7,591,760	89.6699	7,173,595	8,000,000	7,716,249	0	46,126	0	0	3.148	3.879	JD	18,888	251,840	03/15/2022	06/04/2030
B95506-AG-6	Umicore SA Senior Unsecured Notes	D			2.B	25,000,000	103.5592	25,889,800	25,000,000	25,000,000	0	0	0	0	6.320	6.320	JJ	715,389	1,580,000	01/18/2023	01/18/2030
B95506-AP-6	UMICORE SA Senior Sustainability-linked	B			2.B	21,718,000	100.0111	20,700,297	20,000,000	20,698,000	0	0	0	(1,020,000)	4.070	4.070	JJ	381,424	0	04/04/2024	07/18/2031
000000-00-0	CRANEMERE UK HLDGS I 12.50 PIK 6/30/24	D			5.B GI	2,985,650	122.3854	3,654,000	2,985,650	2,985,649	0	0	0	0	12.500	12.617	JUN	683,183	0	12/31/2022	06/30/2025
C7990B-AC-2	Panther BF Aggregator 2 -SECURED		1		3.C FE	94,538	99.7656	103,247	100,000	100,865	0	1,852	0	(6,927)	4.375	6.329	MN	579	4,686	07/28/2022	05/15/2026
D03783-AB-9	APCOA Parking Holdings G-SECURED	B	2		4.B FE	84,885	100.0423	103,534	100,000	95,071	0	3,765	0	(6,482)	4.625	9.083	JJ	2,207	5,054	07/28/2022	01/15/2027
D27366-AI-5	FRITZ DRAXLMAIER GMBH AN Senior Unsecur	D			2.C PL	6,000,000	100.6763	6,040,578	6,000,000	6,000,000	0	0	0	0	6.260	6.253	MS	193,017	0	05/28/2024	09/26/2030
D30036-AA-5	EnBW Energie Baden-Wuert Senior Note Ser	D			2.A	25,000,000	101.0467	25,261,675	25,000,000	25,000,000	0	0	0	0	6.420	6.420	MN	231,833	1,605,000	11/09/2022	11/09/2025
D30036-AC-1	EnBW Energie Baden-Wuert Senior Note Ser	D			2.A	5,000,000	106.4131	5,320,655	5,000,000	5,000,000	0	0	0	0	6.640	6.640	MN	47,956	332,000	11/09/2022	11/09/2031
D54726-AS-9	MOLKEREI ALOIS MUELLER G Senior Unsecur	B			2.B Z	21,770,000	101.1507	20,936,172	20,000,000	20,698,000	0	0	0	(1,072,000)	4.040	4.040	MN	92,911	0	06/03/2024	11/21/2029
D6511A-AE-7	Nidda Healthcare Holding-FIRST LIEN	B	1,2		4.B FE	385,630	102.6983	425,130	400,000	402,629	0	6,409	0	(27,674)	7.500	9.339	FA	20,784	16,019	11/02/2022	08/21/2026
E10006-AE-9	Acciona Financiacion Fil Green Gtd Senio	B			2.C PL	37,611,000	101.4521	36,747,472	35,000,000	36,221,500	0	0	0	(1,389,500)	5.120	5.120	MN	273,030	947,968	05/08/2024	05/08/2031
E50006-AA-2	Espai Barca FT - Senior Unsecured Note S	B			2.B PL	26,595,000	106.0188	27,429,714	25,000,000	25,872,500	0	0	0	(1,787,500)	6.010	6.011	JD	781,788	1,628,860	05/31/2023	06/30/2028
E5706X-AT-5	Grifols SA-SECURED	B	2		4.A FE	1,090,752	102.7545	1,105,943	1,040,000	1,076,296	0	0	0	(14,456)	7.125	7.128	MN	2,556	0	12/11/2024	05/01/2030
E7650V-AG-9	NH Hotel Group SA-SECURED	B	1,2		3.B FE	188,028	99.8820	206,736	200,000	200,148	0	4,393	0	(13,727)	4.000	6.337	JJ	4,117	8,673	07/26/2022	07/02/2026
E7514A-AA-6	Lorca Telecom Bondco SA-SECURED	B	1,2		3.A FE	507,315	99.8127	568,129	550,000	540,164	0	9,945	0	(37,094)	4.000	6.059	MS	6,704	24,214	10/03/2022	09/18/2027
F20006-AC-2	C2 DEVELOPPEMENT Senior Unsecured Notes	B			2.A PL	21,390,000	101.2551	20,957,781	20,000,000	20,698,000	0	0	0	(692,000)	4.670	4.669	JJ	456,448	0	04/26/2024	07/15/2031
F20046-AA-2	Compagnie Daher Senior Note Series A (US	D			3.C	8,750,000	96.6751	8,459,071	8,750,000	8,750,000	0	0	0	0	5.830	5.830	AO	90,689	510,125	04/27/2022	04/27/2030
F29776-AC-9	Elis SA Senior Unsecured Notes	D			2.B PL	88,000,000	91.5196	80,537,248	88,000,000	88,000,000	0	0	0	0	4.320	4.320	JD	316,800	3,801,600	06/01/2022	06/01/2032
F50746-MK-6	iliad SA-SENIOR UNSECURED	B	1,2		3.B FE	638,168	107.7450	669,032	600,000	615,777	0	850	0	(42,523)	5.625	5.813	FEB	30,384	36,322	06/13/2023	02/15/2030
F7163Q-AA-2	Chrome Bideo SASU-SECURED	B	1,2		4.C FE	364,259	82.1294	339,983	400,000	385,540	0	7,665	0	(26,462)	3.500	5.742	MN	8,492	7,593	07/25/2022	05/31/2028
F7725A-AC-3	Remy Cointreau SA-SENIOR UNSECURED	B			2.C	10,558,000	108.2462	11,202,399	10,000,000	10,349,000	0	0	0	(715,000)	5.194	5.194	SEP	137,335	579,027	09/28/2023	09/26/2030
G0066R-AD-6	ABO Finance Ltd-SENIOR UNSECURED	D			1.F FE	3,573,200	97.5315	3,901,260	4,000,000	3,890,382	0	151,823	0	0	1.875	6.007	MS	23,542	75,000	11/01/2022	09/08/2025
G03696-BH-8	Anglian Water Services F Senior Secured	B			1.G FE	18,206,400	95.6506	19,159,198	16,000,000	20,030,400	0	0	0	(390,400)	6.070	6.070	MN	175,622	1,225,994	11/09/2022	11/09/2037
G05666-AE-9	Arqiva PP Financing PLC Senior Secured N	D			2.B FE	18,000,000	102.9599	18,532,782	18,000,000	18,000,000	0	0	0	0	6.240	6.242	JD	564,720	1,151,280	06/22/2023	06/30/2031
G10016-AB-2	Artis LoanCo 1 PLC Senior Secured Fixed	D			2.C FE	16,667,000	101.9154	16,986,240	16,667,000	16,667,000	0	0	0	0	8.250	8.250	MON	542,372	1,045,160	12/20/2022	06/09/2026
G17466-AG-1	Cadent Finance PLC - Senior Unsecured No	B			1.G FE	29,582,400	101.8052	30,587,983	24,000,000	30,045,600	0	0	0	(496,800)	6.219	6.219	JJ	783,747	2,863,564	01/31/2023	01/31/2030
G19696-AJ-5	Balfour Beatty PLC Senior Note Series A	D			2.B PL	8,035,700	100.5591	8,080,628	8,035,700	8,035,700	0	0	0	0	6.710	6.710	MN	269,598	269,598	05/28/2024	05/28/2031
G2019U-AI-7	CBQ Finance Ltd-SENIOR UNSECURED	D			1.G FE	989,450	97.3354	1,070,690	1,100,000	1,071,040	0	39,024	0	0	2.000	5.858	MS	6,478	22,000	11/01/2022	09/15/2025
G22426-AE-3	COATS GROUP PLC Senior Unsecured Notes	D			2.B Z	9,250,000	98.6230	9,122,628	9,250,000	9,250,000	0	0	0	0	5.360	5.360	JD	37,185	0	10/09/2024	12/04/2030
G22836-AG-8	Colombo BidCo Limited Senior Secured Not	B			2.C PL	19,352,800	94.5758	20,127,905	17,000,000	21,282,300	0	0	0	(414,800)	6.660	6.660	MS	397,660	1,474,464	09/20/2022	09/20/2032
G22836-AH-6	Colombo BidCo Limited Senior Secured Not	B			2.C PL	5,692,000	98.8118	6,185,125	5,000,000	6,259,500	0	0	0	567,500	7.564	7.564	MS	566,652	432,044	09/20/2022	09/20/2029
G25532-AN-2	CPUK Finance Ltd-CPKLN 4 1/2 08/28/27	B	2		4.B FE	432,384	94.6778	474,108	400,000	471,950	0	9,771	0	(9,211)	4.500	6.908	FA	7,716	23,261	07/26/2022	08/28/2027
G26166-BC-4	DCC Treasury 2014 Ltd Guaranteed Senior	D			2.B	25,000,000	102.0356	25,508,900	25,000,000	25,000,000	0	0	0	0	6.120	6.120	JD	68,000	2,295,000	12/15/2022	12/15/2032
G29529-AE-7	eircom Finance DAC-SECURED	B			4.A FE	357,097	97.2123	402,420	400,000	387,619	0	11,853	0	(26,511)	2.625	5.858	FA	1,388	11,246	07/25/2022	02/15/2027
G30766-AF-3	Envol Investments Limite Senior Secured	B			2.B PL	21,214,000	107.4548	22,240,995	20,000,000	20,698,000	0	0	0	(1,430,000)	5.478	5.478	JJ	557,470	1,191,246	01/04/2023	01/04/2032
G33016-AK-9	FIL Ltd/Bermuda Senior Note Series A	B			2.A	25,248,000	99.4944	24,911,408	20,000,000	25,038,000	0	0	0	(210,000)	6.110	6.110	JD	8,499	2,318,745	06/29/2023	06/29/2030

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
G3427@-AA-8	GKN INDUSTRIES LTD Senior Unsecured Note	D.....			..2.C PL	20,131,500	..97.8127	19,691,164	20,131,500	20,131,500	0	0	0	0	..5.770	..5.770	AO	196,825	0	10/02/2024	10/30/2029
G389AY-AA-2	Gatwick Airport Finance -SECURED	B.....	1,2		..3.C FE	139,541	..98.1800	184,367	150,000	174,510	0	9,511	0	(3,416)	..4.375	10.467	AO	1,917	8,445	10/03/2022	04/07/2026
G3908*-AA-8	GAST MIDCO LTD Senior Secured Notes	B.....			..2.B PL	16,738,750	..97.7337	15,294,102	12,500,000	15,648,750	0	0	0	(1,090,000)	..5.870	5.870	MN	0	0	09/24/2024	11/26/2029
G3908*-AB-6	GAST MIDCO LTD Senior Secured Notes	B.....			..2.B PL	8,369,375	..97.1220	7,599,189	6,250,000	7,824,375	0	0	0	(545,000)	..6.020	6.020	MN	45,794	0	09/24/2024	11/26/2031
G3934#-AA-2	Global Ports Group Finan Senior Secured	B.....			..2.C PL	10,000,000	101.8290	10,182,900	10,000,000	10,000,000	0	0	0	0	..7.870	7.872	IMSD	198,936	795,744	09/27/2023	03/31/2040
G4640#-AA-5	Holman Leasing Ltd Senior Guaranteed Not	B.....			..2.A	38,136,000	..99.4319	37,343,639	30,000,000	37,557,000	0	0	0	(579,000)	..5.510	5.510	MN	1,299,118	0	05/23/2024	05/15/2029
G4691@-AA-5	IBC CAPITAL LTD USA Senior Secured Notes	D.....			..2.B PL	5,793,000	..99.4824	5,763,015	5,793,000	5,793,000	0	0	0	0	..6.840	6.840	MN	42,926	0	11/14/2024	11/22/2029
G4691@-AB-3	IBC CAPITAL LTD USA Senior Secured Notes	D.....			..2.B PL	12,000,000	..99.1603	11,899,236	12,000,000	12,000,000	0	0	0	0	..7.010	7.010	MN	91,130	0	11/14/2024	11/22/2031
G5222@-AA-0	Keller Holdings Limited Gtd Senior Note	D.....			..2.C	25,000,000	..99.8301	24,957,525	25,000,000	25,000,000	0	0	0	0	..6.370	6.370	FA	623,729	1,592,500	08/10/2023	08/10/2030
G5264#-AX-7	Kingspan Securities Limi Senior Unsecur	B.....			..2.B	21,376,000	103.7532	21,474,837	20,000,000	20,698,000	0	0	0	(678,000)	..4.700	4.700	JD	64,854	1,507,243	06/07/2023	06/07/2029
G6369#-AB-7	NSG UK Enterprises Limit Senior Note Ser	B.....			..2.C PL	26,625,000	100.2172	25,928,695	25,000,000	25,872,500	0	0	0	(752,500)	..4.790	4.790	AO	254,744	648,147	04/17/2024	04/17/2031
G6516#-AB-9	John Swire & Sons Ltd Senior Note Series	D.....			..1.G	20,000,000	103.1355	20,627,100	20,000,000	20,000,000	0	0	0	0	..6.530	6.530	MN	170,506	1,306,000	11/14/2023	11/14/2030
G6901#-AA-4	Pantheon International p Senior Secured	B.....			..1.G PL	6,250,000	101.5815	6,348,844	6,250,000	6,250,000	0	0	0	0	..6.360	6.363	FA	133,604	231,875	02/01/2024	02/01/2029
G6901#-AB-2	Pantheon International p Senior Secured	B.....			..1.G PL	12,500,000	..99.0398	12,379,975	12,500,000	12,500,000	0	0	0	0	..6.530	6.532	FA	274,351	476,146	02/01/2024	02/01/2031
G71132-AD-9	Pinewood Finance Co Ltd-SECURED	B.....	1,2		..3.A FE	2,187,672	..94.3906	2,540,602	2,150,000	2,452,849	0	74,182	12,564	(47,916)	..3.625	7.090	MN	12,564	98,864	10/03/2022	11/15/2027
G7334@-BC-6	RPPF ENGINE LEASING LTD Senior Secured N	C.....			..2.B FE	2,000,000	..99.8096	1,996,192	2,000,000	2,000,000	0	0	0	0	..5.340	5.346	JD	8,010	0	10/30/2024	12/04/2027
G7334@-BG-7	RPPF ENGINE LEASING LTD Senior Secured N	C.....			..2.B FE	3,000,000	..99.0356	2,971,068	3,000,000	3,000,000	0	0	0	0	..5.440	5.443	JD	12,240	0	10/30/2024	12/04/2029
G76311-AH-5	Rolls-Royce PLC-SENIOR UNSECURED	B.....			..3.C FE	536,271	..97.5504	610,617	500,000	597,892	0	18,044	11,402	(11,675)	..3.375	6.678	JUN	11,402	21,435	08/18/2022	06/18/2026
G7682@-AC-5	Royal Bank of Scotland I Senior Notes Se	D.....			..1.F FE	20,000,000	101.2839	20,256,780	20,000,000	20,000,000	0	0	0	0	..6.310	6.310	AO	301,478	1,262,000	04/05/2023	04/05/2026
G8338#-AG-0	SPECTRIS PLC Senior Unsecured Notes	B.....			..2.B Z	8,151,000	..99.0436	7,687,517	7,500,000	7,761,750	0	0	0	(389,250)	..3.560	3.560	MN	26,864	0	10/16/2024	11/26/2029
G8481@-AA-0	STENN MEZZ CLASS B	D.....			..2.B PL	21,250,000	100.2422	21,301,477	21,250,000	21,250,000	0	0	0	0	..8.531	8.531	MON	1,486,443	400,694	10/07/2024	12/19/2028
G8481@-AB-8	STENN MEZZ CLASS C	D.....			..3.B PL	25,250,000	100.1936	25,298,890	25,250,000	24,956,062	0	0	0	0	11.531	11.530	MON	2,320,087	701,672	10/07/2024	12/19/2028
G8655*-AA-2	TPG Partner Holdings, L. Senior Note Ser	C.....			..1.D PL	1,852,571	..85.5942	1,585,693	1,852,571	1,852,571	0	0	0	0	..2.970	2.970	MS	13,908	55,021	09/10/2020	09/30/2030
G9020*-AC-4	Travis Perkins PLC Senior Note Series A	B.....			..2.C PL	17,809,400	..94.1153	16,495,212	14,000,000	17,526,600	0	0	0	(282,800)	..6.200	6.200	FA	386,364	1,122,715	08/23/2023	08/23/2029
G9020*-AE-0	Travis Perkins PLC Senior Note Series C	B.....			..2.C PL	11,448,900	..91.2314	10,279,133	9,000,000	11,267,100	0	0	0	(181,800)	..6.260	6.260	FA	250,781	728,730	08/23/2023	08/25/2031
G9372@-AX-6	Virgin Media Secured Fin-FIRST LIEN	B.....	1,2		..4.A FE	264,003	..93.1250	279,800	240,000	282,727	0	3,440	0	(5,516)	..5.250	6.832	MN	2,016	15,940	07/25/2022	05/15/2029
G9372@-AZ-1	Virgin Media Secured Fin-SECURED	B.....	1,2		..4.A FE	270,375	..87.6863	285,413	260,000	293,590	0	5,297	0	(5,730)	..4.250	6.566	JD	2,920	14,104	07/25/2022	01/15/2030
K3752@-AG-5	Copenhagen Airports A/S Senior Secured P	B.....			..2.C	24,906,235	105.4593	24,879,380	170,000,000	23,591,452	0	0	0	(1,641,208)	..5.260	5.262	JD	627,402	1,307,356	06/28/2023	06/30/2030
K7802#-BH-1	Royal Greenland A/S Senior Note	B.....			..2.B	24,111,821	103.5142	24,061,377	167,500,000	23,244,518	0	0	0	(867,303)	..4.270	4.270	JD	55,141	502,929	06/11/2024	06/11/2029
L1591Y-AA-6	Cidron Aida Finco Sarl-SECURED	B.....	1,2		..4.C FE	209,063	..95.1954	238,350	200,000	229,641	0	5,348	0	(4,484)	..6.250	9.253	AO	3,912	16,142	07/25/2022	04/01/2028
L3009#-AA-6	Ergea Group S.A r.L. Guaranteed Secured	B.....			..2.B PL	18,930,000	103.5124	19,438,076	15,000,000	18,778,500	0	0	0	(151,500)	..7.160	7.160	MN	183,007	2,037,905	05/10/2023	05/12/2030
L3551#-AN-0	Ferrero International SA Gtd Senior Note	B.....			..2.A	18,009,750	102.0960	17,433,760	16,500,000	17,075,850	0	0	0	(933,900)	..4.270	4.270	JD	22,279	1,131,190	06/20/2024	06/20/2030
L6256K-AA-8	Maslow Kensington Investments S.A.R.L -	B.....			..1.F Z	3,462,240	100.0000	3,432,843	2,742,106	3,432,843	0	0	0	(71,699)	..7.701	7.701	MON	23,178	199,428	12/04/2024	05/07/2027
L7598*-AC-4	PILI 1 Portfolio SCSp Senior Unsecured N	B.....			..1.E PL	22,000,000	..87.5440	19,259,680	22,000,000	22,000,000	0	0	0	0	..4.970	4.970	MN	170,084	1,093,400	05/05/2022	05/05/2037
L8869T-AA-4	Summer BC Holdco B SARL-SECURED	B.....	1		..4.C FE	189,701	..99.7438	206,450	200,000	199,867	0	3,631	0	(13,727)	..5.750	7.793	AO	2,017	12,386	07/25/2022	10/31/2026
L8984J-AA-6	Telenet Finance Luxembourg-FIRST LIEN	B.....	1,2		..3.C FE	461,678	..99.0854	512,717	500,000	467,198	0	8,921	0	(33,455)	..3.500	5.543	MS	9,006	19,124	07/26/2022	03/01/2028
M0153A-AA-6	Abu Dhabi Ports Co PJSC-SENIOR UNSECURED	D.....			..1.E FE	1,231,580	..86.0770	1,144,824	1,330,000	1,258,078	0	9,968	0	0	..2.500	3.456	MN	5,080	33,250	04/01/2022	05/06/2031
M2R53V-AB-6	Burgan Bank SAK-SUBORDINATED	D.....	2		..2.A FE	1,038,083	..92.1744	1,090,424	1,183,000	1,073,171	0	13,278	0	0	..2.750	4.309	JD	1,446	32,533	04/01/2022	12/15/2031
N3149*-AE-1	EVOS FINANCE BV Senior Secured Notes Tra	B.....			..2.B PL	24,681,300	102.0322	24,286,418	23,000,000	23,802,700	0	0	0	(878,600)	..4.570	4.570	JD	501,589	0	07/01/2024	06/30/2031
N4281@-CM-5	Koninklijke Vopak NV Senior Notes Series	B.....			..2.B	24,076,800	102.6714	23,376,019	22,000,000	22,767,800	0	0	0	(1,309,000)	..4.570	4.570	JD	34,683	1,623,112	06/15/2023	06/19/2029
N5828#-AC-4	Modec Finance B.V. Senior Note Series A	D.....			..2.C FE	17,500,000	..94.9218	16,611,315	17,500,000	17,500,000	0	0	0	0	..4.080	4.080	JD	731,850	378,875	12/22/2021	12/22/2026
N5828#-AD-2	Modec Finance B.V. Senior Note Series B	D.....			..2.C FE	7,500,000	..91.2176	6,841,320	7,500,000	7,500,000	0	0	0	0	..4.530	4.530	JD	178,369	358,500	12/22/2021	12/22/2028
N5828#-AE-0	Modec Finance B.V. Senior Note Series E	D.....			..2.C FE	50,000,000	101.3790	50,689,500	50,000,000	50,000,000	0	0	0	0	..7.840	5.423	MAT	3,767,556	1,633,333	08/15/2023	07/15/2026
N7137#-AB-8	Pon Holdings BV Senior Unsecured Notes	D.....			..2.B Z	30,000,000	..99.1326	29,739,780	30,000,000	30,000,000	0	0	0	0	..5.630	5.629	FA	680,292	1,717,100	08/09/2022	08/04/2032
N7334#-AY-9	Wereldhave NV Senior Note Series C	D.....			..2.B PL	25,000,000	105.0455	26,261,375	25,000,000	25,000,000	0	0	0	0	..7.640	7.640	JJ	801,139	955,000	01/31/2024	01/31/2031

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
N7334#-AZ-6	WERELDHAVE NV Senior Unsecured Notes	B.....			2.B PL	10,910,000	101.6728	10,522,118	10,000,000	10,349,000	0	0	0	(561,000)	4.880	4.875	FA	172,552	0	07/16/2024	08/28/2027
N88808-AD-7	Trivium Packaging Financ-SECURED	B.....	1		4.B FE	190,213	98.9628	204,833	200,000	200,724	0	3.736	0	(13,782)	3.750	5.724	FA	2,932	8,153	07/25/2022	08/15/2026
N8965N-AB-6	Energizer Gamma Acquisit-SENIOR UNSECURE	B.....	1,2		4.B FE	156,038	96.0121	198,726	200,000	172,108	0	6.494	0	(11,742)	3.500	8.038	JD	3,642	7,589	07/25/2022	06/30/2029
N9T19K-AB-5	VZ Secured Financing BV-SECURED	B.....	1,2		4.A FE	343,795	92.4875	382,861	400,000	361,503	0	6.171	0	(24,834)	3.500	5.711	JJ	6,681	15,299	07/25/2022	01/15/2032
P4900*-AA-4	Gran Americas Usme Provi Senior Secured	D.....			2.B PL	7,471,838	92.7647	6,931,228	7,471,838	7,471,838	0	0	0	0	4.220	4.220	IJSD	191,952	253,073	08/25/2021	03/31/2031
P4900*-AB-2	Gran Americas Usme Provi Senior Secured	D.....			2.B PL	664,472	92.7647	616,396	664,472	664,472	0	0	0	0	4.220	4.220	IJSD	17,070	22,591	08/25/2021	03/31/2031
T0149#-AA-7	ASR Media and Sponsorshi Senior Secured	B.....			2.C PL	22,396,500	106.9555	24,904,856	22,500,000	23,285,250	0	0	0	(1,608,750)	6.040	6.036	AO	973,718	1,083,347	10/26/2022	10/30/2027
T3420#-AE-1	CRIF SpA Senior Unsecured Notes	B.....			2.C	26,925,000	101.5103	26,263,252	25,000,000	25,872,500	0	0	0	(1,052,500)	4.880	4.880	MM	820,675	0	05/07/2024	05/07/2034
V0055B-AK-1	Africa Finance Corp-SENIOR UNSECURED	D.....			1.G FE	1,038,720	91.2848	987,702	1,082,000	1,052,739	0	5.321	0	0	3.750	4.376	AO	6,875	40,575	04/01/2022	10/30/2029
V5000*-AB-1	Kalsoy Navigation, Inc. Gtd Senior Secur	D.....			2.C	1,250,000	82.1827	1,027,284	1,250,000	1,250,000	0	0	0	0	3.740	3.740	MS	11,817	46,750	03/30/2022	03/30/2034
V5739#-AA-5	Luffield Navigation, Inc Gtd Senior Secu	D.....			2.C	13,750,000	82.1827	11,300,121	13,750,000	13,750,000	0	0	0	0	3.740	3.740	MS	129,991	514,250	06/17/2022	03/30/2034
V09821D-AQ-7	Verisure Holding AB-SECURED	B.....	1,2		4.A FE	362,334	98.3666	407,198	400,000	390,351	0	10.564	0	(26,728)	3.250	6.155	FA	5,083	14,131	07/26/2022	02/15/2027
X0971F-AB-1	Canpack SA / Canpack US -SENIOR UNSECURE	1,2			3.C FE	697,316	97.0813	803,755	800,000	758,845	0	22.895	0	(51,908)	2.375	5.599	MM	3,277	20,475	07/28/2022	11/01/2027
X2004#-AA-2	Ciconia Investments Limi Senior Secured	B.....			2.B PL	25,692,650	98.8710	25,374,204	20,500,000	25,663,950	0	0	0	(28,700)	6.240	6.240	MAY	1,009,121	1,625,572	05/16/2023	05/16/2033
Y0889V-AC-4	Bharti Airtel Ltd-SENIOR UNSECURED	D.....	1,2		2.C FE	1,026,637	88.3703	987,980	1,118,000	1,050,301	0	8.958	0	0	3.250	4.340	JD	2,826	36,335	04/01/2022	06/03/2031
Y5008*-AA-2	Knausen Holding LLC Senior Secured Notes	D.....			2.B FE	13,292,400	98.9073	13,147,154	13,292,400	13,292,400	0	0	0	0	5.690	5.689	JAJO	359,459	973,239	06/14/2022	07/15/2027
13645R-BE-3	Canadian Pacific Railway-SENIOR UNSECURE	A.....	1,2		2.B FE	9,076,052	94.7180	9,471,801	10,000,000	9,489,837	0	248,751	0	0	1.750	4.555	JD	14,097	175,000	04/20/2023	12/02/2026
15135U-AR-0	Cenovus Energy Inc-SENIOR UNSECURED	A.....	1,2		2.B FE	12,390,000	88.9467	8,894,670	10,000,000	12,197,225	0	(62,356)	0	0	5.400	3.901	JD	24,000	540,000	10/04/2021	06/15/2047
29250N-BR-5	Enbridge Inc-SENIOR UNSECURED	A.....	1,2		2.A FE	10,142,800	100.9554	10,095,540	10,000,000	10,125,259	0	(12,284)	0	0	5.700	5.503	MS	178,917	570,000	07/26/2023	03/08/2033
29250N-BX-2	Enbridge Inc-SENIOR UNSECURED	A.....	1,2		2.A FE	9,960,169	103.4952	9,904,494	9,570,000	9,924,697	0	(35,472)	0	0	6.000	4.915	MM	73,370	287,100	07/26/2024	11/15/2028
29250N-CA-1	Enbridge Inc-SENIOR UNSECURED	A.....	1,2		2.A FE	5,098,700	101.2227	5,061,136	5,000,000	5,090,219	0	(8,481)	0	0	5.250	4.371	AO	62,708	0	10/15/2024	04/05/2027
58518N-ZB-7	MEGlobal Canada ULC-SENIOR UNSECURED	A.....			2.B FE	1,029,308	99.7227	992,241	995,000	999,368	0	(11,292)	0	0	5.000	3.816	MM	5,942	49,750	04/01/2022	05/18/2025
70137W-AG-3	Parkland Corp-SENIOR UNSECURED	A.....	1,2		3.B FE	3,801,065	92.7500	3,939,093	4,247,000	3,934,604	0	54,748	0	0	4.500	6.314	AO	47,779	191,115	06/08/2022	10/01/2029
89352H-BA-6	TransCanada PipeLines Lt-SENIOR UNSECURE	A.....	1,2		2.A FE	6,538,887	94.8779	6,736,334	7,100,000	6,639,433	0	73,035	0	0	4.100	5.530	AO	61,454	291,100	08/08/2023	04/15/2030
89352H-BC-2	TransCanada PipeLines Lt-SENIOR UNSECURE	A.....	1,2		2.A FE	8,107,700	84.9967	8,499,666	10,000,000	8,380,009	0	193,244	0	0	2.500	5.383	AO	54,861	250,000	07/26/2023	10/12/2031
C2100*-AA-0	CANDO RAIL AND TERMINALS Senior Secured				1.F PL	10,118,531	100.5471	9,786,286	14,000,000	9,733,037	0	0	0	(385,495)	4.760	4.760	MM	70,781	0	10/23/2024	11/15/2031
05178T-AA-9	Aurora Military Housing -SECURED				1.F FE	771,129	96.3327	742,849	771,129	771,196	0	5	0	0	5.820	5.818	JJ	20,695	44,870	06/28/2011	07/15/2034
010392-FJ-2	Alabama Power Co-SENIOR UNSECURED				1.F FE	5,435,709	79.0643	3,955,589	5,003,000	5,391,042	0	(15,713)	0	0	3.850	3.274	JD	16,051	192,616	01/20/2022	12/01/2042
255123-AA-0	Diversified ABS Phase VIII Senior Secured				2.A FE	5,172,000	101.7592	5,262,986	5,172,000	5,172,000	0	0	0	0	7.670	7.670	MM	199,448	35,572	05/29/2024	05/31/2044
743674-BD-4	Protective Life Corp-SENIOR UNSECURED	1,2			1.G FE	8,285,490	97.2707	8,754,364	9,000,000	8,518,769	0	111,474	0	0	4.300	5.909	MS	97,825	387,000	03/22/2022	09/03/2028
216378-AB-5	Cooks Venture Inc-SECURED				6. *	8,150,000	89.3000	7,277,950	8,150,000	7,277,950	(872,050)	0	0	0	8.750	8.750	MM	0	178,281	06/01/2023	06/15/2027
828730-AB-7	Simmons First National C-SUBORDINATED	2			2.B FE	22,000,000	98.2602	21,617,248	22,000,000	22,000,000	0	0	0	0	7.005	7.003	JAJO	393,834	1,728,988	03/21/2018	04/01/2028
902494-BC-6	Tyson Foods Inc-SENIOR UNSECURED	1,2			2.B FE	9,674,500	97.0945	9,709,453	10,000,000	9,719,488	0	44,988	0	0	3.550	4.790	JD	28,597	177,500	06/02/2022	06/02/2027
902494-BJ-1	Tyson Foods Inc-SENIOR UNSECURED	1,2			2.B FE	2,581,656	99.3096	2,624,753	2,643,000	2,599,785	0	18,129	0	0	4.000	5.460	MS	35,240	52,860	06/25/2024	03/01/2026
902494-BL-6	Tyson Foods Inc-SENIOR UNSECURED	1,2			2.B FE	20,612,795	101.0743	20,748,539	20,528,000	20,599,273	0	(13,522)	0	0	5.400	5.437	MS	326,395	575,810	02/28/2024	03/15/2029
90319#-AA-1	UOA Fayetteville (Univer Senior Secured				1.C	10,277,543	86.1677	8,768,240	10,175,785	10,248,731	0	0	0	0	3.350	3.238	MM	43,776	370,129	03/22/2021	03/15/2041
931142-ER-0	Walmart Inc-SENIOR UNSECURED	1,2			1.C FE	8,855,700	94.6309	9,463,091	10,000,000	9,462,945	0	295,999	0	0	1.050	4.340	MS	30,333	105,000	11/22/2022	09/17/2026
931142-FA-6	Walmart Inc-SENIOR UNSECURED	1,2			1.C FE	2,336,976	99.5372	2,388,993	2,400,000	2,365,990	0	24,786	0	0	4.000	5.145	AO	20,267	96,000	10/24/2023	04/15/2026
053807-AU-7	Avnet Inc-SENIOR UNSECURED	1,2			2.C FE	18,894,340	85.1991	16,187,825	19,000,000	18,928,234	0	9.548	0	0	3.000	2.894	MM	72,833	570,000	07/14/2021	05/15/2031
142339-AH-3	Carlisle Cos Inc-SENIOR UNSECURED	1,2			2.B FE	6,808,134	97.3449	7,041,932	7,234,000	6,971,801	0	81,313	0	0	3.750	5.102	JD	22,606	271,275	12/02/2022	12/01/2027
35952F-AB-6	Fort Huachuca-YPG Commu-UNSECURED				2.B FE	1,112,336	100.5652	1,039,129	1,033,289	1,033,647	0	(16,039)	0	0	8.000	7.024	JD	3,674	82,663	10/19/2009	12/15/2026
58048#-AA-6	Mesa Air Group, Inc. Class A Notes	1			1.G PL	2,533,792	95.4775	2,419,201	2,533,792	2,534,439	0	274	0	0	4.750	4.743	JJ	55,497	118,599	12/14/2015	07/15/2029
759509-AB-8	Reliance Steel & Aluminu-SENIOR UNSECURE	1			2.A FE	7,180,777	107.7069	5,598,604	5,198,000	6,864,630	0	(111,359)	0	0	6.850	3.522	MM	45,497	356,063	01/20/2022	11/15/2036
760759-AF-7	Republic Services Inc-SENIOR UNSECURED N				2.A FE	3,967,800	103.4978	3,104,934	3,000,000	3,783,938	0	(64,474)	0	0	6.086	3.082	MS	53,760	182,580	01/20/2022	03/15/2035
760759-AS-9	Republic Services Inc-SENIOR UNSECURED	1,2			2.A FE	3,561,659	96.7898	3,605,420	3,725,000	3,581,869	0	20,210	0	0	3.375	4.822	MM	16,064	62,859	07/22/2024	11/15/2027

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
760759-AV-2	Republic Services Inc-SENIOR UNSECURED			1,2	2.A FE	6,225,708	87.9305	6,368,809	7,243,000	6,434,745	0	134,953	0	0	2.300	4.761	MS	55,530	166,589	06/02/2023	03/01/2030
760759-BB-5	Republic Services Inc-SENIOR UNSECURED			1,2	2.A FE	5,030,050	99.8032	4,990,158	5,000,000	5,021,716	0	(4,642)	0	0	4.875	4.758	AO	60,938	243,750	03/27/2023	04/01/2029
862121-AA-8	STORE Capital Corp-SENIOR UNSECURED			1,2	2.C FE	13,192,746	96.9826	12,244,051	12,625,000	12,931,411	0	(96,513)	0	0	4.500	3.626	MS	167,281	568,125	03/15/2022	03/15/2028
862121-AB-6	STORE Capital Corp-SENIOR UNSECURED			1,2	2.C FE	1,974,180	96.3388	1,926,775	2,000,000	1,982,631	0	3,611	0	0	4.625	4.854	MS	27,236	92,500	07/25/2022	03/15/2029
862121-AC-4	STORE Capital Corp-SENIOR UNSECURED			1,2	2.C FE	20,934,730	86.2066	18,965,442	22,000,000	21,213,195	0	113,339	0	0	2.750	2.671	MN	72,264	605,000	10/06/2021	11/18/2030
D1T1JZ-AA-1	Techem Verwaltungsgesell-FIRST LIEN	B		1	4.C FE	167,145	99.9706	181,923	175,840	176,449	0	3,290	0	(12,115)	6.000	8.080	JJ	4,580	11,422	07/26/2022	07/30/2026
59151K-AL-2	Methanex Corp-SENIOR UNSECURED	A		1,2	3.A FE	9,996,900	96.1910	9,619,100	10,000,000	9,997,725	0	345	0	0	5.250	5.255	JD	23,333	525,000	09/09/2019	12/15/2029
630028-AA-2	NRM Cabin Intermediate # Senior Secured				1.G FE	14,649,897	102.4628	14,037,045	19,705,576	13,699,650	0	0	0	(950,247)	5.583	5.583	JJ	320,074	370,078	02/12/2024	07/31/2033
68251P-AA-5	1375209 BC Ltd-FIRST LIEN	A			5.B	5,883,890	99.6250	6,199,664	6,223,000	5,915,854	0	36,065	0	0	9.000	10.842	JJ	172,908	425,070	07/02/2024	01/30/2028
878742-AS-4	TECK RESOURCES LTD-NOTE	A	1,2		2.C FE	13,203,310	97.4479	9,744,786	10,000,000	12,762,369	0	(135,248)	0	0	6.000	3.613	FA	226,667	600,000	08/04/2021	08/15/2040
878742-AW-5	TECK RESOURCES LTD-SENIOR UNSECURED NOTE	A	1,2		2.C FE	19,527,900	98.5300	14,779,502	15,000,000	18,944,787	0	(172,453)	0	0	6.250	4.011	JJ	432,292	937,500	06/07/2021	07/15/2041
878742-AZ-8	Teck Resources Ltd-SENIOR UNSECURED	A	1,2		2.C FE	12,339,100	90.2131	9,021,311	10,000,000	12,084,455	0	(82,337)	0	0	5.400	3.768	FA	225,000	540,000	10/06/2021	02/01/2043
Y7563*-AE-7	Seaspan Holdco III, Ltd. Senior Secured				2.B PL	25,000,000	92.0372	23,009,300	25,000,000	25,000,000	0	0	0	0	5.150	5.150	MJSD	92,986	1,648,437	08/03/2022	09/05/2032
Y7563*-AF-4	Seaspan Holdco III, Ltd. Senior Secured				2.B PL	10,000,000	91.0966	9,109,660	10,000,000	10,000,000	0	0	0	0	5.290	5.290	MJSD	38,206	676,875	08/03/2022	09/05/2034
Y7563*-AG-2	Seaspan Holdco III, Ltd. Senior Secured				2.B PL	45,000,000	90.2881	40,629,645	45,000,000	45,000,000	0	0	0	0	5.490	5.490	MJSD	178,425	2,540,812	08/03/2022	09/05/2037
00846U-AN-1	Agilent Technologies Inc-SENIOR UNSECURE		1,2		2.A FE	5,299,734	84.8708	4,796,051	5,651,000	5,399,065	0	36,327	0	0	2.300	3.096	MS	39,353	129,973	03/04/2022	03/12/2031
00846U-AQ-4	Agilent Technologies Inc-SENIOR UNSECURE		1,2		2.A FE	19,973,200	98.7283	19,745,660	20,000,000	19,974,786	0	1,586	0	0	4.200	4.248	MS	261,333	0	09/04/2024	09/09/2027
00912X-AV-6	Air Lease Corp-SENIOR UNSECURED		1,2		2.B FE	12,911,093	97.5616	13,480,090	13,817,000	13,306,243	0	207,773	0	0	3.625	5.389	AO	125,217	500,866	01/17/2023	04/01/2027
00914A-AF-9	Air Lease Corp-SENIOR UNSECURED		1,2		2.B FE	22,980,520	99.7824	22,889,078	22,939,000	22,939,000	0	(14,395)	0	0	2.300	2.236	FA	219,832	527,597	01/20/2022	02/01/2025
00914A-AK-8	Air Lease Corp-SENIOR UNSECURED		1,2		2.B FE	8,601,570	88.9197	8,002,769	9,000,000	8,716,854	0	42,018	0	0	3.125	3.722	JD	23,438	281,250	02/25/2022	12/01/2030
00914A-AT-9	Air Lease Corp-SENIOR UNSECURED		1,2		2.B FE	10,003,921	102.4690	10,246,895	10,000,000	10,002,281	0	(791)	0	0	5.850	5.840	JD	26,000	585,000	12/05/2022	12/15/2027
02665W-DZ-1	American Honda Finance C-SENIOR UNSECURE				1.G FE	5,163,487	94.5239	5,496,567	5,815,000	5,441,277	0	206,071	0	0	1.300	5.328	MS	23,518	75,595	08/17/2023	09/09/2026
02665W-ED-9	American Honda Finance C-SENIOR UNSECURE				1.G FE	10,072,700	99.7628	9,976,283	10,000,000	10,048,096	0	(14,537)	0	0	4.700	4.528	JJ	220,639	470,000	03/27/2023	01/12/2028
02665W-EH-0	American Honda Finance C-SENIOR UNSECURE				1.G FE	15,687,797	98.1425	15,690,033	15,987,000	15,742,776	0	39,291	0	0	4.600	4.930	AO	151,166	735,402	08/07/2023	04/17/2030
02665W-EY-3	American Honda Finance C-SENIOR UNSECURE				1.G FE	3,846,423	100.1736	3,853,679	3,847,000	3,846,645	0	222	0	0	4.950	4.958	JJ	90,982	94,684	01/08/2024	01/09/2026
02666T-AA-5	American Homes 4 Rent LP-SENIOR UNSECURE		1,2		2.B FE	1,564,134	97.6262	1,628,405	1,668,000	1,601,928	0	18,819	0	0	4.250	5.650	FA	26,781	70,890	12/05/2022	02/15/2028
02666T-AB-3	American Homes 4 Rent LP-SENIOR UNSECURE		1,2		2.B FE	16,177,965	99.1388	16,634,506	16,779,000	16,319,105	0	84,054	0	0	4.900	5.653	FA	310,598	660,643	04/23/2024	02/15/2029
02666T-AE-7	American Homes 4 Rent LP-SENIOR UNSECURE		1,2		2.B FE	12,189,625	89.3679	11,170,984	12,500,000	12,262,198	0	27,615	0	0	3.625	3.927	AO	95,660	453,125	03/31/2022	04/15/2032
031162-BE-9	AMGEN INC-SENIOR UNSECURED				2.A FE	7,719,609	90.3575	5,543,430	6,135,000	7,505,198	0	(60,927)	0	0	4.950	3.215	AO	75,921	303,683	04/27/2021	10/01/2041
031162-BZ-2	AMGEN INC-SENIOR UNSECURED		1,2		2.A FE	32,895,920	82.8221	23,190,188	28,000,000	32,337,535	0	(152,412)	0	0	4.400	3.327	MN	205,333	1,232,000	02/25/2021	05/01/2045
031162-CR-9	Amgen Inc-SENIOR UNSECURED		1,2		2.A FE	7,290,982	74.2122	5,936,973	8,000,000	7,373,134	0	30,041	0	0	3.150	3.837	FA	91,000	252,000	02/25/2022	02/21/2040
037833-BX-7	APPLE INC-SENIOR UNSECURED		1,2		1.B FE	14,594,106	91.2481	10,458,860	11,462,000	14,264,157	0	(96,310)	0	0	4.650	3.046	FA	189,505	532,983	06/03/2021	02/23/2046
037833-BY-5	APPLE INC-SENIOR UNSECURED		1,2		1.B FE	12,070,350	98.8083	12,351,043	12,500,000	12,340,774	0	132,402	0	0	3.250	4.400	FA	144,444	406,250	11/29/2022	02/23/2026
037833-CJ-7	Apple Inc-SENIOR UNSECURED		1,2		1.B FE	5,707,570	97.8507	5,919,967	6,050,000	5,823,934	0	98,938	0	0	3.350	5.246	FA	79,944	202,675	10/24/2023	02/09/2027
038222-AN-5	Applied Materials Inc-SENIOR UNSECURED		1,2		1.F FE	10,255,596	85.4474	10,347,680	12,110,000	10,492,416	0	236,820	0	0	1.750	4.561	JD	17,660	211,925	01/30/2024	06/01/2030
052769-AE-6	Autodesk Inc-SENIOR UNSECURED		1,2		2.A FE	3,297,148	97.0288	3,289,275	3,390,000	3,301,152	0	4,004	0	0	5.300	5.273	JD	5,273	59,325	11/18/2024	06/15/2027
052769-AH-9	Autodesk Inc-SENIOR UNSECURED		1,2		2.A FE	13,261,436	84.0722	13,108,544	15,592,000	13,297,026	0	35,590	0	0	2.400	4.925	JD	16,631	187,104	11/22/2024	12/15/2031
05367A-AH-6	Aviation Capital Group L-SENIOR UNSECURE		1,2		2.C FE	3,983,880	99.8479	3,993,917	4,000,000	3,998,320	0	1,768	0	0	4.875	4.923	AO	48,750	195,000	09/14/2015	10/01/2025
05369A-AD-3	Aviation Capital Group L-SENIOR UNSEC																				

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
09345B-AD-2	Blast Motion Inc-FIRST LIEN			1,2	1.E PL	14,650,000	.90.8000	13,302,200	14,650,000	14,650,000	.0	.0	.0	.0	10.000	10.000	MON	.0	366,250	08/14/2023	08/15/2026
11135F-AN-1	Broadcom Inc-SENIOR UNSECURED			1,2	2.B FE	4,918,900	.98.0578	4,902,888	5,000,000	4,927,301	.0	8,401	.0	.0	3.459	4.350	MS	50,924	.0	10/15/2024	09/15/2026
11135F-AQ-4	Broadcom Inc-SENIOR UNSECURED			1,2	2.B FE	4,935,370	.95.9709	5,110,449	5,325,000	4,969,549	.0	34,179	.0	.0	4.150	5.494	MM	28,237	220,988	04/24/2024	11/15/2030
11135F-BF-7	Broadcom Inc-SENIOR UNSECURED			1,2	2.B FE	11,972,640	.82.7653	9,931,836	12,000,000	11,980,737	.0	2,082	.0	.0	2.600	2.622	FA	117,867	312,000	01/04/2021	02/15/2033
11135F-BJ-9	Broadcom Inc-SENIOR UNSECURED			1,2	2.B FE	16,895,730	.78.0754	13,272,816	17,000,000	16,911,172	.0	4,001	.0	.0	3.500	3.543	FA	224,778	595,000	02/22/2021	02/15/2041
11135F-BL-4	Broadcom Inc-SENIOR UNSECURED			1,2	2.B FE	9,060,198	.86.8297	7,780,805	8,961,000	9,035,429	.0	(6,939)	.0	.0	3.469	3.362	AO	65,625	310,857	03/31/2021	04/15/2034
11135F-BT-7	Broadcom Inc-SENIOR UNSECURED			1,2	2.B FE	5,699,117	.93.7729	5,879,562	6,270,000	5,738,490	.0	39,373	.0	.0	4.150	5.580	AO	54,932	130,103	04/23/2024	04/15/2032
11135F-BZ-3	Broadcom Inc-AVGO 5.05 07/12/27			1,2	2.B FE	7,109,480	100.9920	7,069,440	7,000,000	7,094,855	.0	(14,625)	.0	.0	5.050	4.460	JJ	165,949	.0	08/02/2024	07/12/2027
12656V-AD-5	C3 Nano Inc-SECURED				1.E PL	15,700,000	.90.5000	14,208,500	15,700,000	15,700,000	.0	.0	.0	.0	10.000	10.000	MMN	.0	523,333	08/24/2023	08/15/2026
127387-AM-0	Cadence Design Systems I-SENIOR UNSECURE				1.G FE	4,999,150	.98.8980	4,944,898	5,000,000	4,998,974	.0	(176)	.0	.0	4.200	4.206	MS	64,750	.0	09/04/2024	09/10/2027
127387-AN-8	Cadence Design Systems I-SENIOR UNSECURE			1,2	1.G FE	14,890,700	.98.0527	14,707,898	15,000,000	14,893,855	.0	3,155	.0	.0	4.300	4.467	MS	198,875	.0	10/29/2024	09/10/2029
14162V-AB-2	Sabra Health Care LP-SENIOR UNSECURED			1,2	2.C FE	4,000,000	100.0654	4,002,616	4,000,000	(80)	.0	(80)	.0	.0	5.125	5.122	FA	77,444	205,000	07/07/2016	08/15/2026
16300N-AA-2	Cheever Escrow Issuer LL-SECURED			1,2	4.C FE	6,613,153	101.3739	6,737,312	6,646,000	6,629,762	.0	5,153	.0	.0	7.125	7.464	AO	118,382	402,278	02/09/2023	10/01/2027
166756-AT-3	Chevron USA Inc-SENIOR UNSECURED			1,2	1.D FE	26,267,944	105.8152	18,829,806	17,795,000	25,042,898	.0	(364,914)	.0	.0	6.000	2.776	MS	355,900	1,067,700	07/14/2021	03/01/2041
17275R-BQ-4	Cisco Systems Inc-SENIOR UNSECURED			1,2	1.E FE	10,151,532	100.6873	10,068,734	10,000,000	10,138,204	.0	(13,328)	.0	.0	4.800	4.096	FA	166,667	.0	10/15/2024	02/26/2027
17275R-BS-0	Cisco Systems Inc-SENIOR UNSECURED			1,2	1.E FE	20,117,400	100.4001	20,080,026	20,000,000	20,105,200	.0	(12,200)	.0	.0	4.950	4.847	FA	343,750	495,000	03/27/2024	02/26/2031
17858P-AB-7	City of Hope-SENIOR UNSECURED			1,2	1.F FE	21,986,617	.80.7220	15,441,726	19,130,000	21,781,525	.0	(74,150)	.0	.0	4.378	3.496	FA	316,393	837,511	03/31/2022	08/15/2048
22565V-AA-8	Crescent Capital BDC, In Senior Note Ser				2.C FE	5,000,000	.97.9520	4,897,600	5,000,000	5,000,000	.0	.0	.0	.0	4.000	3.999	FA	74,444	200,000	02/17/2021	02/17/2026
25389J-AV-8	Digital Realty Trust LP-SENIOR UNSECURED			1,2	2.B FE	16,437,739	101.5982	16,575,753	16,315,000	16,393,196	.0	(24,799)	.0	.0	5.550	5.842	JJ	417,528	905,483	11/15/2022	01/15/2028
254687-EV-4	Walt Disney Co/The-SENIOR UNSECURED			1,2	1.G FE	4,996,120	.89.5266	3,581,064	4,000,000	4,881,183	.0	(32,774)	.0	.0	4.750	3.205	MS	55,944	190,000	04/29/2021	09/15/2044
254687-FR-2	Walt Disney Co/The-SENIOR UNSECURED			1,2	1.F FE	17,371,440	.92.4010	12,936,134	14,000,000	16,814,162	.0	(150,848)	.0	.0	4.625	2.934	MS	176,264	647,500	02/24/2021	03/23/2040
25468P-DB-9	WALT DISNEY COMPANY/THE-SR UNSECURED				1.G FE	22,485,200	.82.2840	16,456,804	20,000,000	22,253,143	.0	(81,431)	.0	.0	4.125	3.332	JD	68,750	825,000	01/19/2022	06/01/2044
29717P-AR-8	ESSEX PORTFOLIO LP-SENIOR UNSECURED			1,2	2.A FE	6,812,573	.97.5547	6,786,883	6,957,000	6,823,594	.0	11,022	.0	.0	3.625	4.498	MM	42,032	126,096	10/15/2024	05/01/2027
29717P-AT-4	Essex Portfolio LP-SENIOR UNSECURED			1,2	2.A FE	1,567,060	.96.1930	1,635,280	1,700,000	1,606,239	.0	19,500	.0	.0	4.000	5.497	MS	22,667	68,000	12/05/2022	03/01/2029
29717P-AU-1	Essex Portfolio LP-SENIOR UNSECURED			1,2	2.A FE	6,012,860	.90.5067	6,335,468	7,000,000	6,262,499	.0	124,171	.0	.0	3.000	5.417	JJ	96,833	210,000	12/05/2022	01/15/2030
29717P-AY-3	Essex Portfolio LP-SENIOR UNSECURED			1,2	2.A FE	10,838,903	.90.3909	12,238,924	13,540,000	11,836,604	.0	473,573	.0	.0	1.700	6.130	MS	76,727	230,180	11/04/2022	03/01/2028
29717P-BA-4	ESS 5 1/2 04/01/34			1,2	2.A FE	2,057,420	.99.9130	1,998,260	2,000,000	2,055,648	.0	(1,772)	.0	.0	5.500	5.110	AO	27,500	60,194	08/19/2024	04/01/2034
33616C-AB-6	FIRST REPUBLIC BANK-SUBORDINATED	2		.6	*	7,308,091	.0.0250	1,843	7,371,000	1,843	(35,012)	.0	.0	.0	4.375	4.375	FA	.0	.0	07/25/2016	08/01/2046
33817#-AA-8	FITLAB INC TERM LN				1.F PL	10,142,857	100.1624	10,159,328	10,142,857	10,142,857	.0	.0	.0	.0	4.571	4.571	FMAN	480,540	.0	02/07/2024	02/29/2028
35086#-AJ-0	Four Corners Property Tr Senior Unsecure				2.B FE	15,000,000	.84.1532	12,622,980	15,000,000	15,000,000	.0	.0	.0	.0	3.090	3.090	MS	133,900	463,500	03/17/2022	03/17/2031
35826#-AA-4	County of Fresno CA Trust Certificates				1.C	8,870,355	.95.6269	8,398,640	8,782,717	8,837,556	.0	(7,863)	.0	.0	4.680	4.561	MMN	18,268	411,014	08/24/2018	06/15/2038
36198*-AB-2	GI PARTNERS HOLDINGS LP GI PARTNERS HOLD				1.F Z	10,000,000	.98.7374	9,873,740	10,000,000	10,000,000	.0	.0	.0	.0	5.650	5.650	AO	106,722	.0	09/05/2024	10/23/2027
37519H-AA-6	GiSky Inc-UNSECURED	2			1.G PL	3,960,000	.99.5463	3,961,852	4,000,000	3,967,064	.0	7,064	.0	.0	10.000	10.317	FMAN	84,444	257,778	02/22/2024	02/23/2028
375558-AS-2	GILEAD SCIENCES INC-SENIOR UNSECURED NOT			1,2	2.A FE	13,355,946	.99.8777	9,796,009	9,808,000	12,846,221	.0	(138,711)	.0	.0	5.650	3.208	JD	46,179	554,152	02/24/2021	12/01/2041
375558-AX-1	GILEAD SCIENCES INC-SR UNSECURED			1,2	2.A FE	15,732,660	.89.4457	11,627,946	13,000,000	15,408,054	.0	(90,095)	.0	.0	4.800	3.450	AO	156,000	624,000	04/29/2021	04/01/2044
375558-BS-1	Gilead Sciences Inc-SENIOR UNSECURED			1,2	2.A FE	22,037,170	.69.1487	15,906,501	23,000,000	22,186,632	.0	40,265	.0	.0	5.000	5.110	AO	149,500	598,000	02/22/2021	10/01/2040
37960X-AB-3	Global Infrastructure So-SENIOR UNSECURE			1,2	4.A FE	3,745,000	.99.0613	3,709,844	3,745,000	3,745,000	.0	.0	.0	.0	7.500	7.499	AO	59,296	280,875	04/05/2022	04/15/2032
44891A-BG-1	Hyundai Capital America-SENIOR UNSECURED			1,2	1.G FE	8,671,800	.96.1313	9,613,126	10,000,000	9,302,785	.0	298,619	.0	.0	3.000	6.594	FA	117,500	300,000	10/19/2022	02/10/2027
44891A-BK-2	Hyundai Capital America-SENIOR UNSECURED			1,2	1.G FE	2,997,570	100.1498	3,004,494	3,000,000	2,999,562	.0	434	.0	.0	5.875	5.890	AO	41,125	176,250	04/02/2020	04/07/2025
44891A-BZ-9	Hyundai Capital America-SENIOR UNSECURED			1,2	1.G FE	4,171,050	.94.7012	4,735,060	5,000,000	4,608,439	.0	209,503	.0	.0	1.650	6.561	MS	23,833	82,500	10/28/2022	09/17/2026
44891A-CA-3	Hyundai Capital America-SENIOR UNSECURED			1,2	1.G FE	5,430,538	.89.6218	6,264,562	6,990,000	5,932,390	.0	243,231	.0	.0	2.100	6.784	MS	43,222	146,790	11/15/2022	09/15/2028
44891A-CD-7	Hyundai Capital America-SENIOR UNSECURED			1,2	1.G FE	11,966,400	101.2307	12,147,684	12,000,000	11,975,954	.0	6,248	.0	.0	5.600	5.665	MS	169,867	672,000	03/28/2023	03/30/2028
44891A-CN-5	Hyundai Capital America-SENIOR UNSECURED			1,2	1.G FE	8,265,820	102.8738	8,574,528	8,335,000	8,280,466	.0	12,405	.0	.0	6.100	6.296	MS	141,232	508,435	09/27/2023	09/21/2028
45005*-AC-4	IRG Industrial, LLC Senior Note Series C				2.C FE	30,000,000	.91.2435	27,373,050	30,000,000	30,000,000	.0	.0	.0	.0	4.480	4.479	FA	470,400	1,344,000	03/03/2021	02/25/2031
48203R-AD-6	Juniper Networks Inc-SENIOR UNSECURED NO				2.B FE	41,219,600	.98.4938	29,548,134	30,000,000	39,771,323	.0	(448,748)	.0	.0	5.950	3.331	MS	525,583	1,785,000	10/05/2021	03/15/2041

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
482480-AG-5	KLA Corp-SENIOR UNSECURED			1,2	1.F FE	4,852,050	.97.5145	4,875,727	5,000,000	4,885,908	.0	23,941	.0	.0	4.100	4.703	MS	60,361	205,000	07/24/2023	03/15/2029
48305Q-AC-7	Kaiser Foundation Hospit-SENIOR UNSECURE			1,2	1.D FE	1,569,315	.96.8074	1,558,599	1,610,000	1,572,451	.0	3.135	.0	.0	3.150	4.208	MM	8,453	25,358	10/15/2024	05/01/2027
502175-E*-9	LTC Properties Inc Senior Unsecured Note				2.C	22,500,000	.85.9992	19,349,820	22,500,000	22,500,000	.0	.0	.0	.0	3.660	3.660	FMAN	100,650	823,500	05/17/2022	05/17/2033
512807-AS-7	Lam Research Corp-SENIOR UNSECURED			1,2	1.G FE	4,948,706	.98.9874	4,850,382	4,900,000	4,914,220	.0	(13,232)	.0	.0	3.750	3.463	MS	54,104	183,750	04/25/2022	03/15/2026
512807-AV-0	Lam Research Corp-SENIOR UNSECURED			1,2	1.G FE	5,780,337	.85.6983	5,913,179	6,900,000	5,915,846	.0	135,509	.0	.0	1.900	4.912	JD	5,827	131,100	02/13/2024	06/15/2030
550321-AA-1	Luna Care Inc-SECURED				1.E PL	3,490,000	.99.1055	3,458,783	3,490,000	3,490,000	.0	.0	.0	.0	8.875	8.875	MON	13,766	309,738	12/12/2023	12/15/2027
58278L-A*-7	MOREIF SubREIT LLC-SENIOR SECURED NOTES			1	5.B GI	8,021,773	.90.2200	7,239,854	8,024,667	8,022,880	.0	1,106	.0	.0	6.750	6.773	JD	353,587	355,333	05/06/2024	12/06/2025
64110L-AX-4	Netflix Inc-SENIOR UNSECURED				2.A FE	21,741,600	.105.8481	21,169,614	20,000,000	21,607,491	.0	(134,109)	.0	.0	6.375	4.336	MM	162,917	637,500	08/02/2024	05/15/2029
652315-AA-0	Newport Realty Trust Inc-SECURED			1	1.G PL	12,500,000	100.0000	12,500,000	12,500,000	12,500,000	.0	.0	.0	.0	15.000	14.995	MON	625,000	585,938	11/13/2019	12/01/2025
67066G-AF-1	NVIDIA Corp-SENIOR UNSECURED			1,2	1.D FE	6,840,300	.91.5840	6,868,803	7,500,000	6,927,448	.0	87,148	.0	.0	2.850	4.498	AO	53,438	213,750	01/26/2024	04/01/2030
681639-AA-8	Olympus Water US Holding-SECURED			1,2	4.C FE	3,705,710	.93.4940	3,673,378	3,929,000	3,789,263	.0	32,116	.0	.0	4.250	5.293	AO	41,746	166,983	04/18/2022	10/01/2028
683720-AA-4	Open Text Holdings Inc-SENIOR UNSECURED			1,2	3.C FE	2,361,270	.90.7583	2,304,352	2,539,000	2,413,110	.0	20,898	.0	.0	4.125	5.240	FA	39,566	104,734	05/31/2022	02/15/2030
683720-AC-0	Open Text Holdings Inc-SENIOR UNSECURED			1,2	3.C FE	1,317,590	.88.2678	1,235,749	1,400,000	1,337,682	.0	7,400	.0	.0	4.125	4.891	JD	4,813	57,750	03/16/2022	12/01/2031
69331C-AH-1	PG&E Corp-FIRST LIEN			1,2	3.B FE	1,642,625	.97.6717	1,660,419	1,700,000	1,665,483	.0	8,688	.0	.0	5.000	5.647	JJ	42,500	85,000	03/31/2022	07/01/2028
69331C-AJ-7	PG&E Corp-FIRST LIEN			1,2	3.B FE	3,879,163	.97.8900	3,803,027	3,885,000	3,881,162	.0	587	.0	.0	5.250	5.271	JJ	101,981	203,963	06/23/2021	07/01/2030
69478X-AD-7	Pacific Premier Bancorp-SUBORDINATED			2	2.B FE	18,000,000	.98.6250	17,752,500	18,000,000	18,000,000	.0	.0	.0	.0	7.285	7.284	FMAN	171,199	1,173,080	05/03/2019	05/15/2029
69478X-AE-5	Pacific Premier Bancorp-SUBORDINATED			2	2.B FE	8,000,000	.98.6125	7,889,000	8,000,000	8,000,000	.0	.0	.0	.0	5.375	5.375	JD	19,111	430,000	06/09/2020	06/15/2030
74460W-AF-4	Public Storage Operating-SENIOR UNSECURE			1,2	1.F FE	5,332,446	101.3626	5,473,579	5,400,000	5,347,646	.0	11,269	.0	.0	5.125	5.395	JJ	127,613	268,294	08/17/2023	01/15/2029
747525-BN-2	QUALCOMM Inc-SENIOR UNSECURED			1,2	1.F FE	6,866,800	.89.8276	7,186,210	8,000,000	7,178,212	.0	219,378	.0	.0	1.300	4.611	MM	11,844	104,000	07/21/2023	05/20/2028
75041V-AB-0	Radiology Partners Inc-RADPAR 8 1/2 01/3			2	4.C FE	4,439,855	.98.6250	4,469,011	4,531,317	4,452,342	.0	12,486	.0	.0	7.775	8.288	JJ	126,244	.0	02/22/2024	01/31/2029
756109-AS-3	REALTY INCOME CORP-SENIOR UNSECURED			1,2	1.G FE	4,518,950	.96.6741	4,833,703	5,000,000	4,752,888	.0	3,169	.0	.0	3.000	5.598	JJ	111,369	150,000	10/28/2022	01/15/2027
756109-AW-4	Realty Income Corp-SENIOR UNSECURED			1,2	1.G FE	3,390,938	.93.2493	3,496,850	3,750,000	3,492,552	.0	50,408	.0	.0	3.250	4.987	JD	5,417	121,875	12/02/2022	06/15/2029
756109-BJ-2	Realty Income Corp-SENIOR UNSECURED			1,2	1.G FE	6,535,875	.91.4045	6,855,341	7,500,000	6,867,226	.0	164,264	.0	.0	2.200	4.883	JD	7,333	165,000	12/02/2022	06/15/2028
756109-BR-4	Realty Income Corp-SENIOR UNSECURED			1,2	1.G FE	9,881,300	.99.3990	9,939,900	10,000,000	9,910,052	.0	14,643	.0	.0	4.850	5.047	MS	142,806	485,000	01/09/2023	03/15/2030
756109-BY-9	Realty Income Corp-SENIOR UNSECURED			1,2	1.G FE	1,226,650	.99.5559	1,259,382	1,265,000	1,239,577	.0	12,926	.0	.0	4.450	5.699	MS	16,575	56,293	01/23/2024	09/15/2026
756109-CA-0	Realty Income Corp-SENIOR UNSECURED			1,2	1.G FE	4,426,530	.92.1559	4,607,793	5,000,000	4,545,893	.0	119,362	.0	.0	2.100	5.212	MS	30,917	105,000	01/23/2024	03/15/2028
756109-CB-8	Realty Income Corp-SENIOR UNSECURED			1,2	1.G FE	12,053,204	.96.1892	11,466,715	11,921,000	12,025,676	.0	(27,528)	.0	.0	4.000	3.204	JJ	219,876	238,420	01/23/2024	07/15/2029
756109-CE-2	Realty Income Corp-SENIOR UNSECURED			1,2	1.G FE	4,867,867	.84.9320	4,951,534	5,830,000	4,960,339	.0	92,472	.0	.0	2.700	5.236	FA	59,466	157,410	01/23/2024	02/15/2032
756109-CF-9	Realty Income Corp-SENIOR UNSECURED			1,2	1.G FE	9,922,500	.99.2541	9,925,408	10,000,000	9,935,596	.0	13,096	.0	.0	4.750	4.923	FA	179,444	275,764	01/08/2024	02/15/2029
771196-CV-5	Roche Holdings Inc-SENIOR UNSECURED			1,2	1.C FE	15,000,000	.97.6697	14,650,454	15,000,000	15,000,000	.0	.0	.0	.0	4.203	4.203	MS	196,140	.0	09/03/2024	09/09/2029
778296-AD-5	Ross Stores Inc-SENIOR UNSECURED			1,2	2.A FE	3,979,200	.97.6636	3,906,544	4,000,000	3,987,735	.0	1,943	.0	.0	4.800	4.865	AO	40,533	192,000	04/02/2020	04/15/2030
79466L-AF-1	salesforce.com Inc-SENIOR UNSECURED			1,2	1.E FE	5,634,456	.97.2507	5,835,044	6,000,000	5,725,130	.0	74,902	.0	.0	3.700	5.237	AO	49,333	222,000	10/06/2023	04/11/2028
79466L-AJ-3	Salesforce Inc-SENIOR UNSECURED			1,2	1.E FE	5,428,309	.83.9027	5,378,162	6,410,000	5,536,477	.0	108,168	.0	.0	1.950	4.368	JJ	57,637	62,498	01/12/2024	07/15/2031
86944B-AG-8	Sutter Health-UNSECURED			1,2	1.E FE	11,759,835	.86.8965	11,658,897	13,417,000	11,794,190	.0	34,355	.0	.0	2.294	4.770	FA	116,275	.0	12/19/2024	08/15/2030
88632Q-AE-3	Cloud Software Group Inc-SECURED			1,2	4.B FE	7,437,258	.98.2098	7,689,827	7,830,000	7,478,648	.0	41,390	.0	.0	6.500	7.756	MS	128,651	254,475	05/29/2024	03/31/2029
89677Y-AB-9	TriplePoint Venture Grow Senior Note Ser				2.C FE	12,500,000	.98.4392	12,304,900	12,500,000	12,500,000	.0	.0	.0	.0	4.500	4.498	MS	187,500	562,500	03/01/2021	03/01/2026
90353T-AK-6	Uber Technologies Inc-SENIOR UNSECURED			1,2	2.B FE	1,725,000	.96.7602	1,935,204	2,000,000	1,797,770	.0	35,783	.0	.0	4.500	7.103	FA	34,000	90,000	11/17/2022	08/15/2029
90353T-AN-0	Uber Technologies Inc-SENIOR UNSECURED			1,2	2.B FE	18,993,730	.96.4391	18,323,431	19,000,000	18,993,092	.0	(638)	.0	.0	4.300	4.308	JD	254,178	.0	09/04/2024	01/15/2030
90915U-AB-4	Uniquify Inc-SECURED				1.E PL	16,960,000	.91.9000	15,586,240	16,960,000	16,960,000	.0	.0	.0	.0	10.000	10.000	MON	.0	424,000	08/24/2023	08/15/2026
92676X-AF-4	Viking Cruises Ltd-SENIOR UNSECURED			1,2	4.C FE	2,515,625	100.4984	2,512,461	2,500,000	2,511,525	.0	(4,100)	.0	.0	7.000	6.557	FA	66,111	87,500	08/09/2024	02/15/2029
92928Q-AD-0	WEA Finance LLC-SENIOR UNSECURED			1,2	2.B FE	4,067,526	.78.4202	2,980,752	3,801,000	4,048,366	.0	(6,217)	.0	.0	4.625	4.184	MS	49,321	175,796	10/06/2021	09/20/2048
92928Q-AF-5	WEA Finance LLC-SENIOR UNSECURED			1,2	2.B FE	34,567,805	.91.9900	32,656,461	35,500,000	34,855,787	.0	121,534	.0	.0	3.500	3.919	JD	55,222	1,242,500	03/22/2022	06/15/2029
95000U-2A-0	Wells Fargo & Co-SENIOR UNSECURED			2	2.A FE	1,941,600	.96.8849	1,937,699	2,000,000	1,977,984	.0	5,939	.0	.0	3.584	3.933	MM	7,765	71,680	03/14/2018	05/22/2028
98138H-AG-6	Workday Inc-SENIOR UNSECURED			1,2	2.B FE	30,482,116	.97.4838	31,244,520	32,051,000	31,016,006	.0	380,721	.0	.0	3.500	5.032	AO	280,446	946,785	11/19/2024	04/01/2027
98138H-AH-4	Workday Inc-SENIOR UNSECURED			1,2	2.B FE	31,183,979	.95.1874	31,655,505	33,256,000	31,502,697	.0	236,091	.0	.0	3.700	5.093	AO	307,618	689,236	12/19/2024	04/01/2029

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
98138H-AJ-0	Workday Inc-SENIOR UNSECURED			1,2	2.B FE	12,285,626	.90.9209	11,192,364	12,310,000	12,290,883	.0	2,183	.0	.0	3.800	3.824	AO	116,945	467,780	03/30/2022	04/01/2032
36165R-AC-9	GCC SAB de CV-SENIOR UNSECURED	D		1,2	2.C FE	1,042,790	.85.5680	954,939	1,116,000	1,059,795	.0	6,384	.0	.0	3.614	4.428	AO	7,954	40,332	04/01/2022	04/20/2032
012873-AH-8	Ovintiv Inc-SENIOR UNSECURED				2.C FE	11,525,400	112.1267	11,212,668	10,000,000	11,140,316	.0	(164,774)	.0	.0	8.125	5.749	MS	239,236	812,500	07/22/2022	09/15/2030
25470X-BB-0	DISH DBS Corp-SENIOR UNSECURED			1,2	6. FE	3,417,491	.71.4281	2,412,128	3,377,000	2,412,128	(133,903)	(5,849)	843,288	.0	7.375	7.375	JJ	124,527	249,054	11/12/2021	07/01/2028
25470X-BE-4	DISH DBS Corp-SECURED			1,2	6. FE	2,205,000	.90.9239	2,004,871	2,205,000	2,004,871	(200,129)	.0	.0	.0	5.250	5.248	JD	9,647	115,763	11/10/2021	12/01/2026
25470X-BF-1	DISH DBS Corp-SECURED			1,2	6. FE	2,838,000	.85.5000	2,426,490	2,838,000	2,426,490	(54,834)	.0	356,676	.0	5.750	5.750	JD	13,599	163,185	11/10/2021	12/01/2028
292505-AD-6	ENCANA CORP-BOND				2.C FE	6,342,650	103.7422	5,187,111	5,000,000	6,082,241	.0	(91,653)	.0	.0	6.500	3.793	FA	122,778	487,500	01/19/2022	08/15/2034
292505-AE-4	ENCANA CORP-SENIOR UNSECURED NOTE			1	2.C FE	7,120,694	103.2677	5,748,912	5,567,000	6,897,742	.0	(78,730)	.0	.0	6.625	4.169	FA	139,330	368,814	01/19/2022	08/15/2037
391382-AB-4	GREAT-WEST LIFE CO FINANC-SENIOR UNSECURE			1,2	1.F FE	12,898,340	.79.0662	10,278,610	13,000,000	12,914,412	.0	2,255	.0	.0	4.150	4.195	JD	41,961	539,500	05/23/2017	06/03/2047
422340-AE-2	Heartland Financial USA -SUBORDINATED			2	2.B FE	5,790,000	.87.0000	5,037,300	5,790,000	5,790,000	.0	.0	.0	.0	2.750	2.750	MS	46,883	159,225	08/31/2021	09/15/2031
469815-AL-8	Jacobs Entertainment Inc-SENIOR UNSECURE			1,2	4.C FE	7,263,336	.96.5000	7,437,255	7,707,000	7,291,067	.0	27,731	.0	.0	6.750	8.315	FA	196,529	42,188	12/05/2024	02/15/2029
60871R-AD-2	MOLSON COORS BREWING CO-SENIOR UNSECURED			1	2.B FE	43,273,799	.91.7579	33,743,949	36,775,000	42,453,006	.0	(228,529)	.0	.0	5.000	3.777	MN	306,458	1,838,750	04/27/2021	05/01/2042
60871R-AG-5	MOLSON COORS BREWING CO-SENIOR UNSECURED			1,2	2.B FE	3,814,480	.97.4761	3,899,045	4,000,000	3,909,170	.0	55,715	.0	.0	3.000	4.544	JJ	55,333	120,000	04/05/2023	07/15/2026
60871R-AH-3	MOLSON COORS BREWING CO-SENIOR UNSECURED			1,2	2.B FE	19,129,942	.80.0536	13,929,323	17,400,000	18,961,537	.0	(49,757)	.0	.0	4.200	3.585	JJ	336,980	730,800	08/04/2021	07/15/2046
62979*-AQ-0	NSA OP LP Senior Note Series 0				2.A FE	10,000,000	101.9101	10,191,010	10,000,000	10,000,000	.0	.0	.0	.0	6.550	6.550	AO	156,472	655,000	10/05/2023	10/05/2028
62979*-AR-8	NSA OP LP Senior Note Series P				2.A FE	4,000,000	102.5293	4,101,172	4,000,000	4,000,000	.0	.0	.0	.0	6.660	6.660	AO	63,640	266,400	10/05/2023	10/05/2030
62979*-AT-4	NSA OP LP Senior Notes				2.A FE	15,000,000	.98.7140	14,807,100	15,000,000	15,000,000	.0	.0	.0	.0	5.400	5.400	MS	261,000	.0	08/23/2024	09/05/2028
651639-AB-1	Newmont Mining Corp-SENIOR UNSECURED NOT			1,2	2.A FE	5,732,118	.91.2410	4,077,559	4,469,000	5,565,515	.0	(49,937)	.0	.0	4.875	2.997	MS	64,149	217,864	07/13/2021	06/03/2047
690470-AB-8	Ovintiv Inc-SENIOR UNSECURED			1,2	2.C FE	14,880,330	101.3550	15,203,253	15,000,000	14,913,320	.0	22,330	.0	.0	5.650	5.839	MN	108,292	847,500	06/08/2023	05/15/2028
77340R-AS-6	Rockies Express Pipeline-SENIOR UNSECURE			1,2	3.B FE	6,991,600	.98.7500	6,912,500	7,000,000	6,999,144	.0	1,681	.0	.0	3.600	3.625	MN	32,200	252,000	01/16/2020	05/15/2025
90265E-AM-2	UDR Inc-SENIOR UNSECURED			1,2	2.A FE	4,568,100	.96.7605	4,838,025	5,000,000	4,754,926	.0	88,894	.0	.0	3.500	5.629	JJ	87,509	175,000	10/28/2022	07/01/2027
90265E-AQ-3	UDR Inc-SENIOR UNSECURED			1,2	2.A FE	7,881,331	.91.5119	7,851,717	8,580,000	7,893,512	.0	12,181	.0	.0	3.200	5.016	JJ	126,603	.0	11/22/2024	01/15/2030
90265E-AR-1	UDR Inc-SENIOR UNSECURED			1,2	2.A FE	7,781,128	.87.7290	6,527,913	7,441,000	7,675,867	.0	(33,640)	.0	.0	3.000	2.462	FA	84,331	223,230	10/07/2021	08/15/2031
90265E-AS-9	UDR Inc-SENIOR UNSECURED			1,2	2.A FE	8,510,699	.81.4333	6,675,088	8,197,000	8,436,737	.0	(21,586)	.0	.0	3.100	2.751	MN	42,351	254,107	06/08/2021	11/01/2034
90265E-AT-7	UDR Inc-SENIOR UNSECURED			1,2	2.A FE	5,364,898	.79.5490	5,309,896	6,675,000	5,645,170	.0	111,531	.0	.0	2.100	4.526	FA	58,406	140,175	05/20/2022	08/01/2032
90265E-AU-4	UDR Inc-SENIOR UNSECURED			1,2	2.A FE	5,315,700	.76.7984	4,607,903	6,000,000	5,469,308	.0	55,898	.0	.0	1.900	3.130	MS	33,567	114,000	03/01/2022	03/15/2033
90265E-AV-2	UDR Inc-SENIOR UNSECURED			1,2	2.A FE	11,243,375	.77.1206	9,640,076	12,500,000	11,516,882	.0	99,917	.0	.0	2.100	3.167	JD	11,667	262,500	03/04/2022	06/15/2033
911350-AA-3	United Power, Inc. First Mortgage Bond S				1.F FE	7,894,750	100.3348	7,921,182	7,894,750	7,894,750	.0	.0	.0	.0	5.830	5.830	AO	84,382	230,132	04/25/2024	04/25/2029
911350-AB-1	United Power, Inc. First Mortgage Bonds				1.F FE	4,500,000	.99.8999	4,495,496	4,500,000	4,500,000	.0	.0	.0	.0	5.920	5.920	AO	48,840	133,200	04/25/2024	04/25/2032
92845V-AA-5	Vita Inclinata Technolog-SECURED				1.G PL	12,739,792	103.5000	13,372,200	12,920,000	12,805,422	.0	40,869	.0	.0	10.500	10.932	MON	113,050	1,469,650	05/01/2023	05/01/2027
00817Y-AF-5	Aetna Inc-SENIOR UNSUBORDINATED NOTE			1	2.B FE	15,602,570	105.1557	11,407,285	10,848,000	14,657,790	.0	(275,273)	.0	.0	6.625	2.983	JD	31,941	718,680	06/04/2021	06/15/2036
00817Y-AJ-7	Aetna Inc-SR UNSECURED			1,2	2.B FE	3,429,303	.81.1959	2,247,503	2,768,000	3,343,637	.0	(26,054)	.0	.0	4.500	2.929	MN	15,916	124,560	08/02/2021	05/15/2042
00817Y-AZ-1	AETNA INC-SENIOR UNSECURED			1,2	2.B FE	4,180,073	.70.0096	2,539,948	3,628,000	4,128,437	.0	(15,719)	.0	.0	3.875	3.016	FA	53,110	140,585	08/02/2021	08/15/2047
084423-AP-7	BERKLEY (WR) CORPORATION-SR UNSECURED				2.A FE	9,208,180	103.6721	8,293,769	8,000,000	8,868,080	.0	(50,916)	.0	.0	6.250	5.042	FA	188,889	500,000	01/27/2017	02/15/2037
125523-AG-5	Cigna Corp-SENIOR UNSECURED			1,2	2.A FE	14,579,209	.99.3836	14,592,487	14,683,000	14,641,873	.0	38,709	.0	.0	4.125	3.515	MN	77,391	605,674	04/25/2022	11/15/2025
125523-AH-3	Cigna Corp-SENIOR UNSECURED			1,2	2.A FE	27,780,478	.98.2054	28,256,628	28,773,000	28,012,319	.0	175,739	.0	.0	4.375	5.147	AO	265,751	1,258,819	10/06/2022	10/15/2028
125523-BD-1	Cigna Corp-SENIOR UNSECURED				2.A FE	7,660,817	103.3434	5,713,858	5,529,000	7,252,551	.0	(119,194)	.0	.0	6.150	3.008	MN	43,449	340,034	06/08/2021	11/15/2036
125523-CL-2	Cigna Corp-SENIOR UNSECURED			1,2	2.A FE	11,004,826	.87.4422	11,384,969	13,020,000	11,347,184	.0	270,154	.0	.0	2.400	5.250	MS	92,008	312,480	01/12/2024	03/15/2030
416515-AP-9	Hartford Financial Servi-SR UNSECURED				2.A FE	17,000,060	102.3484	12,136,476	11,858,000	16,332,191	.0	(199,700)	.0	.0	6.100	3.177	AO	180,835	723,338	07/14/2021	10/01/2041
416515-AS-3	Hartford Financial Servi-SENIOR UNSECURE				2.A FE	6,339,420	103.0233	4,792,645	4,652,000	6,013,589	.0	(95,094)	.0	.0	5.950	2.986	AO	58,434	276,794	06/08/2021	10/15/2036
416515-BA-1	Hartford Financial Servi-SR UNSECURED				2.A FE	5,119,595	107.7807	3,640,833	3,378,000	4,866,853	.0	(76,019)	.0	.0	6.625	3.001	MS	56,570	223,793	07/16/2021	03/30/2040
416515-BB-9	HARTFORD FINANCIAL SERVI-SENIOR UNSECURE				2.A FE	2,541,097	.84.2928	1,723,787	2,045,000	2,481,664	.0	(18,068)	.0	.0	4.300	2.800	AO	18,564	87,935	08/04/2021	04/15/2043
416515-BE-3	Hartford Financial Servi-SENIOR UNSECURE			1,2	2.A FE	1,860,629	.91.1726	1,937,418	2,125,000	1,933,108	.0	35,942	.0	.0	2.800	5.007	FA	21,817	59,500	12/02/2022	08/19/2029
428291-AN-8	HEXCEL CORP-SENIOR UNSECURED			1,5	3.A FE	4,977,950	.97.8600	4,893,002	5,000,000	4,994,483	.0	2,344	.0	.0	4.200	4.253	FA	79,333	210,000	02/13/2017	02/15/2027
68902V-AK-3	Otis Worldwide Corp-SENIOR UNSECURED			1,2	2.B FE	31,609,819	.89.0529	31,734,877	35,636,000	32,273,283	.0	435,670	.0	.0	2.565	4.656	FA	345,313	722,227	08/02/2024	02/15/2030

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates		
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22	
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost			Rate Used to Obtain Fair Value	Fair Value												Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
68902V-AR-8	Otis Worldwide Corp-SENIOR UNSECURED			1,2	2.B FE	5,999,640	99.9752	5,998,514	6,000,000	5,999,298	0	(342)	0	0	5.125	5.126	MN	35,875	0		11/12/2024	11/19/2031
85571B-AU-9	Starwood Property Trust -SENIOR UNSECURE			1,2	3.C FE	1,991,000	96.5739	1,922,787	1,991,000	1,991,000	0	0	0	0	3.625	3.625	JJ	33,280	72,174		06/29/2021	07/15/2026
85917A-AB-6	Sterling Bancorp/DE-SUBORDINATED			2	2.A FE	15,000,000	99.3000	14,895,000	15,000,000	15,000,000	0	0	0	0	4.000	4.000	MJSD	0	900,000		12/12/2019	12/30/2029
85917A-AC-4	Sterling Bancorp/DE-SUBORDINATED			2	2.A FE	7,500,000	94.3000	7,072,500	7,500,000	7,500,000	0	0	0	0	3.875	3.875	MN	48,438	290,625		10/28/2020	11/01/2030
442851-AK-7	Howard University-UNSECURED				2.B FE	4,014,743	90.9130	4,045,629	4,450,000	4,136,063	0	74,435	0	0	2.845	4.927	AO	31,651	126,603		05/03/2023	10/01/2028
93884P-CQ-1	Washington Gas Light Co-SENIOR UNSECURED				1.G FE	1,875,932	102.7514	1,541,272	1,500,000	1,586,973	0	(29,385)	0	0	6.490	4.223	MS	28,664	97,350		08/31/2012	09/27/2027
00138C-AX-6	Corebridge Global Fundin-CRBG 5.2 01/12/				1.F FE	8,328,667	100.5833	8,381,605	8,333,000	8,329,262	0	595	0	0	5.200	5.212	JJ	203,418	216,658		01/09/2024	01/12/2029
00138C-BB-3	Corebridge Global Fundin-SECURED				1.F FE	11,248,200	99.6540	11,211,069	11,250,000	11,247,795	0	(405)	0	0	4.650	4.656	FA	187,453	0		08/19/2024	08/20/2027
00164T-AA-6	AMC East Communities LLC-SECURED				1.F FE	2,422,757	100.3148	2,317,157	2,309,886	2,341,163	0	9,148	0	0	5.740	5.251	JJ	61,138	130,764		01/03/2012	01/15/2028
008513-AA-1	Agree LP-SENIOR UNSECURED			1,2	2.A FE	14,156,159	88.4368	14,518,669	16,417,000	14,609,758	0	232,439	0	0	2.900	5.131	AO	119,023	403,593		10/01/2020	10/01/2030
008513-AB-9	Agree LP-SENIOR UNSECURED			1,2	2.A FE	79,664	90.4448	90,445	100,000	86,627	0	3,359	0	0	2.000	6.372	JD	89	2,000		11/04/2022	06/15/2028
008513-AC-7	Agree LP-SENIOR UNSECURED			1,2	2.A FE	32,861,892	80.3266	26,953,574	33,555,000	33,029,343	0	54,028	0	0	2.600	2.809	JD	38,775	872,430		01/19/2022	06/15/2033
045054-AF-0	Ashtead Capital Inc-SENIOR UNSECURED			1,2	2.C FE	18,950,600	98.2015	19,640,300	20,000,000	19,367,270	0	217,428	0	0	4.375	5.688	FA	330,556	875,000		01/10/2023	08/15/2027
045054-AJ-2	Ashtead Capital Inc-SENIOR UNSECURED			1,2	2.C FE	4,676,600	96.1360	4,806,800	5,000,000	4,772,707	0	60,457	0	0	4.000	5.509	MN	33,333	200,000		05/16/2023	05/01/2028
045054-AL-7	Ashtead Capital Inc-SENIOR UNSECURED			1,2	2.C FE	5,364,731	94.8868	5,530,949	5,829,000	5,485,016	0	59,994	0	0	4.250	4.249	MN	41,289	247,733		10/28/2019	11/01/2029
04636N-AK-9	Astrazeneca Finance LLC-SENIOR UNSECURED			1,2	1.F FE	31,950,896	100.5405	31,955,805	31,784,000	31,932,169	0	(18,727)	0	0	4.800	4.560	FA	529,733	480,000		11/19/2024	02/26/2027
04636N-AM-5	Astrazeneca Finance LLC-SENIOR UNSECURED			1,2	1.F FE	5,905,546	99.7796	5,886,995	5,900,000	5,904,861	0	(685)	0	0	4.900	4.883	FA	100,382	144,550		03/21/2024	02/26/2031
05969A-AA-3	Bancorp Bank/The-SENIOR UNSECURED			2	2.B FE	19,550,000	97.5909	19,518,180	20,000,000	19,889,009	0	168,650	0	0	4.750	5.666	FA	279,722	950,000		11/30/2022	08/15/2025
117665-AD-1	Bryn Mawr Bank Corp-SUBORDINATED				2.A FE	5,000,000	97.6500	4,882,500	5,000,000	5,000,572	0	276	0	0	6.670	6.673	MJSD	14,823	384,402		12/08/2017	12/15/2027
212168-AA-6	Continental Wind LLC-FIRST LIEN				2.B FE	4,724,946	101.2955	4,786,158	4,724,946	4,724,946	0	0	0	0	6.000	5.998	FA	95,286	283,497		09/23/2013	02/28/2033
23110A-AB-2	Cumulus Media New Holdin-FIRST LIEN				5.A FE	2,500,412	36.8500	917,565	2,490,000	1,004,618	0	(10,412)	1,485,381	0	8.000	8.000	JJ	58,653	70,638		05/02/2024	07/01/2029
25466A-AJ-0	Discover Bank-SENIOR UNSECURED			2	2.B FE	4,628,250	97.7204	4,886,019	5,000,000	4,829,911	0	100,478	0	0	3.450	5.742	JJ	73,792	172,500		12/05/2022	07/27/2026
25466A-AN-1	Discover Bank-SUBORDINATED				2.B FE	7,000,000	101.2675	7,088,725	7,000,000	7,000,000	0	0	0	0	5.974	5.973	FA	164,949	418,180		08/06/2018	08/09/2028
25466A-AP-6	Discover Bank-SENIOR UNSECURED			2	2.B FE	3,277,236	97.8895	3,576,882	3,654,000	3,398,646	0	58,739	0	0	4.650	6.816	MS	50,973	169,911		11/04/2022	09/13/2028
26078J-AE-0	DowDuPont Inc-SENIOR UNSECURED			1,2	2.A FE	36,642,706	100.1040	29,124,255	29,094,000	35,361,212	0	(369,350)	0	0	5.319	3.306	MN	197,737	1,547,510		02/24/2022	11/15/2038
36143L-2D-6	GA Global Funding Trust-SECURED				1.F FE	9,902,564	89.3074	10,214,979	11,438,000	10,449,964	0	235,752	0	0	1.950	4.479	MS	65,673	223,041		10/19/2022	09/15/2028
36143L-2H-7	GA Global Funding Trust-SECURED				1.F FE	19,942,020	83.8350	17,605,350	21,000,000	20,209,320	0	97,812	0	0	2.900	3.510	JJ	296,042	609,000		03/04/2022	01/06/2032
36143L-2J-3	GA Global Funding Trust-SECURED				1.F FE	12,440,875	99.6945	12,461,813	12,500,000	12,493,570	0	20,492	0	0	3.850	4.021	AO	106,944	481,250		04/25/2022	04/11/2025
36264F-AK-7	GSK Consumer Healthcare -SENIOR UNSECURE			1,2	2.A FE	22,575,631	97.0886	22,495,424	23,170,000	22,653,070	0	77,439	0	0	3.375	4.434	MS	210,702	337,500		11/18/2024	03/24/2027
38242H-AJ-6	Goodman North American P Gtd Senior Note				2.B PL	15,000,000	80.5106	12,076,590	15,000,000	15,000,000	0	0	0	0	2.660	2.660	AO	90,883	399,000		10/28/2021	10/09/2031
46849L-SQ-5	Jackson National Life GI-SECURED				1.F FE	2,905,952	97.7030	3,051,265	3,123,000	3,034,701	0	62,483	0	0	3.050	5.279	AO	16,404	95,252		11/15/2022	04/29/2026
48250A-AA-1	KKR Group Finance Co III-SENIOR UNSECURE			1,2	1.F FE	2,687,731	90.9733	1,834,023	2,016,000	2,611,521	0	(22,959)	0	0	5.125	3.057	JD	8,610	103,320		07/16/2021	06/01/2044
573874-AJ-3	Marvell Technology Inc-SENIOR UNSECURED			1,2	2.C FE	9,981,100	87.7742	8,777,422	10,000,000	9,987,445	0	1,753	0	0	2.950	2.972	AO	62,278	295,000		04/05/2021	04/15/2031
64105M-AA-9	Nestle Capital Corp-SENIOR UNSECURED			1,2	1.D FE	9,577,152	99.9027	9,590,659	9,600,000	9,579,859	0	2,707	0	0	4.650	4.704	MS	135,160	219,480		03/13/2024	03/12/2029
64952W-CH-4	NEW YORK LIFE GLOBAL FDG-SECURED				1.A FE	5,472,670	96.8381	5,575,022	5,945,000	5,735,594	0	128,387	0	0	2.350	4.754	JJ	64,809	139,708		11/22/2022	07/14/2026
64952W-ED-1	New York Life Global Fun-SECURED				1.A FE	7,041,721	95.2854	7,356,031	7,720,000	7,471,952	0	165,295	0	0	1.150	3.458	JD	5,425	88,780		04/25/2022	06/09/2026
74153H-CU-1	Pricea Global Funding I-SECURED				1.D FE	14,996,700	99.6144	14,942,166	15,000,000	14,996,285	0	(415)	0	0	4.400	4.408	FA	227,333	0		08/20/2024	08/27/2027
74258L-EX-3	Principal Life Global Fu-SECURED				1.E FE	6,664,400	100.6342	6,709,279	6,667,000	6,665,031	0	631	0	0	5.000	5.014	JJ	152,785	166,675			

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
		C o d e	F o r e i g n	Bond Char			Rate Used to Obtain Fair Value	Fair Value			Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor-tization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
CUSIP Identification	Description				NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost			Par Value	Book/ Adjusted Carrying Value											
83416W-AA-1	Solar Star Funding LLC-FIRST LIEN				2.B FE	5,134,569	99.1353	5,090,170	5,134,569	5,134,575	0	1	0	0	5.375	5.375	JD	767	420,242	06/20/2013	06/30/2035
83416W-AB-9	SOLAR STAR FUNDING LLC-SECURED	1			2.B FE	4,604,330	89.6193	4,126,369	4,604,330	4,603,924	0	(37)	0	0	3.950	3.951	JD	505	277,380	03/04/2015	06/30/2035
87251F-AD-1	TCW DIRECT LENDING STRUCTURED SOLUTIONS				2.B FE	1,342,613	104.8900	1,408,267	1,342,613	1,342,613	0	0	0	0	10.466	10.465	MJSD	110,151	0	10/10/2024	09/30/2032
929328-AF-9	WSFS Financial Corp-SENIOR UNSECURED	2			1.G FE	5,000,000	94.9500	4,747,500	5,000,000	5,000,000	0	0	0	0	2.750	2.750	JD	6,111	137,500	12/03/2020	12/15/2030
U4327B-AA-8	Hikma Finance USA LLC-SENIOR UNSECURED				2.C FE	984,711	98.3944	1,001,655	1,018,000	1,012,351	0	10,456	0	0	3.250	4.335	JJ	15,807	33,085	04/01/2022	07/09/2025
05969B-AD-5	Banco Santander Mexico S-SENIOR UNSECURE	D			2.A FE	3,922,500	99.9290	3,997,160	4,000,000	3,989,696	0	32,331	0	0	5.375	6.237	AO	44,194	215,000	11/01/2022	04/17/2025
40049J-BB-2	Grupo Televisa SAB-SENIOR UNSECURED	D	1.2		2.C FE	3,832,840	98.2725	3,930,898	4,000,000	3,940,584	0	51,511	0	0	4.625	6.061	JJ	77,597	185,000	11/01/2022	01/30/2026
456829-AA-8	Infraestructura Energeti-SENIOR UNSECURE	D			2.B FE	1,032,216	94.1438	987,568	1,049,000	1,039,705	0	2,817	0	0	3.750	4.063	JJ	18,248	40,387	04/01/2022	01/14/2028
71654Q-BW-1	Petroleos Mexicanos-SENIOR UNSECURED	D			4.A FE	5,989,200	96.4994	5,789,964	6,000,000	5,989,626	0	1,090	0	0	4.500	4.520	JJ	118,500	270,000	01/15/2015	01/23/2026
71654Q-CK-6	Petroleos Mexicanos-SENIOR UNSECURED	D			4.A FE	4,995,000	91.7300	4,586,500	5,000,000	4,998,146	0	497	0	0	5.350	5.361	FA	103,285	267,500	02/02/2018	02/12/2028
05329W-AM-4	AUTONATION INC-SR UNSECURED		1.5		2.C FE	3,986,520	99.6641	3,986,566	4,000,000	3,998,608	0	1,461	0	0	4.500	4.539	AO	45,000	180,000	09/16/2015	10/01/2025
115236-AE-1	Brown & Brown Inc-SENIOR UNSECURED	1.2			2.C FE	4,698,750	92.3019	4,615,094	5,000,000	4,764,923	0	26,463	0	0	4.200	4.983	MS	60,667	210,000	05/23/2022	03/17/2032
126408-GS-6	CSX CORP-UNSECURED NOTE	1			1.G FE	7,534,100	106.9147	5,345,735	5,000,000	7,164,445	0	(112,235)	0	0	6.220	2.742	AO	52,697	311,000	08/04/2021	04/30/2040
126408-HH-9	CSX Corp-SENIOR UNSECURED	1.2			1.G FE	1,944,449	96.7743	2,038,067	2,106,000	1,993,937	0	42,121	0	0	3.250	5.635	JD	5,704	68,445	10/24/2023	06/01/2027
126408-HM-8	CSX Corp-SENIOR UNSECURED	1.2			1.G FE	4,742,850	97.9288	4,896,440	5,000,000	4,791,893	0	42,958	0	0	4.250	5.367	MS	62,569	212,500	11/06/2023	03/15/2029
126408-HQ-9	CSX Corp-SENIOR UNSECURED	1.2			1.G FE	1,062,228	88.6770	1,149,253	1,296,000	1,099,428	0	32,027	0	0	2.400	5.871	FA	11,750	31,104	10/30/2023	02/15/2030
14448C-AQ-7	Carrier Global Corp-SENIOR UNSECURED	1.2			2.B FE	9,076,800	89.4375	8,943,752	10,000,000	9,106,350	0	29,550	0	0	2.722	4.705	FA	102,831	0	10/21/2024	02/15/2030
14448C-AR-5	Carrier Global Corp-SENIOR UNSECURED	1.2			2.B FE	37,122,050	76.9888	26,946,094	35,000,000	36,799,891	0	(96,323)	0	0	3.377	2.944	AO	282,355	1,181,950	07/14/2021	04/05/2040
14989B-AA-2	CEAMER FINANCE II LLC Senior Secured Not				2.B PL	22,337,600	100.9695	22,554,163	22,337,600	22,337,600	0	0	0	0	6.920	6.916	MN	970,395	1,406,477	09/01/2022	11/15/2037
26444H-AH-4	Duke Energy Florida LLC-SECURED	1.2			1.F FE	11,617,601	89.4694	11,720,491	13,100,000	11,825,357	0	207,756	0	0	2.500	4.741	JD	27,292	327,500	01/31/2024	12/01/2029
29977G-AA-0	TIAA FSB Holdings Inc-SUBORDINATED	2			2.B FE	20,000,000	99.7500	19,950,000	20,000,000	20,000,000	0	(44)	0	0	5.750	5.750	JJ	571,806	1,150,000	06/26/2015	07/02/2025
31620M-BU-9	Fidelity National Inform-SENIOR UNSECURE	1.2			2.B FE	11,927,400	72.7561	8,730,728	12,000,000	11,938,007	0	2,889	0	0	3.100	3.141	MS	124,000	372,000	02/23/2021	03/01/2041
341081-EP-8	FLORIDA POWER & LIGHT CO-BOND	1			1.E FE	7,679,936	103.2291	6,348,588	6,150,000	7,331,363	0	(126,554)	0	0	5.850	3.140	FA	149,906	359,775	02/25/2022	02/01/2033
341081-FF-9	FLORIDA POWER & LIGHT CO-SECURED	1.2			1.E FE	14,373,000	83.2328	9,987,934	12,000,000	14,045,983	0	(95,520)	0	0	4.125	2.830	FA	206,250	495,000	06/08/2021	02/01/2042
341081-FQ-5	Florida Power & Light Co-SECURED	1.2			1.D FE	18,953,642	78.3706	12,983,654	16,567,000	18,765,245	0	(65,823)	0	0	3.950	3.128	MS	218,132	654,397	01/18/2022	03/01/2048
413875-AN-5	HARRIS CORPORATION-SENIOR UNSECURED NOTE				2.B FE	14,016,158	103.9217	9,763,447	9,395,000	13,374,491	0	(194,884)	0	0	6.150	2.832	JD	25,680	577,793	08/03/2021	12/15/2040
413875-AT-2	HARRIS CORPORATION-SENIOR UNSECURED	1.2			2.B FE	40,282,800	91.5293	27,458,781	30,000,000	39,194,140	0	(335,901)	0	0	5.054	2.992	AO	269,547	1,516,200	10/05/2021	04/27/2045
47587H-AA-6	JEN HoldCo 23 LLC Senior Secured Note				2.B PL	25,000,000	101.9605	25,490,125	25,000,000	25,000,000	0	0	0	0	7.735	7.734	MON	2,065,353	189,006	05/14/2024	12/15/2028
51223*-AF-1	LAKEVIEW LOAN SERVICING Senior Unsecured				1.F PL	15,000,000	98.5373	14,780,595	15,000,000	15,000,000	0	0	0	0	6.690	6.690	MN	133,800	0	10/30/2024	11/13/2031
61945C-BY-5	Mosaic Co/The-SENIOR UNSECURED	1.2			2.B FE	5,328,445	99.0169	5,020,158	5,070,000	5,267,521	0	(20,795)	0	0	5.450	5.478	MN	35,307	276,315	11/08/2013	11/15/2033
61945C-AE-3	Mosaic Co/The-SENIOR UNSECURED	1.2			2.B FE	3,718,024	94.6374	2,751,110	2,907,000	3,621,151	0	(26,581)	0	0	5.625	3.761	MN	20,894	163,519	02/24/2021	11/15/2043
62886H-BE-0	NCL Corp Ltd-SECURED	D	1.2		3.C FE	1,446,000	99.6859	1,441,458	1,446,000	1,446,000	0	0	0	0	5.875	5.875	FA	32,093	84,953	02/10/2022	02/15/2027
637417-AK-2	National Retail Properti-SENIOR UNSECURE	1.2			2.A FE	7,582,549	96.5946	7,785,523	8,060,000	7,707,235	0	63,587	0	0	3.500	5.197	AO	59,554	84,315	11/19/2024	10/15/2027
637417-AL-0	National Retail Properti-SENIOR UNSECURE	1.2			2.A FE	2,857,372	97.6004	2,985,597	3,059,000	2,921,691	0	31,616	0	0	4.300	5.630	AO	27,769	131,537	12/02/2022	10/15/2028
637417-AM-8	National Retail Properti-SENIOR UNSECURE	1.2			2.A FE	8,425,690	84.5259	5,916,814	7,000,000	8,305,641	0	(35,294)	0	0	4.800	3.609	AO	70,933	336,000	06/03/2021	10/15/2048
65339K-BY-5	NextEra Energy Capital H-SENIOR UNSECURE	1.2			2.A FE	3,876,924	94.4620	3,881,444	4,109,000	3,888,962	0	12,038	0	0	1.875	4.885	JJ	35,526	0	11/18/2024	01/15/2027
65339K-BZ-2	NextEra Energy Capital H-SENIOR UNSECURE	1.2			2.A FE	2,839,050	83.4439	2,503,317	3,000,000	2,880,413	0	14,998	0	0	2.440	3.074	JJ	33,753	73,200	03/01/2022	01/15/2032
65339K-CT-5	NextEra Energy Capital H-SENIOR UNSECURE	1.2			2.A FE	9,978,900	99.7427	9,974,265	10,000,000	9,982,347	0	3,447	0	0	4.900	4.945	MS	144,278	306,250	01/29/2024	03/15/2029
667469-AA-8	NORTHWEST FLORIDA TIMBER-SECURED				1.D FE	14,772,450	95.3554	14,303,309	15,000,000	14,923,738	0	15,915	0	0	4.750	4.885	MS	217,708	712,500	04/03/2014	03/04/2029
686514-AH-3	Orlando Health Obligated-SENIOR UNSECURE	1.2			1.E FE	4,123,590	70.5415	2,849,875	4,040,000	4,117,878	0	(2,001)	0	0	3.327	3.214	AO	33,603	134,411	02/07/2022	10/01/2050
743615-A*-7	PROSPERITY BKG CO - JR SUB DEFERRABLE I				2.A FE	4,578,750	100.0000	4,500,000	4,500,000	4,499,803	0	(78,947)	0	0	7.877	7.876	MS	200,311	908,771	03/01/2018	03/26/2033
754730-AF-6	RAYMOND JAMES FINANCIAL-SENIOR UNSECURED	1			1.G FE	15,636,500	89.7995	10,775,934	12,000,000	15,303,058	0	(105,543)	0	0	4.950	3.175	JJ	273,900	594,000	10/06/2021	07/15/2046
754730-AG-4	Raymond James Financial -SENIOR UNSECURE	1.2			1.G FE	7,973,440	98.8979	7,911,830	8,000,000	7,984,373	0	2,480	0	0	4.650	4.691	AO	93,000	372,000	03/26/2020	04/01/2030
75884R-AV-5	Regency Centers LP-SENIOR UNSECURED	1.2			2.A FE	6,625,920	97.5567	6,630,928	6,797,000	6,634,482	0	8,563	0	0	3.600	4.818	FA	101,955	0	11/19/2024	02/01/2027
75884R-AX-1	Regency Centers LP-SENIOR UNSECURED	1.2			2.A FE	1,882,457	97.4912	1,953,724	2,004,000	1,926,023	0	21,657	0	0	4.125	5.462	MS	24,340	82,665	12/02/2022	03/15/2028

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
75884R-AZ-6	Regency Centers LP-SENIOR UNSECURED			1,2	2.A FE	10,466,827		9,789,221	10,680,000	10,540,834		26,892			2.950	3.250	MS	92,768	315,060	02/24/2022	09/15/2029
776696-AG-1	Roper Technologies Inc-SENIOR UNSECURED			1,2	2.B FE	9,955,000		9,817,372	10,000,000	9,957,233		2,233			4.500	4.597	AO	162,500		08/19/2024	10/15/2029
776743-AL-0	Roper Technologies Inc-SENIOR UNSECURED			1,2	2.A FE	11,035,460		11,509,546	14,000,000	11,286,017		250,557			1.750	5.525	FA	92,556	122,500	04/23/2024	02/15/2031
780153-AW-2	Royal Caribbean Cruises -SENIOR UNSECURE	D		1,2	3.A FE	3,984,920		3,783,203	4,000,000	3,994,609		1,507			3.700	3.744	MS	43,578	148,000	11/20/2017	03/15/2028
780153-BJ-0	Royal Caribbean Cruises -SENIOR UNSECURE	D		1,2	3.A FE	4,043,000		4,034,105	4,043,000	4,043,000					5.500	5.497	FA	74,739	222,365	08/11/2021	08/31/2026
78355H-KR-9	Ryder System Inc-SENIOR UNSECURED			1,2	2.A FE	5,571,828		5,746,281	5,800,000	5,730,412		99,621			3.350	5.197	MS	64,767	194,300	05/17/2023	09/01/2025
78355H-KV-0	Ryder System Inc-SENIOR UNSECURED			1,2	2.A FE	28,533,961		28,646,775	28,015,000	28,456,524		(68,314)			5.650	5.089	MS	527,616	1,083,896	07/26/2024	03/01/2028
78355H-KW-8	Ryder System Inc-SENIOR UNSECURED			1,2	2.A FE	4,931,600		5,037,566	5,000,000	4,950,988					5.250	5.567	JD	21,875	262,500	06/08/2023	06/01/2028
78355H-KX-6	Ryder System Inc-SENIOR UNSECURED			1,2	2.A FE	11,220,004		11,604,269	11,084,000	11,193,280		(23,302)			6.300	6.007	JD	58,191	756,483	11/20/2023	12/01/2028
78355H-KZ-1	Ryder System Inc-SENIOR UNSECURED			1,2	2.A FE	2,675,533		2,692,408	2,660,000	2,673,216		(2,317)			5.375	5.238	MS	42,098	77,445	03/13/2024	03/15/2029
78355H-LC-1	R 4.95 09/01/29			1,2	2.A FE	4,988,650		4,983,859	5,000,000	4,988,991		341			4.950	5.001	MS	103,125		11/22/2024	09/01/2029
78355H-LD-9	Ryder System Inc-SENIOR UNSECURED			1,2	2.A FE	4,995,550		4,966,567	5,000,000	4,995,344		(206)			4.900	4.919	JD	38,111		10/28/2024	12/01/2029
875127-AV-4	Tampa Electric Co-NOTE			1	1.G FE	20,185,011		14,732,691	13,965,000	19,018,842		(372,444)			6.550	2.810	MN	116,879	914,708	10/06/2021	05/15/2036
875127-BF-8	Tampa Electric Co-SENIOR UNSECURED			1,2	1.G FE	12,117,538		8,210,524	9,970,000	11,962,594		(54,326)			4.450	3.244	JD	19,718	443,665	01/19/2022	06/15/2049
875127-BH-4	Tampa Electric Co-SENIOR UNSECURED			1,2	1.G FE	5,980,371		6,170,173	7,211,000	6,175,500		138,438			2.400	5.131	MS	50,958	173,064	07/26/2023	03/15/2031
875127-BM-3	Tampa Electric Co-SENIOR UNSECURED			1,2	1.G FE	26,646,016		26,573,039	26,594,000	26,637,033		(8,983)			4.900	4.914	MS	434,369	763,765	01/25/2024	03/01/2029
87819#-AA-2	TD Bank (Miami, FL) CTL Trust Certificat				1.D	3,865,512		3,323,192	3,865,512	3,865,514		(1)			3.790	3.790	MON	18,770	234,550	01/31/2013	01/15/2038
894164-AA-0	Travel + Leisure Co-SECURED			1,2	3.C FE	8,249,000		93,2655	8,249,000	8,249,000					4.500	4.499	JD	30,934	371,205	11/15/2023	12/01/2029
96524V-AA-3	WhiteHorse Finance, Inc. Senior Note Ser				2.A PL	5,000,000		4,944,485	5,000,000	5,000,000					5.375	5.374	JD	288,906	134,375	12/04/2020	12/04/2026
96524V-AA-5	WhiteHorse Finance, Inc. Senior Note				2.A PL	7,000,000		6,968,787	7,000,000	7,000,000					5.375	5.373	AO	74,205	376,250	10/20/2020	10/20/2025
98310W-AM-0	Travel + Leisure Co-SECURED			1,2	3.C FE	13,472,520		13,168,000	13,168,000	13,189,735		(41,668)			6.600	6.597	AO	217,272	869,088	09/10/2015	10/01/2025
98310W-AN-8	Travel + Leisure Co-FIRST LIEN			1,2	3.C FE	14,086,900		13,997,597	14,000,000	14,021,384		(10,541)			6.000	6.025	AO	210,000	840,000	03/16/2017	04/01/2027
000000-00-0	CEAMER FINANCE III LLC 6.79% Senior Secu				2.B Z	15,000,000		14,929,530	15,000,000	15,000,000					6.790	6.791	MN	59,413		11/22/2024	11/15/2039
03464A-AA-9	Angel Oak Financial Stra Senior Note Ser				1.E FE	25,000,000		22,713,750	25,000,000	25,000,000					2.800	2.800	JJ	336,389	700,000	07/08/2021	07/08/2028
043436-AX-2	Asbury Automotive Group -SENIOR UNSECURE			1,2	3.B FE	3,000,000		2,744,875	3,000,000	3,000,000					5.000	4.999	FA	19,167	150,000	11/04/2021	02/15/2032
191216-CT-5	Coca-Cola Co/The-SENIOR UNSECURED				1.E FE	9,310,600		9,462,408	10,000,000	9,397,655		87,055			3.450	4.763	MS	92,000	345,000	02/13/2024	03/25/2030
195869-AP-7	COLONIAL PIPELINE CO-SR UNSECURED			1,2	1.G FE	4,986,300		4,949,837	5,000,000	4,998,646		1,464			3.750	3.781	AO	46,875	187,500	09/16/2015	10/01/2025
224044-BY-2	COX COMMUNICATIONS INC-SENIOR UNSECURED				2.B FE	735,720		483,128	604,000	721,051		(4,730)			4.700	3.265	JD	1,262	28,388	10/07/2021	12/15/2042
224044-CC-9	Cox Communications Inc-SENIOR UNSECURED			1,2	2.B FE	10,411,738		8,869,389	8,561,000	10,191,960		(66,743)			4.500	3.110	JD	1,070	577,868	08/02/2021	06/30/2043
224044-CF-2	COX COMMUNICATIONS INC-SR UNSECURED			1,2	2.B FE	11,820,970		8,972,926	9,818,000	11,352,356		(136,934)			4.800	2.919	FA	196,360	471,264	09/06/2021	02/01/2035
224044-CS-4	Cox Communications Inc-SENIOR UNSECURED			1,2	2.B FE	40,950,800		39,726,312	40,000,000	40,873,389		(77,411)			5.700	5.368	JD	101,333	2,280,000	01/16/2024	06/15/2033
23316#-AA-5	DEA (Nashville TN) LLC Pass-Thru Certifi				1.B	8,116,131		6,926,533	8,116,131	8,116,131					3.228	3.228	MON	18,921	283,894	08/12/2020	08/05/2040
316041-AJ-0	Fidelity Bank/Atlanta GA-SUBORDINATED	2			2.A FE	7,000,000		6,933,500	7,000,000	7,000,000					5.875	5.873	MN	34,271	411,250	05/29/2015	05/31/2030
372460-AA-3	Genuine Parts Co-SENIOR UNSECURED			1,2	2.B FE	6,467,360		6,695,031	8,000,000	6,611,131		143,771			1.875	5.382	MN	25,000	150,000	04/09/2024	11/01/2030
373298-BR-8	GEORGIA-PACIFIC LLC-SENIOR UNSECURED				1.G FE	21,628,707		21,360,654	18,997,000	21,311,726		(316,981)			7.750	4.906	MN	188,123	1,472,268	04/09/2024	11/15/2029
37331N-AJ-0	Georgia-Pacific LLC-SENIOR UNSECURED			1,2	1.G FE	1,958,220		1,863,220	2,000,000	1,955,041		57,639			1.750	3.847	MS		35,000	05/17/2023	09/30/2025
373334-KY-6	SO 4.55 03/15/30			1,2	1.G FE	8,017,115		7,928,400	8,036,000	8,017,095		(21)			4.550	4.602	MS	26,407		12/02/2024	03/15/2030
37363J-AK-7	Georgia Tech Foundation -UNSECURED				1.B FE	6,131,510		4,549,729	5,815,000	6,080,684		(6,994)			3.843	3.557	MN	37,245	223,470	09/12/2016	11/01/2048
389286-AF-3	Gray Escrow II Inc-SENIOR UNSECURED			1,2	5.A FE	1,019,000		53,3394	1,019,000	1,019,000					5.375	5.374	MN		54,771	10/26/2021	11/15/2031
437076-BF-8	Home Depot Inc/The-SENIOR UNSECURED NOTE			1,2	1.F FE	4,823,385		3,368,929	3,950,000	4,726,298		(28,337)			4.400	3.064	MS	51,174	173,800	06/03/2021	03/15/2045
437076-BM-3	Home Depot Inc/The-SENIOR UNSECURED			1,2	1.F FE	1,907,660		1,964,216	2,000,000	1,963,870		27,428			3.000	4.499	AO	15,000	60,000	11/22/2022	04/01/2026
437076-BW-1	Home Depot Inc/The-SENIOR UNSECURED			1,2	1.F FE	7,343,807		7,600,836	7,802,000	7,443,925		80,081			3.900	5.205	JD	21,130	304,278	09/27/2023	12/06/2028
437076-BX-9	Home Depot Inc/The-SENIOR UNSECURED			1,2	1.F FE	5,624,050		4,270,376	5,000,000	5,582,584		(15,313)			4.500	3.748	JD	15,625	225,000	03/08/2022	12/06/2048
437076-BY-7	Home Depot Inc/The-SENIOR UNSECURED			1,2	1.F FE	5,671,715		5,717,073	6,150,000	5,733,910		62,195			2.950	4.648	JD	8,063	181,425	03/27/2024	06/15/2029
437076-CH-3	Home Depot Inc/The-SENIOR UNSECURED			1,2	1.F FE	13,048,050		13,415,516	15,000,000	13,613,711		338,720			1.500	4.220	MS	66,250	225,000	04/19/2023	09/15/2028

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
437076-CJ-9	Home Depot Inc/The-SENIOR UNSECURED			1,2	1.F FE	15,825,624	.82.6588	16,035,798	19,400,000	16,342,332	.0	345,252	.0	.0	1.875	4.636	MS	107,104	298,125	03/27/2024	09/15/2031
437076-CN-0	Home Depot Inc/The-SENIOR UNSECURED			1,2	1.F FE	1,841,160	.96.6078	1,932,155	2,000,000	1,891,859	.0	43,212	.0	.0	2.875	5.416	AO	12,139	57,500	10/24/2023	04/15/2027
437076-CS-9	Home Depot Inc/The-SENIOR UNSECURED			1,2	1.F FE	3,059,550	.97.3364	2,920,093	3,000,000	3,049,964	.0	(5,590)	.0	.0	4.500	4.237	MS	39,750	135,000	04/05/2023	09/15/2032
437076-CX-8	Home Depot Inc/The-SENIOR UNSECURED				1.F FE	10,086,083	100.7392	10,084,996	10,011,000	10,078,549	.0	(7,534)	.0	.0	5.100	4.388	JD	9,928	253,862	11/18/2024	12/24/2025
437076-CZ-3	Home Depot Inc/The-SENIOR UNSECURED				1.F FE	10,013,200	100.9756	10,097,562	10,000,000	10,009,839	.0	(3,361)	.0	.0	5.150	5.080	JD	8,583	257,500	06/25/2024	06/25/2026
45866F-AJ-3	Intercontinental Exchange-SENIOR UNSECURE			1,2	1.G FE	4,781,200	.96.3278	4,816,388	5,000,000	4,810,582	.0	29,382	.0	.0	3.750	4.874	MS	52,083	93,750	05/07/2024	09/21/2028
45866F-BB-9	Intercontinental Exchange-SENIOR UNSECURE			1,2	1.G FE	13,647,684	.95.9127	13,714,560	14,299,000	13,692,914	.0	45,230	.0	.0	3.625	4.901	MS	172,780	.0	09/10/2024	09/01/2028
655844-BM-9	NORFOLK SOUTHERN CORP-SENIOR UNSECURED N			1,2	2.A FE	3,425,340	.80.4778	2,414,333	3,000,000	3,366,485	.0	(15,985)	.0	.0	3.950	3.035	AO	29,625	118,500	02/23/2021	10/01/2042
670001-AH-9	Novelis Corp-SENIOR UNSECURED			1,2	3.C FE	5,028,000	.86.1050	4,305,250	5,000,000	5,017,426	.0	(3,421)	.0	.0	3.875	3.791	FA	73,194	193,750	09/22/2021	08/15/2031
74170*-CC-1	Prime Property Fund LLC Senior Note Seri				2.A	15,000,000	102.3061	15,345,915	15,000,000	15,000,000	.0	.0	.0	.0	6.600	6.600	AO	220,000	990,000	10/11/2023	10/11/2028
74170*-CD-9	Prime Property Fund LLC Senior Note Seri				2.A	20,000,000	102.6317	20,526,340	20,000,000	20,000,000	.0	.0	.0	.0	6.660	6.600	AO	296,000	1,332,000	10/11/2023	10/11/2030
74170*-CK-3	Prime Property Fund LLC Sr Note Series E				1.F Z	4,000,000	.96.9655	3,878,620	4,000,000	4,000,000	.0	3,878	.0	.0	5.250	5.250	MS	53,083	.0	09/17/2024	09/30/2029
87161C-AN-5	Synovus Financial Corp-SENIOR UNSECURED			1,2	2.C FE	27,731,592	.99.9088	27,707,710	27,733,000	27,730,779	.0	336	.0	.0	5.200	5.260	FA	560,823	1,442,116	08/05/2022	08/11/2025
90985F-AF-3	United Community Banks I-SENIOR UNSECURE			2	2.A FE	15,000,000	.99.0000	14,850,000	15,000,000	15,000,000	.0	.0	.0	.0	5.500	5.472	FA	313,958	825,000	07/31/2015	02/14/2027
90985F-AJ-1	United Community Banks I-SUBORDINATED			2	2.B FE	10,000,000	.96.0000	9,600,000	10,000,000	10,000,000	.0	.0	.0	.0	6.971	6.969	JAJO	121,989	779,012	01/10/2018	01/30/2028
90985F-AH-9	United Community Banks I-SENIOR UNSECURE			2	2.A FE	12,000,000	.98.3000	11,796,000	12,000,000	12,000,000	.0	.0	.0	.0	5.000	5.000	JD	26,667	600,000	06/12/2020	06/15/2030
911312-AJ-5	UNITED PARCEL SERVICE IN-SENIOR UNSECURE			1	1.F FE	46,948,710	107.0441	35,324,540	33,000,000	44,647,878	.0	(724,410)	.0	.0	6.200	2.924	JJ	943,433	2,046,000	01/19/2022	01/15/2038
911312-BV-7	United Parcel Service In-SENIOR UNSECURE			1,2	1.F FE	3,399,760	.97.2920	2,529,591	2,600,000	3,269,201	.0	(35,537)	.0	.0	5.200	3.024	AO	33,800	135,200	02/25/2021	04/01/2041
911312-BW-5	United Parcel Service In-SENIOR UNSECURE			1,2	1.F FE	20,141,366	.95.7218	15,124,044	15,800,000	19,872,345	.0	(98,212)	.0	.0	5.300	3.701	AO	209,350	837,400	03/11/2022	04/01/2050
92940P-AG-9	WRKCo Inc-SENIOR UNSECURED			1,2	2.B FE	2,272,709	.83.8577	1,970,657	2,350,000	2,289,431	.0	6,099	.0	.0	3.000	3.352	JD	3,133	70,500	03/03/2022	06/15/2033
419870-JF-8	Hawaiian Electric Indust Senior Unsecure				4.B	15,500,000	.85.2500	13,213,750	15,500,000	15,500,000	.0	.0	.0	.0	5.430	5.431	MN	37,407	1,262,475	11/01/2022	11/01/2032
677071-AF-9	Ohana Military Communiti-UNSECURED				1.D FE	569,887	.99.8462	562,225	563,090	563,985	.0	(503)	.0	.0	5.675	5.573	AO	7,989	31,955	06/10/2010	10/01/2026
677071-AM-4	Ohana Military Communiti-UNSECURED				1.D FE	380,325	.99.7157	368,409	369,459	370,989	.0	658	.0	.0	5.462	5.206	AO	5,045	20,180	07/07/2011	10/01/2026
04686J-AA-9	Athene Holding Ltd-SENIOR UNSECURED			1,2	2.A FE	4,845,263	.97.5716	4,712,706	4,830,000	4,838,311	.0	(2,705)	.0	.0	4.125	4.060	JJ	93,531	199,238	04/05/2022	01/12/2028
461070-AQ-7	Interstate Power & Light-SENIOR UNSECURE			1,2	2.A FE	4,668,950	.94.5626	4,728,129	5,000,000	4,711,789	.0	42,839	.0	.0	3.600	5.125	AO	45,000	90,000	04/09/2024	04/01/2029
74251V-AR-3	Principal Financial Grou-SENIOR UNSECURE			1,2	1.G FE	4,980,100	.95.3566	4,767,831	5,000,000	4,990,411	.0	1,949	.0	.0	3.700	3.747	MN	23,639	185,000	05/07/2019	05/15/2029
79588T-AC-4	Sammons Financial Group -SENIOR UNSECURE			1,2	2.A FE	6,815,870	.97.9998	6,859,985	7,000,000	6,903,469	.0	37,367	.0	.0	4.450	5.074	MN	42,399	311,500	07/26/2022	05/12/2027
79588T-AD-2	Sammons Financial Group -SENIOR UNSECURE			1,2	2.A FE	16,734,214	.85.8945	13,949,264	16,240,000	16,569,525	.0	(49,203)	.0	.0	3.350	2.980	AO	113,342	544,040	07/14/2021	04/16/2031
79588T-AE-0	Sammons Financial Group -SENIOR UNSECURE			1,2	2.A FE	51,565,719	.91.5386	49,245,015	53,797,000	51,978,315	.0	193,767	.0	.0	4.750	5.305	AO	589,152	2,555,358	08/18/2022	04/08/2032
89787E-BX-6	Trustage Financial Group-SENIOR UNSECURE			1,2	2.B FE	64,529,400	.91.1523	59,249,002	65,000,000	64,634,427	.0	40,669	.0	.0	4.625	4.716	AO	634,653	3,006,250	03/22/2022	04/05/2032
422704-AH-9	Hecla Mining Co-SENIOR UNSECURED			1,2	4.B FE	9,552,324	100.6107	8,918,135	8,864,000	9,043,048	.0	(159,168)	.0	.0	7.250	5.358	FA	242,775	642,640	10/13/2021	02/15/2028
00185A-AB-0	Aon PLC-SENIOR UNSECURED			D	2.A FE	3,667,609	.80.2618	2,423,906	3,020,000	3,589,153	.0	(23,888)	.0	.0	4.250	2.896	JD	6,774	128,350	08/04/2021	12/12/2042
00185A-AG-9	Aon PLC-SR UNSECURED			1,2	2.A FE	30,276,516	.84.4676	19,664,890	23,281,000	29,482,866	.0	(241,056)	.0	.0	4.600	2.798	JD	50,572	1,070,926	08/03/2021	06/14/2044
00185A-AH-7	AON PLC-SENIOR UNSECURED			D	2.A FE	6,115,717	.86.1434	3,955,706	4,592,000	5,949,612	.0	(50,473)	.0	.0	4.750	2.800	MN	27,871	218,120	08/03/2021	05/15/2045
002824-BH-2	ABBOTT LABORATORIES-SENIOR UNSECURED			1,2	1.D FE	13,105,800	.93.3778	9,337,783	10,000,000	12,841,895	.0	(92,597)	.0	.0	4.900	3.078	MN	42,194	490,000	01/20/2022	11/30/2046
002824-BQ-2	Abbott Laboratories-SENIOR UNSECURED			1,2	1.D FE	1,553,580	.84.5130	1,690,260	2,000,000	1,690,260	.0	57,759	.0	.0	1.400	5.437	JD	78	42,000	10/30/2023	06/30/2030
00287Y-AW-9	ABBVIE INC-SENIOR UNSECURED			1,2	1.G FE	6,230,600	.85.1277	4,256,384	5,000,000	6,107,080	.0	(37,645)	.0	.0	4.450	3.013	MN	29,049	222,500	08/03/2021	05/14/2046
00287Y-BV-0	AbbVie Inc-SENIOR UNSECURED			1,2	1.G FE	12,320,020	.97.1845	12,346,314	12,704,000	12,340,976	.0	20,956	.0	.0	2.950	4.544	MN	41,641	187,384	11/19/2024	11/21/2026
00287Y-BX-6	AbbVie Inc-SENIOR UNSECURED			1,2	1.G FE	11,214,680	.92.8982	11,147,783	12,000,000	11,410,586	.0	106,023	.0	.0	3.200	4.632	MN	42,667	384,000	04/05/2023	11/21/2029
00287Y-CA-5	AbbVie Inc-SENIOR UNSECURED			1,2	1.G FE	29,662,130	.85.5086	22,232,233	26,000,000	29,050,362	.0	(166,977)	.0	.0	4.050	3.037	MN	117,000	1,053,000	04/29/2021	11/21/2039
00440K-AA-1	ACN 3.9 10/04/27			1,2	1.D FE	8,877,533	.98.4847	8,754,307	8,889,000	8,877,985	.0	452	.0	.0	3.900	3.946	AO	83,779	.0	10/01/2024	10/04/2027
00440K-AB-9	ACN 4.05 10/04/29			1,2	1.D FE	6,964,790	.97.2815	6,787,327	6,977,000	6,964,968	.0	178	.0	.0	4.050	4.089	AO	68,287	.0	10/01/2024	10/04/2029
007589-AC-8	Advocate Health & Hospit-SENIOR UNSECURE			1,2	1.C FE	4,731,650	.71.2059	3,560,294	5,000,000	4,748,064	.0	6,118	.0	.0	3.387	3.699	AO	35,752	169,350	03/16/2022	10/15/2049
032177-AJ-6	Amsted Industries Inc-SENIOR UNSECURED			1,2	3.C FE	1,790,000	.94.0892	1,881,783	2,000,000	1,846,712	.0	23,270	.0	.0	4.625	6.329	MN	11,819	92,500	06/08/2022	05/15/2030
037389-BE-2	Aon Corp-SENIOR UNSECURED			1,2	2.A FE	3,419,931	.89.0461	3,559,174	3,997,000	3,519,396	.0	74,774	.0	.0	2.800	5.391	MN	14,300	111,916	08/24/2023	05/15/2030

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
03740M-AB-6	AON 5.15 03/01/29			1,2	2.A FE	10,060,800	100.1856	10,018,558	10,000,000	10,052,024	0	(8,776)	0	0	5.150	5.007	MS	171,667	257,500	03/27/2024	03/01/2029
03740M-AC-4	AON North America Inc-SENIOR UNSECURED			1,2	2.A FE	6,649,666	101.0383	6,736,222	6,667,000	6,650,891	0	1,226	0	0	5.300	5.345	MS	117,784	176,676	02/28/2024	03/01/2031
039482-AB-0	Archer-Daniels-Midland C-SENIOR UNSECURE			1,2	1.F FE	2,706,244	92.2850	2,832,226	3,069,000	2,764,686	0	48,934	0	0	3.250	5.450	MS	26,044	99,743	10/16/2023	03/27/2030
039482-AD-6	Archer-Daniels-Midland C-SENIOR UNSECURE			1,2	1.F FE	2,739,677	86.2929	2,705,281	3,135,000	2,794,782	0	39,078	0	0	2.900	4.701	MS	30,305	90,915	07/26/2023	03/01/2032
04316J-AL-3	Arthur J Gallagher & Co-SENIOR UNSECURED			1,2	2.B FE	4,196,724	99.8984	4,195,732	4,200,000	4,196,668	0	(56)	0	0	4.850	4.868	JD	6,790	0	12/10/2024	12/15/2029
04316J-AM-1	Arthur J Gallagher & Co-SENIOR UNSECURED			1,2	2.B FE	2,081,625	98.5979	2,053,795	2,083,000	2,081,589	0	(36)	0	0	5.000	5.009	FA	3,472	0	12/10/2024	02/15/2032
10334#-AG-7	Boyd Watterson GSA Fund, Senior Note Ser				2.C PL	4,875,300	97.1222	4,856,110	5,000,000	4,876,041	0	741	0	0	4.640	5.855	MS	70,244	0	12/10/2024	03/12/2027
10373Q-AE-0	BP Capital Markets Ameri-SENIOR UNSECURE			1,2	1.E FE	4,017,869	97.8410	3,987,022	4,075,000	4,034,165	0	9,466	0	0	4.234	4.519	MN	26,360	172,536	03/27/2023	11/06/2028
10373Q-BM-1	BP Capital Markets Ameri-SENIOR UNSECURE			1,2	1.E FE	11,463,760	84.4460	11,822,434	14,000,000	11,908,378	0	317,682	0	0	1.749	4.821	FA	95,904	244,860	07/31/2023	08/10/2030
10373Q-BY-5	BP Capital Markets Ameri-SENIOR UNSECURE			1,2	1.E FE	10,103,400	101.0660	10,106,601	10,000,000	10,099,653	0	(3,747)	0	0	5.017	4.632	MN	61,319	0	11/20/2024	11/17/2027
14575E-AA-3	Cars.com Inc-SENIOR UNSECURED			1,2	4.B FE	1,439,833	99.4063	1,698,853	1,709,000	1,520,085	0	38,747	0	0	6.375	9.905	MN	18,158	108,949	10/18/2022	11/01/2028
20268J-AD-5	CommonSpirit Health-SECURED			1,2	1.E FE	11,150,535	74.2985	8,414,309	11,325,000	11,158,587	0	3,424	0	0	3.817	3.256	AO	108,069	432,275	01/21/2022	10/01/2049
20268J-AK-9	CommonSpirit Health-SECURED			1,2	1.G FE	18,798,371	103.1826	19,053,706	18,466,000	18,732,490	0	(65,881)	0	0	6.073	5.466	MN	186,907	1,121,440	04/23/2024	11/01/2027
205887-CE-0	Conagra Brands Inc-SENIOR UNSECURED			1,2	2.C FE	11,749,720	90.6890	8,162,006	9,000,000	11,513,003	0	(67,665)	0	0	5.400	3.617	MN	81,000	486,000	04/29/2021	11/01/2048
20903X-AF-0	Consolidated Communicati-FIRST LIEN			1,2	4.C FE	3,298,755	96.4339	3,375,188	3,500,000	3,311,140	0	12,390	0	0	6.500	8.195	AO	56,875	113,750	09/12/2024	10/01/2028
260003-AP-3	DOV 2.95 11/04/29			1,2	2.A FE	10,664,788	91.3531	10,609,754	11,614,000	10,682,993	0	18,205	0	0	2.950	4.826	MN	54,247	0	11/21/2024	11/04/2029
319383-AD-7	First Busey Corp-SUBORDINATED			2	2.B FE	8,000,000	96.3000	7,704,000	8,000,000	8,000,000	0	0	0	0	5.250	5.250	JD	35,000	420,000	05/28/2020	06/01/2030
319383-AE-5	First Busey Corp-SUBORDINATED			2	2.B FE	12,500,000	88.8000	11,100,000	12,500,000	12,500,000	0	0	0	0	5.000	5.000	JD	27,778	625,000	05/25/2022	06/15/2032
361448-AW-3	GATX CORP-SR UNSECURED			1	2.B FE	5,182,200	99.4396	4,971,982	5,000,000	5,000,000	0	55,970	0	0	3.250	1.965	MS	41,076	162,500	01/20/2022	03/30/2025
361448-BF-9	GATX Corp-SENIOR UNSECURED			1,2	2.B FE	14,392,350	94.6058	14,190,872	15,000,000	14,564,145	0	68,212	0	0	4.000	4.604	JD	1,667	900,000	05/20/2022	06/30/2030
361448-BG-7	GATX Corp-SENIOR UNSECURED			1,2	2.B FE	3,670,525	81.5701	3,344,376	4,100,000	3,788,318	0	43,067	0	0	1.900	3.221	JD	6,492	77,900	03/04/2022	06/01/2031
36267V-AF-0	GE HealthCare Technolog-SENIOR UNSECURE			1,2	2.B FE	53,506,368	102.5216	53,917,151	52,591,000	53,410,340	0	(92,980)	0	0	5.650	5.689	MN	379,678	1,668,050	11/13/2023	11/15/2027
448579-AF-9	Hyatt Hotels Corp-SENIOR UNSECURED			1,2	2.C FE	19,992,990	100.0022	20,000,440	20,000,000	19,998,495	0	371	0	0	4.850	4.854	MS	285,611	970,000	03/01/2016	03/15/2026
46124J-A*-3	InvenTrust Properties Co Senior Unsecure				2.C PL	5,000,000	95.8786	4,793,930	5,000,000	5,000,000	0	0	0	0	5.070	5.070	FA	98,583	253,500	08/11/2022	08/11/2029
46124J-A8-1	InvenTrust Properties Co Senior Unsecure				2.C PL	20,000,000	93.1666	18,633,320	20,000,000	20,000,000	0	0	0	0	5.200	5.200	FA	404,444	1,040,000	08/11/2022	08/11/2032
488401-AB-6	Kemper Corp-SENIOR UNSECURED			1	2.C FE	21,901,630	99.6606	21,925,336	22,000,000	21,996,839	0	13,616	0	0	4.350	4.411	FA	361,533	957,000	06/12/2017	02/15/2025
488401-AC-4	Kemper Corp-SENIOR UNSECURED			1,2	2.C FE	7,959,100	84.5384	8,453,844	10,000,000	8,399,840	0	229,277	0	0	2.400	5.704	MS	60,667	240,000	01/06/2023	09/30/2030
57763R-AD-9	Mauser Packaging Solutio-SECURED			2	4.B FE	4,882,962	102.0210	5,049,019	4,949,000	4,895,892	0	12,930	0	0	7.875	8.400	AO	147,233	128,829	04/16/2024	04/15/2027
58013M-EV-2	MCDONALD'S CORP-SENIOR UNSECURED			1,2	2.A FE	6,418,225	86.9182	4,341,562	4,995,000	6,265,205	0	(46,561)	0	0	4.600	2.908	MN	22,339	229,770	08/03/2021	05/26/2045
58013M-FB-6	McDonald's Corp-SENIOR UNSECURED			1,2	2.A FE	17,402,225	97.2514	17,257,264	17,745,000	17,511,269	0	65,488	0	0	3.800	4.236	AO	168,578	674,310	04/23/2023	04/01/2028
58013M-FM-1	McDonald's Corp-SENIOR UNSECURED			1,2	2.A FE	3,598,854	87.2995	3,666,578	4,200,000	3,671,511	0	72,657	0	0	2.125	4.911	MS	29,750	44,625	02/29/2024	03/01/2030
58013M-FP-4	McDonald's Corp-SENIOR UNSECURED			1,2	2.A FE	5,921,887	97.4752	6,219,894	6,381,000	6,059,206	0	116,594	0	0	3.500	5.693	JJ	111,668	223,335	10/24/2023	07/01/2027
58013M-FQ-2	McDonald's Corp-SENIOR UNSECURED			1,2	2.A FE	4,700,850	93.7273	4,686,365	5,000,000	4,738,556	0	37,706	0	0	3.600	4.990	JJ	90,000	90,000	08/16/2024	01/01/2030
58013M-FU-3	McDonald's Corp-SENIOR UNSECURED			1,2	2.A FE	9,755,800	100.1777	10,017,774	10,000,000	9,812,666	0	45,584	0	0	4.800	5.375	FA	182,667	480,000	09/27/2023	08/14/2028
67080L-AA-3	Nuveen LLC-SENIOR UNSECURED			1,2	1.C FE	10,291,710	96.8863	10,657,489	11,000,000	10,519,205	0	110,092	0	0	4.000	5.271	MN	73,333	440,000	12/05/2022	11/01/2028
67080L-AC-9	Nuveen LLC-SENIOR UNSECURED			1,2	2.A FE	30,613,205	101.8993	30,900,969	30,325,000	30,600,467	0	(12,738)	0	0	5.550	5.605	JJ	776,067	289,833	04/23/2024	01/15/2030
67181#-AD-0	Oak Street Real Estate C Senior Secured				2.A PL	18,750,000	101.7965	19,086,844	18,750,000	18,750,000	0	0	0	0	6.630	6.630	MN	210,641	1,243,125	10/31/2022	11/01/2027
67181#-AE-8	Oak Street Real Estate C Senior Secured				2.A PL	5,000,000	102.8564	5,142,820	5,000,000	5,000,000	0	0	0	0	6.730	6.730	AO	57,018	336,500	10/31/2022	10/31/2029
78200J-AA-0	Rush Obligated Group-UNSECURED			1,2	1.E FE	12,759,747	95.9350	12,817,874	13,361,000	12,824,412	0	64,665	0	0	3.922	4.856	MN	66,958	322,147	11/07/2024	01/15/2029
82922T-AA-7	Sinai Health System-SECURED				1.B FE	2,990,000	89.5735	2,678,247	2,990,000	2,990,000	0	0	0	0	3.034	3.034	JJ	40,570	90,657	11/06/2012	01/20/2036
91412N-BG-4	University of Chicago/TH-UNSECURED			1,2	1.C FE	4,994,126	71.0059	3,805,918	5,360,000	5,014,387	0	7,444	0	0	3.000	3.359	AO	40,200	160,800	03/03/2022	10/01/2052
931427-AW-8	WBA 8 1/8 08/15/29			1,2	4.A FE	2,540,625	98.9397	2,473,493	2,500,000	2,537,103	0	(3,522)	0	0	8.125	7.643	FA	78,429	0	08/16/2024	08/15/2029
96928*-CQ-8	William Blair & Company, Trust Certificat				3.A	2,056,967	92.4370	1,901,399	2,056,967	2,056,968	0	(2)	0	0	6.660	6.660	MON	6,089	136,988	12/16/2009	06/15/2033
96928*-CR-6	William Blair & Company, Trust Certificat				3.A	2,884,931	91.4446	2,638,114	2,884,931	2,884,932	0	(3)	0	0	6.660	6.660	MON	8,539	192,366	12/23/2009	05/15/2034
96928*-CX-3	William Blair & Company, Trust Certifica				1.F	8,466,411	103.4575	8,671,760	8,381,954	8,415,949	0	(6,756)	0	0	6.190	6.084	MON	23,060	518,834	03/18/2010	01/15/2035

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
96928*-DA-2	William Blair & Company, Trust Certifica .....	.....	.....	.....	1.A	7,156,770	100.6846	7,128,956	7,080,483	7,097,627	0	(8,257)	0	0	5.370	5.245	MON	16,899	380,188	06/01/2010	08/15/2031
96928*-DJ-3	William Blair & Company, Trust Certifica .....	.....	.....	.....	1.A	5,020,233	100.3161	5,036,101	5,020,232	5,020,243	0	0	0	0	5.250	5.250	MON	19,767	263,333	09/28/2010	09/15/2031
96928*-EN-3	William Blair & Company, Trust Certifica .....	.....	.....	.....	1.A	5,245,127	96.0726	4,985,446	5,189,249	5,206,286	0	(5,534)	0	0	4.160	4.043	MON	9,594	219,237	01/06/2012	02/15/2034
96928*-EZ-6	William Blair & Company, Trust Certifica .....	.....	.....	.....	1.G	9,133,654	90.6111	8,276,104	9,133,653	9,133,664	0	3	0	0	5.040	5.040	MON	17,902	501,323	08/17/2012	09/15/2033
96928*-FH-5	William Blair & Company, Trust Certifica .....	.....	.....	.....	2.A	563,851	100.0401	564,077	563,851	563,851	0	0	0	0	6.170	6.170	MON	1,546	33,180	04/03/2013	04/15/2025
96928*-FK-8	William Blair & Company, Trust Certifica .....	.....	.....	.....	1.C	6,435,788	102.7099	6,610,192	6,435,788	6,436,011	0	(69)	0	0	5.930	5.929	MON	81,482	352,311	05/15/2013	11/15/2032
96928*-FQ-5	William Blair & Company, Trust Certifica .....	.....	.....	.....	1.A	6,042,657	95.5368	5,772,961	6,042,657	6,042,657	0	(2)	0	0	4.010	4.010	MON	10,769	242,295	12/20/2013	09/15/2033
96928*-FX-0	William Blair & Company, Trust Certifica .....	.....	.....	.....	1.B	14,535,378	93.5760	13,601,625	14,535,377	14,535,381	0	(5)	0	0	4.010	4.010	MON	25,905	582,597	12/23/2014	02/15/2036
96928*-FY-8	William Blair & Company, Trust Certifica .....	.....	.....	.....	3.A	4,614,535	88.3609	4,077,445	4,614,535	4,614,536	0	(2)	0	0	4.510	4.510	MON	9,250	227,184	02/11/2015	01/15/2035
97650W-AG-3	Wintrust Financial Corp-SUBORDINATED .....	.....	.....	.....	2.B FE	25,000,000	95.4756	23,868,895	25,000,000	25,000,000	0	0	0	0	4.850	4.849	JD	84,201	1,212,500	06/03/2019	06/06/2029
036752-AR-4	Anthem Inc-SENIOR UNSECURED .....	.....	.....	1,2	2.A FE	3,027,985	96.3007	3,105,698	3,225,000	3,085,014	0	57,029	0	0	1.500	5.261	MS	14,244	24,188	06/25/2024	03/15/2026
036752-BB-8	Elevance Health Inc-SENIOR UNSECURED .....	.....	.....	1,2	2.A FE	16,954,680	98.7024	16,779,406	17,000,000	16,954,930	0	250	0	0	4.750	4.809	FA	136,826	0	10/28/2024	02/15/2030
036752-BC-6	Elevance Health Inc-SENIOR UNSECURED .....	.....	.....	1,2	2.A FE	7,980,800	98.2141	7,857,124	8,000,000	7,980,644	0	(156)	0	0	4.950	4.991	MN	67,100	0	10/22/2024	11/01/2031
12621E-AL-7	CNO Financial Group Inc-SENIOR UNSECURED .....	.....	.....	1,2	2.C FE	14,573,606	99.2680	14,948,770	15,059,000	14,713,107	0	66,611	0	0	5.250	5.846	MN	68,079	790,598	12/05/2022	05/30/2029
373865-AD-6	German American Bancorp -SUBORDINATED .....	.....	.....	2	2.B FE	4,000,000	95.1902	3,807,607	4,000,000	4,000,000	0	0	0	0	5.312	5.312	MJSD	54,894	180,000	06/25/2019	06/30/2029
455434-BT-6	INDIANAPOLIS PIWR & LIGHT-SECURED .....	.....	.....	1,2	1.F FE	15,547,157	77.9987	10,722,485	13,747,000	15,391,565	0	(54,479)	0	0	4.050	3.255	MN	92,792	556,754	01/18/2022	05/01/2046
532457-CK-2	LLY 4 1/2 02/09/29 .....	.....	.....	1,2	1.E FE	5,638,079	99.3211	5,611,643	5,650,000	5,638,437	0	358	0	0	4.500	4.554	FA	100,288	0	11/22/2024	02/09/2029
633717-AA-1	National Bank of Indiana-SUBORDINATED .....	.....	.....	2	2.B PL	5,000,000	99.0000	4,950,000	5,000,000	5,000,000	0	0	0	0	9.417	9.418	MJSD	20,927	394,024	08/28/2019	09/15/2029
654730-AX-1	NISOURCE FINANCE CORP-SENIOR UNSECURED N .....	.....	.....	1,2	2.B FE	4,829,405	101.1540	3,358,311	3,320,000	4,620,624	0	(63,467)	0	0	5.950	2.872	JD	8,780	197,540	08/03/2021	06/15/2041
654730-BB-8	NISOURCE FINANCE CORP-SENIOR UNSECURED B .....	.....	.....	1,2	2.B FE	6,617,550	93.4205	4,671,025	5,000,000	6,419,568	0	(59,533)	0	0	5.250	3.140	FA	99,167	262,500	07/14/2021	02/15/2043
654730-BD-4	NISOURCE FINANCE CORP-SENIOR UNSECURED B .....	.....	.....	1,2	2.B FE	14,071,238	97.8676	10,191,931	10,414,000	13,680,978	0	(115,517)	0	0	5.650	3.435	FA	245,163	588,391	07/16/2021	02/01/2045
654730-BG-7	NISOURCE FINANCE CORP-SENIOR UNSECURED .....	.....	.....	1,2	2.B FE	8,779,431	75.9599	5,836,757	7,684,000	8,686,201	0	(29,806)	0	0	3.950	3.143	MS	76,723	303,518	10/04/2021	03/30/2048
682691-AA-8	Onellmain Finance Corp-SENIOR UNSECURED .....	.....	.....	1,2	3.B FE	1,975,000	88.6694	1,773,387	2,000,000	1,983,474	0	2,502	0	0	4.000	4.163	MS	23,556	80,000	06/23/2021	09/15/2030
760293-AA-8	Republic Airways Holding Senoir Secured .....	.....	.....	.....	2.B PL	20,812,500	107.7075	22,416,623	20,812,500	20,812,500	0	0	0	0	8.000	8.001	MJSD	74,000	2,080,889	07/06/2023	12/15/2028
768475-A*-6	River Valley Bancorp - JR SUB DEFERRABLE .....	.....	.....	.....	2.C	7,122,500	100.0000	7,000,000	7,000,000	6,998,896	0	(123,604)	0	0	7.477	7.479	MJSD	143,924	1,426,407	03/01/2018	03/26/2033
828807-CL-9	Simon Property Group LP-SENIOR UNSECURED .....	.....	.....	1,2	1.G FE	3,883,931	89.5225	2,703,580	3,020,000	3,770,125	0	(34,577)	0	0	4.750	2.868	MS	42,238	143,450	08/03/2021	03/15/2042
828807-CY-1	Simon Property Group LP-SENIOR UNSECURED .....	.....	.....	1,2	1.G FE	5,580,660	97.5623	5,853,739	6,000,000	5,727,591	0	130,836	0	0	3.250	5.788	MN	16,792	195,000	11/13/2023	11/30/2026
828807-CZ-8	SIMON PROPERTY GROUP LP-SENIOR UNSECURED .....	.....	.....	1,2	1.G FE	6,070,128	81.6545	4,131,719	5,060,000	5,971,785	0	(29,655)	0	0	4.250	3.093	MN	18,518	215,050	07/16/2021	11/30/2046
828807-DF-1	Simon Property Group LP-SENIOR UNSECURED .....	.....	.....	1,2	1.G FE	1,192,775	89.8989	1,339,493	1,490,000	1,273,270	0	38,775	0	0	2.450	6.051	MS	10,952	36,505	11/04/2022	09/13/2029
828807-DG-7	Simon Property Group LP-SENIOR UNSECURED .....	.....	.....	1,2	1.G FE	7,916,683	88.8981	8,713,791	9,802,000	8,192,083	0	236,957	0	0	2.650	6.198	JJ	119,775	259,753	03/30/2023	07/15/2030
828807-DQ-7	Simon Property Group LP-SENIOR UNSECURED .....	.....	.....	1,2	1.G FE	7,728,190	82.9948	6,888,568	8,300,000	7,874,523	0	53,378	0	0	2.250	3.065	JJ	86,113	186,750	03/04/2022	01/15/2032
828807-DT-1	Simon Property Group LP-SENIOR UNSECURED .....	.....	.....	1,2	1.G FE	9,509,500	85.1044	8,510,441	10,000,000	9,634,227	0	45,250	0	0	2.650	3.232	FA	110,417	265,000	02/25/2022	02/01/2032
918418-AA-8	Virginia (Lafayette, IN) Trust Certifica .....	.....	.....	.....	1.A	4,727,100	89.2727	4,220,010	4,727,100	4,727,100	0	0	0	0	3.250	3.250	MON	32,860	153,590	12/04/2019	08/15/2036
94973V-BF-3	ANTHEM INC-SR UNSECURED .....	.....	.....	.....	2.A FE	10,556,265	90.9921	7,060,985	7,760,000	10,239,469	0	(96,358)	0	0	5.100	2.903	JJ	182,489	395,750	08/03/2021	01/15/2044
852060-AD-4	SPRINT CAPITAL CORP-SENIOR UNSECURED .....	.....	.....	.....	2.B FE	14,142,039	106.1631	13,848,976	13,045,000	13,821,677	0	(178,442)	0	0	6.875	5.150	MN	114,597	896,844	11/28/2023	11/15/2028
852060-AD-9	Sprint Capital Corp-SENIOR UNSECURED .....	.....	.....	.....	2.B FE	9,733,180	119.6297	8,374,082	7,000,000	9,059,427	0	(242,171)	0	0	8.750	4.007	MS	180,347	619,500	02/10/2022	03/15/2032
096630-AE-8	Boardwalk Pipelines LP-SENIOR UNSECURED .....	.....	.....	1,2	2.C FE	4,943,000	101.1892	5,059,461	5,000,000	4,989,632	0	6,602	0	0	5.950	6.100	JD	24,792	297,500	05/11/2016	06/01/2026
115637-AU-4	Brown-Forman Corp-SENIOR UNSECURED .....	.....	.....	1,2	1.G FE	22,237,168	97.4316	21,650,278	22,221,000	22,233,922	0	(1,523)	0	0	4.750	4.693	AO	222,827	1,055,498	03/28/2023	04/15/2033
444859-BB-7	Humana Inc-SENIOR UNSECURED NOTE .....	.....	.....	.....	2.B FE	3,201,528	82.3778	2,077,568	2,522,000	3,116,308	0	(25,925)	0	0	4.625	2.893	JD	9,720	116,643	08/03/2021	12/01/2042
444859-BE-1	Humana Inc-SR UNSECURED .....	.....	.....	.....	2.B FE	13,353,700	84.8148	8,481,477	10,000,000	12,979,117	0	(113,978)	0	0	4.950	2.916	AO	123,750	495,000	08/04/2021	10/01/2044
444859-CA-8	Humana Inc-SENIOR UNSECURED .....	.....	.....	.....	2.B FE	10,228,224	99.1048	10,148,329	10,240,000	10,229,368	0	1,144	0	0	5.375	5.393	AO	116,196	324,124	03/27/2024	04/15/2031
698813-AA-0	Papa John's Internationa-SENIOR UNSECURE .....	.....	.....	.....	2.A FE	2,408,857	89.4488	2,408,857	2,693,000	2,693,000	0	0	0	0	3.875	3.874	MS	30,726	104,354	09/08/2021	09/15/2029
92277G-AB-3	VENTAS REALTY LP-SR UNSECURED .....	.....	.....	.....	2.A FE	15,586,222	97.0260	11,382,114	11,731,000	15,164,830	0	(132,429)	0	0	5.700	3.513	MS	169,024	668,667	10/05/2021	09/30/2043
92277G-AF-4	VENTAS REALTY LP-SR UNSECURED .....	.....	.....	.....	2.A FE	4,551,335	81.3233	3,318,804	4,081,000	4,502,089	0	(14,545)	0	0	4.375	3.634	FA	74,393	178,544	06/08/2021	02/01/2045
92277G-AL-1	Ventas Realty LP-SENIOR UNSECURED .....	.....	.....	.....	2.A FE	1,721,308	97.7251	1,787,392	1,829,000	1,770,398	0	23,834	0	0	3.850	5.378	AO	17,604	70,417	11/15/2022	04

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
9227G-AM-9	Ventas Realty LP-SENIOR UNSECURED			1,2	2.A FE	4,542,400	.97.1076	4,855,378	5,000,000	4,710,897	0	80,467	0	0	4.000	6.031	MS	66,667	200,000	10/28/2022	03/01/2028
22960*-AA-0	CTL PASS THRU TR SER 2013 (OCHSNER SLIDE				1.G	4,517,704	100.0764	4,521,156	4,517,705	4,517,715	0	(33)	0	0	5.260	5.259	MON	31,834	217,764	12/30/2013	12/15/2028
29364W-AU-2	Entergy Louisiana LLC-FIRST LIEN			1,2	1.F FE	4,995,850	.99.5408	4,977,042	5,000,000	4,999,686	0	362	0	0	3.780	3.788	AO	47,250	189,000	06/24/2014	04/01/2025
29365P-AR-3	Entergy Gulf States Loui-FIRST LIEN			1,2	1.F FE	5,995,020	.99.4689	5,968,133	6,000,000	5,999,623	0	434	0	0	3.780	3.788	AO	56,700	226,800	06/24/2014	04/01/2025
45074J-AA-2	ITT Holdings LLC-SENIOR UNSECURED			2	4.C FE	5,594,678	.91.3417	5,106,912	5,591,000	5,583,669	0	(3,213)	0	0	6.500	6.341	FA	151,423	363,415	07/16/2021	08/01/2029
68621T-AA-0	Origin Bank-SUBORDINATED			2	2.C FE	8,000,000	.94.3000	7,544,000	8,000,000	8,000,000	0	0	0	0	4.500	4.500	MN	60,000	360,000	10/08/2020	11/01/2030
68622B-AA-8	Origin Bank-SUBORDINATED			2	2.B FE	13,000,000	.98.5000	12,805,000	13,000,000	13,000,000	0	0	0	0	4.250	4.250	FA	208,722	552,500	02/06/2020	02/15/2030
78518#-AA-5	Saber Midstream LLC Senior Secured Notes				2.C PL	31,507,384	.96.8732	30,598,708	31,586,350	31,535,572	0	11,225	0	0	4.090	4.131	MJSD	335,699	1,649,394	04/06/2022	03/31/2029
78518#-AB-3	Saber Midstream LLC Senior Secured Notes				2.C PL	8,965,502	101.6918	9,117,181	8,965,502	8,965,502	0	0	0	0	6.770	6.772	MJSD	158,188	657,545	09/01/2023	03/31/2030
03027X-AW-0	American Tower Corp-SENIOR UNSECURED			1,2	2.B FE	12,575,351	.94.8705	12,377,749	13,047,000	12,609,130	0	33,779	0	0	3.800	4.614	FA	187,297	247,893	08/02/2024	08/15/2029
03027X-BW-9	American Tower Corp-SENIOR UNSECURED			1,2	2.B FE	19,029,032	.92.6550	19,364,895	20,900,000	19,167,651	0	138,619	0	0	4.050	5.456	MS	249,233	423,225	04/09/2024	03/15/2032
03027X-CG-3	American Tower Corp-SENIOR UNSECURED			1,2	2.B FE	10,183,284	100.5160	10,051,602	10,000,000	10,175,873	0	(7,411)	0	0	5.200	4.716	FA	196,444	0	10/21/2024	02/15/2029
03027X-CL-2	American Tower Corp-SENIOR UNSECURED			1,2	2.B FE	6,973,540	.99.3546	6,954,822	7,000,000	6,973,630	0	90	0	0	5.000	5.080	JJ	38,889	0	11/18/2024	01/31/2030
032654-AN-5	Analog Devices Inc-SENIOR UNSECURED			1,2	1.G FE	15,072,750	.98.0889	14,713,340	15,000,000	15,029,492	0	(16,647)	0	0	3.500	3.379	JD	37,917	525,000	04/25/2022	12/05/2026
032654-AW-5	Analog Devices Inc-SENIOR UNSECURED			1,2	1.G FE	14,440,856	.70.1165	10,517,471	15,000,000	14,504,749	0	22,338	0	0	2.800	3.053	AO	105,000	420,000	01/18/2022	10/01/2041
08661U-AA-4	Beth Israel Lahey Health-SENIOR UNSECURE			1,2	1.G FE	1,376,117	.89.8100	1,404,628	1,564,000	1,402,574	0	26,458	0	0	2.220	5.502	JJ	17,360	17,360	05/08/2024	07/01/2028
10112R-BA-1	Boston Properties LP-SENIOR UNSECURED			1,2	2.B FE	4,616,150	.97.2749	4,863,743	5,000,000	4,735,505	0	58,173	0	0	4.500	6.035	JD	18,750	225,000	11/15/2022	12/01/2028
10112R-BG-8	Boston Properties LP-SENIOR UNSECURED			1,2	2.B FE	1,069,380	104.2541	1,083,200	1,039,000	1,057,442	0	(5,799)	0	0	6.750	6.058	JD	5,844	70,133	11/15/2022	12/01/2027
101137-AX-5	Boston Scientific Corp-SENIOR UNSECURED			1,2	2.A FE	19,720,000	.96.5209	19,304,170	20,000,000	19,742,208	0	22,208	0	0	4.000	4.340	MS	266,667	400,000	08/02/2024	03/01/2029
101137-BA-4	Boston Scientific Corp-SENIOR UNSECURED			1,2	2.A FE	15,977,310	.88.9796	16,016,335	18,000,000	16,047,914	0	70,604	0	0	2.650	4.957	JD	39,750	132,500	12/19/2024	06/01/2030
11373M-AA-5	Brookline Bancorp Inc-SUBORDINATED			2	2.C FE	2,500,000	.99.0000	2,475,000	2,500,000	2,500,000	0	0	0	0	8.523	8.523	MS	63,332	150,000	09/11/2014	09/15/2029
19567P-AH-2	Colonial Gas Co-FIRST LIEN				1.F FE	16,201,360	104.9901	14,698,613	14,000,000	14,475,631	0	(128,704)	0	0	7.120	5.958	AO	376,569	996,800	08/31/2012	04/07/2028
26847#-AA-8	Edx/Ge Inventory Supply Pass-Thru Certif				2.A	1,529,659	.96.6834	1,478,926	1,529,659	1,529,664	0	(3)	0	0	3.250	3.250	JAJO	10,495	49,471	12/28/2017	04/15/2028
26848#-AA-5	EDX/GE Inventory Supply Pass-Thru Certif				2.A	4,046,086	.97.9171	3,961,810	4,046,086	4,046,125	0	(16)	0	0	4.400	4.400	JAJO	37,584	177,917	10/01/2018	01/15/2029
26848*-AA-9	EDX/GE Inventory Supply Pass-Thru Certif				2.A	874,669	.96.0841	840,418	874,669	874,669	0	0	0	0	3.290	3.290	JAJO	6,075	28,681	01/03/2020	01/15/2030
30040W-AT-5	Eversource Energy-SENIOR UNSECURED			1,2	2.B FE	12,850,170	101.3141	12,546,733	12,384,000	12,692,586	0	(91,284)	0	0	5.450	4.573	MS	224,976	674,928	03/29/2023	03/01/2028
30250B-AQ-9	FMR LLC-UNSECURED				1.E FE	6,509,280	110.2219	6,613,311	6,000,000	6,364,204	0	(69,436)	0	0	7.570	5.996	JD	20,187	454,200	10/28/2022	06/15/2029
410867-AA-3	Hanover Insurance Group -SENIOR UNSECURE				2.B FE	97,745	102.0635	115,332	113,000	111,796	0	1,383	0	0	7.625	9.027	AO	1,819	8,616	05/22/2003	10/15/2025
44106M-AV-4	Service Properties Trust-SENIOR UNSECURE			1,2	5.A FE	1,952,300	.97.1084	1,942,168	2,000,000	1,993,210	0	5,597	0	0	5.250	5.560	FA	39,667	105,000	01/29/2016	02/15/2026
44106M-AW-2	Service Properties Trust-SENIOR UNSECURE			1,2	5.A FE	7,916,320	.93.2954	7,963,635	8,000,000	7,978,737	0	9,661	0	0	4.950	5.081	FA	149,600	396,000	01/10/2017	02/15/2027
44106M-AY-8	Service Properties Trust-SENIOR UNSECURE			1,2	5.A FE	3,412,290	.75.3330	2,636,653	3,500,000	3,456,765	0	7,290	0	0	4.375	4.648	FA	57,847	153,125	01/30/2018	02/15/2030
49271V-AF-7	Keurig Dr Pepper Inc-SENIOR UNSECURED			1,2	2.B FE	23,753,449	.99.1677	23,636,624	23,835,000	23,777,600	0	14,946	0	0	4.597	4.673	MN	109,570	1,095,695	05/22/2023	05/25/2028
49271V-AN-0	Keurig Dr Pepper Inc-SENIOR UNSECURED			1,2	2.B FE	13,805,735	.84.6872	13,253,544	15,650,000	14,111,697	0	201,676	0	0	2.250	4.025	MS	103,681	352,125	01/30/2024	03/15/2031
49271V-AQ-3	Keurig Dr Pepper Inc-SENIOR UNSECURED			1,2	2.B FE	19,433,570	.93.4453	19,156,295	20,500,000	19,636,189	0	95,884	0	0	4.050	4.740	AO	175,275	830,250	01/12/2024	04/15/2032
49271V-AT-7	Keurig Dr Pepper Inc-SENIOR UNSECURED			1,2	2.B FE	4,986,050	100.3608	5,018,038	5,000,000	4,987,773	0	1,723	0	0	5.050	5.113	MS	74,347	131,861	04/09/2024	03/15/2029
53079E-AZ-7	LIBERTY MUTUAL GROUP INC-SENIOR UNSECURE				2.B FE	4,625,308	.97.9389	3,201,622	3,269,000	4,460,438	0	(48,577)	0	0	6.500	3.654	MN	35,414	212,485	06/09/2021	05/01/2042
53079E-BG-8	Liberty Mutual Group Inc-SENIOR UNSECURE				2.B FE	779,186	.97.8094	761,935	779,000	779,078	0	(23)	0	0	4.569	4.565	FA	14,830	35,593	01/28/2019	02/01/2029
53079E-BJ-2	Liberty Mutual Group Inc-SENIOR UNSECURE			1,2	2.B FE	11,216,900	.72.4370	7,243,700	10,000,000	11,128,759	0	(28,269)	0	0	3.951	3.290	AO	83,410	395,100	10/05/2021	10/15/2050
53636C-AA-2	LiquiGlide Inc-SECURED				1.F PL	7,630,000	.96.2240	7,341,890	7,630,000	7,630,000	0	0	0	0	5.500						

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
872540-AW-9	TJX Cos Inc/The-SENIOR UNSECURED			1,2	1.F FE	6,600,918	.81.8455	6,711,329	8,200,000	6,739,790	.0	138,872	.0	.0	1.600	4.885	MN	16,764	131,200	04/09/2024	05/15/2031
095828-AA-3	Blue Owl RE Net Lease Pr Senior Secured				2.A PL	30,000,000	101.1440	30,343,200	30,000,000	30,000,000	.0	.0	.0	.0	6.550	6.550	AO	365,708	982,500	04/24/2024	04/24/2027
11523*-AA-3	Brown Advisory Managemen Senior Secured				1.G PL	14,000,000	.82.4874	11,548,236	14,000,000	14,000,000	.0	.0	.0	.0	2.890	2.890	MN	51,699	404,600	11/15/2021	11/15/2031
12795*-AA-2	CGA Capital Corp Pass Thru Ctls Series 2				1.A Z	7,095,106	.92.5805	6,568,684	7,095,106	7,095,106	.0	.0	.0	.0	2.487	2.487	MON	71,832	226,766	03/03/2021	03/10/2031
20727P-AG-9	Congressional Bancshares-CGLBNC 4 01/01/			2	2.A PL	15,000,000	.85.6000	12,840,000	15,000,000	15,000,000	.0	.0	.0	.0	4.000	4.000	JJ	300,000	600,000	12/15/2021	01/01/2032
25470D-AJ-8	DISCOVERY COMMUNICATIONS-SENIOR UNSECURE				2.C FE	1,154,870	.75.8640	758,640	1,000,000	1,137,435	.0	(5,131)	.0	.0	4.875	3.822	AO	12,188	48,750	06/02/2021	04/01/2043
313747-AV-9	FEDERAL REALTY INVESTMEN-SR UNSECURED			1,5	2.A FE	2,164,374	.83.3156	1,578,830	1,895,000	2,139,870	.0	(8,618)	.0	.0	4.500	3.571	JD	7,106	85,275	01/19/2022	12/01/2044
313747-AX-5	FEDERAL REALTY INVESTMEN-SENIOR UNSECURE			1,2	2.A FE	10,725,500	.69.7686	6,976,855	10,000,000	10,654,363	.0	(21,475)	.0	.0	3.625	3.196	FA	151,042	362,500	07/15/2021	08/01/2046
313747-AZ-0	Federal Realty Investmen-SENIOR UNSECURE			1,2	2.A FE	1,616,995	.92.2083	1,751,958	1,900,000	1,697,813	.0	38,557	.0	.0	3.200	5.954	JD	2,702	60,800	10/28/2022	06/15/2029
478111-AC-1	Johns Hopkins Health Sys-UNSECURED				1.D FE	23,972,585	.79.3655	18,737,403	23,609,000	23,945,401	.0	(10,173)	.0	.0	3.837	3.739	MN	115,751	905,877	03/24/2022	05/15/2046
518058-AH-1	LaSalle Property Fund, L Gtd Senior Note				2.B	10,000,000	.87.2443	8,724,430	10,000,000	10,000,000	.0	.0	.0	.0	2.580	2.580	MN	165,550	129,000	05/10/2022	05/10/2029
524901-AR-6	Legg Mason Inc-SENIOR UNSECURED BOND			1	1.F FE	5,801,640	.97.5164	3,900,658	4,000,000	5,596,978	.0	(62,185)	.0	.0	5.625	2.885	JJ	103,750	225,000	08/02/2021	01/15/2044
539830-BU-2	Lockheed Martin Corp-SENIOR UNSECURED			1,2	1.F FE	10,071,600	100.2116	10,021,157	10,000,000	10,018,557	.0	(25,694)	.0	.0	4.950	4.675	AO	104,500	495,000	11/23/2022	10/15/2025
571903-BF-9	Marriott International I-SENIOR UNSECURE			1,2	2.B FE	4,934,150	.88.2817	4,414,086	5,000,000	4,949,277	.0	5,516	.0	.0	3.500	3.650	AO	36,944	175,000	02/24/2022	10/15/2032
571903-BH-5	Marriott International I-SENIOR UNSECURE			1,2	2.B FE	14,769,650	.82.2189	12,332,832	15,000,000	14,824,184	.0	17,292	.0	.0	2.750	2.902	AO	87,083	412,500	10/06/2021	10/15/2033
579780-AN-7	MCCORMICK & CO INC/MD-SENIOR UNSECURED			1,2	2.B FE	8,328,068	.97.0524	8,346,503	8,600,000	8,339,059	.0	10,991	.0	.0	3.400	4.641	FA	110,462	.0	11/18/2024	08/15/2027
579780-AR-8	McCormick & Co Inc/MD-SENIOR UNSECURED			1,2	2.B FE	895,980	.95.7088	957,088	1,000,000	948,492	.0	43,229	.0	.0	0.900	5.702	FA	3,400	9,000	10/06/2023	02/15/2026
579780-AS-6	McCormick & Co Inc/MD-SENIOR UNSECURED			1,2	2.B FE	5,161,054	.82.7435	5,302,201	6,408,000	5,295,971	.0	134,918	.0	.0	1.850	5.195	FA	44,785	82,547	02/13/2024	02/15/2031
579780-AT-4	McCormick & Co Inc/MD-SENIOR UNSECURED			1,2	2.B FE	9,096,950	.97.5965	8,783,681	9,000,000	9,082,539	.0	(8,231)	.0	.0	4.950	4.811	AO	94,050	445,500	04/05/2023	04/15/2033
59567L-AA-2	Midcap Financial Issuer -SENIOR UNSECURE			1,2	4.A FE	7,257,562	.97.5932	6,756,376	6,923,000	6,965,226	.0	(30,073)	.0	.0	6.500	6.009	MN	74,999	449,995	10/14/2021	05/01/2028
59590A-AA-7	Midcap Financial Issuer -SENIOR UNSECURE			1,2	4.A FE	8,185,087	.91.6325	7,589,004	8,282,000	8,217,804	.0	10,640	.0	.0	5.625	5.804	JJ	214,814	465,863	10/26/2021	01/15/2030
681936-BH-2	Omega Healthcare Investo-SENIOR UNSECURE			1,2	2.C FE	4,985,850	100.1675	5,008,375	5,000,000	4,998,092	.0	1,629	.0	.0	5.250	5.286	JJ	121,042	262,500	09/16/2015	01/15/2026
681936-BM-1	Omega Healthcare Investo-SENIOR UNSECURE			1,2	2.C FE	25,168,281	.88.7327	21,945,360	24,732,000	25,018,729	.0	(44,789)	.0	.0	3.375	3.580	FA	347,794	834,705	10/07/2020	02/01/2031
681936-BN-9	Omega Healthcare Investo-SENIOR UNSECURE			1,2	2.C FE	17,874,720	.83.7484	15,074,716	18,000,000	17,909,196	.0	9,312	.0	.0	3.250	3.320	AO	123,500	585,000	03/03/2021	04/15/2033
75606*-AC-4	Realterm Logistics Incom Senior Note Ser				2.B PL	36,100,000	.91.4715	33,021,212	36,100,000	36,100,000	.0	.0	.0	.0	4.870	4.870	MN	185,574	1,758,070	05/23/2022	05/23/2032
75606*-AD-2	Realterm Logistics Incom Senior Note Ser				2.B PL	28,900,000	.90.3958	26,124,386	28,900,000	28,900,000	.0	.0	.0	.0	5.020	5.020	MN	153,138	1,450,780	05/23/2022	05/23/2034
800363-AB-9	Sandy Spring Bancorp Inc-SUBORDINATED				2.B FE	10,000,000	.98.8000	9,880,000	10,000,000	10,000,000	.0	.0	.0	.0	7.405	7.412	FMAN	96,677	425,000	10/29/2019	11/15/2029
800363-AC-7	Sandy Spring Bancorp Inc-SUBORDINATED			2	2.B FE	25,000,000	.90.3000	22,575,000	25,000,000	25,000,000	.0	.0	.0	.0	3.875	3.875	MS	244,878	968,750	03/15/2022	03/30/2032
468223-AW-2	Jackson Laboratory/The-UNSECURED			1,2	1.E FE	975,470	.69.3394	693,394	1,000,000	976,905	.0	514	.0	.0	3.468	3.604	JJ	17,340	34,680	03/08/2022	07/01/2051
592838-AA-4	Mexico Generadora de Ene-SECURED		D		2.B FE	594,677	.97.0871	569,159	586,235	592,951	.0	(668)	.0	.0	5.500	5.320	JD	2,339	32,315	04/01/2022	12/06/2032
125896-BN-9	CMS ENERGY CORP-SENIOR UNSECURED BOND			1,2	2.B FE	18,310,324	.89.0903	12,212,504	13,708,000	17,771,972	.0	(163,452)	.0	.0	4.875	2.821	MS	222,755	668,265	08/03/2021	03/01/2044
125896-BS-8	CMS Energy Corp-SENIOR UNSECURED			1,2	2.B FE	9,217,700	.96.6838	9,668,376	10,000,000	9,435,588	.0	193,759	.0	.0	3.450	5.799	FA	130,333	345,000	11/13/2023	08/15/2027
16372P-AA-0	Chemical Bank Pass-Thru Certificate				2.A	12,903,148	.84.7032	10,929,379	12,903,148	12,903,148	.0	.0	.0	.0	4.589	4.589	MON	84,871	592,359	02/10/2020	06/10/2044
233331-BK-2	DTE Energy Co-SENIOR UNSECURED			1,2	2.B FE	9,930,500	100.2440	10,024,397	10,000,000	9,940,852	.0	10,352	.0	.0	5.100	5.258	MS	170,000	277,667	02/13/2024	03/01/2029
233331-BM-8	DTE Energy Co-SENIOR UNSECURED			1,2	2.B FE	31,229,901	100.3936	31,161,176	31,039,000	31,209,705	.0	(20,196)	.0	.0	4.950	4.708	JJ	635,912	.0	11/18/2024	07/01/2027
23338V-AD-3	DTE Electric Co-SECURED			1,2	1.E FE	17,463,846	.91.4937	18,091,039	19,773,000	17,466,646	.0	453,337	.0	.0	1.900	5.014	AO	93,922	375,687	03/21/2024	04/01/2028
260543-CG-6	Dow Chemical Co/The-SENIOR UNSECURED NOT			1,2	2.B FE	61,425,973	.81.8544	42,597,833	52,041,000	60,210,468	.0	(347,774)	.0	.0	4.375	3.190	MN	290,924	2,276,794	07/16/2021	11/15/2042
26067*-AA-3	Dow (Midland M) Control Trust Certifica				2.A	8,797,269	.98.6553	8,640,092	8,757,859	8,774,082	.0	(3,775)	.0	.0	5.180	5.127	MON	20,163	453,643	12/11/2013	03/15/2034
337930-AD-3	Flagstar Bancorp Inc-SUBORDINATED			2	4.B FE	8,000,000	.88.5000	7,080,000	8,000,000	8,000,000	.0	.0	.0	.0	4.125	4.125	MN	53,167	330,000	10/23/2020	11/01/2030
345277-AE-7	FORD HOLDINGS LLC-SENIOR UNSECURED				3.A FE	4,448,343	113.6330	3,612,394	3,179,000	3,786,440	.0	(100,614)	.0	.0	9.300	5.049	MS	98,549	295,647	03/30/2017	03/01/2030
345370-CA-6	Ford Motor Co-SENIOR UNSECURED NOTE				3.A FE	2,470,000	107.4105	2,148,209	2,000,000	2,470,000	.0	.0	.0	.0	7.450	7.450	JJ	68,292	149,000	02/18/2022	07/16/2031
345397-XL-2	Ford Motor Credit Co LLC-SENIOR UNSECURE				3.A FE	10,000,000	.99.4526	9,945,258	10,000,000	10,000,000	.0	.0	.0	.0	4.134	4.133	FA	168,805	413,400	07/30/2015	08/04/2025
345397-XU-2	Ford Motor Credit Co LLC-SENIOR UNSECURE				2.C FE	15,000,000	.99.2225	14,883,372	15,000,000	15,000,000	.0	.0	.0	.0	4.389	4.389	JJ	316,374	658,350	01/05/2016	01/08/2026
345397-ZY-2	Ford Motor Credit Co LLC-SENIOR UNSECURE				2.C FE	778,451	.99.3809	822,794	800,000	816,453	.0	12,888	.0	(56,116)	2.330	3.924	NOV	1,955	19,546	07/25/2022	11/25/2025
37045V-AF-7	GENERAL MOTORS CO-SENIOR UNSECURED				2.B FE	27,564,300	.98.8001	19,760,016	20,000,000	26,778,430	.0	(246,500)	.0	.0	6.250	3.722	AO	309,028	1,250,000	10/05/2021	10/02/2043

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
37045V-AV-2	General Motors Co-SENIOR UNSECURED	1,2			2.B FE	4,057,720	100.8270	4,033,080	4,000,000	4,017,436	0	(25,272)	0	0	6.125	5.443	AO	61,250	245,000	05/17/2023	10/01/2025
37045V-AY-6	General Motors Co-SENIOR UNSECURED	1,2			2.B FE	9,713,600	100.9088	10,090,880	10,000,000	9,787,943	0	37,124	0	0	5.400	5.913	AO	114,000	540,000	12/02/2022	10/15/2029
465685-AR-6	ITC Holdings Corp-SENIOR UNSECURED	1,2			2.B FE	21,763,183	100.1671	21,689,178	21,653,000	21,758,701	0	(4,482)	0	0	4.950	4.750	MS	294,751	0	11/19/2024	09/22/2027
46817M-AL-1	Jackson Financial Inc-SENIOR UNSECURED	1,2			2.B FE	39,478,221	85.1936	36,933,981	43,353,000	40,285,046	0	365,788	0	0	3.125	4.304	MN	143,005	1,354,781	09/23/2022	11/23/2031
46817M-AR-8	Jackson Financial Inc-SENIOR UNSECURED	1,2			2.B FE	27,175,790	100.4437	27,537,654	27,416,000	27,277,059	0	49,896	0	0	5.170	5.038	JD	90,556	1,417,408	07/26/2022	06/08/2027
487836-BP-2	Kellogg Co-SENIOR UNSECURED				2.B FE	8,511,831	98.3558	8,526,460	8,669,000	8,524,753	0	12,922	0	0	3.250	4.632	AO	70,436	0	11/18/2024	04/01/2026
581760-AS-4	McLaren Health Care Corp-SECURED				1.E FE	10,750,000	94.7206	10,182,468	10,750,000	10,749,380	0	5	0	0	4.534	4.534	MN	62,280	487,405	03/18/2015	05/15/2038
59748T-AA-7	MIDLAND COGEN VENTURE-SENIOR SECURED NOT	1			3.A FE	406,889	99.4000	404,448	406,889	406,889	0	0	0	0	6.000	5.990	MS	7,188	24,413	08/17/2011	03/15/2025
78525C-AA-3	S&S Holdings LLC-SECURED	2			4.B FE	3,880,356	100.4699	3,892,205	3,874,000	3,879,977	0	(379)	0	0	8.375	8.375	AO	81,112	0	09/20/2024	10/01/2031
85855C-AD-2	Stellantis Finance US In-SENIOR UNSECURE	1,2			2.A FE	37,118,164	101.3283	39,011,403	38,500,000	37,635,643	0	247,758	0	0	5.625	6.790	JJ	1,016,641	2,165,625	11/15/2022	01/12/2028
863667-AG-6	STRYKER CORP-SR UNSECURED	1,2			2.A FE	5,980,550	84.1582	4,207,912	5,000,000	5,864,171	0	(33,083)	0	0	4.375	3.153	MN	27,951	218,750	04/27/2021	05/15/2044
863667-AQ-4	Stryker Corp-SENIOR UNSECURED	1,2			2.A FE	18,785,100	96.5981	19,319,622	20,000,000	19,083,614	0	257,620	0	0	3.650	5.229	MS	231,167	730,000	11/28/2023	03/07/2028
863667-AY-7	Stryker Corp-SENIOR UNSECURED	1,2			2.A FE	3,611,689	86.2326	3,668,336	4,254,000	3,692,793	0	81,104	0	0	1.950	4.721	JD	3,687	82,953	01/30/2024	06/15/2030
863667-BC-4	Stryker Corp-SENIOR UNSECURED	1,2			2.A FE	5,755,804	100.2596	5,815,059	5,800,000	5,761,443	0	5,639	0	0	4.850	5.037	JD	17,972	281,300	05/07/2024	12/08/2028
863667-BE-0	Stryker Corp-SENIOR UNSECURED	1,2			2.A FE	29,754,400	97.3039	29,191,170	30,000,000	29,762,367	0	7,967	0	0	4.250	4.437	MS	389,583	0	10/28/2024	09/11/2029
896517-AB-5	Trinity Health Corp-SENIOR UNSECURED	1,2			1.D FE	8,225,056	69.5752	5,941,025	8,539,000	8,270,357	0	13,134	0	0	2.632	2.880	JD	18,729	224,746	06/04/2021	12/01/2040
91631*-AB-2	UPPER PENINSULA POWER CO Senior Secured				2.A Z	8,000,000	98.7352	7,898,816	8,000,000	8,000,000	0	0	0	0	5.020	5.021	FIAN	47,969	0	10/08/2024	11/18/2027
N52698-AE-8	Lineage Logistics, LLC Senior Guaranteed				2.B	23,078,250	98.4390	22,921,000	22,500,000	23,285,250	0	0	0	(1,608,750)	3.330	3.330	FA	282,159	818,631	08/15/2022	08/20/2027
05490L-AA-7	Blue Cross and Blue Shie-SENIOR UNSECURE	1,2			2.B FE	2,999,730	99.4669	2,984,006	3,000,000	3,000,000	0	0	0	0	3.790	3.789	MN	18,950	113,700	04/21/2015	05/01/2025
12542R-M#-4	CHS INC SER DD SR NT				2.B	22,500,000	98.5208	22,167,180	22,500,000	22,500,000	0	0	0	0	5.840	5.840	JJ	602,250	0	04/03/2024	07/16/2032
12542R-M#-6	CHS Inc. Senior Unsecured Notes				2.B	20,000,000	100.8504	20,170,080	20,000,000	20,000,000	0	0	0	0	5.680	5.679	JJ	495,422	1,136,000	01/24/2023	01/24/2030
141781-BM-5	Cargill Inc-SENIOR UNSECURED	1,2			1.F FE	2,424,840	87.2873	2,618,618	3,000,000	2,513,485	0	76,409	0	0	2.125	5.707	AO	12,042	63,750	10/30/2023	04/23/2030
229658-AA-3	WAG (Edina, Minnesota) C Trust Certifica				3.A	3,564,280	78.4491	2,768,461	3,528,990	3,547,298	0	(2,988)	0	0	4.590	4.482	MON	20,952	162,099	12/17/2014	07/15/2037
278865-AV-2	Ecolab Inc-SENIOR UNSECURED	1,2			1.G FE	12,202,905	96.8633	12,259,992	12,657,000	12,316,594	0	69,805	0	0	2.700	4.238	MN	56,957	203,823	10/15/2024	11/01/2026
370334-BJ-2	General Mills Inc-SENIOR UNSECURED NOTE				2.B FE	2,654,280	96.9612	1,939,223	2,000,000	2,553,516	0	(27,481)	0	0	5.400	3.128	JD	4,800	108,000	02/25/2021	06/15/2040
440452-AK-6	Hormel Foods Corp-SENIOR UNSECURED	1,2			1.G FE	13,524,403	100.6184	13,411,423	13,329,000	13,507,455	0	(16,948)	0	0	4.800	4.145	MS	161,725	0	10/15/2024	03/30/2027
87612E-BH-8	Target Corp-SENIOR UNSECURED	1,2			1.F FE	13,126,350	94.9014	13,513,965	14,240,000	13,327,709	0	176,149	0	0	3.375	5.052	AO	101,460	480,600	02/29/2024	04/15/2029
87612E-BP-0	Target Corp-SENIOR UNSECURED	1,2			1.F FE	12,134,130	96.7290	12,163,668	12,575,000	12,163,856	0	29,726	0	0	4.500	5.015	MS	166,619	282,938	04/23/2024	09/15/2032
91159H-JB-7	US Bancorp-SUBORDINATED	2			1.G FE	4,475,929	81.0244	3,852,711	4,755,000	4,520,535	0	16,281	0	0	2.491	2.988	MN	19,083	118,447	03/04/2022	11/03/2036
91159H-JB-8	US Bancorp-SENIOR UNSECURED	1,2			1.G FE	10,077,481	99.2273	10,478,399	10,560,000	10,242,897	0	78,575	0	0	4.548	5.487	JJ	212,119	480,269	07/14/2021	07/22/2028
91324P-CV-2	UnitedHealth Group Inc-SENIOR UNSECURED				1.F FE	7,708,191	98.5350	7,982,320	8,101,000	7,916,725	0	144,234	0	0	3.100	5.064	MS	73,944	251,131	10/24/2023	03/15/2026
91324P-DE-9	UnitedHealth Group Inc-SENIOR UNSECURED				1.F FE	13,634,561	95.6861	13,622,827	14,237,000	13,691,560	0	56,998	0	0	2.950	4.424	AO	88,665	140,863	11/18/2024	10/15/2027
91324P-DL-3	UnitedHealth Group Inc-SENIOR UNSECURED	1,2			1.F FE	8,846,064	80.1152	6,497,344	8,110,000	8,796,002	0	(18,711)	0	0	4.250	3.700	JD	15,319	344,675	03/17/2022	06/15/2048
91324P-DS-8	UnitedHealth Group Inc-SENIOR UNSECURED				1.F FE	4,293,326	91.8476	4,542,783	4,946,000	4,409,825	0	99,122	0	0	2.875	5.566	FA	53,719	142,198	10/24/2023	08/15/2029
91324P-DX-7	UnitedHealth Group Inc-SENIOR UNSECURED				1.F FE	17,579,200	86.1032	17,220,632	20,000,000	17,730,092	0	150,892	0	0	2.000	4.394	MN	51,111	200,000	08/02/2024	05/15/2030
91324P-EE-8	UnitedHealth Group Inc-SENIOR UNSECURED	1,2			1.F FE	45,530,700	72.1816	32,481,711	45,000,000	45,450,329	0	(22,560)	0	0	3.050	2.866	MN	175,375	1,372,500	06/09/2021	05/15/2041
91324P-EU-2	UnitedHealth Group Inc-SENIOR UNSECURED	1,2			1.F FE	3,022,063	97.9774	3,100,004	3,164,000	3,050,362	0	24,638	0	0	4.250	5.248	JJ	62,006	134,470	11/06/2023	01/15/2029
98389B-AY-6	Xcel Energy Inc-SENIOR UNSECURED	1,2			2.A FE	15,794,679	91.8739	16,405,011	17,856,000	16,157,774	0	262,848	0	0	3.400	5.451	JD	50,592	607,104	08/07/2023	06/01/2030
03523T-BU-1	Anheuser-Busch InBev Wor-SENIOR UNSECURE	1,2			1.G FE	24,992,149	100.1355	19,228,054	19,222,000	24,044,508	0	(281,291)	0	0	5.450	3.159	JJ	459,780	1,047,599	07/14/2021	01/23/2039
120568-AX-8	BUNGE LTD FINANCE CORP-SENIOR UNSECURED	1,2			2.A FE	5,800,985	97.6519	5,989,965	6,134,000	5,957,964	0	101,412	0	0	3.250	5.114	FA	75,312	199,355	06/02/2023	08/15/2026
120568-AZ-3	Bunge Ltd Finance Corp-SENIOR UNSECURED	1,2			2.A FE	2,662,960	97.3650	2,773,929	2,849,000	2,720,133	0	42,469	0	0	3.750	5.554	MS	28,490	106,838	08/17/2023	09/25/2027
120568-BC-3	Bunge Ltd Finance Corp-SENIOR UNSECURED	1,2			2.A FE	4,504,800	86.4181	4,550,777	5,266,000	4,693,419	0	75,327	0	0	2.750	4.748	MN	18,906	144,815	05/23/2022	05/14/2031
1248EP-BT-9	CCO HLDGS LLC/CAP CORP-SENIOR UNSECURED	1,5			3.C FE	1,004,480	98.2660	982,660	1,000,000	1,000,442	0	(1,486)	0	0	5.125	4.968	MN	8,542	51,250	02/24/2022	05/01/2027
1248EP-CN-1	CCO Holdings LLC / CCO H-SENIOR UNSECURE	1,2			3.C FE	389,122	86.0000	440,320	512,000	409,993	0	9,823	0	0	4.500	8.162	MN	3,840	23,040	10/20/2022	05/01/2032
1248EP-CQ-4	CCO Holdings LLC / CCO H-SENIOR UNSECURE	1,2			3.C FE	2,748,750	87.6688	2,630,063	3,000,000	2,805,927	0	21,514	0	0	4.750	5.879	FA	59,375	142,500	03/15/2022	02/01/2032

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
15135B-AT-8	Centene Corp-SENIOR UNSECURED			1,2	2.C FE	3,003,750	94.6565	2,839,694	3,000,000	3,002,073	0	(651)	0	0	4.625	4.599	JD	6,167	138,750	03/22/2022	12/15/2029
26882P-BE-1	ERAC USA FINANCE LLC-UNSECURED SENIOR NO			5	1.G FE	29,278,073	112.8301	21,992,843	19,492,000	27,630,131	0	(514,444)	0	0	7.000	3.034	AO	288,048	1,364,440	01/21/2022	10/15/2037
26884T-AE-2	ERAC USA FINANCE LLC-SENIOR UNSECURED				1.G FE	2,791,660	98.9933	1,979,865	2,000,000	2,691,187	0	(30,214)	0	0	5.625	3.032	MS	33,125	112,500	07/15/2021	03/15/2042
26884T-AN-2	ERAC USA FINANCE LLC-SR UNSECURED			1,2	1.G FE	10,979,799	85.2195	7,512,952	8,816,000	10,742,999	0	(71,112)	0	0	4.500	3.016	FA	149,872	396,720	07/14/2021	02/15/2045
26884T-AP-7	ERAC USA Finance LLC-SENIOR UNSECURED			1,2	1.G FE	6,178,917	99.3175	6,088,161	6,130,000	6,139,151	0	(15,211)	0	0	3.800	3.540	MN	38,823	232,940	04/25/2022	11/01/2025
26884T-AS-1	ERAC USA Finance LLC-SENIOR UNSECURED			1,5	1.G FE	21,748,938	81.2939	14,624,778	17,990,000	21,375,563	0	(112,121)	0	0	4.200	2.998	MN	125,930	755,580	07/15/2021	11/01/2046
26884T-AV-4	ERAC USA Finance LLC-SENIOR UNSECURED			1,2	1.G FE	9,962,500	99.3807	9,938,073	10,000,000	9,973,458	0	7,036	0	0	4.600	4.685	MN	76,667	460,000	04/26/2023	05/01/2028
29272W-AF-6	Energizer Holdings Inc-SENIOR UNSECURED			1,2	4.B FE	2,319,000	100.3097	2,326,182	2,319,000	2,319,000	0	0	0	0	6.500	6.503	JD	75,786	150,735	03/03/2022	12/31/2027
390905-AC-1	Great Southern Bank-SUBORDINATED			2	2.C FE	8,000,000	96.6390	7,731,120	8,000,000	8,000,000	0	0	0	0	5.500	5.500	JD	19,556	440,000	06/10/2020	06/15/2030
485170-AS-3	Kansas City Southern-SENIOR UNSECURED			1,2	2.A FE	33,357,582	84.2386	22,926,386	27,216,000	32,686,409	0	(183,789)	0	0	4.950	3.544	FA	508,939	1,347,192	02/26/2021	08/15/2045
67103H-AG-2	O'Reilly Automotive Inc-SENIOR UNSECURED			1,2	2.B FE	14,767,500	98.2960	14,744,397	15,000,000	14,834,679	0	43,424	0	0	4.350	4.702	JD	54,375	652,500	08/07/2023	06/01/2028
67103H-AH-0	O'Reilly Automotive Inc-SENIOR UNSECURED			1,2	2.B FE	12,454,116	95.7829	12,205,609	12,743,000	12,476,331	0	22,214	0	0	3.900	4.426	JD	41,415	248,489	08/02/2024	06/01/2029
67103H-AJ-6	O'Reilly Automotive Inc-SENIOR UNSECURED			1,2	2.A FE	4,997,950	96.2210	4,811,049	5,000,000	4,998,745	0	164	0	0	4.200	4.204	AO	52,500	210,000	03/25/2020	04/01/2030
67103H-AK-3	O'Reilly Automotive Inc-SENIOR UNSECURED			1,2	2.B FE	7,472,739	82.0465	6,809,860	8,300,000	7,707,140	0	85,616	0	0	1.750	3.021	MS	42,768	145,250	03/04/2022	03/15/2031
67103H-AM-9	O'Reilly Automotive Inc-SENIOR UNSECURED			1,2	2.B FE	6,058,212	101.7311	6,165,921	6,061,000	6,058,758	0	883	0	0	5.750	5.767	MN	39,691	348,508	11/13/2023	11/20/2026
759351-AN-9	Reinsurance Group of Ame-SENIOR UNSECURE			1,2	2.A FE	7,775,339	95.5353	8,338,319	8,728,000	7,953,944	0	149,548	0	0	3.900	6.248	MN	43,495	340,392	10/16/2023	05/15/2029
784710-AA-3	SSM Health Care Corp-SENIOR UNSECURED			1,2	1.E FE	6,589,478	98.0802	6,644,930	6,775,000	6,613,261	0	23,783	0	0	3.823	4.880	JD	21,584	186,849	11/18/2024	06/01/2027
902788-AA-6	UMB Financial Corp-SUBORDINATED			2	2.B FE	14,000,000	97.3000	13,622,000	14,000,000	14,000,000	0	0	0	0	3.700	3.700	MS	149,644	518,000	09/14/2020	09/17/2030
318916-AB-9	First Bancshares Inc/The-SUBORDINATED			2	2.C FE	2,000,000	96.3426	1,926,852	2,000,000	1,999,875	0	18	0	0	6.400	6.401	FMAN	21,333	128,000	04/24/2018	05/01/2033
75970E-AD-9	Renasant Corp-SUBORDINATED			2	2.B FE	7,250,000	87.0370	6,310,183	7,250,000	7,250,000	0	0	0	0	4.500	4.500	MS	96,063	326,250	08/31/2020	09/15/2035
75970E-AE-7	Renasant Corp-SUBORDINATED			2	2.B FE	11,625,000	88.0000	10,230,000	11,625,000	11,625,000	0	0	0	0	3.000	3.000	JD	29,063	348,750	11/17/2021	12/01/2031
898402-AA-0	Trustmark Corp-SUBORDINATED			2	2.C FE	4,000,000	97.3599	3,894,395	4,000,000	4,000,000	0	0	0	0	3.625	3.625	JD	12,083	145,000	11/18/2020	12/01/2030
32055Y-AA-0	First Interstate BancSys-SUBORDINATED			2	2.B FE	8,000,000	98.8000	7,904,000	8,000,000	8,000,000	0	0	0	0	5.250	5.250	MN	53,667	420,000	05/13/2020	05/15/2030
00751Y-AE-6	Advance Auto Parts Inc-SENIOR UNSECURED			1,2	3.A FE	4,683,050	89.2050	4,460,250	5,000,000	4,770,191	0	37,176	0	0	3.900	4.896	AO	41,167	195,000	07/26/2022	04/15/2030
06051G-FM-6	Bank of America Corp-SUBORDINATED				2.A FE	10,580,300	99.9224	9,992,241	10,000,000	10,011,545	0	(197,591)	0	0	4.000	1.992	JJ	176,667	400,000	01/21/2022	01/22/2025
06051G-GL-7	Bank of America Corp-SENIOR UNSECURED			1,2	1.G FE	3,000,000	97.4197	2,922,590	3,000,000	3,000,000	0	0	0	0	3.705	3.705	AO	20,686	111,150	04/19/2017	04/24/2028
06051G-HD-4	Bank of America Corp-SENIOR UNSECURED			1,2	1.E FE	17,036,766	95.9073	16,453,855	17,156,000	17,108,190	0	11,009	0	0	3.419	3.495	JD	17,923	586,564	12/20/2017	12/20/2028
06051G-KK-4	Bank of America Corp-SENIOR UNSECURED			1,2	1.G FE	9,653,900	86.0088	8,600,876	10,000,000	9,732,055	0	28,365	0	0	2.972	3.353	FA	121,357	297,200	02/24/2022	02/04/2033
06051G-KL-2	Bank of America Corp-SUBORDINATED			1,2	2.A FE	36,745,000	88.6649	32,579,932	36,745,000	36,745,000	0	0	0	0	3.846	3.846	MS	443,592	1,413,213	03/03/2022	03/08/2037
07330M-AA-5	Branch Banking & Trust C-SUBORDINATED			2	1.G FE	4,967,800	98.1331	4,906,655	5,000,000	4,967,739	0	1,066	0	0	3.800	3.824	AO	32,194	190,000	09/22/2014	10/30/2026
10922N-AF-0	Brighthouse Financial In-SENIOR UNSECURE			1,2	2.B FE	8,469,040	78.1507	5,861,304	7,500,000	8,391,188	0	(25,295)	0	0	4.700	3.891	JD	8,813	352,500	10/07/2021	06/22/2047
10922N-AG-8	Brighthouse Financial In-SENIOR UNSECURE			1,2	2.B FE	26,605,160	102.1005	23,819,035	23,329,000	25,466,129	0	(379,545)	0	0	5.625	3.205	MN	167,678	1,312,256	02/25/2022	05/15/2030
10922N-AH-6	Brighthouse Financial In-SENIOR UNSECURE			1,2	2.B FE	2,248,416	64.9438	2,279,501	2,757,000	2,720,940	0	8,321	0	0	3.850	5.054	JD	2,654	106,145	03/10/2022	12/22/2051
16877H-AA-0	Childress Klien-Cambridg Senior Secured				1.A	10,690,268	92.1315	9,836,790	10,676,902	10,684,756	0	(1,238)	0	0	3.652	3.644	MON	395,969	98,174	01/05/2017	01/05/2036
16877H-AB-8	Childress Klein-Cambridg Senior Secured				1.A	16,157,396	98.3149	15,888,200	16,160,521	16,158,398	0	134	0	0	5.438	5.440	MON	63,470	878,809	01/05/2017	01/05/2036
18972E-AA-1	Clydesdale Acquisition H-SENIOR UNSECURE			1,2	5.B FE	3,432,826	101.2063	3,701,113	3,657,000	3,489,600	0	23,003	0	0	8.750	9.875	AO	67,553	319,988	03/30/2022	04/15/2030
21925D-AB-5	Cornerstone Building Bra-SECURED			1,2	4.B FE	2,187,000	97.0025	2,121,445	2,187,000	2,187,000	0	0	0	0	9.500	9.499	FA	83,106	0	07/31/2024	08/15/2029
26441C-AS-4	Duke Energy Corp-SENIOR UNSECURED			1,2	2.B FE	12,535,009	96.8346	13,062,988	13,490,000	12,958,078	0	297,903	0	0	2.650	5.147	MS	119,162	357,485	08/08/2023	09/01/2026
337358-BH-7	Wachovia Corp-SUBORDINATED				2.B FE	5,506,250	104.1535	5,207,675	5,0,												

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
548661-EH-6	Lowe's Cos Inc-SENIOR UNSECURED			1,2	2.A FE	19,735,970	.91.6236	19,240,946	21,000,000	20,017,612	.0	112,111	.0	.0	3.750	4.513	AO	196,875	787,500	05/23/2022	04/01/2032
548661-EP-8	Lowe's Cos Inc-SENIOR UNSECURED			1,2	2.A FE	9,864,200	100.1752	10,017,515	10,000,000	9,921,749	.0	48,564	.0	.0	4.800	5.449	AO	120,000	360,000	06/25/2024	04/01/2026
720186-AJ-4	Piedmont Natural Gas Co -SENIOR UNSECURE			1,2	2.A FE	4,996,750	.99.0781	4,953,907	5,000,000	4,999,631	.0	277	.0	.0	3.600	3.606	MS	60,000	180,000	09/09/2015	09/01/2025
743263-AE-5	Progress Energy Inc-SR UNSECURED				2.B FE	15,644,314	113.0169	14,692,191	13,000,000	15,010,436	.0	(275,501)	.0	.0	7.750	4.812	MS	335,833	1,007,500	01/10/2023	03/01/2031
835456-BD-3	Sonic Automotive Inc-SENIOR UNSECURED			1,2	3.C FE	4,412,000	.91.9090	4,146,934	4,512,000	4,442,763	.0	11,791	.0	.0	4.625	4.623	MM	26,665	208,680	10/15/2021	11/15/2029
835456-BE-1	Sonic Automotive Inc-SENIOR UNSECURED			1,2	3.C FE	1,965,000	.89.7230	1,763,057	1,965,000	1,965,000	.0	.0	.0	.0	4.875	4.873	MM	12,240	95,794	10/15/2021	11/15/2031
873050-BH-3	TTX Co-UNSECURED				1.F FE	5,458,300	102.8199	5,140,993	5,000,000	5,142,194	.0	(26,537)	.0	.0	7.070	6.333	JJ	29,458	353,500	06/30/2004	07/01/2029
946898-AQ-4	WBI Energy Transmission, Senior Unsecure				2.C	15,000,000	.75.0489	11,257,335	15,000,000	15,000,000	.0	.0	.0	.0	3.670	3.670	JD	12,233	825,750	12/23/2021	12/23/2041
229738-AA-3	Great West Casualty Comp Trust Certifica				1.C PL	13,055,958	.90.1872	11,735,387	13,012,254	13,042,618	.0	(3,054)	.0	.0	4.620	4.585	MON	400,278	650,626	06/15/2017	12/15/2037
335720-AB-4	First National of Nebras-SUBORDINATED			2	2.B FE	16,000,000	.93.3000	14,928,000	16,000,000	16,000,000	.0	.0	.0	.0	6.455	6.453	JAJO	263,936	1,171,271	03/13/2018	04/01/2028
907818-EY-0	Union Pacific Corp-SENIOR UNSECURED			1,2	1.G FE	14,794,381	.97.3463	14,601,944	15,000,000	14,853,671	.0	35,708	.0	.0	3.950	4.237	MS	182,688	592,500	04/20/2023	09/10/2028
449148-AB-7	Hypertherm, Inc. Senior Secured Notes				2.C PL	4,190,068	.85.5999	3,586,694	4,190,068	4,190,068	.0	.0	.0	.0	3.190	3.190	MJSD	33,787	133,663	12/30/2021	12/30/2031
449148-AC-5	Hypertherm, Inc. Senior Secured Notes				2.C PL	5,447,088	.83.3603	4,540,709	5,447,088	5,447,088	.0	.0	.0	.0	3.380	3.380	MJSD	46,539	184,112	12/30/2021	12/30/2033
449148-AD-3	Hypertherm, Inc. Senior Secured Notes				2.C PL	2,514,041	.79.7594	2,005,184	2,514,041	2,514,041	.0	.0	.0	.0	3.610	3.610	MJSD	22,941	90,757	12/30/2021	12/30/2036
449148-AE-1	Hypertherm, Inc. Senior Secured Note Ser				2.C PL	8,380,136	.79.7594	6,683,946	8,380,136	8,380,136	.0	.0	.0	.0	3.610	3.610	MJSD	76,471	302,523	01/26/2022	12/30/2036
449148-AQ-4	HYPERTHERM INC Senior Secured Notes				2.B Z	5,000,000	.97.3220	4,866,100	5,000,000	5,000,000	.0	.0	.0	.0	6.280	6.276	MM	48,844	.0	10/25/2024	11/05/2034
053015-AH-6	Automatic Data Processin-SENIOR UNSECURE			1,2	1.D FE	9,964,100	.95.2428	9,524,277	10,000,000	9,964,411	.0	311	.0	.0	4.450	4.495	MS	138,444	.0	09/04/2024	09/09/2034
05565E-BE-4	BMW US Capital LLC-SENIOR UNSECURED			1,2	1.F FE	13,907,335	.96.4407	13,813,194	14,323,000	14,030,065	.0	72,675	.0	.0	3.950	4.568	FA	215,303	565,759	05/16/2023	08/14/2028
05565E-CE-3	BMW US Capital LLC-SENIOR UNSECURED			1,2	1.F FE	9,842,787	100.1186	10,011,855	10,000,000	9,881,308	.0	28,875	.0	.0	5.050	5.414	FA	196,389	505,000	08/17/2023	08/11/2028
05565E-CJ-2	BMW US Capital LLC-SENIOR UNSECURED			1,2	1.F FE	10,014,400	.99.2499	9,924,994	10,000,000	10,011,726	.0	(2,674)	.0	.0	4.900	4.867	AO	121,139	245,000	03/27/2024	04/02/2029
075887-BG-3	BECTON DICKINSON & CO-SR UNSECURED			1,2	2.B FE	24,362,619	.86.6941	17,053,592	19,671,000	23,825,637	.0	(152,047)	.0	.0	4.685	3.215	JD	40,959	921,586	08/03/2021	12/15/2044
075887-CR-8	Becton Dickinson & Co-SENIOR UNSECURED			1,2	2.B FE	9,910,200	.99.7551	9,975,505	10,000,000	9,924,038	.0	13,838	.0	.0	4.874	5.080	FA	193,606	243,700	02/13/2024	02/08/2029
171232-AQ-4	CHUBB CORP-SR UNSECURED				1.F FE	15,111,498	106.3051	12,118,786	11,400,000	14,553,442	.0	(204,195)	.0	.0	6.000	3.262	MM	95,000	684,000	03/04/2022	05/11/2037
171340-AN-2	CHURCH & DWIGHT CO INC-SENIOR UNSECURED			1,5	2.A FE	12,242,856	.96.7008	12,377,704	12,800,000	12,309,436	.0	66,580	.0	.0	3.150	4.743	FA	168,000	157,500	11/18/2024	08/01/2027
17136M-AA-0	Church & Dwight Co Inc-SENIOR UNSECURED			1,2	2.A FE	57,227,285	.83.7584	57,417,248	68,551,000	58,016,561	.0	749,145	.0	.0	2.300	4.937	JD	70,074	1,179,302	12/13/2024	12/15/2031
233835-AQ-0	DAIMLER FINANCE NA LLC-SR UNSECURED				1.F FE	17,719,680	116.9817	14,037,800	12,000,000	14,758,189	.0	(393,574)	.0	.0	8.500	4.161	JJ	461,833	1,020,000	03/10/2016	01/18/2031
478160-BJ-2	Johnson & Johnson-SR UNSECURED	.SD.		1,2	1.A FE	397,732	.96.7793	387,117	400,000	398,761	.0	110	.0	.0	4.375	4.417	JD	3,530	20,058	12/02/2013	12/05/2033
49177J-AF-9	Kenvue Inc-SENIOR UNSECURED			1,2	1.F FE	26,674,293	101.1639	26,302,619	26,000,000	26,499,602	.0	(145,486)	.0	.0	5.050	4.387	MS	361,075	1,313,000	10/19/2023	03/22/2028
58769J-AB-3	Mercedes-Benz Finance No-SENIOR UNSECURE				1.F FE	12,337,470	100.7866	12,391,706	12,295,000	12,307,868	.0	(14,275)	.0	.0	5.375	5.249	MM	64,250	660,856	11/29/2022	11/26/2025
58769J-AB-4	Mercedes-Benz Finance No-SENIOR UNSECURE				1.F FE	3,589,938	100.1467	3,555,208	3,550,000	3,567,489	.0	(13,531)	.0	.0	4.800	4.384	MS	43,073	170,400	04/26/2023	03/30/2026
58769J-AG-2	Mercedes-Benz Finance No-SENIOR UNSECURE				1.F FE	9,986,400	.99.2792	9,927,923	10,000,000	9,990,087	.0	2,557	.0	.0	4.800	4.831	MS	121,333	480,000	03/27/2023	03/30/2028
58769J-AR-8	Mercedes-Benz Finance No-SENIOR UNSECURE				1.F FE	3,329,034	.99.2045	3,306,485	3,333,000	3,329,681	.0	647	.0	.0	4.850	4.877	JJ	76,335	80,825	01/08/2024	01/11/2029
675234-AB-4	OceanFirst Financial Cor-SUBORDINATED			2	2.C FE	10,000,000	.98.5000	9,850,000	10,000,000	10,000,000	.0	.0	.0	.0	5.250	5.250	MM	67,083	525,000	04/29/2020	05/15/2030
744320-AY-8	Prudential Financial Inc-SENIOR UNSECURE			1,2	1.G FE	51,293,135	.76.6332	39,089,042	51,008,000	50,587,860	.0	(6,800)	.0	.0	3.905	3.873	JD	132,791	1,991,862	12/07/2017	12/07/2047
744320-BS-3	Prudential Financial Inc-SENIOR UNSECURE				1.G FE	2,058,642	.98.7406	1,777,330	1,800,000	2,002,951	.0	(8,146)	.0	.0	5.625	4.634	MM	13,781	101,250	12/15/2016	05/12/2041
744320-AZ-3	PRUDENTIAL FINANCIAL INC-SR UNSECURED				1.G FE	1,828,665	.99.5214	1,558,506	1,566,000	1,774,124	.0	(7,978)	.0	.0	5.800	4.654	MM	90,828	90,828	12/15/2016	11/16/2041
744573-AV-8	Public Service Enterpris-SENIOR UNSECURE			1,2	2.B FE	10,242,612	102.9021	10,393,108	10,100,000	10,216,334	.0	(26,278)	.0	.0	5.850	5.399	MM	75,498	590,850	04/24/2024	11/15/2027
784030-AT-7	SBA Tower Trust-SBATOW 1.631 11/15/26			2	1.F FE	6,323,800	.93.3049	6,531,345	7,000,000	6,487,745	.0	163,945	.0	.0	1.631	5.764	MON	5,074	76,430	05/07/2024	11/15/2026
784030-AZ-3	SBA Tower Trust-SECURED			2	1.F FE	4,000,000	102.2500	4,090,000	4,000,000	4,000,000	.0	.0	.0	.0	6.599	6.599	MON	11,732	264,693	11/15/2022	01/15/2028
838518-HH-8	South Jersey Industries Senior Note Seri				2.B	10,455,000	100.2535	10,481,503	10,455,000	10,455,000	.0	.0	.0	.0	6.080	6.080	FA	257,797	639,195	08/03/2023	08/03/2028
838518-J*-0	South Jersey Industries Senior Note Seri				2.B	8,182,000	.99.7885	8,164,695	8,182,000	8,182,000	.0	.0	.0	.0	6.160	6.160	FA	204,405	506,811	08/03/2023	08/03/2030
904764-BS-5	Unilever Capital Corp-SENIOR UNSECURED			1,2	1.E FE	2,936,940	100.8088	2,902,264	3,000,000	2,951,030	.0	11,663	.0	.0	4.875	5.367	MS	45,966	146,250	10/06/2023	09/08/2028
919794-AC-1	Valley National Bancorp-SUBORDINATED				2.C FE	14,993,700	.98.8152	14,822,286	15,000,000	14,999,615	.0	708	.0	.0	4.550	4.555	JD	1,896	1,023,750	06/16/2015	06/30/2025
919794-AG-2	Valley National Bancorp-SUBORDINATED			2	2.B FE	30,000,000	.90.8000	27,240,000	30,000,000	30,000,000	.0	.0	.0	.0	6.250	6.250	MS	473,958	1,875,000	09/15/2022	09/30/2032
98978V-AL-7	Zoetis Inc-SENIOR UNSECURED			1,2	2.A FE	28,377,000	.95.8238	28,747,140	30,000,000	28,582,194	.0	205,194	.0	.0	3.000	4.890	MS	272,500	450,000	07/26/2024	09/12/2027

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
882384-AA-7	Texas Eastern Transmissi Senior Unsecur				.. 1.G PL	20,000,000	104.4085	20,881,700	20,000,000	20,000,000	0	0	0	0	...6.200	...6.200	JD	86,111	1,860,000	12/06/2022	12/06/2032 ...
55608J-AN-8	Macquarie Group Ltd-SENIOR UNSECURED	D.....	2 .....	.....	.. 1.F FE	3,586,389	98.2338	3,893,986	3,964,000	3,696,394	0	53,166	0	0	...4.654	...6.499	MS	48,171	184,485	11/04/2022	03/27/2029 ...
55608J-AX-6	Macquarie Group Ltd-SENIOR UNSECURED	D.....	2 .....	.....	.. 1.F FE	24,599,846	93.2748	27,755,788	29,757,000	26,465,757	0	886,841	0	0	...1.935	...5.670	AO	123,157	575,798	11/15/2022	04/14/2028 ...
55608X-AB-3	Macquarie Bank Ltd-SUBORDINATED	D.....	.....	.....	.. 2.A FE	9,970,250	99.8136	9,981,355	10,000,000	9,998,118	0	3,451	0	0	...4.875	...4.912	JD	28,438	487,500	06/03/2015	06/10/2025 ...
62878U-2F-8	NBN Co Ltd-SENIOR UNSECURED	D.....	1,2 .....	.....	.. 1.D FE	21,865,492	102.8261	22,253,629	21,642,000	21,817,019	0	(42,050)	0	0	...5.750	...5.503	AO	293,820	1,244,415	11/20/2023	10/06/2028 ...
62878U-2H-4	NBN Co Ltd-SENIOR UNSECURED	D.....	1,2 .....	.....	.. 1.D FE	2,894,577	98.1062	2,845,080	2,900,000	2,894,858	0	281	0	0	...4.000	...4.067	AO	29,000	0	09/24/2024	10/01/2027 ...
62878U-2J-0	NBN Co Ltd-SENIOR UNSECURED	D.....	1,2 .....	.....	.. 1.D FE	2,899,478	97.0753	2,815,183	2,900,000	2,899,339	0	(139)	0	0	...4.250	...4.254	AO	30,813	0	09/24/2024	10/01/2029 ...
00726L-AC-0	Adomni Inc-FIRST LIEN				.. 1.E PL	15,500,000	99.7500	15,461,250	15,500,000	15,500,000	0	0	0	0	...9.000	...9.000	MON	62,000	1,395,000	08/15/2023	02/15/2027 ...
24422E-TW-9	John Deere Capital Corp				.. 1.F FE	13,604,000	95.8656	13,638,795	14,227,000	13,627,854	0	23,854	0	0	...2.800	...4.480	MS	125,040	0	11/19/2024	09/08/2027 ...
24422E-VB-2	John Deere Capital Corp-SENIOR UNSECURED				.. 1.E FE	4,226,890	96.3582	4,259,033	4,420,000	4,341,532	0	44,012	0	0	...2.250	...3.330	MS	29,559	99,450	04/25/2022	09/14/2026 ...
24422E-VK-2	John Deere Capital Corp-SENIOR UNSECURED				.. 1.E FE	2,706,867	96.2362	2,921,730	3,036,000	2,921,417	0	105,438	0	0	...0.700	...4.458	JJ	9,800	21,252	11/29/2022	01/15/2026 ...
24422E-WA-3	John Deere Capital Corp-SENIOR UNSECURED				.. 1.E FE	8,896,700	94.5042	9,450,420	10,000,000	9,289,300	0	322,938	0	0	...1.700	...5.449	JJ	80,278	170,000	10/06/2023	01/11/2027 ...
24422E-WN-5	John Deere Capital Corp-SENIOR UNSECURED				.. 1.E FE	3,969,927	100.4113	3,916,040	3,900,000	3,954,102	0	(9,981)	0	0	...4.850	...4.522	AO	42,033	189,150	05/23/2023	10/11/2029 ...
24422E-WR-6	John Deere Capital Corp-SENIOR UNSECURED				.. 1.E FE	12,535,201	100.4835	12,390,618	12,331,000	12,467,414	0	(41,010)	0	0	...4.750	...4.358	JJ	261,948	585,723	04/19/2023	01/20/2028 ...
24422E-WZ-8	John Deere Capital Corp-SENIOR UNSECURED				.. 1.E FE	18,989,360	99.5836	18,920,875	19,000,000	18,991,416	0	1,267	0	0	...4.700	...4.709	JD	52,092	893,000	07/31/2023	06/10/2030 ...
517834-AE-7	Las Vegas Sands Corp-SENIOR UNSECURED		1,2 .....	.....	.. 2.C FE	10,035,600	97.5424	9,754,242	10,000,000	10,006,751	0	(4,891)	0	0	...3.500	...3.568	FA	129,306	350,000	07/29/2019	08/18/2026 ...
004238-AB-3	ACADIA REALTY TRUST Senior Note				.. 2.B PL	20,000,000	100.7159	20,143,180	20,000,000	20,000,000	0	0	0	0	...5.940	...5.940	FA	429,000	0	05/28/2024	08/21/2029 ...
025816-DN-6	American Express Co-SENIOR UNSECURED		2 .....	.....	.. 1.F FE	5,335,250	106.7816	5,339,078	5,000,000	5,297,746	0	(37,504)	0	0	...6.489	...5.287	AO	54,976	229,819	02/13/2024	10/30/2031 ...
026874-AZ-0	AMERICAN INTL GROUP-NOTE				.. 2.B FE	8,155,668	105.9856	6,308,261	5,952,000	7,716,925	0	(128,013)	0	0	...6.250	...3.123	MN	62,000	372,000	06/03/2021	05/01/2036 ...
026874-DA-2	AMERICAN INTL GROUP-SR UNSECURED		1,2 .....	.....	.. 2.B FE	19,705,529	85.7958	13,401,310	15,620,000	19,243,012	0	(140,747)	0	0	...4.500	...2.905	JJ	322,163	702,900	08/04/2021	07/16/2044 ...
03524B-AF-3	ANHEUSER-BUSCH INBEV FIN-SR UNSECURED				.. 1.G FE	25,410,576	89.1219	18,778,876	21,071,000	24,390,292	0	(143,329)	0	0	...4.625	...3.320	FA	406,056	974,534	07/16/2021	02/01/2044 ...
03761U-AG-1	Apollo Investment Corp-SENIOR UNSECURED				.. 2.C FE	2,228,468	99.8083	2,245,686	2,250,000	2,249,364	0	2,583	0	0	...5.250	...5.371	MS	38,719	118,125	02/24/2015	03/03/2025 ...
038923-AW-8	Arbor Realty Trust Inc-SENIOR UNSECURED		1,2 .....	.....	.. 1.F PL	7,500,000	95.0000	7,125,000	7,500,000	7,500,000	0	0	0	0	...5.000	...4.998	AO	63,542	375,000	04/30/2021	04/30/2026 ...
03939C-AA-1	ARCH CAPITAL FINANCE LLC-SENIOR UNSECURE		1,2 .....	.....	.. 1.G FE	8,098,286	98.7927	8,407,259	8,510,000	8,256,928	0	119,072	0	0	...4.011	...5.637	JD	15,170	341,336	08/24/2023	12/15/2026 ...
03939C-AB-9	ARCH CAPITAL FINANCE LLC-SENIOR UNSECURE		1,2 .....	.....	.. 1.G FE	27,746,940	89.6143	18,750,890	20,924,000	27,110,642	0	(199,928)	0	0	...5.031	...3.128	JD	46,786	1,052,686	10/07/2021	12/15/2046 ...
04010L-BB-8	Ares Capital Corp-SENIOR UNSECURED		1,2 .....	.....	.. 2.B FE	10,175,400	91.9377	9,193,771	10,000,000	10,092,296	0	(26,517)	0	0	...2.875	...2.581	JD	12,778	287,500	10/05/2021	06/15/2028 ...
04010L-BF-9	Ares Capital Corp-SENIOR UNSECURED		1,2 .....	.....	.. 2.B FE	24,161,552	100.8378	24,569,130	24,365,000	24,194,309	0	32,757	0	0	...5.875	...6.065	MS	477,148	866,819	01/16/2024	03/01/2029 ...
054561-AJ-4	AXA Equitable Holdings I-SENIOR UNSECURE		1,2 .....	.....	.. 2.A FE	3,763,306	97.9456	3,880,604	3,962,000	3,834,061	0	34,405	0	0	...4.350	...5.429	AO	33,991	172,347	11/15/2022	04/20/2028 ...
054561-AN-5	EQUITABLE HOLDINGS INC				.. 2.A FE	26,469,260	97.3574	26,286,485	27,000,000	26,646,916	0	75,149	0	0	...4.572	...4.925	FA	466,344	1,234,440	07/22/2022	02/15/2029 ...
05541T-AG-6	BGC Partners Inc-SENIOR UNSECURED		1,2 .....	.....	.. 2.C	4,397,162	98.2702	4,323,889	4,400,000	4,398,542	0	1,380	0	0	...4.375	...4.409	JD	8,556	192,500	01/30/2024	12/15/2025 ...
09256B-AK-3	BLACKSTONE HOLDINGS FINA-SENIOR UNSECURE		1,2 .....	.....	.. 1.E FE	6,268,970	76.7667	4,107,020	5,350,000	6,187,398	0	(26,053)	0	0	...4.000	...3.028	AO	52,906	214,000	10/04/2021	10/02/2047 ...
09260M-AA-5	Blackstone Diversified A-SECURED				.. 1.F FE	20,489,000	96.2580	19,722,302	20,489,000	20,489,000	0	0	0	0	...5.250	...5.249	MN	137,447	1,075,673	05/21/2019	05/15/2029 ...
09260M-AC-1	Blackstone Diversified A-SECURED				.. 2.B FE	6,139,000	98.9210	6,072,760	6,139,000	6,139,000	0	0	0	0	...6.250	...6.248	MN	49,027	383,688	05/21/2019	05/15/2029 ...
09261H-A#-4	Blackstone Private Credi Senior Unsecur				.. 2.C FE	28,377,000	98.8789	28,058,865	28,377,000	28,377,000	0	0	0	0	...5.610	...5.610	MN	1,848,430	795,975	05/03/2022	05/03/2027 ...
09261H-A#-6	Blackstone Private Credi Senior Unsecur				..																

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
110122-DQ-8	Bristol-Myers Squibb Co-SENIOR UNSECURED	1,2			1.F FE	16,849,400	.82.8529	16,570,582	20,000,000	17,028,496	.0	179,096	.0	.0	1.450	4.346	MN	38,667	145,000	08/02/2024	11/13/2030
110122-ED-6	Bristol-Myers Squibb Co				1.F FE	20,744,158	100.4934	20,726,756	20,625,000	20,733,802	.0	(10,356)	.0	.0	4.950	4.464	FA	371,508	.0	11/20/2024	02/20/2026
11135E-AA-2	Broadstone Net Lease LLC-SENIOR UNSECURE	1,2			2.B FE	9,790,148	.82.7314	8,706,648	10,524,000	9,981,871	.0	70,239	.0	.0	2.600	3.464	MS	80,567	273,624	03/18/2022	09/15/2031
12325J-AJ-0	Business Development Cor-SENIOR UNSECURE	1,2			2.C FE	9,969,800	.97.2426	9,724,255	10,000,000	9,969,388	.0	23,334	.0	.0	3.250	3.500	MS	82,153	325,000	03/24/2021	03/30/2026
126307-BA-4	CSC Holdings LLC-SENIOR UNSECURED	1,2			.6. FE	12,923,900	.56.8750	7,291,375	12,820,000	6,636,879	.0	(1,805)	4,496,907	.0	5.750	5.750	JJ	339,909	737,150	09/27/2021	01/15/2030
126307-BD-8	CSC Holdings LLC-SENIOR UNSECURED	1,2			.6. FE	2,936,250	.52.0287	1,560,860	3,000,000	1,519,787	.0	2,645	1,433,368	.0	4.625	4.625	JD	11,563	138,750	06/29/2021	12/01/2030
17259U-A*-6	CION Investment Corporat Senior Note				2.B PL	15,000,000	.98.5086	14,776,290	15,000,000	15,000,000	.0	.0	.0	.0	4.500	4.499	FA	262,500	675,000	02/11/2021	02/11/2026
172967-HB-0	CITIGROUP INC-SUBORDINATED				2.B FE	4,733,000	100.4586	4,754,707	4,733,000	4,733,000	.0	.0	.0	.0	5.500	5.497	MS	78,095	260,315	09/10/2013	09/13/2025
172967-NA-5	Citigroup Inc-SENIOR UNSECURED	1,2			1.G FE	9,663,479	.95.1838	10,931,863	11,485,000	10,470,593	.0	379,418	.0	.0	1.462	5.374	JD	10,261	167,911	10/19/2022	06/09/2027
189754-AA-2	Tapestry Inc-SENIOR UNSECURED	1,2			2.B FE	6,685,080	.99.6565	6,975,956	7,000,000	6,989,315	.0	39,756	.0	.0	4.250	4.846	AO	74,375	297,500	10/26/2015	04/01/2025
189754-AC-8	Tapestry Inc-SENIOR UNSECURED	1,2			2.B FE	15,574,572	.98.0162	15,348,360	15,659,000	15,634,291	.0	8,942	.0	.0	4.125	4.190	JJ	297,847	645,934	07/06/2017	07/15/2027
19260Q-AD-9	Coinbase Global Inc-SENIOR UNSECURED	1,2			4.A FE	3,972,880	.84.5040	3,411,426	4,037,000	3,991,263	.0	5,815	.0	.0	3.625	3.816	AO	36,585	146,341	09/16/2021	10/01/2031
209111-FM-0	ED 3 1/8 11/15/27	1,2			1.G FE	9,115,628	.95.9572	9,370,222	9,765,000	9,230,807	.0	115,180	.0	.0	3.125	5.199	MN	38,992	305,156	04/24/2024	11/15/2027
219350-AX-3	Corning Inc-SENIOR UNSECURED				2.A FE	7,208,740	.92.1779	5,530,675	6,000,000	6,984,019	.0	(65,629)	.0	.0	4.700	3.076	MS	83,033	282,000	07/14/2021	03/15/2037
24765*-AA-3	Delta Epsilon Delaware, Senior Note Seri				1.F FE	2,500,000	100.8844	2,522,110	2,500,000	2,500,000	.0	.0	.0	.0	5.510	5.510	FA	117,470	68,875	08/24/2022	08/24/2029
26113*-AA-7	Dyal Capital Partners IV Senior Secured	C			1.F PL	2,450,000	.87.9633	2,155,101	2,450,000	2,450,000	.0	.0	.0	.0	3.650	3.650	FA	32,044	89,425	02/22/2021	02/22/2041
26113B-AA-5	Dyal Capital Partners IV Senior Secured	C			1.F PL	4,550,000	.87.9633	4,002,330	4,550,000	4,550,000	.0	.0	.0	.0	3.650	3.650	FA	59,510	166,075	02/22/2021	02/22/2041
29280M-AA-9	Energy Asset Issuer Trus Senior Secured				1.F PL	25,411,600	100.9222	25,645,946	25,411,600	25,411,600	.0	.0	.0	.0	7.524	7.523	MON	193,825	1,518,953	02/09/2024	03/25/2049
29977A-B4-1	Evercore Inc. Senior Note Series F				1.G PL	6,000,000	.91.4140	5,484,840	6,000,000	6,000,000	.0	.0	.0	.0	4.440	4.440	FA	178,340	532,800	08/01/2019	08/01/2031
29977A-B0-3	Evercore Inc. Senior Note Series E				1.G PL	3,000,000	.93.8128	2,814,384	3,000,000	3,000,000	.0	.0	.0	.0	4.340	4.340	FA	152,262	260,400	08/01/2019	08/01/2029
31758S-AA-5	Financial Institutions I-SUBORDINATED	2			2.C FE	5,000,000	.98.0000	4,900,000	5,000,000	5,000,000	.0	.0	.0	.0	6.000	6.000	AO	63,333	300,000	04/09/2015	04/15/2030
374297-E*-6	Getty Realty Corp Gtd Senior Note Series				2.C FE	10,000,000	.83.2586	8,325,860	10,000,000	10,000,000	.0	.0	.0	.0	3.650	3.650	JAJO	127,750	304,167	01/20/2023	01/20/2033
38141G-XG-4	Goldman Sachs Group Inc-/SENIOR UNSECURE	1,2			1.F FE	8,632,620	.88.6072	7,974,647	9,000,000	8,752,867	.0	43,930	.0	.0	2.600	3.187	FA	93,600	234,000	03/03/2022	02/07/2030
38141G-ZM-9	Goldman Sachs Group Inc-/SENIOR UNSECURE	1,2			2.A FE	30,722,934	.86.1814	27,147,150	31,500,000	30,896,133	.0	63,231	.0	.0	3.102	3.372	FA	344,710	977,130	03/01/2022	02/24/2033
38147U-AC-1	Goldman Sachs BDC Inc-SENIOR UNSECURED	1,2			2.C FE	3,496,850	.99.8515	3,494,801	3,500,000	3,499,828	.0	612	.0	.0	3.750	3.768	FA	51,406	131,250	02/06/2020	02/10/2025
38173M-AE-2	Golub Capital BDC Inc-SENIOR UNSECURED	1,2			2.C FE	8,014,564	.99.8920	8,097,246	8,106,000	8,027,343	.0	12,778	.0	.0	6.000	6.248	JJ	224,266	221,564	01/29/2024	07/15/2029
4042Q1-AB-3	HSBC BANK USA-SUBORDINATED				1.F FE	12,802,700	.99.1464	9,914,636	10,000,000	12,252,186	.0	(176,384)	.0	.0	5.625	3.118	FA	212,500	562,500	10/05/2021	08/15/2035
44107H-AF-9	NY Society for Relief of-SECURED	1,2			1.E FE	4,561,950	.60.5104	3,025,522	5,000,000	4,590,997	.0	10,204	.0	.0	2.667	3.132	AO	33,338	133,350	01/21/2022	10/01/2050
451102-BT-3	Icahn Enterprises LP / I-SENIOR UNSECURE				3.C FE	5,062,500	.99.1250	4,956,250	5,000,000	5,021,774	.0	11,090	.0	.0	6.250	5.908	MN	39,931	312,500	02/22/2022	05/15/2026
451102-BZ-9	Icahn Enterprises LP / I-SENIOR UNSECURE	1,2			3.C FE	9,699,265	.94.6250	8,819,996	9,321,000	9,469,161	.0	(74,627)	.0	.0	5.250	4.354	MN	62,528	489,353	10/14/2021	05/15/2027
451102-CC-9	Icahn Enterprises LP / I-SENIOR UNSECURE	1,2			3.C FE	1,985,000	.83.3666	1,667,332	2,000,000	1,991,322	.0	1,881	.0	.0	4.375	4.492	FA	36,458	87,500	06/28/2021	02/01/2029
451102-CJ-4	Icahn Enterprises LP / I-SENIOR UNSECURE	1,2			3.C FE	3,714,703	.95.9700	3,597,915	3,749,000	3,716,216	.0	1,512	.0	.0	9.000	8.962	JD	14,996	184,638	10/24/2024	06/15/2030
459200-JG-7	International Business M-SENIOR UNSECURE				1.G FE	6,920,560	.96.6530	6,836,651	6,930,000	6,926,935	.0	2,435	.0	.0	3.450	3.487	FA	87,665	239,085	02/25/2022	02/19/2026
459506-AP-6	International Flavors & -SENIOR UNSECURE	1,2			2.C FE	8,738,103	.91.8913	9,727,614	10,586,000	9,474,898	.0	355,724	.0	.0	1.832	5.971	AO	40,942	193,936	12/02/2022	10/15/2027
459506-AR-2	International Flavors & -SENIOR UNSECURE	1,2			2.C FE	11,599,411	.71.4601	8,345,107	11,678,000	11,610,745	.0	3,155	.0	.0	3.268	3.324	MN	48,765	381,637	04/27/2021	11/15/2040
460690-BS-8	Interpublic Group of Cos-SENIOR UNSECURE	1,2			2.B FE	9,978,300	.74.0487	7,404,867	10,000,000	9,981,434	.0	836	.0	.0	3.375	3.310	MS	112,500	337,500	02/23/2021	03/01/2041
46647P-AJ-5	JPMorgan Chase & Co-SENIOR UNSECURED	1,2			1.F FE	10,000,000	.85.4136	8,541,355	10,000,000	10,000,000	.0	.0	.0	.0	3.882	3.882	JJ	169,298	388,200	07/17/2017	07/24/2038
46647P-BP-0	JPMorgan Chase & Co-SUBORDINATED	1,2			1.G FE	9,720,700	.89.3632	8,936,315	10,000,000	9,797,835	.0	28,054	.0	.0	2.956	3.310	MN	39,413	295,600	02/28/2022	05/13/2031
46647P-CJ-8	JPMorgan Chase & Co-SENIOR UNSECURED	1,2			1.E FE	17,560,479	.86.4849	15,567,280	18,000,000	17,660,512	.0	26,262	.0	.0	3.962	3.230	JJ	231,114	533,340	02/25/2022	01/25/2033
46647P-CZ-7	JPMorgan Chase & Co-SENIOR UNSECURED	1,2			1.F FE	10,029,300	.99.7323	9,973,225	10,000,000	10,002,828	.0	(10,039)	.0	.0	4.080	3.975	AO	73,667	408,000	04/25/2022	04/26/2026
48249D-AA-9	KKR Group Finance Co II -SENIOR UNSECURE	1,2			1.F FE	3,808,774	.95.4399	2,746,759	2,878,000	3,703,252	.0	(34,050)	.0	.0	5.500	3.332	FA	65,954	158,290	10/07/2021	02/01/2043
49446R-AT-6	Kimco Realty Corp-SENIOR UNSECURED	1,2			2.A FE	1,252,650	.81.9403	819,403	1,000,000	1,229,102	.0	(7,169)	.0	.0	4.450	3.024	MS	14,833	44,500	08/03/2021	09/01/2047
49446R-AX-7	Kimco Realty Corp-SENIOR UNSECURED	1,2			2.A FE	3,233,000	.91.2150	3,648,602	4,000,000	3,513,348	.0	135,130	.0	.0	1.900	6.189	MS	25,333	76,000	11/04/2022	03/01/2028
49446R-AZ-2	Kimco Realty Corp-SENIOR UNSECURED	1,2			2.A FE	10,029,650	.87.7877	8,778,772	10,000,000	10,021,551	.0	(2,952)	.0	.0	3.200	3.303	AO	80,000	320,000	02/25/2022	04/01/2032
49446R-BA-6	Kimco Realty Corp-SENIOR UNSECURED	1,2			2.A FE	14,914,500	.95.2490	14,287,349	15,000,000	14,929,439	.0	6,983	.0	.0	4.600	4.670	FA	287,500	690,000	08/10/2022	02/01/2033

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
505742-AP-1	Ladder Capital Finance H-SENIOR UNSECURE			1,2	3.A FE	2,472,215	.94.4407	2,455,457	2,600,000	2,516,162	0	16,142	0	0	4.750	5.577	JD	5,489	123,500	03/10/2022	06/15/2029
52107Q-AH-8	LAZARD GROUP LLC-SENIOR UNSECURED			1,2	2.A FE	3,304,296	.97.1526	3,497,495	3,600,000	3,442,913	0	66,112	0	0	3.625	5.794	MS	43,500	130,500	10/28/2022	03/01/2027
52107Q-AJ-4	Lazard Group LLC-SENIOR UNSECURED			1,2	2.A FE	11,227,281	.98.0453	10,623,207	10,835,000	11,042,148	0	(59,531)	0	0	4.500	3.257	MS	138,147	487,575	02/24/2022	09/19/2028
52728B-BF-0	Leucadia National Corp-SENIOR UNSECURED			1,2	2.B FE	3,995,000	102.4866	5,124,328	5,000,000	4,117,218	0	18,551	0	0	6.625	8.523	AO	62,569	331,250	03/10/2016	10/23/2043
55903V-BA-0	Warnermedia Holdings Inc-SENIOR UNSECURE			1,2	2.C FE	28,386,761	.96.3218	28,896,549	30,000,000	29,039,094	0	398,649	0	0	3.755	5.308	MS	331,692	1,126,500	05/01/2023	03/15/2027
55903V-BB-8	Warnermedia Holdings Inc-SENIOR UNSECURE			1,2	2.C FE	9,912,407	.93.1153	10,708,255	11,500,000	10,299,855	0	237,875	0	0	4.054	6.956	MS	137,273	466,210	05/01/2023	03/15/2029
57174B-BY-7	Marsh & McLennan Cos Inc-SENIOR UNSECURE			1,2	1.G FE	8,663,539	.99.8400	8,655,131	8,669,000	8,663,400	0	(139)	0	0	4.550	4.572	MN	58,070	0	11/18/2024	11/08/2027
57636Q-BA-1	Mastercard Inc-SENIOR UNSECURED			1,2	1.E FE	9,225,923	.98.9995	9,138,641	9,231,000	9,225,977	0	54	0	0	4.100	4.119	JJ	121,952	0	09/03/2024	01/15/2028
60041@-AA-1	MILLENNIUM PIPELINE INTE Senior Unsecure				2.C PL	6,000,000	.98.3602	5,901,612	6,000,000	6,000,000	0	0	0	0	5.600	5.604	MS	90,533	0	08/09/2024	09/30/2029
60041@-AB-9	MILLENNIUM PIPELINE INTE Senior Unsecure				2.C PL	7,500,000	.97.4858	7,311,435	7,500,000	7,500,000	0	0	0	0	5.740	5.743	MS	115,996	0	08/09/2024	09/30/2031
617446-BL-6	Morgan Stanley-SENIOR UNSECURED			1,2	1.E FE	12,566,636	.89.0444	11,639,888	13,072,000	12,712,487	0	52,948	0	0	2.699	3.202	JJ	155,826	352,813	02/25/2022	01/22/2031
617446-BU-6	Morgan Stanley-SENIOR UNSECURED			1,2	1.E FE	7,423,271	.81.7051	6,781,527	8,300,000	7,645,794	0	81,189	0	0	1.794	3.034	FA	55,838	148,902	03/03/2022	02/13/2032
61744Y-AP-3	Morgan Stanley-SENIOR UNSECURED			1,2	1.G FE	1,813,480	.96.5767	1,931,533	2,000,000	1,872,586	0	27,234	0	0	3.772	5.544	JJ	32,900	75,440	09/30/2022	01/24/2029
61747Y-EV-3	Morgan Stanley-SENIOR UNSECURED			1,2	1.E FE	10,447,800	103.5743	10,357,425	10,000,000	10,270,554	0	(87,926)	0	0	6.296	5.240	AO	127,669	629,600	12/02/2022	10/18/2028
61774A-A*-4	Morgan Stanley Direct Le Senior Unsecure				2.C PL	10,000,000	101.1811	10,118,110	10,000,000	10,000,000	0	0	0	0	7.550	7.557	MS	289,417	752,903	09/13/2022	09/13/2025
623115-AC-6	Mount Sinai Hospitals Gr-SECURED				2.B FE	5,450,000	.82.0350	4,470,907	5,450,000	5,450,160	0	(12)	0	0	3.831	3.831	JJ	104,395	208,790	12/14/2017	07/01/2035
62952E-AD-9	NYU Langone Hospitals-SECURED				1.E FE	5,000,000	.90.1302	4,506,509	5,000,000	4,999,708	0	17	0	0	4.168	4.169	JJ	104,200	208,400	05/23/2017	07/01/2037
63618Q-BM-2	National Fuel Gas Co-SENIOR UNSECURED			1,2	2.C FE	17,943,480	.99.8866	17,979,588	18,000,000	17,995,904	0	6,527	0	0	5.200	5.239	JJ	431,600	936,000	06/22/2015	07/15/2025
64128X-AG-5	NEUBERGER BERMAN GRP/FIN-SENIOR UNSECURE			1,2	2.B FE	7,586,757	.98.2884	7,946,616	8,085,000	7,815,557	0	110,495	0	0	4.500	6.134	MS	107,126	363,825	11/15/2022	03/15/2027
64755@-AA-9	New Mountain Guardian III Senior Notes S				2.C PL	8,410,850	.98.5500	8,288,893	8,410,850	8,410,850	0	0	0	0	3.570	3.570	JJ	138,457	300,267	08/04/2021	07/15/2025
64755@-AB-7	New Mountain Guardian III Senior Notes S				2.C PL	3,200,000	.98.5760	3,154,432	3,200,000	3,200,000	0	0	0	0	3.620	3.620	JJ	53,415	115,840	12/21/2021	07/15/2025
647551-C*-9	New Mountain Finance Cor 3.875% Note due				2.C PL	12,500,000	.97.4062	12,175,775	12,500,000	12,500,000	0	0	0	0	3.875	3.874	JJ	204,514	484,375	01/29/2021	01/29/2026
649322-AG-9	New York and Presbyteria-UNSECURED			1,2	1.C FE	1,415,682	.82.7350	1,489,231	1,800,000	1,479,304	0	48,041	0	0	1.651	5.388	FA	12,383	29,718	08/28/2023	08/01/2030
649445-AC-7	New York Community Banco-SUBORDINATED			2	3.C FE	21,000,000	.94.8750	19,923,750	21,000,000	21,000,000	0	0	0	0	7.573	7.572	FMAN	247,393	1,783,458	11/02/2018	11/06/2028
649604-AG-0	New York Mortgage Trust -SENIOR UNSECURE			1,2	2.B PL	7,500,000	.95.8929	7,191,968	7,500,000	7,500,000	0	0	0	0	5.750	5.747	AO	73,073	431,250	04/15/2021	04/30/2026
650119-AA-8	New York University-UNSECURED			1	1.D FE	4,087,189	100.4874	4,211,427	4,191,000	4,158,394	0	10,748	0	0	5.236	5.546	JJ	109,720	219,441	12/22/2009	07/01/2032
65364U-AL-0	Niagara Mohawk Power Cor-SENIOR UNSECURE			1,2	2.A FE	5,258,880	.96.7767	5,322,716	5,500,000	5,293,616	0	34,736	0	0	4.278	5.342	JD	10,457	235,290	03/27/2024	12/15/2028
691205-AE-8	Owl Rock Technology Fina-SENIOR UNSECURE			1,2	2.C FE	4,966,600	.96.7491	4,837,453	5,000,000	4,990,381	0	6,236	0	0	3.750	3.886	JD	7,292	187,500	12/10/2020	06/17/2026
69122J-AB-5	Owl Rock Capital Corpora Senior Unsecure				2.C FE	5,000,000	103.9707	5,198,535	5,000,000	5,000,000	0	0	0	0	7.580	7.580	JJ	168,444	379,000	07/21/2022	07/21/2027
693656-AC-4	PVH Corp-SENIOR UNSECURED			1,2	2.C FE	9,962,500	.99.7387	9,973,868	10,000,000	9,995,617	0	7,823	0	0	4.625	4.708	JJ	219,688	462,500	07/06/2020	07/10/2025
70522@-AA-6	Peco Pallet Holdings Inc Senior Secured				2.B PL	12,500,000	.95.7422	11,967,775	12,500,000	12,500,000	0	0	0	0	3.280	3.280	MJSD	35,306	526,167	02/16/2022	03/01/2027
71344@-DN-5	PepsiCo Inc-SENIOR UNSECURED			1,2	1.E FE	18,178,671	.96.5485	18,204,220	18,855,000	18,218,854	0	40,183	0	0	2.375	4.382	AO	105,732	0	11/18/2024	10/06/2026
71344@-EG-9	PepsiCo Inc-SENIOR UNSECURED				1.E FE	20,440,375	108.7799	20,565,922	18,906,000	20,143,484	0	(259,849)	0	0	7.000	5.229	MS	441,140	1,323,420	11/06/2023	03/01/2029
71344@-ES-3	PepsiCo Inc-SENIOR UNSECURED			1,2	1.E FE	8,482,009	.91.1970	8,918,152	9,779,000	8,675,702	0	173,071	0	0	2.750	5.248	MS	76,195	268,923	02/13/2024	03/19/2030
75003@-AA-5	Renewable Energy Alternra Senior Secured				2.C PL	3,756,398	.74.3343	2,792,292	3,756,398	3,756,398	0	0	0	0	3.820	3.820	JD	72,561	172,568	12/10/2021	12/31/2046
77775*-BU-4	Rosenthal & Rosenthal, I Senior Note				2.B PL	2,000,000	.99.9296	1,998,592	2,000,000	2,000,000	0	(135)	0	0	4.860	4.372	JD	40,393	43,800	01/18/2018	01/15/2025
77775*-BV-2	Rosenthal & Rosenthal, I Senior Note				2.B PL	8,000,000	.99.6175	7,969,400	8,000,000	8,000,000	0	0	0	0	5.320	5.319	JJ	178,516	478,800	01/31/2019	01/31/2026
78409V-BH-6	S&P Global Inc-SENIOR UNSECURED			1,2	1.G FE	4,783,215	.95.6270	4,781,348	5,000,000	4,878,595	0	52,871	0	0	2.450	3.624	MS	40,833	122,500	03/01/2023	03/01/2027
78646U-A*-0	Safehold Inc. Senior Unsecured Notes				2.A PL	25,000,000	.66.8087	16,702,175	25,000,000	25,000,000	0	0	0	0	3.9.						

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
874054-AG-4	Take-Two Interactive Sof-SENIOR UNSECURE			1,2	2.B FE	5,020,318	.97.6345	5,148,265	5,273,000	5,074,669	.0	54,351	.0	.0	3.700	5.470	AO	41,730	97,551	04/23/2024	04/14/2027
874054-AJ-8	Take-Two Interactive Sof-SENIOR UNSECURE				2.B FE	2,219,934	100.2538	2,227,640	2,222,000	2,220,742	.0	809	.0	.0	5.000	5.041	MS	28,701	111,100	01/04/2024	03/28/2026
874054-AK-5	Take-Two Interactive Sof-SENIOR UNSECURE			1,2	2.B FE	26,335,884	100.1015	26,529,890	26,503,000	26,384,019	.0	41,313	.0	.0	4.950	5.373	MS	338,907	631,571	01/04/2024	03/28/2028
886758-AB-3	Tiger Global Management Senior Note Seri				1.F PL	25,000,000	.84.3641	21,091,025	25,000,000	25,000,000	.0	.0	.0	.0	3.820	3.820	AO	206,917	955,000	04/13/2022	04/13/2029
886758-AC-1	Tiger Global Management Senior Note Seri				1.F PL	30,000,000	.75.0841	22,525,230	30,000,000	30,000,000	.0	.0	.0	.0	3.930	3.930	AO	255,450	1,179,000	04/13/2022	04/13/2032
886758-AD-9	Tiger Global Management Senior Note Seri				1.F PL	10,000,000	.71.1749	7,117,490	10,000,000	10,000,000	.0	.0	.0	.0	4.080	4.080	AO	88,400	408,000	04/13/2022	04/13/2034
89680Y-AA-3	Triton Container Interna-FIRST LIEN	D		1,2	2.C FE	15,544,784	.95.9435	17,057,790	17,779,000	16,864,043	.0	660,830	.0	.0	2.050	6.265	AO	76,944	364,470	01/09/2023	04/15/2026
89682*-AA-6	TriplePoint Private Vent Senior Unsecur				2.C FE	30,000,000	.96.9505	29,085,150	30,000,000	30,000,000	.0	.0	.0	.0	5.860	5.860	AO	415,083	1,758,000	04/06/2022	04/06/2027
92343V-BG-8	VERIZON COMMUNICATIONS-SENIOR UNSECURED			1,2	2.A FE	11,722,500	.79.0329	7,903,293	10,000,000	11,502,481	.0	(66,847)	.0	.0	3.850	2.754	MN	64,167	385,000	08/03/2021	11/01/2042
92343V-DD-3	Verizon Communications I-SENIOR UNSECURE				2.A FE	6,142,833	.97.0974	6,281,233	6,469,000	6,218,062	.0	75,229	.0	.0	2.625	5.146	FA	64,151	84,906	06/25/2024	08/15/2026
92343V-DY-7	VERIZON COMMUNICATIONS I-SENIOR UNSECURE				2.A FE	697,865	.98.8390	691,873	700,000	698,023	.0	158	.0	.0	4.125	4.258	MS	8,422	.0	10/15/2024	03/16/2027
92343V-ER-1	Verizon Communications I-SENIOR UNSECURE				2.A FE	4,928,300	.98.0998	4,904,992	5,000,000	4,949,048	.0	12,199	.0	.0	4.329	4.628	MS	60,125	216,450	03/29/2023	09/21/2028
92343V-FW-9	Verizon Communications I-SENIOR UNSECURE			1,2	2.A FE	1,611,426	.59.3352	935,715	1,577,000	1,608,942	.0	(621)	.0	.0	2.987	2.888	AO	7,982	47,105	10/07/2020	10/30/2056
92343V-GG-3	Verizon Communications I-SENIOR UNSECURE			1,2	2.A FE	4,513,300	.96.2623	4,813,116	5,000,000	4,812,459	.0	146,062	.0	.0	1.450	4.648	MS	20,340	72,500	11/22/2022	03/20/2026
92343V-GK-4	Verizon Communications I-SENIOR UNSECURE			1,2	2.A FE	17,007,750	.75.6667	13,620,006	18,000,000	17,113,660	.0	38,831	.0	.0	3.400	3.809	MS	168,300	612,000	02/25/2022	03/22/2041
925524-AV-2	ViacomCBS Inc-SENIOR UNSECURED				2.C FE	12,139,400	.93.7010	9,370,096	10,000,000	11,654,703	.0	(169,643)	.0	.0	5.500	3.228	MN	70,278	550,000	01/18/2022	05/15/2033
92556H-AC-1	ViacomCBS Inc-SENIOR UNSECURED				2.C FE	10,341,300	.75.3666	7,536,664	10,000,000	10,323,399	.0	(6,726)	.0	.0	4.950	4.727	MN	57,750	495,000	03/10/2022	05/19/2050
92556H-AD-9	ViacomCBS Inc-SENIOR UNSECURED			1,2	2.C FE	30,915,158	.88.2127	23,088,795	26,174,000	29,383,303	.0	(409,057)	.0	.0	4.200	2.325	MN	128,253	1,099,308	02/12/2021	05/19/2032
929089-AB-6	Voya Financial Inc-SENIOR UNSECURED				2.A FE	12,196,786	.98.3452	12,113,178	12,317,000	12,272,439	.0	29,077	.0	.0	3.650	3.907	JD	19,981	449,571	04/25/2022	06/15/2026
929089-AC-4	Voya Financial Inc-SENIOR UNSECURED				2.A FE	44,586,186	.85.0192	29,294,226	34,456,000	43,626,622	.0	(297,749)	.0	.0	4.800	3.093	JD	73,506	1,653,888	10/05/2021	06/15/2046
92933B-AT-1	WMG Acquisition Corp-SECURED			1,2	2.C FE	2,478,625	.92.1360	2,303,400	2,500,000	2,486,123	.0	2,505	.0	.0	3.750	3.875	JD	7,813	93,750	11/17/2021	12/01/2029
92936U-AH-2	WP Carey Inc-SENIOR UNSECURED			1,2	2.A FE	26,118,336	.78.8977	21,816,784	27,652,000	26,529,822	.0	119,256	.0	.0	2.250	2.804	AO	155,543	622,170	06/08/2021	04/01/2033
96779*-AA-1	Community Bank System, Inc.- Junior Sub				2.B FE	7,650,000	.98.0600	7,844,800	8,000,000	7,762,715	.0	28,780	.0	.0	2.775	3.134	MJSD	177,600	658,652	02/01/2018	06/19/2034
970648-AG-6	Willis North America Inc-SENIOR UNSECURE			1,2	2.B FE	8,401,136	.98.3149	8,859,155	9,011,000	8,535,526	.0	110,985	.0	.0	4.500	6.110	MS	119,396	405,495	10/06/2023	09/15/2028
970648-AJ-0	Willis North America Inc-SENIOR UNSECURE			1,2	2.B FE	3,802,535	.90.8340	4,023,945	4,430,000	3,923,620	.0	91,228	.0	.0	2.950	5.756	MS	38,479	130,685	08/24/2023	09/15/2029
970648-AL-5	Willis North America Inc-SENIOR UNSECURE			1,2	2.B FE	9,902,512	.99.7246	10,190,854	10,219,000	10,039,337	.0	66,314	.0	.0	4.650	5.422	JD	21,119	475,184	12/02/2022	06/15/2027
62964*-AD-6	AP Grange Holdings LLC Senior Secured No	C			1.G PL	50,000,000	.97.0858	48,542,900	50,000,000	49,334,446	.0	.0	.0	.0	6.500	6.500	MJSD	1,706,250	.0	06/11/2024	03/20/2045
67334*-AC-5	Redding Ridge Holdings L Senior Note Ser	C			1.G PL	21,830,600	102.4117	22,357,089	21,830,600	21,830,600	.0	.0	.0	.0	7.000	7.005	MS	691,909	1,528,142	09/13/2022	09/13/2027
67334*-AD-3	Redding Ridge Holdings L Senior Note Ser	C			1.G PL	5,000,000	103.7560	5,187,800	5,000,000	5,000,000	.0	.0	.0	.0	7.125	7.129	MS	161,302	356,250	09/13/2022	09/13/2029
U2203C-AT-1	Coty Inc-SECURED			1,2	2.C FE	487,880	.99.8666	516,760	500,000	508,696	.0	6,668	.0	(34,995)	3.875	5.245	AO	4,233	20,852	07/26/2022	04/15/2026
009818-AA-9	Akron Childrens Hospital Trust Certifica				1.D Z	8,141,415	.82.1976	6,625,790	8,060,807	8,128,127	.0	(3,530)	.0	.0	3.965	3.888	MON	14,205	346,244	08/22/2019	08/15/2050
14149Y-BD-9	CARDINAL HEALTH INC-SENIOR UNSECURED			1,2	2.B FE	17,559,552	.86.8013	13,028,880	15,010,000	17,290,115	.0	(73,822)	.0	.0	4.900	3.814	MS	216,561	735,490	02/23/2021	09/15/2045
14149Y-BQ-0	CAH 4.7 11/15/26				2.B FE	9,994,200	.99.8444	9,994,200	10,000,000	9,994,044	.0	(156)	.0	.0	4.700	4.732	MN	50,917	.0	11/18/2024	05/15/2026
14149Y-BR-8	Cardinal Health Inc-SENIOR UNSECURED			1,2	2.B FE	24,991,500	.99.5032	24,875,798	25,000,000	24,990,362	.0	(1,138)	.0	.0	5.000	5.008	MN	135,417	.0	11/13/2024	11/15/2029
185899-AK-7	Cleveland-Cliffs Inc-SENIOR UNSECURED			1,2	3.C FE	1,918,254	.92.2000	1,844,000	2,000,000	1,947,682	.0	10,910	.0	.0	4.625	5.332	MS	30,833	92,500	03/14/2022	03/01/2029
278062-AD-6	EATON CORP-SR UNSECURED				1.G FE	18,092,686	.93.4968	17,604,514	18,829,000	18,157,442	.0	64,756	.0	.0	5.000	4.776	MN	123,435	753,160	04/09/2024	11/02/2032
278062-AH-7	Eaton Corp-SENIOR UNSECURED			1,2	1.G FE	4,881,700	.93.9616	4,698,078	5,000,000	4,898,565	.0	10,015	.0	.0	4.150	4.447	MS	61,097	207,500	04/05/2023	03/15/2033
278062-AK-0	Eaton Corp-SENIOR UNSECURED			1,2	1.G FE	3,124,168	.99.0643	3,146,283	3,176,000	3,134,034	.0	9,886	.0	.0	4.350	4.776	MN	16,502	138,156	02/13/2024	05/18/2028
320209-AA-7	First Financial Bancorp-SUBORDINATED				2.B FE	15,000,000	.98.1750	14,726,250	15,000,000	15,000,000	.0	.0	.0	.0	5.125	5.123	FA	269,063	768,750	08/20/2015	08/25/2025
320209-AB-5	First Financial Bancorp-SUBORDINATED	2			2.B FE	10,000,000	.98.0000	9,800,000	10,000,000	10,000,000	.0	.0	.0	.0	5.250	5.250	MN	67,083	525,000	04/24/2020	05/15/2030
369604-BH-5	General Electric Co-SENIOR UNSECURED BON				2.A FE	12,562,200	.86.3369	8,633,685	10,000,000	12,275,584	.0	(87,169)	.0	.0	4.500	2.940	MS	137,500	450,000	08/03/2021	03/11/2044
369604-BX-0	General Electric Co-SENIOR UNSECURED			1,2	2.A FE	11,728,800	.83.3572	8,335,721	10,000,000	11,470,367	.0	(77,612)	.0	.0	4.250	3.833	MN	70,833	425,000	07/14/2021	05/01/2040
369626-4B-7	GENERAL ELECTRIC CO-SR UNSECURED GMTN				2.A FE	45,472	112.5221	42,758	38,000	43,185	.0	(241)	.0	.0	6.875	5.469	JJ	1,241	2,613	01/24/2012	01/10/2039
42217K-BB-1	WELLTOWER INC-SENIOR UNSECURED			1,2	2.A FE	1,487,560	.91.8964	1,098,161	1,195,000	1,454,949	.0	(10,483)	.0	.0	5.125	3.470	MS	18,033	61,244	10/06/2021	03/15/2043
501044-CR-0	KROGER CO/THE-SENIOR UNSECURED			1,2	2.A FE	13,199,878	.90.7659	9,352,518	10,304,000	12,823,409	.0	(113,006)	.0	.0	5.000	3.116	AO	108,764	515,200	08/04/2021	04/15/2042

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
501044-CT-6	KROGER CO/THE-SR UNSECURED			1,2	2.A FE	6,729,750	.91.4708	4,573,540	5,000,000	6,523,281	0	(62,896)	0	0	5.150	2.962	FA	107,292	257,500	08/04/2021	08/01/2043
501044-DJ-7	Kroger Co/The-SENIOR UNSECURED			1,2	2.A FE	9,671,500	.97.6576	9,765,757	10,000,000	9,793,778	0	73,502	0	0	3.700	4.554	FA	154,167	370,000	04/20/2023	08/01/2027
532716-AN-7	Bath & Body Works Inc-SENIOR UNSECURED				4.A FE	892,500	101.1646	1,011,646	1,000,000	898,267	0	4,261	0	0	7.600	8.967	JJ	35,044	76,000	08/21/2023	07/15/2037
55336V-AM-2	MPLX LP-SENIOR UNSECURED			1,2	2.B FE	4,051,087	.87.1652	3,042,067	3,490,000	3,955,964	0	(29,046)	0	0	4.500	3.218	AO	33,155	157,050	08/03/2021	04/15/2038
55336V-AR-1	MPLX LP-SENIOR UNSECURED			1,2	2.B FE	12,430,692	.96.9818	12,861,724	13,262,000	12,597,893	0	152,518	0	0	4.000	5.729	MS	156,197	365,240	04/23/2024	03/15/2028
55336V-BN-9	MPLX LP-SENIOR UNSECURED			1,2	2.B FE	4,924,600	.98.4365	4,921,827	5,000,000	4,927,138	0	2,538	0	0	4.250	4.790	JD	17,708	106,250	11/19/2024	12/01/2027
55336V-BQ-2	MPLX LP-SENIOR UNSECURED			1,2	2.B FE	30,087,505	.87.3117	30,559,078	35,000,000	30,957,283	0	547,383	0	0	2.650	5.033	FA	350,389	795,000	03/27/2024	08/15/2030
55336V-BR-0	MPLX LP-SENIOR UNSECURED			1,2	2.B FE	2,991,233	.96.5810	3,158,197	3,270,000	3,138,123	0	106,670	0	0	1.750	5.360	MS	19,075	57,225	08/08/2023	03/01/2026
55336V-BT-6	MPLX LP-SENIOR UNSECURED			1,2	2.B FE	19,796,400	.83.9815	16,796,300	20,000,000	19,803,769	0	3,305	0	0	4.950	5.016	MS	294,250	990,000	03/10/2022	03/14/2052
56585A-AM-4	MARATHON PETROLEUM CORP-SENIOR UNSECURED			1,2	2.B FE	11,264,629	.94.9485	8,290,902	8,732,000	11,042,221	0	(72,285)	0	0	5.850	3.952	JD	22,703	510,822	10/07/2021	12/15/2045
56585A-BD-3	Marathon Petroleum Corp-SENIOR UNSECURED			1,2	2.B FE	11,089,440	.96.3957	11,567,485	12,000,000	11,354,347	0	176,067	0	0	3.800	5.632	AO	114,000	456,000	08/17/2023	04/01/2028
56585A-BH-4	Marathon Petroleum Corp-SENIOR UNSECURED			1,2	2.B FE	18,675,804	.99.9397	17,252,584	17,263,000	17,377,027	0	(451,056)	0	0	4.700	2.034	MN	135,227	811,361	01/20/2022	05/01/2025
58942H-AC-5	Mercy Health/OH-SECURED			1,2	1.E FE	14,264,457	.98.2167	14,354,366	14,615,000	14,348,914	0	63,877	0	0	4.302	5.007	JJ	314,369	309,744	08/15/2024	07/01/2028
591894-CC-2	Metropolitan Edison Co-SENIOR UNSECURED			1,2	2.A FE	10,945,997	.97.3535	11,046,699	11,347,000	11,063,642	0	61,822	0	0	4.300	4.990	JJ	224,986	487,921	01/17/2023	01/15/2029
638612-AM-3	Nationwide Financial Ser-SENIOR UNSECURE			1,2	1.G FE	11,783,415	.73.5069	7,718,227	10,500,000	11,693,208	0	(31,748)	0	0	3.900	3.224	MN	35,263	409,500	01/21/2022	11/30/2049
677415-CR-0	Ohio Power Co-SENIOR UNSECURED			1,2	2.A FE	8,501,031	.75.0512	5,778,941	7,700,000	8,444,349	0	(19,895)	0	0	4.000	3.406	JD	25,667	308,000	01/18/2022	06/01/2049
700658-AA-5	Park National Corp-SUBORDINATED			2	2.B FE	11,500,000	.97.2500	11,183,750	11,500,000	11,500,000	0	0	0	0	4.500	4.500	MS	172,500	517,500	08/17/2020	09/01/2030
70109H-AN-5	Parker-Hannifin Corp-SR UNSECURED			1,2	2.A FE	7,785,729	.85.5965	5,555,214	6,490,000	7,632,659	0	(41,882)	0	0	4.450	3.222	MN	32,089	288,805	02/25/2021	11/21/2044
71845J-AA-6	Phillips Edison Grocery -SENIOR UNSECURE			1,2	2.B FE	5,931,540	.83.4933	5,009,600	6,000,000	5,951,508	0	6,313	0	0	2.625	2.755	MN	20,125	157,500	10/07/2021	11/15/2031
74052B-AA-5	Premier Health Partners-UNSECURED			1,2	2.A FE	3,011,022	.95.9135	3,005,929	3,134,000	3,013,546	0	2,524	0	0	2.911	5.087	MN	11,657	0	12/13/2024	11/15/2026
743315-AJ-2	Progressive Corp/The-SENIOR UNSECURED				1.F FE	4,743,798	106.8680	4,759,901	4,454,000	4,655,303	0	(42,113)	0	0	6.625	5.397	MS	98,359	295,078	10/28/2022	03/01/2029
824348-AW-6	Sherwin-Williams Co/The-SENIOR UNSECURED			1,2	2.B FE	18,255,085	.97.2302	18,411,503	18,936,000	18,339,109	0	84,024	0	0	3.450	4.847	JD	54,441	326,646	11/20/2024	06/01/2027
824348-BL-9	Sherwin-Williams Co/The-SENIOR UNSECURED			1,2	2.B FE	2,970,420	.87.2692	2,958,424	3,390,000	2,977,066	0	6,646	0	0	2.300	4.906	MN	9,963	0	11/22/2024	05/15/2030
832696-AW-8	J M Smucker Co/The-SENIOR UNSECURED			1,2	2.B FE	9,927,405	103.6267	9,844,533	9,500,000	9,851,999	0	(75,406)	0	0	5.900	4.818	MN	71,619	591,639	01/31/2024	11/15/2028
87227R-QE-7	TCF National Bank-SUBORDINATED			2	2.A FE	7,000,000	.99.1577	6,941,036	7,000,000	7,000,000	0	0	0	0	5.500	5.500	MN	58,819	385,000	05/01/2020	05/06/2030
878055-AE-2	TCF National Bank-SUBORDINATED				2.A FE	7,950,000	.99.8566	7,988,525	8,000,000	7,998,613	0	5,823	0	0	4.600	4.676	FA	126,756	368,000	02/24/2015	02/27/2025
887389-AK-0	Timken Co/The-SENIOR UNSECURED			1,2	2.B FE	1,972,060	.98.0557	1,961,113	2,000,000	1,979,641	0	4,562	0	0	4.500	4.785	JD	4,000	90,000	04/26/2023	12/15/2028
95040Q-AD-6	Welltower Inc-SENIOR UNSECURED			1,2	2.A FE	4,575,950	.97.9912	4,899,561	5,000,000	4,728,771	0	72,299	0	0	4.250	6.092	AO	44,861	212,500	10/19/2022	04/15/2028
95040Q-AH-7	Welltower Inc-SENIOR UNSECURED			1,2	2.A FE	2,385,347	.96.7522	2,467,182	2,550,000	2,433,655	0	24,032	0	0	4.125	5.349	MS	30,972	105,188	12/05/2022	03/15/2029
95040Q-AK-0	Welltower Inc-SENIOR UNSECURED			1,2	2.A FE	4,443,250	.96.1600	4,808,000	5,000,000	4,707,814	0	126,060	0	0	2.700	5.659	FA	51,000	135,000	10/28/2022	02/15/2027
95040Q-AN-4	Welltower Inc-SENIOR UNSECURED			1,2	2.A FE	8,899,520	.89.6112	9,631,406	10,748,000	9,449,060	0	280,519	0	0	2.050	5.422	JJ	101,598	220,334	01/09/2023	01/15/2029
95040Q-AP-9	Welltower Inc-SENIOR UNSECURED			1,2	2.A FE	4,727,300	.85.1363	4,256,816	5,000,000	4,796,890	0	25,132	0	0	2.750	3.404	JJ	63,403	137,500	02/24/2022	01/15/2032
97573*-AC-7	WinSupply Inc. Senior Unsecured Notes				2.B	11,500,000	.96.6103	11,110,185	11,500,000	11,500,000	0	0	0	0	5.370	5.370	MS	192,127	617,550	03/03/2023	03/09/2035
165167-DG-9	Chesapeake Energy Corp-SENIOR UNSECURED			1,2	2.C FE	2,145,000	.98.7297	1,974,595	2,000,000	2,032,734	0	(29,536)	0	0	5.875	3.983	FA	48,958	117,500	09/14/2021	02/01/2029
190897-AA-6	BOKF Merger Corp Number -SUBORDINATED			2	2.B FE	7,000,000	.98.0000	6,860,000	7,000,000	7,000,000	0	0	0	0	5.625	5.625	JD	6,563	393,750	06/22/2015	06/25/2030
25179M-AV-5	DEVON ENERGY CORPORATION-SENIOR UNSECURE			1,2	2.B FE	925,239	100.6998	917,375	911,000	915,548	0	(6,097)	0	0	5.850	5.129	JD	2,369	53,294	05/17/2023	12/15/2025
25179M-BF-9	DVN 4 1/2 01/15/30			1,2	2.B FE	6,693,979	.96.6955	6,735,809	6,966,000	6,727,070	0	33,091	0	0	4.500	5.284	JJ	144,545	156,735	04/09/2024	01/15/2030
302704-AA-9	FLYWHEEL ENERGY ASSET IS Class A Note				1.F PL	40,000,000	.99.9242	39,969,680	40,000,000	40,000,000	0	0	0	0	7.151	7.151	MON	1,525,547	0	06/24/2024	09/25/2033
302704-AB-7	FLYWHEEL ENERGY ASSET IS Class B Note				2.B PL	10,000,000	.99.8028	10,0													

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
682680-BJ-1	ONEOK Inc-SENIOR UNSECURED			1,2	2.B FE	4,993,450	101.9891	5,099,457	5,000,000	4,995,292	0	1,943	0	0	5.650	5.675	MN	47,083	335,076	08/10/2023	11/01/2028
682680-BK-8	ONEOK Inc-SENIOR UNSECURED			1,2	2.B FE	9,816,820	102.7874	10,110,170	9,836,000	9,820,652	0	4,039	0	0	5.800	5.830	MN	95,081	676,662	08/10/2023	11/01/2030
682680-BV-4	ONEOK Inc-SENIOR UNSECURED			1,2	2.B FE	8,738,278	89.3613	6,194,525	6,932,000	8,680,063	0	(58,215)	0	0	5.150	3.302	AO	75,366	356,998	02/27/2024	10/15/2043
88339W-AB-2	Williams Cos Inc/The-WMB 4.9 03/15/29			1,2	2.B FE	14,304,960	99.2501	14,292,017	14,400,000	14,320,006	0	15,046	0	0	4.900	5.046	MS	207,760	490,000	03/21/2024	03/15/2029
969457-CH-1	Williams Cos Inc/The-SENIOR UNSECURED			1,2	2.B FE	15,027,150	100.6935	15,104,024	15,000,000	15,011,929	0	(10,599)	0	0	5.400	5.322	MS	267,750	810,000	08/07/2023	03/02/2026
96949L-AD-7	Williams Cos Inc/The-SENIOR UNSECURED			1,2	2.B FE	5,225,904	97.4269	5,261,054	5,400,000	5,250,818	0	24,914	0	0	3.750	4.958	JD	9,000	101,250	07/22/2024	06/15/2027
03666H-AD-3	Antares Holdings LP-SENIOR UNSECURED			1,2	2.B FE	12,502,751	93.6920	11,795,828	12,590,000	12,555,780	0	16,024	0	0	2.750	2.888	JJ	159,648	346,225	07/21/2021	01/15/2027
06368B-GS-1	Bank of Montreal-SUBORDINATED			2	2.A FE	14,887,730	95.6606	13,870,791	14,500,000	14,707,302	0	(65,790)	0	0	3.803	3.291	JD	24,508	551,435	02/28/2022	12/15/2032
06368F-AJ-8	Bank of Montreal-SENIOR UNSECURED			A	1.F FE	5,919,292	95.9800	6,012,185	6,264,000	6,100,919	0	70,047	0	0	2.650	3.903	MS	52,104	165,996	04/25/2022	03/08/2027
064159-HB-5	BANK OF NOVA SCOTIA-SUBORDINATED			A	2.A FE	6,915,614	99.4695	6,751,986	6,788,000	6,823,378	0	(35,647)	0	0	4.500	3.939	JD	12,728	305,460	04/25/2022	12/16/2025
067901-AH-1	Barrick Gold Corp-SENIOR UNSECURED			A	2.A FE	6,791,800	94.6487	4,732,437	5,000,000	6,565,112	0	(68,897)	0	0	5.250	2.926	AO	65,625	262,500	08/02/2021	04/01/2042
11271L-AA-0	BROOKFIELD FINANCE INC-SENIOR UNSECURED			A	1,5	1.G FE	1,994,520	99.3571	2,000,000	1,995,215	0	695	0	0	4.250	4.423	JD	6,847	42,500	10/15/2024	06/02/2026
11271L-AC-6	Brookfield Finance Inc-SENIOR UNSECURED			A	1,2	1.G FE	5,924,962	97.3748	6,664,000	6,203,794	0	131,733	0	0	3.900	6.415	JJ	112,622	259,896	10/19/2022	01/25/2028
11271L-AF-9	Brookfield Finance Inc-SENIOR UNSECURED			A	1,2	1.G FE	19,461,312	69.0238	13,395,445	19,407,000	0	(1,220)	0	0	3.500	3.484	MS	171,698	679,245	01/18/2022	03/30/2051
286181-AD-5	Element Fleet Management-SENIOR UNSECURE			A	1,2	2.A FE	6,756,504	101.7303	6,741,000	6,750,340	0	(5,949)	0	0	6.271	6.170	JD	5,871	422,728	11/20/2023	06/26/2026
53278L-B4-3	Linamar Corp Senior Notes				2.C	15,207,969	105.3124	14,642,992	20,000,000	13,904,338	0	0	0	(1,197,980)	5.960	5.959	JD	347,593	967,025	06/22/2023	06/30/2033
56501R-AC-0	Manulife Financial Corp-SENIOR UNSECURED			A	1.F FE	4,430,892	99.3777	4,321,937	4,349,000	4,375,055	0	(21,476)	0	0	4.150	3.621	MS	58,657	180,484	04/25/2022	03/04/2026
57701R-AM-4	Mattamy Group Corp-SENIOR UNSECURED			A	1,2	3.C FE	2,500,000	92.8047	2,320,118	2,500,000	0	0	0	0	4.625	4.624	MS	38,542	115,625	06/22/2021	03/01/2030
655422-AV-5	Glencore Canada Corp-SENIOR UNSECURED			A	2.A FE	8,710,953	104.5157	7,037,039	6,733,000	8,296,022	0	(121,710)	0	0	6.200	3.526	JD	18,553	417,446	06/04/2021	06/15/2035
784448-AA-6	SIP HoldCo LLC Senior Secured Notes				2.B PL	11,583,360	79.0478	9,156,391	11,583,360	11,583,360	0	0	0	0	3.360	3.360	JD	17,298	593,987	12/29/2021	12/15/2046
89115A-2H-4	Toronto-Dominion Bank/Th-SENIOR UNSECURE			A	1.F FE	19,578,700	99.8121	19,962,428	20,000,000	19,751,238	0	82,487	0	0	4.693	5.187	MS	276,366	938,600	12/02/2022	09/15/2027
941053-AJ-9	Waste Connections Inc-SENIOR UNSECURED			A	1,2	2.A FE	7,061,346	94.5732	7,424,945	7,851,000	0	127,079	0	0	3.500	5.648	MN	45,798	274,785	10/24/2023	05/01/2029
94106B-AA-9	Waste Connections Inc-SENIOR UNSECURED			A	1,2	2.A FE	8,325,150	89.5485	8,954,854	10,000,000	0	230,851	0	0	2.600	5.827	FA	108,333	260,000	10/30/2023	02/01/2030
94106B-AE-1	Waste Connections Inc-SENIOR UNSECURED			A	1,2	2.A FE	13,937,876	87.4935	13,998,965	16,000,000	0	191,977	0	0	3.200	4.995	JD	42,667	512,000	06/08/2023	06/01/2032
98417E-AC-4	GLENCORE FINANCE CANADA-SENIOR UNSECURED			A	1	2.A FE	2,922,497	108.3225	2,278,021	2,103,000	0	(40,648)	0	0	6.900	3.711	MN	18,541	145,107	06/07/2021	11/15/2037
233853-AQ-3	Daimler Trucks Finance N-SENIOR UNSECURE				1.G FE	26,962,118	100.3983	26,968,981	26,862,000	26,925,474	0	(19,044)	0	0	5.125	5.039	JJ	619,505	1,376,678	03/27/2023	01/19/2028
233853-AV-2	Daimler Truck Finance No-SENIOR UNSECURE				1.G FE	16,512,779	100.2699	16,464,311	16,420,000	16,499,490	0	(13,288)	0	0	5.000	4.747	JJ	378,572	157,825	08/02/2024	01/15/2027
233853-AY-6	Daimler Truck Finance No-SENIOR UNSECURE			1,2	1.G FE	10,155,000	100.6166	10,061,659	10,000,000	10,143,949	0	(11,051)	0	0	5.125	4.541	MS	136,667	0	10/15/2024	09/25/2027
55167#-AA-7	Umpqua Holdings Corporation - Private Bo				5.B GI	9,157,500	100.0000	9,000,000	9,000,000	8,997,591	0	227	0	0	8.004	8.007	MJSD	190,351	801,971	03/01/2018	03/26/2033
874060-AJ-6	Takeda Pharmaceutical Co-SENIOR UNSECURE			D	1,2	2.A FE	14,890,950	100.2529	15,037,937	14,911,722	0	19,761	0	0	5.000	5.167	MN	72,917	750,000	11/28/2023	12/16/2028
874060-AX-4	Takeda Pharmaceutical Co-SENIOR UNSECURE			D	1,2	2.A FE	33,192,811	86.4472	35,573,006	41,150,000	0	2,945,248	0	0	2.050	5.717	MS	213,237	843,575	02/13/2024	03/31/2030
00440E-AH-0	CHUBB INA HOLDINGS INC-SENIOR UNSECURED				1.F FE	2,537,724	111.0642	2,040,249	1,837,000	2,423,300	0	(41,848)	0	0	6.700	3.309	MN	15,727	123,079	03/03/2022	05/15/2036
00653V-AC-5	AdaptHealth LLC-SENIOR UNSECURED			1,2	4.A FE	3,564,535	89.9300	3,233,883	3,596,000	3,776	0	3,776	0	0	4.625	4.794	FA	69,298	166,315	10/26/2021	08/01/2029
009158-BH-8	Air Products and Chemica-SENIOR UNSECURE			1,2	1.F FE	15,190,724	99.7270	15,258,236	15,300,000	15,207,393	0	16,669	0	0	4.600	4.763	FA	279,565	351,900	02/29/2024	02/08/2029
009158-BJ-4	Air Products and Chemica-SENIOR UNSECURE			1,2	1.F FE	19,861,000	99.1567	19,831,344	20,000,000	19,872,880	0	11,880	0	0	4.750	4.871	FA	377,361	475,000	05/07/2024	02/08/2031
03073E-AP-0	Cencora Inc-SENIOR UNSECURED			1,2	2.A FE	15,721,888	96.7782	15,758,394	16,283,000	15,741,433	0	19,545	0	0	3.450	4.945	JD	24,967	280,882	07/14/2021	12/15/2027
03073E-AR-6	Cencora Inc-SENIOR UNSECURED			1,2	2.A FE	3,788,339	89.6452	3,849,363	4,294,000	3,843,345	0	55,006	0	0	2.800	5.055	MN	15,363	120,232	03/21/2024	05/15/2030
03073E-AW-5	COR 4.85 12/15/29			1,2	2.B FE	6,174,024	99.5905	6,150,712	6,176,000	6,173,852	0	(171)	0	0	4.850	4.857	JD	18,305	0	12/02/2024	12/15/2029
20030N-DH-1	Comcast Corp-SENIOR UNSECURED			1,2	1.G FE	48,487,260	80.0537	34,423,091	43,000,000	47,606,715	0	(248,410)	0	0	3.750	2.854	AO	403,125	1,612,500	04/01/2040	
22966R-AF-3	CubeSmart LP-SENIOR UNSECURED			1,2	2.B FE	8,433,200	90.0399	9,003,993	10,000,000	8,714,316	0	208,956	0	0	3.000	5.948	FA	113,333	300,000	08/17/2023	02/15/2030
22966R-AG-1	CubeSmart LP-SENIOR UNSECURED			1,2	2.B FE	4,083,600	83.1063	4,155,317	5,000,000	4,320,257	0	94,218	0	0	2.000	4.570	FA	37,778	100,000	05/20/2022	02/15/2031
22966R-AH-9	CubeSmart LP-SENIOR UNSECURED			1,2	2.B FE	9,517,808	90.0513	10,265,847	11,400,000	10,077,448	0	291,302	0	0	2.250	5.557	JD	11,400	256,500	08/17/2023	12/15/2028
22966R-AJ-5	CubeSmart LP-SENIOR UNSECURED			1,2	2.B FE	5,002,504	83.6738	4,460,648	5,331,000	5,085,417	0	30,199	0	0	2.500	3.229	FA	50,348	133,275	03/04/2022	02/15/2032
23204G-AG-5	Customers Bancorp Inc-SENIOR UNSECURED			2	2.B FE	15,085,000	87.6000	13,214,460	15,085,000	15,085,000	0	0	0	0	2.875	2.875	FA	163,840	433,694	08/03/2021	08/15/2031
23204H-BM-9	Customers Bank-SUBORDINATED			2	2.B FE	7,070,000	99.4250	6,959,750	7,000,000	7,002,685	0	(4,373)	0	0	8.363	8.193	MJSD	8,131	524,149	12/19/2018	06/26/2029

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
26884L-AF-6	EOT Corp-SENIOR UNSECURED			1,2	2.C FE	2,250,072	.97.2705	2,334,492	2,400,000	2,289,784	.0	35,968	.0	.0	.3.900	5.726	AO	23,400	93,600	11/20/2023	10/01/2027
302520-AB-7	FNB Corp/PA-SUBORDINATED				2.B FE	5,000,000	.99.5279	4,976,395	5,000,000	5,000,000	.0	.0	.0	.0	.4.875	4.873	AO	60,260	243,750	09/29/2015	10/02/2025
302520-AC-5	FNB Corp/PA-SENIOR UNSECURED			2	2.B FE	12,682,220	.99.9430	12,692,761	12,700,000	12,695,029	.0	6,029	.0	.0	.5.150	5.201	FA	228,918	654,050	08/18/2022	08/25/2025
30259J-AA-1	FNB Corp/PA-SUBORDINATED			2	2.B FE	8,000,000	.98.1436	7,851,490	8,000,000	8,000,000	.0	.0	.0	.0	.7.178	7.172	FMAN	74,975	679,592	02/11/2019	02/14/2029
31982Q-AY-5	First Commonwealth Bank-SUBORDINATED			2	2.C FE	8,000,000	.72.8000	5,824,000	8,000,000	8,000,055	.0	(121)	.0	.0	.5.500	5.498	JD	36,667	440,000	05/16/2018	06/01/2033
360271-AM-2	Fulton Financial Corp-SUBORDINATED			2	2.B FE	10,000,000	.80.3000	8,030,000	10,000,000	10,000,000	.0	.0	.0	.0	.3.750	3.750	MS	110,417	375,000	02/25/2020	03/15/2035
534187-AW-9	Lincoln National Corp-SENIOR UNSECURED				2.B FE	2,236,898	104.2344	1,603,125	1,538,000	2,114,629	.0	(37,118)	.0	.0	.6.300	2.790	AO	22,070	96,894	08/03/2021	10/09/2037
534187-BA-6	LINCOLN NATIONAL CORP-SENIOR NOTE				2.B FE	5,909,577	109.2861	4,182,380	3,827,000	5,614,758	.0	(88,533)	.0	.0	.7.000	3.157	JD	11,906	267,890	07/13/2021	06/15/2040
644274-AG-7	New Enterprise Stone & L-SENIOR UNSECURE			1,2	5.A FE	3,351,250	102.4143	3,584,500	3,500,000	3,403,092	.0	21,428	.0	.0	.9.750	10.707	JJ	157,354	341,250	05/25/2022	07/15/2028
644274-AH-5	New Enterprise Stone & L-SECURED			1,2	4.A FE	1,795,000	.96.7023	1,934,045	2,000,000	1,866,178	.0	31,944	.0	.0	.5.250	7.434	JJ	48,417	105,000	08/29/2022	07/15/2028
69352P-AQ-6	PPL Capital Funding Inc-SENIOR UNSECURED			1,2	2.A FE	3,998,640	.95.2890	3,811,560	4,000,000	3,999,181	.0	102	.0	.0	.4.125	4.128	AO	34,833	165,000	04/01/2020	04/15/2030
707569-AV-1	Penn National Gaming Inc-SENIOR UNSECURE			1,2	4.C FE	3,000,000	.89.7875	2,693,625	3,000,000	3,000,000	.0	.0	.0	.0	.4.125	4.125	JJ	61,875	123,750	06/24/2021	07/01/2029
709599-AW-4	Penske Truck Leasing Co -SENIOR UNSECURE			1,2	2.B FE	6,512,240	.97.3660	6,815,617	7,000,000	6,683,390	.0	155,153	.0	.0	.3.400	5.987	MN	30,411	238,000	11/20/2023	11/15/2026
709599-BM-5	Penske Truck Leasing Co -SENIOR UNSECURE			1,2	2.B FE	876,360	.95.5193	955,193	1,000,000	945,959	.0	34,675	.0	.0	.1.700	5.618	JD	756	17,000	12/05/2022	06/15/2026
709599-BN-3	Penske Truck Leasing Co -SENIOR UNSECURE			1,2	2.B FE	1,886,920	.98.7233	1,974,465	2,000,000	1,936,718	.0	22,895	.0	.0	.4.400	5.777	JJ	44,000	88,000	09/30/2022	07/01/2027
709599-BR-4	Penske Truck Leasing Co -SENIOR UNSECURE			1,2	2.B FE	9,814,700	102.3623	10,236,230	10,000,000	9,861,425	.0	42,379	.0	.0	.5.875	6.407	MN	75,069	587,500	11/13/2023	11/15/2027
709599-BS-2	Penske Truck Leasing Co -SENIOR UNSECURE			1,2	2.B FE	10,107,200	101.8115	10,181,147	10,000,000	10,068,044	.0	(20,349)	.0	.0	.5.700	5.451	FA	237,500	570,000	01/06/2023	02/01/2028
709599-BT-0	Penske Truck Leasing Co -SENIOR UNSECURE			1,2	2.B FE	20,297,511	101.4876	20,297,511	20,000,000	19,966,330	.0	8,436	.0	.0	.5.550	5.653	MN	185,000	1,110,000	03/27/2023	05/01/2028
709599-BU-7	Penske Truck Leasing Co -SENIOR UNSECURE			1,2	2.B FE	2,508,975	100.9809	2,524,523	2,500,000	2,506,523	.0	(2,452)	.0	.0	.5.750	5.540	MN	14,774	71,875	06/25/2024	05/24/2026
709599-BW-3	Penske Truck Leasing Co -SENIOR UNSECURE			1,2	2.B FE	3,076,440	102.9466	3,088,399	3,000,000	3,062,439	.0	(14,002)	.0	.0	.6.050	5.389	FA	75,625	90,750	02/13/2024	08/01/2028
709599-BY-9	Penske Truck Leasing Co -SENIOR UNSECURE			1,2	2.B FE	942,971	100.7715	951,283	944,000	943,266	.0	295	.0	.0	.5.350	5.390	JJ	23,709	25,252	01/09/2024	01/12/2027
915271-AC-4	Univest Financial Corp-SUBORDINATED			2	2.B FE	4,000,000	.95.5000	3,820,000	4,000,000	4,000,000	.0	.0	.0	.0	.5.000	4.973	FA	75,556	200,000	07/29/2020	08/15/2030
915271-AD-2	Univest Financial Corp-SUBORDINATED			2	2.B FE	15,000,000	.87.1250	13,068,750	15,000,000	15,000,000	.0	.0	.0	.0	.7.250	7.250	MN	138,958	1,087,500	11/07/2022	11/15/2032
92556V-AD-8	Viatis Inc-SENIOR UNSECURED			1,2	2.C FE	1,329,331	.86.7250	1,432,697	1,652,000	1,401,579	.0	37,625	.0	.0	.2.700	5.988	JD	1,115	44,604	01/06/2023	06/22/2030
92556V-AE-6	Viatis Inc-SENIOR UNSECURED			1,2	2.C FE	43,308,400	.75.0751	30,030,052	40,000,000	42,827,455	.0	(144,677)	.0	.0	.3.850	3.250	JD	38,500	1,540,000	10/05/2021	06/22/2040
960386-AM-2	Westinghouse Air Brake T-SENIOR UNSECURE			1,2	2.B FE	9,393,500	.99.0016	9,900,157	10,000,000	9,707,814	.0	68,975	.0	.0	.4.700	5.581	MS	138,389	470,000	12/20/2018	09/15/2028
071734-AQ-0	Bausch Health Cos Inc-FIRST LIEN		A		4.C FE	1,964,829	.95.0000	2,328,450	2,451,000	2,083,166	.0	118,337	.0	.0	.11.000	16.509	MS	68,151	539,220	01/31/2023	09/30/2028
071734-AR-8	Bausch Health Cos Inc-BHCON 14 10/15/30		A	1,2	5.C FE	392,806	.92.5250	453,373	490,000	406,131	.0	13,326	.0	.0	.14.000	18.975	AO	14,482	140,058	01/31/2023	10/15/2030
09039B-AA-0	THEIA BIDCO PTY LTD FAC A1		B		5.B GI	4,322,813	.97.6800	4,150,459	6,869,906	4,121,566	.0	.0	.0	(201,247)	.11.330	.11.330	MAT	208,025	123,931	04/30/2024	04/04/2030
126650-CX-6	CVS Health Corp-SENIOR UNSECURED			1,2	2.B FE	24,459,150	.97.1432	24,285,790	25,000,000	24,632,982	.0	101,645	.0	.0	.4.300	4.792	MS	286,667	1,075,000	03/25/2028	
126650-CY-4	CVS Health Corp-SENIOR UNSECURED			1,2	2.B FE	11,938,127	.86.6479	8,664,791	10,000,000	11,596,365	.0	(99,880)	.0	.0	.4.780	3.240	MS	127,467	478,000	06/03/2021	03/25/2038
126650-DM-9	CVS Health Corp-SENIOR UNSECURED			1,2	2.B FE	8,681,153	.90.6102	9,200,564	10,154,000	9,142,970	.0	347,433	.0	.0	.1.300	5.398	FA	47,667	132,002	08/24/2023	08/21/2027
126650-DJ-1	CVS Health Corp-SENIOR UNSECURED			1,2	2.B FE	8,254,480	.95.6354	7,650,831	8,000,000	8,216,988	.0	(22,105)	.0	.0	.5.250	4.832	FA	151,667	420,000	02/21/2023	02/15/2033
126650-EB-2	CVS 5.4 06/01/29			1,2	2.B FE	14,985,450	.99.8941	14,984,120	15,000,000	14,986,984	.0	1,534	.0	.0	.5.400	5.421	JD	67,500	454,500	05/07/2024	06/01/2029
148056-AZ-0	Hasbro Inc-SENIOR UNSECURED			1,2	2.B FE	24,922,340	.93.6233	25,278,286	27,000,000	25,467,125	.0	268,117	.0	.0	.3.900	5.229	MN	122,850	1,053,000	03/27/2023	11/19/2029
631005-BJ-3	Narragansett Electric Co-SENIOR UNSECURE			1,2	1.G FE	13,581,916	.92.2416	13,720,932	14,875,000	13,724,604	.0	142,688	.0	.0	.3.395	5.085	AO	115,029	505,006	03/21/2024	04/09/2030
15201P-AA-7	CenterState Bank Corp-SUBORDINATED			2	2.B FE	19,000,000	.98.8500	18,781,500	19,000,000	19,000,000	.0	.0	.0	.0	.5.750	5.750	JD	91,042	1,092,500	05/21/2020	06/01/2030
27965F-AV-4	EDENS LIMITED PARTNERSH Senior Note 3yr				2.B PL	10,000,000	.100.2706	10,027,060	10,000,000	10,000,000	.0	.0	.0	.0	.5.620	5.620	FA	226,361	.0	07/23/2024	08/06/2027
60081H-AF-5	Milliken & Co Senior Note Series C				2.B	5,000,000	.84.2249	4,211,245	5,000,000	5,000,000	.0	.0	.0	.0	.2.710	2.710	AO	28,606	135,500	10/18/2021	10/15/2031
60081H-A@-7	Milliken & Co Senior Note Series B				2.B	5,000,000	.90.0695	4,503,475	5,000,000	5,000,000	.0	.0	.0	.0	.2.400	2.400	AO	25,333	120,000	10/18/2021	10/15/2028
33738K-AA-3	WELLS FARGO BANK NA-SUBORDINATED				1.F FE	1,476,480	.98.0977	1,304,699	1,330,000	1,415,675	.0	(5,507)	.0	.0	.6.180	5.401	FA	31,051	82,194	07/21/2015	02/15/2036
33738M-AA-9	Wells Fargo Bank NA-SUBORDINATED				2.A FE	12,194,512	.99.4691	12,513,218	12,580,000	12,367,432	.0	12,578	.0	.0	.6.180	6.392	FA	293,701	777,444	01/13/1998	02/15/2036
67077M-AQ-1	Nutrien Ltd-SENIOR UNSECURED		A	1,2	2.B FE	3,595,076	102.0444	2,544,987	2,494,000	3,438,639	.0	(46,913)	.0	.0	.6.125	3.047	JJ	70,438	152,758	07/13/2021	01/15/2041
67077M-AT-5	Nutrien Ltd-SENIOR UNSECURED		A	1,2	2.B FE	4,501,198	.97.0108	4,586,671	4,728,000	4,552,245	.0	36,023	.0	.0	.4.200	5.184	AO	49,644	198,576	07/21/2023	04/01/2029
67077M-BA-5	Nutrien Ltd-SENIOR UNSECURED		A	1,2	2.B FE	15,147,958	.99.9143	15,275,890	15,289,000	15,181,555	.0	26,144	.0	.0	.4.900	5.136	MS	195,614	749,161	03/21/2024	03/27/2028

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
606822-CN-2	Mitsubishi UFJ Financial-SENIOR UNSECURE	D	2		1.G FE	15,095,760	101.3088	15,702,867	15,500,000	15,228,215	0	63,529	0	0	5.354	5.885	MS	248,961	829,870	11/15/2022	09/13/2028
60687Y-BP-3	Mizuho Financial Group I-SENIOR UNSECURE	D	2		1.G FE	16,351,534	95.3307	18,200,535	19,092,000	17,570,054	0	586,417	0	0	1.234	4.800	MN	25,523	235,595	12/02/2022	05/22/2027
60687Y-QL-1	Mizuho Financial Group I-SENIOR UNSECURE	D	2		1.G FE	14,020,394	101.3767	14,530,318	14,333,000	14,122,808	0	49,094	0	0	5.414	5.857	MS	232,797	775,989	11/15/2022	09/13/2028
053332-AW-2	AutoZone Inc-SENIOR UNSECURED		1,2		2.B FE	10,236,050	95.3701	10,490,707	11,000,000	10,328,778	0	92,728	0	0	3.750	5.357	AO	83,646	206,250	04/23/2024	04/18/2029
053332-AZ-5	AutoZone Inc-SENIOR UNSECURED		1,2		2.B FE	8,993,970	95.2575	8,573,175	9,000,000	8,996,475	0	515	0	0	4.000	4.007	AO	76,000	360,000	03/26/2020	04/15/2030
053332-BC-5	AutoZone Inc-SENIOR UNSECURED		1,2		2.B FE	10,637,042	99.0874	10,668,743	10,767,000	10,680,787	0	25,252	0	0	4.500	4.781	FA	201,881	484,515	03/29/2023	02/01/2028
12543D-BG-4	CHS/Community Health Sys-FIRST LIEN		1,2		4.C FE	923,095	95.9710	1,003,857	1,046,000	974,875	0	27,869	0	0	5.625	9.089	MS	17,324	58,838	01/20/2023	03/15/2027
14913R-2H-9	Caterpillar Financial Se-SENIOR UNSECURE				1.F FE	8,976,100	96.8338	9,683,382	10,000,000	9,684,903	0	348,540	0	0	0.800	4.548	MN	10,667	80,000	11/29/2022	11/13/2025
14913R-2K-2	Caterpillar Financial Se-SENIOR UNSECURE				1.F FE	4,497,700	96.0090	4,800,450	5,000,000	4,759,715	0	194,307	0	0	0.900	5.187	MS	14,875	45,000	08/17/2023	03/02/2026
14913U-AA-8	Caterpillar Financial Se-SENIOR UNSECURE				1.F FE	11,197,932	99.8833	11,465,604	11,479,000	11,326,733	0	103,774	0	0	4.350	5.361	MN	63,804	499,337	10/06/2023	05/15/2026
14913U-AE-0	Caterpillar Financial Se-SENIOR UNSECURE				1.F FE	10,012,200	100.1980	10,019,803	10,000,000	10,011,952	0	(248)	0	0	4.500	4.437	JJ	216,250	0	11/20/2024	01/08/2027
14913U-AJ-9	Caterpillar Financial Se-SENIOR UNSECURE				1.F FE	5,001,150	100.5029	5,025,145	5,000,000	5,000,916	0	(234)	0	0	4.850	4.843	FA	83,528	121,250	04/09/2024	02/27/2029
14913U-AS-9	CAT 4.6 11/15/27				1.F FE	20,024,812	100.0317	20,006,342	20,000,000	20,023,030	0	(1,783)	0	0	4.600	4.555	MN	117,556	0	11/18/2024	11/15/2027
277432-AL-4	EASTMAN CHEMICAL CO-SENIOR UNSECURED BON		1,2		2.B FE	16,127,884	87.0864	11,539,823	13,251,000	15,739,804	0	(105,791)	0	0	4.800	3.352	MS	212,016	636,048	02/25/2021	09/01/2042
277432-AP-5	EASTMAN CHEMICAL CO-SR UNSECURED		1,2		2.B FE	11,902,900	84.6092	8,460,924	10,000,000	11,689,323	0	(60,856)	0	0	4.650	3.444	AO	98,167	465,000	04/27/2021	10/15/2044
31428X-AW-6	FEDEX CORP-SR UNSECURED				2.B FE	18,500,360	90.9447	12,961,440	14,252,000	18,025,319	0	191,259	0	0	5.100	3.226	JJ	335,160	726,852	07/14/2021	01/15/2044
31428X-BG-0	FEDEX CORP-SENIOR UNSECURED		1,2		2.B FE	6,271,250	83.2791	4,163,955	5,000,000	6,143,314	0	(38,992)	0	0	4.550	3.054	AO	56,875	227,500	08/03/2021	04/01/2046
31428X-CE-4	FedEx Corp-SENIOR UNSECURED		1,2		2.B FE	20,427,800	73.0519	14,610,376	20,000,000	20,368,337	0	(17,941)	0	0	3.250	3.101	MN	83,056	650,000	07/14/2021	05/15/2041
33766N-AJ-3	FirstBank/Nashville TN-SUBORDINATED		2		2.B FE	7,000,000	97.4779	6,823,456	7,000,000	7,000,000	0	0	0	0	4.500	4.500	MS	105,000	315,000	08/31/2020	09/01/2030
404119-BQ-1	HCA Inc-FIRST LIEN				2.C FE	3,839,955	100.0710	3,502,484	3,500,000	3,531,221	0	(107,015)	0	0	5.250	2.125	AO	38,792	183,750	01/19/2022	04/15/2025
404119-BU-2	HCA Inc-FIRST LIEN		1,2		2.C FE	14,333,550	98.9906	14,848,583	15,000,000	14,646,762	0	151,643	0	0	4.500	5.689	FA	255,000	675,000	12/05/2022	02/15/2027
404119-BV-0	HCA Inc-FIRST LIEN		1,2		2.C FE	36,410,469	90.9115	25,455,214	28,000,000	35,712,537	0	(225,613)	0	0	5.500	3.663	JD	68,444	1,540,000	10/07/2021	06/15/2047
404121-AJ-4	HCA Inc-SENIOR UNSECURED		1,2		2.C FE	1,922,000	101.2766	2,025,532	2,000,000	1,948,112	0	12,137	0	0	5.625	6.427	MS	37,500	112,500	09/30/2022	09/01/2028
460146-CH-4	International Paper Co-SENIOR UNSECURED		1,2		2.B FE	46,916,916	102.3750	33,361,972	32,588,000	44,949,818	0	(575,569)	0	0	6.000	3.040	MN	249,841	1,955,280	08/02/2021	11/15/2041
460146-CK-7	International Paper Co-SR UNSECURED		1,2		2.B FE	14,808,862	87.8976	9,957,039	11,328,000	14,407,108	0	(120,405)	0	0	4.800	2.920	JD	24,166	543,744	08/02/2021	06/15/2044
59523U-AQ-0	Mid-America Apartments L-SENIOR UNSECURE		1,2		1.G FE	3,119,342	96.3473	3,223,779	3,346,000	3,168,054	0	36,737	0	0	3.950	5.378	MS	38,916	132,167	08/24/2023	03/15/2029
72346Q-AC-8	Pinnacle Financial Partn-SUBORDINATED		1,2		2.A FE	37,000,000	98.4500	36,426,500	37,000,000	37,000,000	0	0	0	0	7.983	7.984	MJSD	131,280	2,272,906	03/28/2022	09/15/2029
892356-AA-4	Tractor Supply Co-SENIOR UNSECURED		1,2		2.B FE	9,080,462	83.6672	10,076,873	12,044,000	9,500,321	0	353,203	0	0	1.750	6.107	MN	35,128	210,770	10/30/2023	11/01/2030
892356-AB-2	Tractor Supply Co-SENIOR UNSECURED		1,2		2.B FE	16,040,183	99.9821	16,145,111	16,148,000	16,053,625	0	8,637	0	0	5.250	5.336	MN	108,326	847,770	06/08/2023	05/15/2033
91529Y-AU-0	UNUM GROUP SR NT				2.B FE	16,364,056	99.1683	16,432,184	16,570,000	16,548,682	0	(137,531)	0	0	3.875	4.026	MN	99,880	642,088	12/01/2016	11/05/2025
91529Y-AP-1	Unum Group-SENIOR UNSECURED		1,2		2.B FE	19,685,548	79.4419	14,529,135	18,289,000	19,591,182	0	(30,777)	0	0	4.500	4.039	JD	36,578	823,005	10/04/2021	12/15/2049
921814-AA-7	Vanderbilt University Me-UNSECURED		1,2		1.F FE	3,500,000	84.9455	2,973,091	3,500,000	3,500,090	0	(6)	0	0	4.172	4.172	JJ	73,010	146,020	07/12/2017	07/01/2037
00206R-GQ-9	AT&T Inc-SENIOR UNSECURED		1,2		2.B FE	1,010,658	96.7529	973,334	1,006,000	1,008,178	0	(392)	0	0	4.300	4.250	FA	16,342	43,258	12/01/2017	02/05/2030
00206R-JC-7	AT&T Inc-SENIOR UNSECURED				2.B FE	34,382,660	105.4640	27,420,648	26,000,000	33,054,012	0	(466,935)	0	0	6.500	3.661	MN	215,944	1,690,000	01/18/2022	11/15/2036
00206R-MM-1	AT&T Inc-SENIOR UNSECURED		1,2		2.B FE	47,855,000	80.6255	38,105,238	47,262,000	47,683,091	0	(43,727)	0	0	2.550	2.318	JD	100,432	1,205,181	12/07/2020	12/01/2033
009098-AA-5	Air Cargo Logistics Ft W Lease-Collatera				1.E	3,772,028	91.4345	3,448,935	3,772,028	3,772,030	0	0	0	0	4.494	4.494	MON	9,888	212,488	02/10/2019	11/10/2039
049560-AT-2	Atmos Energy Corp-SENIOR UNSECURED		1,2		1.G FE	10,484,034	82.0876	10,509,677	12,803,000	10,528,880	0	44,846	0	0	1.500	4.937	JJ	88,554	17,138	12/19/2024	01/15/2031
12008R-AP-2	Builders FirstSource Inc-SENIOR UNSECURE		1,2		3.C FE	4,681,250	88.1530	4,407,650	5,000,000	4,755,227	0	28,047	0	0	4.250	5.081	FA	88,542	212,500	03/29/2022	02/01/2032
12189L-AE-1	BURLINGTN NORTH SANTA FE-SR UNSECURED		1,2		1.F FE	4,029,720	97.9236	2,937,709	3,000,000	3,055,347	0	(42,099)	0	0	5.400	3.069	JD	13,500	162,000	02/26/2021	06/01/2041
12189L-AS-0	BURLINGTN NORTH SANTA FE-SENIOR UNSECURE		1,2		1.F FE	10,509,730	91.7399	7,481,388	8,155,000	10,215,952	0	(79,942)	0	0	4.900	3.111	AO	99,899	399,595	02/25/2021	04/01/2044
12189L-AU-5	BURLINGTN NORTH SANTA FE-SENIOR UNSECURE		1,2		1.F FE	5,580,461	86.9646	4,001,241	4,601,000	5,467,495	0	(32,245)	0	0	4.550	3.225	MS	69,782	209,346	04/29/2021	09/01/2044
12662P-AD-0	CVR Energy Inc-SENIOR UNSECURED		1,2		4.B FE	1,797,600	92.4667	1,886,320	2,040,000	1,889,569	0	39,980	0	0	5.750	8.484	FA	44,313	115,000	09/27/2024	02/15/2028
127097-AG-8	Coterra Energy Inc-SENIOR UNSECURED		1,2		2.B FE	9,497,298	97.6972	9,769,718	10,000,000	9,714,381	0	110,191	0	0	3.900	5.193	MN	49,833	390,000	12/23/2022	05/15/2027
127097-AK-9	Coterra Energy Inc-SENIOR UNSECURED		1,2		2.B FE	9,241,220	96.7638	9,192,559	9,500,000	9,314,733	0	38,655	0	0	4.375	4.892	MS	122,378	415,625	01/18/2023	03/15/2029
149123-CH-2	Caterpillar Inc-SENIOR UNSECURED		1,2		1.F FE	4,450,200	90.1357	4,506,783	5,000,000	4,553,770	0	73,373	0	0	2.600	4.521	AO	29,611	130,000	07/26/2023	04/09/2030

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
149123-CX-5	Caterpillar Inc-SENIOR UNSECURED			1,2	1.F FE	3,403,200	.84.9768	3,399,074	4,000,000	3,517,172	.0	67,072	.0	.0	1.900	4.127	MS	23,011	76,000	04/05/2023	03/12/2031
15089Q-AM-6	Celanese US Holdings LLC-SENIOR UNSECURE			1,2	2.C FE	14,849,955	101.5811	15,491,113	15,250,000	15,017,102	.0	80,433	.0	.0	6.165	6.826	JJ	433,519	940,163	12/05/2022	07/15/2027
15089Q-AN-4	Celanese US Holdings LLC-SENIOR UNSECURE			1,2	2.C FE	27,312,214	101.9546	27,527,742	27,000,000	27,215,280	.0	(41,569)	.0	.0	6.330	6.330	JJ	788,085	1,709,100	07/07/2022	07/15/2029
15189Y-AG-1	CenterPoint Energy Resou-SENIOR UNSECURE			1,2	1.G FE	10,153,400	101.0140	10,101,399	10,000,000	10,104,912	.0	(30,889)	.0	.0	5.250	4.878	MS	175,000	525,000	05/23/2023	03/01/2028
18453H-AE-6	Clear Channel Outdoor Ho-FIRST LIEN			1,2	4.B FE	2,483,000	104.9083	2,604,874	2,483,000	2,483,000	.0	.0	.0	.0	9.000	8.996	MS	65,800	237,747	08/08/2023	09/15/2028
205768-AT-1	Comstock Resources Inc-SENIOR UNSECURED			1,2	4.B FE	1,859,300	.93.3944	1,724,061	1,846,000	1,852,798	.0	(2,007)	.0	.0	5.875	5.740	JJ	50,009	108,453	06/16/2021	01/15/2030
20825C-AF-1	ConocoPhillips-UNSECURED SENIOR NOTE				1.F FE	8,820,327	105.6908	8,621,198	8,157,000	8,735,603	.0	(60,054)	.0	.0	5.900	4.797	AO	101,600	481,263	07/26/2023	10/15/2032
20825C-AP-9	ConocoPhillips-SR UNSECURED				1.F FE	2,934,585	103.8828	2,278,149	2,193,000	2,827,669	.0	(37,452)	.0	.0	5.900	3.219	MN	16,533	129,387	01/19/2022	05/15/2038
20825C-AQ-7	ConocoPhillips-NOTE				1.F FE	14,989,011	109.3074	10,953,694	10,021,000	14,196,860	.0	(237,422)	.0	.0	6.500	2.879	FA	271,402	651,365	07/14/2021	02/01/2039
20825V-AB-8	CONOCOPHILLIPS CANADA-SENIOR UNSECURED				1.F FE	13,855,100	104.0926	10,409,259	10,000,000	13,154,527	.0	(223,175)	.0	.0	5.950	2.791	AO	125,611	595,000	10/04/2021	10/15/2036
20826F-AR-7	ConocoPhillips Co-SENIOR UNSECURED			1,2	1.F FE	28,687,800	102.5662	20,513,234	20,000,000	27,936,473	.0	(263,952)	.0	.0	5.950	3.291	MS	350,389	1,190,000	01/20/2022	03/15/2046
20826F-BJ-4	ConocoPhillips Co-SENIOR UNSECURED			1,2	1.F FE	14,813,270	.99.1318	14,869,770	15,000,000	14,814,048	.0	.778	.0	.0	4.700	4.979	JJ	50,917	.0	12/19/2024	01/15/2030
21871X-AD-1	Corebridge Financial Inc-SENIOR UNSECURE			1,2	2.A FE	7,987,880	.97.2559	8,496,275	8,736,000	8,274,658	.0	184,382	.0	.0	3.650	6.185	AO	76,173	318,864	05/31/2023	04/05/2027
21871X-AF-6	Corebridge Financial Inc-SENIOR UNSECURE			1,2	2.A FE	9,483,190	.95.5173	9,551,725	10,000,000	9,608,952	.0	80,594	.0	.0	3.850	4.876	AO	91,972	385,000	05/31/2023	04/05/2029
21871X-AH-2	Corebridge Financial Inc-SENIOR UNSECURE			1,2	2.A FE	11,959,589	.91.0098	11,376,221	12,500,000	12,040,761	.0	52,012	.0	.0	3.900	4.496	AO	116,458	487,500	05/31/2023	04/05/2032
226373-AQ-1	ET 5 5/8 05/01/27			1,2	2.B FE	5,010,450	.99.8560	4,992,800	5,000,000	5,006,149	.0	(4,301)	.0	.0	5.625	5.223	MN	46,875	140,625	10/15/2024	05/01/2027
22822R-BD-1	Crown Castle Towers LLC-CROCAS 3.663 05/			1	1.F FE	36,000,000	.99.1183	35,682,570	36,000,000	36,000,000	.0	.0	.0	.0	3.663	3.663	MON	58,608	1,318,680	04/30/2015	05/15/2025
22822R-BH-2	Crown Castle Towers LLC-SECURED			1,2	1.F FE	15,000,000	.96.1318	14,419,764	15,000,000	14,994,372	.0	2,576	.0	.0	4.241	4.260	MON	28,273	636,150	06/26/2018	07/15/2028
22822V-BD-2	Crown Castle Inc-SENIOR UNSECURED			1,2	2.B FE	5,071,350	102.1375	5,106,873	5,000,000	5,061,913	.0	(9,437)	.0	.0	5.600	5.276	JD	23,333	276,111	03/21/2024	06/01/2029
25278X-AM-1	Diamondback Energy Inc-SENIOR UNSECURED			1,2	2.B FE	7,042,208	.97.3786	7,035,602	7,225,000	7,059,414	.0	17,206	.0	.0	3.250	4.510	JD	19,568	117,406	10/15/2024	12/01/2026
26875P-AP-6	EOG Resources Inc-SENIOR UNSECURED			1,2	1.G FE	2,984,160	.99.5772	2,987,315	3,000,000	2,985,773	.0	1,613	.0	.0	4.150	4.621	JJ	57,408	.0	11/19/2024	01/15/2026
26875P-AU-5	EOG Resources Inc-SENIOR UNSECURED			1,2	1.G FE	8,301,097	.96.9945	8,140,751	8,393,000	8,301,949	.0	853	.0	.0	4.375	4.607	AO	77,519	.0	12/06/2024	04/15/2030
27889*-AQ-2	ECOM ATLANTIC INC Senior Unsecured Notes				1.G PL	25,000,000	.98.7810	24,695,250	25,000,000	25,000,000	.0	.0	.0	.0	6.230	3.880	FA	536,472	.0	08/08/2024	08/27/2027
29250R-AW-6	Enbridge Energy Partners-SENIOR UNSECURE			1,2	2.A FE	23,916,960	100.5337	24,128,078	24,000,000	23,990,028	.0	8,985	.0	.0	5.875	5.916	AO	297,667	1,410,000	10/01/2015	10/15/2025
29273V-AP-5	Energy Transfer LP-SENIOR UNSECURED			1,2	2.B FE	8,729,126	101.5632	8,822,796	8,687,000	8,715,730	.0	(8,723)	.0	.0	5.550	5.552	FA	182,138	482,129	12/05/2022	02/15/2028
29273V-AT-7	Energy Transfer LP-SENIOR UNSECURED			1,2	2.B FE	9,945,078	105.6340	10,152,486	9,611,000	9,915,211	.0	(29,867)	.0	.0	6.400	5.746	JD	51,259	615,104	04/23/2024	12/01/2030
29278N-AN-3	Energy Transfer Operatin-SENIOR UNSECURE			1,2	2.B FE	6,257,268	101.2799	6,300,623	6,221,000	6,240,559	.0	(8,193)	.0	.0	5.500	5.346	JD	28,513	342,155	12/05/2022	06/01/2027
29336T-AA-8	EnLink Midstream LLC-SENIOR UNSECURED			1,2	2.C FE	1,491,000	100.0553	1,500,830	1,500,000	1,494,132	.0	1,130	.0	.0	5.375	5.475	JD	6,719	80,625	02/18/2022	06/01/2029
29336U-AD-9	EnLink Midstream Partner-SENIOR UNSECURE			1,2	2.C FE	435,550	.85.3810	529,362	620,000	443,691	.0	3,464	.0	.0	5.050	7.882	AO	7,828	31,310	07/01/2022	04/01/2045
29336U-AF-7	EnLink Midstream Partner-SENIOR UNSECURE			1,2	2.C FE	1,603,268	.99.5397	1,725,022	1,733,000	1,725,995	.0	16,075	.0	.0	4.150	5.134	JD	5,993	150,730	09/02/2015	06/01/2025
29336U-AG-2	EnLink Midstream Partner-SENIOR UNSECURE			1,2	2.C FE	2,534,400	.89.6490	2,581,891	2,880,000	2,555,303	.0	6,378	.0	.0	5.450	6.404	JD	13,080	156,960	06/22/2021	06/01/2047
29365H-AG-1	Entergy New Orleans LLC First Mortgage B				2.B	25,000,000	.99.5448	24,886,200	25,000,000	25,000,000	.0	.0	.0	.0	6.410	6.410	MON	872,472	97,931	05/23/2024	06/15/2031
29379V-AV-5	ENTERPRISE PRODUCTS OPER-SENIOR UNSECURE				1.G FE	1,438,141	.99.4362	1,037,120	1,043,000	1,388,474	.0	(14,985)	.0	.0	5.700	3.177	FA	22,459	59,451	07/16/2021	02/15/2042
29379V-BA-0	ENTERPRISE PRODUCTS OPER-SR UNSECURED			1,2	1.G FE	36,051,778	.89.4109	26,286,813	29,400,000	35,316,397	.0	(223,914)	.0	.0	4.850	3.387	MS	419,848	1,425,900	10/07/2021	03/15/2044
29379V-BL-6	Enterprise Products Oper-SENIOR UNSECURE			1,2	1.G FE	13,607,944	.98.5719	13,735,007	13,934,000	13,689,961	.0	82,016	.0	.0	3.950	4.826	FA	207,926	275,197	03/21/2024	02/15/2027
30231G-BF-8	Exxon Mobil Corp-SENIOR UNSECURED			1,2	1.D FE	5,061,214	.87.5592	5,901,640	4,456,000	4,982,322	.0	(27,596)	.0	.0	4.227	3.213	MS	53,367	188,355	01/18/2022	03/19/2040
30231G-BK-7	Exxon Mobil Corp-SENIOR UNSECURED			1,2	1.D FE	4,492,700	.94.1543	4,707,717	5,000,000	4,574,941	.0	68,847	.0	.0	3.482	5.371	MS	49,328	174,100	10/16/2023	03/19/2030
30231G-BN-1	Exxon Mobil Corp-SENIOR UNSECURED			1,2	1.D FE	12,964,568	.89.1434	12,861,610	14,428,000	13,146,883	.0	182,315	.0	.0	2.610	4.362	AO	79,498	376,571	01/12/2024	10/15/2030
33972P-AA-7	FLNG LIQUEFACTION 2 LLC-FIRST LIEN				2.B FE	4,006,500	.89.4383	3,583,343	4,006,500	4,006,145	.0	(9)	.0	.0	4.125	4.125	MS	41,776	165,268	07/12/2016	03/31/2038
37045X-EB-8	General Motors Financial-SENIOR UNSECURE			1,2	2.B FE	5,038,600	102.6168	5,130,841	5,000,000	5,024,405	.0	(7,346)	.0	.0	6.000	5.818	JJ	143,333	300,000	01/06/2023	01/09/2028
37185L-AQ-5	Genesis Energy LP / Gene-SENIOR UNSECURE			1,2	4.C FE	2,510,836	.97.8838	2,479,395	2,533,000	2,510,833	.0	(3)	.0	.0	7.875	8.032	MN	25,488	.0	12/13/2024	05/15/2032
37185L-AR-3	Genesis Energy LP / Gene-SENIOR UNSECURE			1,2	4.C FE	537,506	.97.8100	533,065	545,000	537,500	.0	(6)	.0	.0	8.000	8.232	MN	1,453	.0	12/17/2024	05/15/2033
379352-AL-1	GLOBAL MARINE INC-NOTE				5.C FE	4,168,455	.93.5125	4,132,317	4,419,000	4,191,002	.0	22,547	.0	.0	7.000	8.777	JD	25,778	154,665	08/23/2024	06/01/2028
40495*-AB-4	HGIT PROPERTIES LP Guaranteed Senior Not				2.B PL	19,593,000	102.8745	19,163,668	18,000,000	18,628,200	.0	.0	.0	(964,900)	5.050	5.050	JJ	467,749	.0	06/03/2024	07/02/2029
406216-AW-1	HALLIBURTON CO-SENIOR UNSECURED NOTE			1	2.A FE	5,337,423	108.9004	4,166,528	3,826,000	5,103,015	.0	(71,018)	.0	.0	6.700	3.594	MS	75,478	256,342	07/16/2021	09/15/2038

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
406216-BA-8	HALLIBURTON CO-SENIOR UNSECURED NOTE	1,2			2.A FE	2,635,938	.85.8858	1,975,374	2,300,000	2,592,758	.0	(13,089)	.0	.0	4.500	3.474	MN	13,225	103,500	07/16/2021	11/15/2041
406216-BG-5	HALLIBURTON COMPANY-SR UNSECURED	1,2			2.A FE	7,275,216	.99.1490	7,131,790	7,193,000	7,209,249	.0	(25,296)	.0	.0	3.800	3.431	MN	34,926	273,334	04/25/2022	11/15/2025
406216-BJ-9	HALLIBURTON CO-SR UNSECURED	1,2			2.A FE	15,147,743	.95.0074	12,472,577	13,128,000	14,776,650	.0	(130,582)	.0	.0	4.850	3.402	MN	81,357	636,708	01/20/2022	11/15/2035
406216-BK-6	HALLIBURTON CO-SR UNSECURED	1,2			2.A FE	39,262,486	.89.3396	29,167,599	32,648,000	38,622,128	.0	(194,344)	.0	.0	5.000	3.709	MN	208,584	1,632,400	02/25/2022	11/15/2045
40621P-AA-7	Halliburton Co-SENIOR UNSECURED				2.A FE	3,249,268	.103.1010	3,214,689	3,118,000	3,187,611	.0	(30,764)	.0	.0	6.750	5.596	FA	87,694	210,465	12/05/2022	02/01/2027
417558-AB-9	Harvest Midstream LP-SENIOR UNSECURED	1,2			3.C FE	3,045,000	.101.7648	3,052,944	3,000,000	3,040,536	.0	(4,464)	.0	.0	7.500	7.131	MN	28,750	118,125	06/05/2024	05/15/2032
42824C-AW-9	HP ENTERPRISE CO-SENIOR UNSECURED	1,2			2.B FE	4,606,250	.100.0550	5,002,751	5,000,000	4,958,658	.0	49,191	.0	.0	4.900	5.977	AO	51,722	245,000	02/11/2016	10/15/2025
431318-AS-3	Hilcorp Energy LP / Hi-SENIOR UNSECURE	1,2			3.B FE	7,503,200	.96.9321	7,010,132	7,232,000	7,257,771	.0	(13,290)	.0	.0	6.250	6.036	MN	75,333	452,000	10/15/2021	11/01/2028
431318-BG-8	Hilcorp Energy LP / Hi-SENIOR UNSECURE	1,2			3.B FE	636,000	.93.9680	597,636	636,000	636,000	.0	.0	.0	.0	7.250	7.252	FA	10,759	.0	10/02/2024	02/15/2035
432748-AB-7	Hilltop Holdings Inc-SENIOR UNSECURED	2			2.A FE	13,000,000	.97.2130	12,637,690	13,000,000	13,000,000	.0	.0	.0	.0	5.000	4.996	AO	137,222	650,000	04/06/2015	04/15/2025
432748-AE-1	Hilltop Holdings Inc-SUBORDINATED	2			2.B FE	9,000,000	.90.9014	8,181,122	9,000,000	9,000,000	.0	.0	.0	.0	6.125	6.125	MN	70,438	551,250	05/07/2020	05/15/2035
433248-AH-0	HINES GLOBAL REAL ESTATE Senior Note				1.F PL	15,750,000	.100.2279	15,785,894	15,750,000	15,750,000	.0	.0	.0	.0	6.660	6.660	JD	536,130	.0	06/20/2024	06/27/2029
436106-AA-6	HollyFrontier Corp-SENIOR UNSECURED	1,2			2.C FE	6,005,880	.100.5683	6,034,098	6,000,000	6,000,762	.0	(1,048)	.0	.0	5.875	5.855	AO	88,125	352,500	11/16/2016	04/01/2026
436106-AC-2	HollyFrontier Corp-SENIOR UNSECURED	1,2			2.C FE	12,977,120	.94.3011	12,259,148	13,000,000	12,985,413	.0	2,054	.0	.0	4.500	4.521	AO	146,250	585,000	09/14/2020	10/01/2030
436655-AB-4	Holt Texas Ltd Senior Note Series B				2.B PL	25,000,000	.103.0140	25,753,500	25,000,000	25,000,000	.0	.0	.0	.0	6.760	6.760	MN	215,944	1,661,833	11/21/2023	11/15/2030
449298-BD-5	ICRE REIT Holdings Senior Note Series I				2.B	16,000,000	.101.5346	16,245,536	16,000,000	16,000,000	.0	.0	.0	.0	6.720	6.742	FEB	406,187	537,600	02/15/2024	02/15/2029
449298-BE-3	ICRE REIT Holdings Senior Note Series I				2.B	5,000,000	.102.3064	5,115,320	5,000,000	5,000,000	.0	.0	.0	.0	6.860	6.877	FEB	301,078	.0	02/15/2024	02/15/2031
46188B-AB-8	Invitation Homes Operati-SENIOR UNSECURE	1,2			2.B FE	1,174,123	.90.2804	1,253,091	1,388,000	1,238,968	.0	33,729	.0	.0	2.300	5.410	MN	4,079	31,924	01/09/2023	11/15/2028
46188B-AD-4	Invitation Homes Operati-SENIOR UNSECURE	1,2			2.B FE	2,234,300	.91.9965	2,299,913	2,500,000	2,252,462	.0	18,162	.0	.0	4.150	5.836	AO	21,903	51,875	04/23/2024	04/15/2032
486606-R8-7	KAYNE ANDERSON ENERGY IN KYN 7Y Senior				1.A FE	10,000,000	.96.3970	9,639,700	10,000,000	10,000,000	.0	.0	.0	.0	5.190	5.192	MS	148,492	.0	08/13/2024	09/18/2031
494550-AV-8	KINDER MORGAN ENER PART-SENIOR UNSECURED				2.B FE	4,040,760	.104.7075	3,141,224	3,000,000	3,852,269	.0	(55,498)	.0	.0	6.500	3.582	FA	81,250	195,000	06/08/2021	02/01/2037
494550-AW-6	KINDER MORGAN ENER PART-BOND				2.B FE	1,966,434	.108.3308	1,511,214	1,395,000	1,870,990	.0	(28,084)	.0	.0	6.950	3.640	JJ	44,706	96,953	06/07/2021	01/15/2038
494550-BF-2	KINDER MORGAN ENER PART-SR UNSECURED				2.B FE	9,400,556	.103.6418	6,732,572	6,496,000	9,008,579	.0	(119,770)	.0	.0	6.550	3.360	MS	125,283	425,488	08/03/2021	09/15/2040
494553-AD-2	Kinder Morgan Inc-SENIOR UNSECURED	1,2			2.B FE	7,986,720	.99.6176	7,969,405	8,000,000	7,988,568	.0	1,848	.0	.0	5.000	5.038	FA	166,667	200,000	01/29/2024	02/01/2029
49456B-AG-6	KINDER MORGAN INC/DELAWARE-SENIOR UNSECURE	1,2			2.B FE	12,182,100	.97.3723	9,737,234	10,000,000	11,670,001	.0	(149,561)	.0	.0	5.300	3.229	JD	44,167	530,000	06/03/2021	12/01/2034
497266-B#-2	Kirby Corp Senior Note Series B				2.C	20,000,000	.83.1036	16,620,720	20,000,000	20,000,000	.0	.0	.0	.0	3.510	3.510	JJ	315,900	702,000	01/19/2023	01/19/2033
55921Q-AA-0	Magna Imperio Systems Co-SECURED				6. *	12,003,750	.65.2000	7,905,500	12,125,000	7,905,500	.0	(4,168,185)	.0	.0	7.000	7.297	MJSD	.0	256,646	06/23/2022	06/29/2026
57708#-AA-9	Matterhorn Express Pipel Senior Secured				2.C PL	15,000,000	.95.0134	14,252,010	15,000,000	15,000,000	.0	.0	.0	.0	5.630	5.629	MJSD	213,471	844,500	06/15/2023	06/30/2034
57708#-AB-7	Matterhorn Express Pipel Senior Secured				2.C PL	10,000,000	.99.0025	9,900,250	10,000,000	10,000,000	.0	.0	.0	.0	7.600	7.599	MJSD	(377,889)	1,330,000	06/15/2023	06/30/2034
581557-AB-7	McKesson Corp-SENIOR UNSECURED NOTE	1,2			2.A FE	4,903,830	.87.4670	3,551,524	4,060,000	4,806,777	.0	(27,789)	.0	.0	4.883	3.531	MS	58,374	198,250	04/29/2021	03/15/2044
581557-BR-5	McKesson Corp-SENIOR UNSECURED	1,2			1.G FE	33,643,705	.94.8427	33,669,144	35,500,000	33,761,291	.0	117,586	.0	.0	1.300	4.462	FA	174,344	.0	11/19/2024	08/15/2026
581557-BT-1	McKesson Corp-SENIOR UNSECURED	1,2			1.G FE	5,656,623	.100.3500	5,719,947	5,700,000	5,666,171	.0	8,533	.0	.0	4.900	5.085	JJ	128,788	302,575	11/28/2023	07/15/2028
637071-AK-7	National Oilwell Varco I-SR UNSECURED	1,2			2.B FE	19,884,420	.74.3088	14,861,760	20,000,000	19,897,144	.0	3,849	.0	.0	3.950	3.949	JD	65,833	790,000	10/05/2021	12/01/2042
637071-AM-3	National Oilwell Varco I-SENIOR UNSECURE	1,2			2.B FE	6,785,783	.93.2210	7,054,035	7,567,000	6,948,831	.0	106,676	.0	.0	3.600	5.519	JD	22,701	272,412	06/08/2023	12/01/2029
64116#-AK-9	Netrality Properties LP Senior Notes Ser				2.C PL	25,000,000	.104.7128	26,178,200	25,000,000	25,000,000	.0	.0	.0	.0	8.210	8.217	FA	68,417	1,710,417	02/20/2024	02/19/2029
674599-DF-9	Occidental Petroleum Corp-SENIOR UNSECURE				2.C FE	4,680,000	.102.3884	4,580,000	4,000,000	4,580,242	.0	(36,212)	.0	.0	6.450	4.813	MS	75,967	258,000	02/17/2022	09/15/2036
68389X-BU-8	Oracle Corp-SENIOR UNSECURED	1,2			2.B FE	6,717,340	.96.0343	6,722,403	7,000,000	6,730,201	.0	12,861	.0	.0	2.800	4.621	AO	49,000	.0	11/19/2024	04/01/2027
68389X-BW-4	Oracle Corp-SENIOR UNSECURED	1,2			2.B FE	21,327,750	.78.1514	15,630,288	20,000,000	21,112,315	.0	(58,649)	.0	.0	3.600	3.126	AO	180,000	720,000	02/25/2021	04/01/2040
68389X-BZ-7	Oracle Corp-SENIOR UNSECURED	1,2			2.B FE	23,516,360	.77.7527	17,883,114	23,000,000	23,444,564	.0	(20,948)	.0	.0	3.650	3.489	MS	223,867	839,500	06/03/2021	03/25/2041
69357V-AA-3	PMHC II Inc-SENIOR UNSECURED	1,2			5.B FE	1,810,000	.92.2453	1,844,906	2,000,000	1,821,512	.0	11,512	.0	.0	9.000	11.339	FA	68,000	90,000	07/12/2024	02/15/2030
70337U-10-0	Patrons' Legacy-PATRLN 5.775 12/23/22				3.C FE	2,917,915	.81.4500	2,458,395	3,018,287	3,018,287	.0	100,372	.0	.0	5.775	5.775	MON	32,924	325,402	09/17/2010	06/23/2026
70337V-10-2	Patrons' Legacy-PATRLN 5.8594 07/10/58				1.F FE	913,263	.90.6100	855,305	943,941	942,770	.0	(413)	.0	.0	5.859	5.821	MON	12,445	64,528	09/17/2010	07/10/2058
70338A-10-3	Patrons' Legacy-PATRLN 5.646 05/17/22				1.F FE	1,325,415	.89.1900	1,182,138	1,325,415	1,325,415	.0	.0	.0	.0	5.646	5.646	MON	15,382	168,374	12/12/2003	09/17/2025
70339C-10-9	Patrons' Legacy-PATRLN 6.673 12/04/23				1.G FE	1,103,351	.94.6900	1,044,763	1,103,351	1,103,351	.0	.0	.0	.0	6.673	6.673	MON	17,793	208,615	04/30/2004	09/04/2026
703481-AB-7	Patterson-UTI Energy Inc-SENIOR UNSECURE	1,2			2.C FE	896,920	.95.6739	956,739	1,000,000	921,759	.0	22,087	.0	.0	3.950	6.804	FA	16,458	39,500	11/13/2023	02/01/2028

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
		C o d e	F o r e i g n	Bond Char			Rate Used to Obtain Fair Value	Fair Value			Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor-tization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
CUSIP Identification	Description				NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost			Par Value	Book/ Adjusted Carrying Value											
703481-AC-5	Patterson-UTI Energy Inc-SENIOR UNSECURE	1,2			2.C FE	4,989,200	97.3190	4,865,949	5,000,000	4,993,940	0	1,013	0	0	5.150	5.177	MN	32,903	257,500	11/07/2019	11/15/2029
718546-AR-5	Phillips 66-SENIOR UNSECURED	1,2			2.A FE	9,641,700	96.9845	9,698,446	10,000,000	9,755,781	0	68,842	0	0	3.900	4.728	MS	114,833	390,000	04/20/2023	03/15/2028
718546-AW-4	Phillips 66-SENIOR UNSECURED	1,2			2.A FE	12,129,243	84.8137	12,264,057	14,460,000	12,548,133	0	269,876	0	0	2.150	4.708	JD	13,817	310,890	07/31/2023	12/15/2030
718547-AK-8	Phillips 66 Co-SENIOR UNSECURED	1,2			2.A FE	10,064,314	91.9669	10,298,457	11,198,000	10,178,332	0	114,017	0	0	3.150	5.261	JD	15,677	352,737	05/08/2024	12/15/2029
718547-AT-9	Phillips 66-SENIOR UNSECURED	1,2			2.A FE	14,838,912	100.7616	14,912,712	14,800,000	14,825,813	0	(8,649)	0	0	4.950	5.003	JD	61,050	732,600	03/27/2023	12/01/2027
723787-AV-9	Pioneer Natural Resource-SENIOR UNSECURE				1.D FE	14,096,495	100.6989	14,189,486	14,091,000	14,092,250	0	(1,809)	0	0	5.100	5.086	MS	183,653	718,641	03/27/2023	03/29/2026
726509-BN-1	Plains All American Pipe-SENIOR UNSECURE	1,2			2.B FE	18,575,919	92.7568	16,605,317	17,902,000	18,341,837	0	(73,947)	0	0	3.800	2.862	MS	200,304	680,276	10/04/2021	09/15/2030
741011-AA-8	Presidio Petroleum LLC Presidio Finance				1.G PL	14,773,463	102.0000	15,068,933	14,773,463	14,773,463	0	0	0	0	7.806	7.805	MON	766,167	750,008	07/17/2023	05/25/2028
75086#-AA-3	Rainier Gsa Portfolio I US Govt Lease Ba				1.F	3,846,844	97.4207	3,747,622	3,846,844	3,846,844	0	(1)	0	0	4.820	4.820	JJ	181,491	159,010	07/01/2015	07/15/2036
75458*-AB-5	Rayburn Country Electric Senior Secured				2.B FE	21,556,396	101.1775	21,810,222	21,556,396	21,556,396	0	0	0	0	6.040	6.040	JD	664,163	1,319,735	06/16/2023	12/30/2042
76711*-AA-8	Rio Grande LNG Senior Secured Notes				2.C PL	25,000,000	101.0309	25,257,725	25,000,000	25,000,000	0	0	0	0	6.670	6.673	JD	421,507	2,051,951	07/12/2023	06/30/2033
78396*-AE-8	SCF Funding LLC Senior Note Series E				2.B PL	10,000,000	100.3277	10,032,770	10,000,000	10,000,000	0	6,605	0	0	6.600	6.605	JD	137,500	737,311	06/29/2022	06/30/2027
78396*-AF-5	SCF Funding LLC Senior Note Series F				2.B PL	50,000,000	99.5974	49,798,700	50,000,000	50,000,000	0	0	0	0	6.690	6.694	JD	696,875	3,445,000	06/29/2022	06/30/2029
78396*-AK-4	SCF Funding LLC Senior Unsecured Notes				2.B PL	10,000,000	104.4601	10,446,010	10,000,000	10,000,000	0	0	0	0	8.320	8.324	MN	173,333	832,000	11/08/2022	11/08/2027
78396*-AT-5	SCF FUNDING LLC Senior Unsecured Notes				2.B PL	20,000,000	98.8278	19,765,560	20,000,000	20,000,000	0	0	0	0	6.500	6.504	FA	270,833	180,556	07/31/2024	08/27/2029
785592-AS-5	Sabine Pass Liquefaction-FIRST LIEN	1,2			2.A FE	5,037,150	100.1581	5,007,905	5,000,000	5,033,098	0	(4,052)	0	0	5.000	4.588	MS	73,611	0	10/15/2024	03/15/2027
785592-AX-4	Sabine Pass Liquefaction-FIRST LIEN	1,2			2.A FE	9,053,310	96.9008	9,128,055	9,420,000	9,092,252	0	38,942	0	0	4.500	5.250	MN	54,165	423,900	04/09/2024	05/15/2030
78573N-AV-5	Sabre GLBL Inc-SECURED	1,2			4.C FE	6,134,434	107.7000	6,670,938	6,194,000	6,145,174	0	8,307	0	0	11.250	11.567	JD	379,383	67,163	08/01/2024	12/15/2027
78573N-AJ-1	Sabre GLBL Inc-FIRST LIEN	1,2			4.C FE	613,953	98.5754	651,583	661,000	621,853	0	7,872	0	0	8.625	11.494	JD	19,004	31,049	06/04/2024	06/01/2027
806851-AH-4	Schlumberger Holdings Co-SENIOR UNSECURE	1,2			1.G FE	27,846,263	97.4589	28,260,154	28,997,000	28,121,622	0	175,911	0	0	4.300	5.083	MN	207,812	1,246,871	06/02/2023	05/01/2029
806851-AK-7	Schlumberger Holdings Co-SENIOR UNSECURE	1,2			1.G FE	20,439,436	97.1253	21,061,623	21,685,000	20,707,892	0	227,415	0	0	3.900	5.375	MN	103,365	845,715	04/23/2024	05/17/2028
806851-AM-3	Schlumberger Holdings Co-SENIOR UNSECURE	1,2			1.G FE	8,717,835	100.1506	8,713,098	8,700,000	8,717,645	0	(190)	0	0	5.000	4.951	MN	55,583	0	12/19/2024	11/15/2029
808513-AQ-8	Charles Schwab Corp/The-SENIOR UNSECURED	1,2			1.F FE	16,124,042	96.8838	15,968,381	16,482,000	16,182,042	0	37,400	0	0	3.200	4.082	MS	174,343	160,000	10/15/2024	03/02/2027
84470P-AF-6	Southside Bancshares Inc-SUBORDINATED	2			2.B FE	7,500,000	95.3000	7,147,500	7,500,000	7,500,000	0	0	0	0	3.875	3.875	MN	37,135	290,625	11/06/2020	11/15/2030
86746H-AA-8	SUNNOVA ENERGY CORP Sunnova SOL VIII Iss				1.F Z	7,233,514	95.5100	7,039,087	7,370,000	7,230,951	0	(2,563)	0	0	6.450	6.587	JAJO	99,034	0	10/16/2024	07/30/2059
86746H-AB-6	SUNNOVA ENERGY CORP Sunnova SOL VIII Iss				2.B Z	316,746	94.1400	303,131	322,000	316,583	0	(163)	0	0	8.780	8.935	JAJO	5,890	0	10/16/2024	07/30/2059
86765B-AS-8	Energy Transfer LP-SENIOR UNSECURED	1,2			2.B FE	6,981,450	100.7211	7,050,476	7,000,000	6,997,589	0	2,047	0	0	5.950	5.982	JD	34,708	416,500	11/12/2015	12/01/2025
871829-BF-3	SY 3 1/4 07/15/27	1,2			2.B FE	5,924,300	96.5105	5,994,270	6,211,000	5,963,942	0	39,642	0	0	3.250	4.936	JJ	93,079	0	07/22/2024	07/15/2027
87612B-BS-0	Targa Resources Partners-SENIOR UNSECURE	1,2			2.B FE	9,258,758	96.6858	9,668,576	10,000,000	9,414,276	0	77,511	0	0	4.875	6.039	FA	203,125	487,500	12/05/2022	02/01/2031
87612K-AW-5	Targa Resources Corp-SENIOR UNSECURED	1,2			2.B FE	17,852,963	100.6770	18,121,858	18,000,000	17,914,791	0	31,008	0	0	5.200	5.405	JJ	468,000	936,000	09/09/2023	01/11/2028
88033G-DQ-0	Tenet Healthcare Corp-FIRST LIEN	1,2			3.C FE	2,403,000	99.1368	2,382,256	2,403,000	2,403,000	0	0	0	0	6.125	6.125	JD	6,542	147,184	06/15/2023	06/15/2030
88033G-DR-8	Tenet Healthcare Corp-FIRST LIEN	1,2			3.C FE	2,165,000	92.8810	2,010,874	2,165,000	2,165,000	0	0	0	0	4.375	4.373	JJ	43,676	94,719	11/16/2021	01/15/2030
880451-AZ-2	Tennessee Gas Pipeline C-SENIOR UNSECURE	1,2			2.B FE	9,042,200	89.5237	9,952,369	10,000,000	9,244,059	0	124,445	0	0	2.900	4.536	MS	96,667	290,000	08/24/2023	03/01/2030
88224P-JS-9	Texas Capital Bank NA-SUBORDINATED				2.C FE	18,000,000	98.3819	17,708,744	18,000,000	18,000,000	0	0	0	0	5.250	5.249	JJ	396,375	945,000	01/28/2014	01/31/2026
89236T-DR-3	Toyota Motor Credit Corp-SENIOR UNSECURE				1.E FE	3,349,515	97.3828	3,436,640	3,529,000	3,419,068	0	50,403	0	0	3.200	4.831	JJ	53,327	112,928	08/08/2023	01/11/2027
89236T-EM-3	Toyota Motor Credit Corp-SENIOR UNSECURE				1.E FE	9,312,500	95.7883	9,578,826	10,000,000	9,514,027	0	145,762	0	0	3.050	4.798	JJ	144,028	305,000	08/07/2023	01/11/2028
89236T-KK-0	Toyota Motor Credit Corp-SENIOR UNSECURE				1.E FE	5,053,050	100.7065	5,035,323	5,000,000	5,015,900	0	(18,069)	0	0	5.400	5.009	MN	38,250	270,000	11/22/2022	11/10/2025
89236T-MD-4	Toyota Motor Credit Corp-SENIOR UNSECURE				1.E FE	7,012,600	100.7762	7,054,334	7,000,000	7,009,132	0	(3,468)	0	0	5.200	5.096	MN	46,511	180,989	06/25/2024	05/15/2026
89679E-AE-2	Triumph Bancorp Inc-SUBORDINATED	2			1.G FE	6,000,000	89.5500	5,373,000	6,000,000	6,000,000	0	0	0	0	3.500	3.500	MS	70,000	210,000	02/01/2022	09/01/2031
91913Y-BC-3	Valero Energy Corp-SENIOR UNSECURED	1,2			2.B FE	11,963,206	85.3112	11,879,578	13,925,000	12,331,571	0	175,928	0	0	2.800	4.759	JD	32,492	389,900	03/21/2024	12/01/2031
94106L-BT-5	Waste Management Inc-SENIOR UNSECURED	1,2			1.G FE	22,183,864	98.9840	22,806,352	23,050,000	22,317,475	0	116,555	0	0	4.625	5.338	FA	402,735	834,813	02/29/2024	02/15/2030
94106L-BU-2	Waste Management Inc-SENIOR UNSECURED	1,2			1.G FE	9,818,500	97.0751	9,707,511	10,000,000	9,840,292	0	15,643	0	0	4.625	4.865	FA	174,722	462,500	07/26/2023	02/15/2033
94106L-BX-6	Waste Management Inc-SENIOR UNSECURED	1,2			1.G FE	10,059,200	101.1094	10,110,944	10,000,000	10,050,894	0	(8,306)	0	0	4.950	4.727	JJ	244,750	0	07/22/2024	07/03/2027
94106L-BZ-1	Waste Management Inc-SENIOR UNSECURED	1,2			1.G FE	9,733,875	96.4325	9,739,680	10,100,000	9,743,512	0	9,637	0	0	3.875	4.847	JJ	180,467	0	11/18/2024	01/15/2029
94106L-CB-3	WM 4 1/2 03/15/28	1,2			1.G FE	2,994,570	99.4818	2,984,454	3,000,000	2,994,650	0	80	0	0	4.500	4.560	MS	21,375	0	11/05/2024	03/15/2028

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
97246J-AA-6	Wilsonart LLC-SENIOR UNSECURED .....	.....	.....	1,2	.. 5.B FE	..2,250,000	..97.7500	..2,199,375	..2,250,000	..2,250,000	0	0	0	0	..11.000	..10.998	FA	..100,375	0	..07/25/2024	..08/15/2032
052798-AA-9	Autoliv ASP, Inc. Trust Certificate Tran .....	.....	.....	.....	.. 2.B	..3,682,485	..95.3818	..3,512,421	..3,682,485	..3,682,485	0	0	0	0	..4.101	..4.101	MON	..(8,690)	..176,960	..11/15/2018	..05/15/2034
06849R-AG-7	BARRICK NA FINANCE LLC-SENIOR UNSECURED .....	.....	.....	.....	.. 2.A FE	..6,763,400	..98.3294	..4,916,469	..5,000,000	..6,527,045	0	..(69,276)	0	0	..5.700	..3.279	MN	..24,542	..285,000	..06/09/2021	..05/30/2041
06849R-AK-8	BARRICK NA FINANCE LLC-SR UNSECURED .....	.....	.....	.....	.. 2.A FE	..9,899,260	..98.6135	..6,902,944	..7,000,000	..9,559,108	0	..(102,160)	0	0	..5.750	..3.117	MN	..67,083	..402,500	..07/13/2021	..05/01/2043
24023F-AA-7	DC Department of Correct Pass-Thru Certi .....	.....	.....	.....	.. 1.B PL	..7,919,820	..96.1793	..7,617,227	..7,919,820	..7,928,131	0	..(1,398)	0	0	..4.570	..4.547	MON	..20,620	..545,035	..04/19/2018	..03/15/2033
30225V-AH-0	Extra Space Storage LP-SENIOR UNSECURED .....	.....	.....	1,2	.. 2.B FE	..31,157,405	..95.5644	..30,211,720	..31,614,000	..31,288,229	0	..65,678	0	0	..3.900	..4.159	AO	..308,237	..1,232,946	..12/05/2022	..04/01/2029
30225V-AK-3	Extra Space Storage LP-SENIOR UNSECURED .....	.....	.....	1,2	.. 2.B FE	..4,767,408	..101.7207	..4,777,822	..4,697,000	..4,758,664	0	..(8,744)	0	0	..5.500	..5.216	JJ	..129,168	..129,168	..01/26/2024	..07/01/2030
30225V-AR-8	Extra Space Storage LP-SENIOR UNSECURED .....	.....	.....	1,2	.. 2.B FE	..10,455,400	..103.0782	..10,307,818	..10,000,000	..10,402,119	0	..(53,281)	0	0	..5.900	..5.100	JJ	..272,056	..367,111	..01/12/2024	..01/15/2031
74319R-AA-9	PROG Holdings Inc-SENIOR UNSECURED .....	.....	.....	1,2	.. 4.A FE	..1,502,880	..95.7554	..1,547,407	..1,616,000	..1,536,726	0	..13,126	0	0	..6.000	..7.209	MN	..12,389	..96,960	..03/31/2022	..11/15/2029
02352B-AA-3	Amentum Escrow Corp-SENIOR UNSECURED .....	.....	.....	1,2	.. 4.B FE	..421,000	..100.7500	..424,158	..421,000	..421,000	0	0	0	0	..7.250	..7.251	FA	..11,700	0	..07/30/2024	..08/01/2032
04911A-AA-5	Atlantic Union Bankshare-SUBORDINATED .....	.....	.....	2	.. 2.B FE	..15,000,000	..92.3000	..13,845,000	..15,000,000	..15,000,000	0	0	0	0	..2.875	..2.875	JD	..19,167	..431,250	..12/01/2021	..12/15/2031
05348A-AC-5	AvalonBay Communities In-SENIOR UNSECURE .....	.....	.....	1,2	.. 1.G FE	..9,183,745	..89.3569	..9,445,021	..10,570,000	..9,413,659	0	..229,914	0	0	..1.900	..5.010	JD	..16,736	..200,830	..02/13/2024	..12/01/2028
097023-BL-8	Boeing Co/The-SENIOR UNSECURED .....	.....	.....	1,2	.. 2.C FE	..9,785,100	..67.0077	..6,700,765	..10,000,000	..9,805,273	0	..6,440	0	0	..3.500	..3.637	MS	..116,667	..350,000	..10/05/2021	..03/01/2045
097023-CV-5	Boeing Co/The-SENIOR UNSECURED .....	.....	.....	1,2	.. 2.C FE	..6,413,000	..95.1137	..4,755,687	..5,000,000	..6,221,722	0	..(61,556)	0	0	..5.705	..3.569	MN	..47,542	..285,250	..10/05/2021	..05/01/2040
14040H-BK-0	Capital One Financial Co-SUBORDINATED .....	.....	.....	2	.. 2.B FE	..4,283,100	..98.1863	..4,418,385	..4,500,000	..4,401,213	0	..58,605	0	0	..3.750	..5.218	JJ	..71,719	..168,750	..12/02/2022	..07/28/2026
14040H-CM-5	Capital One Financial Co-SENIOR UNSECURE .....	.....	.....	2	.. 2.A FE	..14,496,900	..99.5667	..14,935,002	..15,000,000	..14,839,210	0	..131,660	0	0	..2.636	..3.576	MS	..129,603	..395,400	..04/25/2022	..03/03/2026
14040H-CU-7	Capital One Financial Co-SENIOR UNSECURE .....	.....	.....	2	.. 2.A FE	..5,005,150	..99.9544	..4,997,720	..5,000,000	..5,000,857	0	..(1,753)	0	0	..4.986	..4.949	JJ	..108,723	..249,250	..07/26/2022	..07/24/2026
256746-AJ-7	Dollar Tree Inc-SENIOR UNSECURED .....	.....	.....	1,2	.. 2.B FE	..1,816,056	..84.4066	..1,856,944	..2,200,000	..1,876,007	0	..38,007	0	0	..2.650	..5.213	JD	..4,858	..58,300	..12/20/2010	..12/15/2035
257469-AJ-5	Dominion Resources Inc/V-SENIOR NOTE .....	.....	.....	.....	.. 2.B FE	..4,967,000	..98.6704	..4,933,521	..5,000,000	..4,984,438	0	..1,378	0	0	..5.250	..5.295	FA	..109,375	..262,500	..11/28/2006	..08/01/2033
25746U-DL-0	Dominion Energy Inc-SENIOR UNSECURED .....	.....	.....	1,2	.. 2.B FE	..8,541,261	..83.2737	..8,712,927	..10,463,000	..8,713,368	0	..172,108	0	0	..2.250	..5.274	FA	..88,936	..98,091	..03/13/2024	..08/15/2031
347466-AE-4	Fort Irwin Land LLC-UNSECURED .....	.....	.....	.....	.. 1.F FE	..6,618,503	..96.2484	..6,773,682	..6,860,214	..6,860,214	0	..65,942	0	0	..5.300	..5.936	JD	..16,578	..372,998	..12/20/2010	..12/15/2035
446413-AT-3	Huntington Ingalls Indus-SENIOR UNSECURE .....	.....	.....	1,2	.. 2.C FE	..2,999,880	..94.9093	..2,847,278	..3,000,000	..3,000,050	0	..(32)	0	0	..4.200	..4.199	MN	..21,000	..126,000	..03/26/2020	..05/01/2030
570535-AQ-7	Markel Corp-SENIOR UNSECURED .....	.....	.....	.....	.. 2.B FE	..8,017,080	..87.0117	..5,220,700	..6,000,000	..7,819,899	0	..(60,081)	0	0	..5.000	..3.050	AO	..71,667	..300,000	..08/03/2021	..04/05/2046
570535-AR-5	Markel Corp-SENIOR UNSECURED .....	.....	.....	1,2	.. 2.B FE	..2,002,431	..96.5606	..2,103,090	..2,178,000	..2,071,926	0	..33,756	0	0	..3.500	..5.374	MN	..12,705	..76,230	..11/15/2022	..11/01/2027
570535-AU-8	Markel Corp-SENIOR UNSECURED .....	.....	.....	1,2	.. 2.B FE	..7,942,705	..93.3716	..7,541,620	..8,077,000	..7,982,587	0	..17,518	0	0	..3.350	..3.616	MS	..78,167	..270,580	..12/02/2022	..09/17/2029
571676-AB-1	MARS 3.2 04/01/30 .....	.....	.....	1,2	.. 1.E FE	..1,878,028	..92.3830	..1,912,328	..2,070,000	..1,896,341	0	..18,313	0	0	..3.200	..5.037	AO	..16,560	..33,120	..05/07/2024	..04/01/2030
571676-AF-2	Mars Inc-SENIOR UNSECURED .....	.....	.....	1,2	.. 1.E FE	..21,877,931	..76.6588	..14,545,998	..18,975,000	..21,661,761	0	..(75,612)	0	0	..3.950	..3.103	AO	..187,378	..749,513	..01/19/2022	..04/01/2049
571676-AT-2	Mars Inc-SENIOR UNSECURED .....	.....	.....	1,2	.. 1.E FE	..42,807,988	..99.0631	..42,696,196	..43,100,000	..42,866,787	0	..60,982	0	0	..4.550	..4.355	AO	..386,762	..1,961,050	..05/16/2023	..04/20/2028
571676-AU-9	Mars Inc-SENIOR UNSECURED .....	.....	.....	1,2	.. 1.E FE	..13,780,751	..97.4269	..13,597,877	..13,957,000	..13,800,562	0	..17,075	0	0	..4.650	..4.857	AO	..127,997	..649,001	..04/09/2024	..04/20/2031
571676-AV-7	Mars Inc-SENIOR UNSECURED .....	.....	.....	1,2	.. 1.E FE	..13,610,498	..96.2802	..13,229,860	..13,741,000	..13,626,624	0	..10,849	0	0	..4.750	..4.872	AO	..128,726	..652,698	..07/26/2023	..04/20/2033
63902H-AM-1	Nature Conservancy/The-SENIOR UNSECURED .....	.....	.....	.....	.. 1.C FE	..1,085,916	..85.9153	..1,116,899	..1,300,000	..1,115,907	0	..29,991	0	0	..1.511	..5.070	JJ	..9,822	..9,822	..02/27/2024	..07/01/2029
666807-BT-8	Northrop Grumman Corp-SENIOR UNSECURED .....	.....	.....	1,2	.. 2.A FE	..12,756,820	..95.4222	..9,542,215	..10,000,000	..12,315,250	0	..(120,516)	0	0	..5.150	..3.180	MN	..85,833	..515,000	..02/25/2021	..05/01/2040
679574-AG-8	Old Dominion Electric Co-FIRST LIEN .....	.....	.....	.....	.. 1.E FE	..2,603,922	..100.8777	..2,436,910	..2,416,667	..2,472,992	0	..(12,723)	0	0	..6.210	..5.534	JD	..12,506	..243,872	..08/31/2012	..12/01/2028
679574-AH-6	Old Dominion Electric Co-FIRST LIEN .....	.....	.....	.....	.. 1.E FE	..692,713	..99.8481	..665,612	..666,624	..675,340	0	..(2,008)	0	0	..5.676	..5.295	JD	..3,153	..61,486	..08/31/2012	..12/01/2028
832248-AZ-1	Smithfield Foods Inc-SENIOR UNSECURED .....	.....	.....	1,2	.. 2.C FE	..4,212,375	..97.9049	..4,405,720	..4,500,000	..4,342,759	0	..68,720	0	0	..4.250	..6.058	FA	..79,688	..191,250	..01/13/2023	..02/01/2027
843395-AG-8	Primis Financial Corp-SUBORDINATED .....	.....	.....	.....	.. 2.C FE	..5,000,000	..99.9876	..4,999,380	..5,000,000	..4,999,528	0	..146	0	0	..8.801	..8.801	JAJO	..198,461	..361,778	..01/20/2017	..01/31/2027
843395-AB-0	Primis Financial Corp-SUBORDINATED .....	.....	.....	2	.. 2.C FE	..4,000,000	..95.8000	..3,832,000	..4,000,000	..4,000,000	0	0	0	0	..5.400	..5.400	MS	..72,000	..216,000	..08/20/2020	..09/01/2030
90539J-A*-0	Atlantic Union Bankshare-UNION BKSHPs ST .....	.....	.....	.....	.. 1.F FE	..7,507,031	..98.8700	..7,415,250	..7,500,000	..7,504,206	0	..(308)	0	0	..2.870	..2.863	MJSD	..278,680	..318,709	..02/08/2018	..06/19/2034
927804-FU-3	Virginia Electric & Powe-SENIOR UNSECURE .....	.....	.....	1,2	.. 2.A FE	..1,595,294	..98.4124	..1,653,329	..1,680,000	..1,641,996	0	..34,618	0	0	..3.150	..5.417	JJ	..24,402	..52,920	..08/17/2023	..01/15/2026
927804-FZ-2	Virginia Electric & Powe-SENIOR UNSECURE .....	.....	.....	1,2	.. 2.A FE	..6,661,607	..96.7789	..6,806,463	..7,033,000	..6,720,498	0	..58,890	0	0	..3.800	..5.304	AO	..66,814	..133,627	..04/23/2024	..04/01/2028
928668-AU-6	Volkswagen Group of Amer-SENIOR UNSECURE .....	.....	.....	.....	.. 1.G FE	..15,595,030	..97.2254	..15,947,879	..16,403,000	..15,850,554	0	..123,256	0	0	..4.750	..5.728	MN	..103,886	..779,143	..12/05/2022	..11/13/2028
928668-BS-0	Volkswagen Group of Amer-SENIOR UNSECURE .....	.....	.....	1,2	.. 1.G FE	..4,657,850	..97.9340	..4,896,701	..5,000,000	..4,807,189	0	..71,294	0	0	..4.350	..6.075	JD	..13,896	..217,500	..10/28/2022	..06/08/2027</

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
		C o d e	F o r e i g n	Bond Char			Rate Used to Obtain Fair Value	Fair Value			Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor-tization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
CUSIP Identification	Description				NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost			Par Value	Book/ Adjusted Carrying Value											
055451-AZ-1	BHP Billiton Finance USA-SENIOR UNSECURE	D	1,2		1.F FE	10,201,800	99.8702	9,987,024	10,000,000	10,135,163	0	(40,358)	0	0	4.750	4.275	FA	162,292	475,000	04/26/2023	02/28/2028
055451-BB-3	BHP Billiton Finance USA-SENIOR UNSECURE	D			1.F FE	9,923,700	101.0797	10,107,972	10,000,000	9,954,154	0	24,801	0	0	5.250	5.533	MS	164,792	525,000	09/27/2023	09/08/2026
055451-BD-9	BHP Billiton Finance USA-SENIOR UNSECURE	D	1,2		1.F FE	7,766,480	101.6503	8,132,021	8,000,000	7,800,691	0	28,760	0	0	5.250	5.768	MS	131,833	420,000	10/16/2023	09/08/2030
141150-AA-2	Carbon Revolution Ltd-SECURED	D			1.E PL	5,668,288	99.2483	5,627,380	5,670,000	5,668,719	0	404	0	0	8.500	8.511	MON	21,420	483,714	05/23/2024	05/15/2027
632525-AS-0	National Australia Bank -SUBORDINATED	D	2		1.G FE	14,000,000	93.4016	13,076,228	14,000,000	14,000,000	0	0	0	0	3.933	3.933	FA	227,896	550,620	07/29/2019	08/02/2034
02073L-AA-9	Alpha Generation LLC-SENIOR UNSECURED		1,2		4.B FE	461,000	98.9543	456,179	461,000	461,000	0	0	0	0	6.750	6.749	AO	7,866	0	09/19/2024	10/15/2032
023135-BC-9	Amazon.com Inc-SENIOR UNSECURED		1,2		1.E FE	19,365,471	96.7072	19,341,430	20,000,000	19,390,347	0	24,876	0	0	3.150	4.383	FA	225,750	0	11/19/2024	08/22/2027
023135-BJ-4	Amazon.com Inc-SENIOR UNSECURED		1,2		1.E FE	18,832,900	82.3238	12,348,572	15,000,000	18,458,794	0	(113,391)	0	0	4.050	2.664	FA	217,688	607,500	08/02/2021	08/22/2047
023135-BX-3	Amazon.com Inc-SENIOR UNSECURED		1,2		1.D FE	13,424,750	95.6975	14,354,619	15,000,000	14,207,604	0	547,287	0	0	1.000	5.055	MN	20,417	150,000	10/24/2023	05/12/2026
023135-CA-2	Amazon.com Inc-SENIOR UNSECURED		1,2		1.D FE	17,903,760	73.5721	13,242,978	18,000,000	17,913,782	0	3,902	0	0	2.875	2.829	MN	70,438	517,500	06/08/2021	05/12/2041
023135-CN-4	Amazon.com Inc-SENIOR UNSECURED				1.D FE	9,999,400	100.1083	10,010,833	10,000,000	9,999,445	0	201	0	0	4.600	4.602	JD	38,333	460,000	11/29/2022	12/01/2025
22160K-AP-0	Costco Wholesale Corp-SENIOR UNSECURED		1,2		1.E FE	4,182,300	85.8143	4,290,714	5,000,000	4,268,463	0	86,163	0	0	1.600	4.753	AO	15,778	80,000	04/09/2024	04/20/2030
242247-AA-2	Deako Inc-SECURED				1.E PL	25,000,000	99.7500	24,937,500	25,000,000	25,000,000	0	0	0	0	8.250	8.250	MON	91,667	2,062,500	12/27/2022	12/15/2026
30212P-AM-7	Expedia Group Inc-SENIOR UNSECURED		1,2		2.B FE	12,939,550	100.2062	13,026,810	13,000,000	12,991,624	0	6,444	0	0	5.000	5.054	FA	245,556	650,000	12/01/2015	02/15/2026
30212P-BK-0	Expedia Group Inc-SENIOR UNSECURED		1,2		2.B FE	1,887,840	99.5039	1,887,077	2,000,000	1,935,997	0	22,242	0	0	4.625	5.978	FA	38,542	92,500	09/30/2022	08/01/2027
43785V-AD-4	HomeStreet Inc-SENIOR UNSECURED		1,2		2.C FE	13,000,000	93.1000	12,103,000	13,000,000	8,999,088	0	0	0	0	6.500	6.500	JD	70,417	845,000	05/17/2016	06/01/2026
655664-AS-9	Nordstrom Inc-SENIOR UNSECURED		1,2		3.A FE	5,977,440	95.7075	5,742,450	6,000,000	5,994,170	0	2,355	0	0	4.000	4.044	MS	70,667	240,000	03/06/2017	03/15/2027
655664-AT-7	Nordstrom Inc-SENIOR UNSECURED		1,2		3.A FE	9,988,800	90.7667	9,076,667	10,000,000	9,993,322	0	1,010	0	0	4.375	4.388	AO	109,375	437,500	11/04/2019	04/01/2030
69371R-TS-5	PACCAR Financial Corp-SENIOR UNSECURED				1.E FE	19,999,300	100.0812	20,016,242	20,000,000	19,998,534	0	(766)	0	0	4.500	4.502	MN	90,000	0	11/19/2024	11/25/2026
745332-CB-0	PUGET SOUND ENERGY INC-SENIOR SECURED BO		1		1.F FE	24,078,349	100.0669	16,709,169	16,698,000	22,991,198	0	(329,502)	0	0	5.795	2.746	MS	284,919	967,649	08/02/2021	03/15/2040
745332-CC-8	PUGET SOUND ENERGY INC-SECURED		1		1.F FE	19,155,597	98.7486	13,716,186	13,890,000	18,421,263	0	(224,095)	0	0	5.764	3.101	JJ	369,175	800,620	01/20/2022	07/15/2040
795758-AN-7	SALTCHUK RESOURCES INC Sr Unsecured Bond				2.A PL	8,636,000	99.7205	8,611,862	8,636,000	8,636,000	0	0	0	0	6.310	6.305	MS	261,870	0	06/24/2024	09/19/2031
81257V-AA-9	Seattle Children's Hospi-UNSECURED		1,2		1.C FE	6,639,492	90.3757	6,606,461	7,310,000	6,666,912	0	27,419	0	0	1.208	4.652	AO	22,076	0	11/20/2024	10/01/2027
855244-AK-5	Starbucks Corp-SENIOR UNSECURED		1,2		2.A FE	4,751,850	96.9442	4,847,208	5,000,000	4,814,202	0	62,352	0	0	2.450	5.131	JD	5,444	61,250	06/25/2024	06/15/2026
855244-AR-0	Starbucks Corp-SENIOR UNSECURED		1,2		2.A FE	8,865,914	96.9139	8,792,028	9,072,000	8,923,885	0	34,213	0	0	4.000	4.463	MN	46,368	362,880	04/19/2023	11/15/2028
855244-AZ-2	Starbucks Corp-SENIOR UNSECURED		1,2		2.A FE	13,005,200	87.5221	13,128,317	15,000,000	13,275,713	0	235,762	0	0	2.550	4.820	MN	48,875	382,500	01/26/2024	11/15/2030
855244-BC-2	Starbucks Corp-SENIOR UNSECURED		1,2		2.A FE	19,649,000	87.4560	17,491,206	20,000,000	19,737,598	0	32,270	0	0	3.000	3.207	FA	228,333	600,000	02/25/2022	02/14/2032
855244-BG-3	Starbucks Corp-SBUX 4.85 02/08/27		1,2		2.A FE	5,056,050	100.4505	5,022,524	5,000,000	5,046,913	0	(9,137)	0	0	4.850	4.359	FA	96,326	121,250	08/02/2024	02/08/2027
855244-BH-1	Starbucks Corp-SENIOR UNSECURED		1,2		2.A FE	9,883,000	100.2144	10,021,444	10,000,000	9,895,152	0	12,152	0	0	4.900	5.100	FA	185,111	254,528	02/13/2024	02/15/2031
87264A-BD-6	T-Mobile USA Inc-FIRST LIEN		1,2		2.B FE	9,604,000	97.6913	9,769,126	10,000,000	9,762,749	0	95,530	0	0	3.750	4.855	AO	79,167	375,000	04/19/2023	04/15/2027
87264A-BF-1	T-Mobile USA Inc-FIRST LIEN		1,2		2.B FE	9,061,500	93.9494	9,394,943	10,000,000	9,224,553	0	122,769	0	0	3.875	5.587	AO	81,806	387,500	08/24/2023	04/15/2030
87264A-BL-8	T-Mobile USA Inc-FIRST LIEN		1,2		2.B FE	19,164,000	71.4108	14,282,164	20,000,000	19,286,359	0	33,083	0	0	3.000	3.287	FA	226,667	600,000	02/19/2021	02/15/2041
87264A-BN-5	T-Mobile USA Inc-SENIOR UNSECURED		1,2		2.B FE	9,382,900	97.2314	9,723,140	10,000,000	9,722,796	0	218,128	0	0	2.250	5.626	FA	85,000	225,000	04/26/2023	02/15/2026
87264A-BV-6	T-Mobile USA Inc-SENIOR UNSECURED		1,2		2.B FE	5,949,582	93.3060	6,155,396	6,587,000	6,137,281	0	93,313	0	0	3.375	5.208	AO	47,004	222,649	12/05/2022	04/15/2029
87264A-DA-0	T-Mobile USA Inc-SENIOR UNSECURED		1,2		2.B FE	4,934,500	99.4930	4,974,652	5,000,000	4,952,833	0	11,849	0	0	4.800	5.094	JJ	110,667	240,000	05/23/2023	07/15/2028
045487-AB-1	ASSOC BANC-CORP-SUBORDINATED NOTE				2.C FE	12,954,110	99.9438	12,992,689	13,000,000	12,999,584	0	5,155	0	0	4.250	4.991	JJ	254,764	552,500	11/05/2014	01/15/2025
12592B-AR-5	CNH Industrial Capital L-SENIOR UNSECURE		1,2		2.A FE	20,327,400	101.4772	20,295,438	20,000,000	20,281,380	0	(46,020)	0	0	5.500	5.103	JJ	516,389	550,000	03/27/2024	01/12/2029
12592B-AS-3	CNH Industrial Capital L-SENIOR UNSECURE		1,2		2.A FE	20,063,844	100.0515	20,216,402	20,206,000	20,085,297	0	21,454	0	0	5.100	5.381	AO	203,239	450,224	04/23/2024	04/20/2029
186858-AA-0	Cliffwater Corporate Len Senior Secured				1.C PL	109,000,000	96.2610	104,924,490	109,000,000	108,334,446	0	0	0	0	4.100	4.099	MS	1,154,492	6,399,554	06/07/2022	03/28/2027
186858-AP-7	Cliffwater Corporate Len Senior Secured				1.C PL	10,000,000	102.2269	10,222,690	10,000,000	10,000,000	0	0	0	0	6.770	6.770	FA	276,442	677,000	08/04/2023	08/04/2028
28932M-AA-3	Elm Road Generating Stat-SECURED NOTE				1.F FE	2,767,251	99.5735	2,755,449	2,767,251	2,767,251	0	(70)	0	0	5.209	5.206	FA	56,057	144,146	02/03/2010	02/11/2030
478375-AR-9	Johnson Controls Interna-SENIOR UNSECURE	D	1,2		2.B FE	14,728,700	99.0576	14,886,642	15,000,000	14,886,059	0	96,476	0	0	3.900	4.600	FA	222,625	585,000	04/26/2023	02/14/2026
66815L-2F-5	Northwestern Mutual Glob-SECURED				1.A FE	8,941,600	94.5465	9,454,653	10,000,000	9,451,145	0	252,507	0	0	1.750	4.616	JJ	82,639	175,000	12/05/2022	01/11/2027
743518-AA-6	Project Arrow Oak Creek Trust Certificate				1.D	15,023,503	90.2601	13,560,229	15,023,503	15,023,505	0	0	0	0	4.067	4.067	MON	35,642	611,002	03/11/2019	07/10/2040
758750-AM-5	Regal Rexnord Corp-SENIOR UNSECURED		1,2		2.C FE	25,253,556	102.0150	25,503,745	25,000,000	25,212,301	0	(41,255)	0	0	6.050	5.754	AO	319,306	756,250	05/02/2024	04/15/2028

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
976656-CJ-5	WISCONSIN ELECTRIC POWER-SR UNSECURED			1,2	1.G FE	6,704,531	.81.0173	4,690,901	5,790,000	6,624,627	.0	(28,119)	.0	.0	4.300	3.323	JD	11,065	248,970	01/20/2022	12/15/2045
950810-A*-2	Wesbanco, Inc - Junior Sub Note				1.F FE	4,601,563	.98.0600	4,657,850	4,750,000	4,648,985	.0	12,339	.0	.0	2.775	3.031	IMSD	105,450	199,448	02/01/2018	06/17/2034
000000-00-0	CERBERUS LOAN FUNDING XXVII LP				1.A FE	.0	.0.0000	.0	.0	.727,500	.0	.0	.0	.0	.7376	0.000		.0	.0	03/21/2024	01/15/2027
000000-00-0	Galaxy XXIII CLO Ltd				1.C FE	.0	.0.0000	.0	.0	.267,337	.0	.0	.0	.0	.7140	0.000		.0	.0	04/24/2024	10/14/2027
000000-00-0	Galaxy XXIII CLO Ltd-GALXY 2017-23A C2				1.F FE	.0	.0.0000	.0	.0	1,336,702	.0	.0	.0	.0	.7880	0.000		.0	.0	10/27/2027	04/24/2029
000000-00-0	Madison Park Funding LIX-MDPK 2021-59A A				1.A FE	.0	.0.0000	.0	.0	146,125	.0	.0	.0	.0	.6729	0.000		.0	.0	04/18/2024	01/18/2034
000000-00-0	Marathon CLO IX Ltd				1.B FE	.0	.0.0000	.0	.0	48,000	.0	.0	.0	.0	.7326	0.000		.0	.0	12/31/2024	01/18/2034
000000-00-0	Neuberger Berman Loan Advisers CLO 35 Ltd				1.A FE	.0	.0.0000	.0	.0	15,348	.0	.0	.0	.0	.6911	0.000	MON	.0	.0	12/31/2024	01/15/2027
000000-00-0	TICP CLO XI Ltd				1.B FE	.0	.0.0000	.0	.0	.269,250	.0	.0	.0	.0	.7309	0.000	MON	.0	.0	09/28/2018	10/10/2028
000000-00-0	OHA Credit Partners XV Ltd				3.C FE	.0	.0.0000	.0	.0	.293,929	.0	.0	.0	.0	10.879	0.000	MON	.0	.0	12/31/2024	04/24/2029
1019999999	Subtotal - Bonds - Industrial and Miscellaneous (Unaffiliated) - Issuer Obligations					18,009,287,249	XXX	16,722,613,706	17,980,720,078	17,894,850,280	(11,418,317)	23,192,830	30,357,980	(30,114,017)	XXX	XXX	XXX	225,885,698	696,588,570	XXX	XXX
001120-AA-4	ACHM Trust 2024-HE2-ACHM 2024-HE2 A		4		1.A FE	6,291,003	.98.9433	6,260,883	6,327,751	6,292,503	.0	1,500	.0	.0	.5350	5.550	MON	5,642	69,588	10/04/2024	10/25/2039
00249Y-AC-0	ADMT 2024-NQM6-ADMT 2024-NQM6 A1		4		1.A FE	8,999,919	.99.9895	8,999,051	9,000,000	8,999,942	.0	23	.0	.0	.5666	5.666	MON	42,495	.0	12/13/2024	01/01/2070
00249Y-AD-8	ADMT 2024-NQM6-ADMT 2024-NQM6 A2		4		1.D FE	3,999,978	.99.8201	3,992,804	4,000,000	3,999,989	.0	11	.0	.0	.5920	5.920	MON	19,733	.0	12/13/2024	01/01/2070
002939-AD-8	A&D Mortgage Trust 2024--ADMT 2024-NQM4		4		1.A	4,930,105	.99.3262	4,896,929	4,930,149	4,930,114	.0	.8	.0	.0	.5617	5.617	MON	23,077	92,309	08/27/2024	08/01/2069
002939-AE-6	A&D Mortgage Trust 2024--ADMT 2024-NQM4		4		1.A	9,860,173	.99.4032	9,801,453	9,860,297	9,860,195	.0	21	.0	.0	.5820	5.821	MON	47,822	191,290	08/27/2024	08/01/2069
007036-GS-9	Adjustable Rate Mortgage-ARM2 2005-2 2A1		4		1.A FM	60,568	.97.9622	63,416	64,736	63,860	.0	1,515	.0	.0	.5596	7.482	MON	4,443	1,102	07/24/2013	06/01/2035
007036-SE-7	Adjustable Rate Mortgage-ARM2 2005-9 5A1		4		1.A FM	10,870	.99.3850	15,487	15,583	15,566	.0	217	.0	.0	.4993	6.486	MON	.95	678	08/17/2015	11/25/2035
00703Q-AD-4	Adjustable Rate Mortgage-ARM2 2006-3 4A1		4		1.A FM	4,099,387	.37.4526	2,159,579	5,766,170	2,591,154	.0	869,042	548,141	.0	.4813	11.879	MON	84,535	113,687	10/18/2016	08/25/2036
02146P-AF-2	Alternative Loan Trust 2-CWALT 2006-HY12		4		1.A FM	746,530	.90.8065	1,163,804	.961,543	.961,543	.0	.0	.0	.0	.4474	9.159	MON	8,679	46,416	01/19/2012	08/01/2036
02146T-AL-1	Alternative Loan Trust 2-CWALT 2006-24C8		4		1.A FM	409,526	.50.3033	305,857	.608,025	.309,674	.0	(6,022)	.0	.0	.5750	9.005	MON	9,013	21,205	07/23/2008	08/01/2036
02147W-AT-6	Alternative Loan Trust 2-CWALT 2006-26C8		4		4.B FM	1,800,584	.50.4276	1,281,203	2,540,677	1,462,130	.0	(118,808)	.0	.0	.6500	5.614	MON	39,801	150,432	12/29/2021	09/01/2036
02147X-AR-8	Alternative Loan Trust 2-CWALT 2006-32C8		4		4.C FM	638,983	.52.4707	435,559	.830,099	.538,712	.0	(28,884)	.0	.0	.5500	3.810	MON	11,444	35,470	12/29/2021	11/01/2036
02150V-AA-3	Alternative Loan Trust 2-CWALT 2007-HY7C		4		1.A FM	400,792	.92.2979	457,822	.496,026	.443,543	.0	(25,652)	.0	.0	.4733	8.918	MON	391	29,723	10/18/2016	08/25/2037
02152A-AS-8	Alternative Loan Trust 2-CWALT 2007-16C8		4		1.A FM	1,680,312	.63.6807	1,685,094	2,646,160	1,640,557	.0	(9,634)	(6,130)	.0	.4853	14.264	MON	28,307	118,168	04/06/2020	08/25/2037
02660L-AA-8	American Home Mortgage A-AHMA 2006-4 1A1		4		1.A FM	310,803	.50.5166	209,343	.414,404	.229,061	.0	78,263	.0	.0	.4892	6.208	MON	338	19,475	05/20/2008	10/25/2046
02660T-AR-4	American Home Mortgage I-AHM 2004-1 4A		4		4.C FM	1,371,027	.93.3374	1,294,241	1,386,627	1,386,627	.0	.68	.0	.0	.6853	5.471	MON	15,854	54,706	11/15/2018	04/01/2044
02660T-DH-3	American Home Mortgage I-AHM 2005-1 6A		4		1.A FM	85,419	.98.8784	96,942	.98,042	.98,042	.0	(11,153)	.0	.0	.6862	4.861	MON	1,140	4,577	02/28/2011	06/01/2045
02660T-EK-5	American Home Mortgage I-AHM 2005-2 1A1		4		1.A FM	1,680,643	.88.3221	1,585,981	1,795,678	1,749,175	.0	9,881	.0	.0	.5053	3.931	MON	1,512	80,565	11/13/2019	09/25/2045
02660V-AE-8	American Home Mortgage A-AHMA 2005-1 3A1		4		1.A FM	.24,947	.95.8396	29,314	.30,586	.30,192	.0	551	.0	.0	.4993	4.368	MON	25	1,034	10/30/2013	11/25/2035
026929-AA-7	American Home Mortgage I-AHM 2006-3 11A1		4		1.A FM	1,440,280	.85.5813	1,572,708	1,837,678	1,537,734	.0	57,360	.0	.0	.4813	6.490	MON	1,474	85,735	02/24/2016	12/25/2046
03464B-AB-4	Angel Oak Mortgage Trust-AOMT 2022-1 A2		4		1.A	14,572,245	.88.8984	12,954,613	14,572,386	14,572,259	.0	.0	.0	.0	.3137	3.137	MON	38,095	457,110	02/08/2022	12/01/2066
03464B-AC-2	Angel Oak Mortgage Trust-AOMT 2022-1 A3		4		1.A	14,572,147	.89.5444	13,048,759	14,572,386	14,572,164	.0	(1)	.0	.0	.3290	3.290	MON	39,953	479,404	02/08/2022	12/01/2066
03464P-AA-5	Angel Oak Mortgage Trust-AOMT 2022-2 A1		4		1.A	18,348,767	.91.0333	16,762,436	18,413,531	18,413,531	.0	.0	.0	.0	.3353	3.971	MON	51,450	617,357	03/10/2022	01/01/2067
03464P-AB-3	Angel Oak Mortgage Trust-AOMT 2022-2 A2		4		1.A	11,031,055	.89.9390	9,936,571	11,048,119	11,032,819	.0	1,642	.0	.0	.3762	3.789	MON	34,636	415,597	03/10/2022	01/01/2067
03464P-AC-1	Angel Oak Mortgage Trust-AOMT 2022-2 A3		4		1.B	11,020,340	.90.2326	9,969,006	11,048,119	11,023,189	.0	2,667	.0	.0	.3864	3.908	MON	35,575	426,866	03/10/2022	01/01/2067
03464T-AA-7	Angel Oak Mortgage Trust-AOMT 2022-3 A1		4		1.A	9,410,000	.94.0119	8,942,241	9,511,819	9,456,198	.0	19,494	.0	.0	.4000	4.289	MON	31,706	380,460	05/05/2022	01/01/2067
03464T-AB-5	Angel Oak Mortgage Trust-AOMT 2022-3 A2		4		1.B	6,206,109	.91.3579	5,793,371	6,341,404	6,241,388	.0	10,611	.0	.0	.4138	4.377	MON	43,885	240,387	05/05/2022	01/01/2067
042855-AB-2	Arroyo Mortgage Trust 20-ARRW 2022-1 A2		4		1.A	14,999,936	.79.9824	11,997,362	15,000,000	14,999,966	.0	.4	.0	.0	.3625	3.625	MON	45,313	543,750	02/09/2022	12/01/2056
042855-AC-0	Arroyo Mortgage Trust 20-ARRW 2022-1 A3		4		1.A	4,932,381	.74.1273	3,706,366	5,000,000	4,950,461	.0	5,003	.0	.0	.3650	3.820	MON	15,208	182,500	02/09/2022	12/01/2056
04285E-AC-1	Arroyo Mortgage Trust 20-ARRW 2022-2 A2		4		1.A	3,794,254	.94.7115	3,711,746	3,919,003	3,842,214	.0	13,496	.0	.0	.4950	5.889	MON	16,166	166,625	07/07/2022	07/01/2057
04285E-AD-9	Arroyo Mortgage Trust 20-ARRW 2022-2 A3		4		1.A	3,756,541	.94.7115	3,711,746	3,919,003	3,818,750	.0	17,524	.0	.0	.4950	6.182	MON	16,166	193,980	07/07/2022	07/01/2057
04285E-AE-7	Arroyo Mortgage Trust 20-ARRW 2022-2 M1		4		1.C	1,501,027	.87.2269	1,477,624	1,694,000	1,550,963	.0	17,675	.0	.0	.4950	6.828	MON	6,988	83,853	07/08/2022	07/01/2057
04285E-AM-9	Arroyo Mortgage Trust 20-ARRW 2022-2 A1		4		1.A	3,722,683	.98.3492	3,706,043	3,768,251	3,760,034	.0	17,853	.0	.0	.4950	5.477	MON	15,544	159,674	07/07/2022	07/01/2057

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
05532E-CE-3	BCAP LLC 2009-RR10 Trust-BCAP 2009-RR10			4	1.A FM	81,851	.92.0067	261,787	284,530	166,838	.0	(12,165)	.0	.0	.6.000	17.630	MON	1,423	17,071	09/09/2009	06/01/2037
05532M-AG-2	BCAP LLC 2009-RR15 Trust-BCAP 2009-RR15			4	1.A FM	3,220,231	.34.1298	2,029,625	5,946,781	2,275,166	.0	215,484	.0	.0	.6.000	17.406	MON	59,468	489,273	10/01/2010	05/01/2036
05532T-AF-9	BCAP LLC 2010-RR1 Trust-BCAP 2010-RR1 2A			4	1.A FM	385,057	.98.5306	872,181	885,188	808,739	.0	(265,149)	.0	.0	.4.928	32.798	MON	7,399	38,222	03/16/2012	06/01/2045
05533N-AJ-3	BCAP LLC 2010-RR12 Trust-BCAP 2010-RR12			4	5.B FM	1,212,780	.83.1726	1,151,344	1,384,282	1,354,247	.0	5,706	.0	.0	.4.218	5.513	MON	4,866	55,859	06/07/2016	06/01/2037
058927-AG-9	Banc of America Funding -BAFC 2006-A 3A2			4	2.A FM	250,119	.87.2348	231,799	286,506	259,559	.0	14,089	.0	.0	.5.026	5.758	MON	5,111	9,748	03/21/2016	02/01/2036
058927-AG-9	Banc of America Funding -BAFC 2006-A 3A2			4	3.A FM	.0	.87.2348	18,133	.0	20,770	.0	1,075	.0	.0	.5.026	5.167	MON	400	763	01/09/2017	02/01/2036
058931-AD-8	Banc of America Funding -BAFC 2006-3 2A1			4	1.A FM	539,556	.90.5835	599,279	661,577	500,491	.0	(41,302)	.0	.0	.6.000	11.775	MON	21,162	39,391	03/29/2012	03/01/2036
058931-AT-3	Banc of America Funding -BAFC 2006-3 4A1			4	2.B FM	609,110	.81.3403	507,449	623,859	547,703	.0	(8,896)	.0	.0	.5.750	5.013	MON	12,243	35,451	01/10/2022	03/01/2036
058931-BL-9	Banc of America Funding -BAFC 2006-3 5A8			4	3.C FM	54,412	.84.2475	45,163	53,607	49,375	.0	(82)	.0	.0	.5.500	5.204	MON	2,841	2,452	08/16/2013	03/01/2036
058933-AN-2	Banc of America Funding -BAFC 2006-D 5A1			4	1.A FM	779,682	.87.9196	714,986	813,227	767,287	.0	8,916	.0	.0	.5.392	6.005	MON	13,049	53,023	01/08/2019	05/01/2036
05946X-R7-0	Banc of America Funding -BAFC 2005-7 2A2			4	5.A FE	455,130	2.6658	50,454	1,892,640	.0	.0	(7,447)	.0	.0	.0.507	0.000	MON	160	577	03/05/2008	11/25/2035
05946X-XP-3	Banc of America Funding -BAFC 2005-E 3A1			4	4.B FM	968,601	.92.2252	910,952	987,747	1,003,214	.0	(9,976)	.0	.0	.6.469	4.885	MON	18,842	62,434	01/15/2019	05/01/2035
05946X-Y7-2	Banc of America Funding -BAFC 2005-8 2A8			4	3.C FM	960,860	.93.0303	889,924	956,596	943,918	.0	5,919	1,589	.0	.5.750	4.988	MON	9,257	68,301	08/07/2013	01/01/2036
05946X-YV-9	Banc of America Funding -BAFC 2005-F 2A1			4	4.A FM	617,061	.88.1676	583,830	662,182	695,572	.0	7,195	.0	.0	.5.314	4.983	MON	15,700	39,758	01/04/2017	09/01/2035
05948X-T2-7	Banc of America Mortgage-BOAMS 2004-A 2A			4	1.A FM	303,166	.97.8001	301,012	307,783	308,043	.0	885	.0	.0	.5.570	5.667	MON	2,883	16,703	09/08/2016	02/01/2034
05949A-H8-6	Banc of America Mortgage-BOAMS 2005-A 2A			4	1.A FM	316,951	.95.9499	314,533	327,810	327,810	.0	71	.0	.0	.4.904	4.966	MON	2,752	15,848	05/06/2016	02/01/2035
05949A-H9-4	Banc of America Mortgage-BOAMS 2005-A 2A			4	1.A FM	398,631	.95.9499	392,797	409,377	409,377	.0	70	.0	.0	.4.904	4.966	MON	3,452	18,483	05/06/2016	02/01/2035
05949C-GW-0	Banc of America Mortgage-BOAMS 2005-J 4A			4	4.B FM	526,087	.87.4909	510,368	540,156	510,368	.0	(7,931)	.0	.0	.5.500	5.851	MON	11,849	30,202	08/31/2012	09/01/2035
05949C-HM-1	Banc of America Mortgage-BOAMS 2005-I 1A			4	1.A FM	266,990	.90.2262	273,378	302,992	274,072	.0	7,610	.0	.0	.7.487	10.664	MON	3,832	17,679	07/22/2013	10/01/2035
05949C-KS-4	Banc of America Mortgage-BOAMS 2005-J 2A			4	3.A FM	11,580	.92.0996	10,915	11,851	12,169	.0	17	.0	.0	.5.761	5.700	MON	378	756	09/10/2008	11/01/2035
05949C-KX-3	Banc of America Mortgage-BOAMS 2005-J 4A			4	1.A FM	1,210,401	.84.1628	1,131,899	1,344,892	1,148,843	.0	44,050	(56)	.0	.4.237	7.570	MON	22,436	66,130	06/04/2020	11/01/2035
05949C-PP-5	Banc of America Mortgage-BOAMS 2005-L 4A			4	1.A FM	1,440,533	.89.5076	1,362,629	1,522,361	1,455,974	.0	20,673	.0	.0	.4.805	5.861	MON	53,043	78,399	06/02/2020	01/01/2036
05949T-AX-7	Banc of America Funding -BAFC 2006-1 1A2			4	1.A FM	1,057,366	.98.2309	951,575	968,713	1,059,822	.0	(4,890)	.0	.0	.5.750	3.354	MON	11,114	55,668	01/10/2022	01/01/2036
05950F-AD-7	Banc of America Funding -BAFC 2006-4 A4			0	.6 *	329,055	.4.7199	5,953	126,134	.0	.0	(1,437)	.0	.0	1.047	0.000	MON	22	268	03/12/2008	07/25/2036
05950M-AJ-9	Banc of America Funding -BAFC 2006-G 3A3			4	1.A FM	481,472	.99.4117	499,232	502,187	502,187	.0	8,963	.0	.0	.6.770	5.465	MON	2,833	28,490	04/08/2016	07/01/2036
05950P-AF-0	Banc of America Funding -BAFC 2006-H 2A3			4	1.A FM	957,721	.87.3421	954,945	1,093,338	964,925	.0	26,168	.0	.0	.5.204	7.072	MON	18,252	57,560	03/22/2016	09/01/2046
05950R-BG-3	Banc of America Funding -BAFC 2006-6 3A2			0	.6 *	178,465	.4.3046	2,927	67,996	.0	.0	(1,041)	.0	.0	.0.947	0.000	MON	82	25	10/24/2008	08/25/2036
05950T-AC-9	Banc of America Mortgage-BOAMS 2006-B 2A			4	1.A FM	238,271	.83.0063	239,192	288,162	237,641	.0	1,163	.0	.0	.5.499	5.499	MON	8,905	11,170	11/17/2010	11/01/2046
05951F-AB-0	Banc of America Funding -BAFC 2007-1 1A1			4	1.A FM	43,195	.85.8995	39,057	45,469	35,032	.0	(669)	.0	.0	.5.846	10.761	MON	445	2,055	05/13/2008	01/01/2037
05951K-AN-3	Banc of America Funding -BAFC 2007-5 1A1			4	3.C FM	562,954	.79.6779	462,315	580,230	513,415	.0	(2,589)	.0	.0	.6.000	6.518	MON	6,321	28,946	01/11/2017	09/01/2036
05951U-AC-5	Banc of America Funding -BAFC 2006-8T2 A			4	1.A FM	10,612	.84.7984	9,510	11,215	8,304	.0	(344)	.0	.0	.5.791	10.632	MON	282	456	04/30/2008	10/01/2036
05951V-AV-1	Banc of America Funding -BAFC 2006-I 6A1			4	1.A FM	652,752	.85.9352	680,380	791,736	715,520	.0	(11,552)	.0	.0	.4.865	6.516	MON	1,304	32,708	03/21/2016	12/20/2046
059522-AA-0	Banc of America Funding -BAFC 2007-C 6A1			4	1.A FM	23,904	.90.3148	27,605	27,795	.0	.0	(2,275)	.0	.0	.4.905	4.373	MON	45	7,145	02/25/2016	05/20/2047
059522-AU-6	Banc of America Funding -BAFC 2007-C 1A2			4	1.A FM	1,807,480	.89.3686	1,751,461	1,959,817	1,783,136	.0	372,229	286,668	.0	.4.899	7.080	MON	14,448	114,526	02/12/2016	05/01/2036
059523-AN-0	Banc of America Funding -BAFC 2007-5 4A3			4	.6 *	4,815,405	.10.6276	1,091,444	10,269,891	1,091,444	.0	(58,123)	.0	.0	.2.097	1.282	MON	3,589	140,685	12/06/2013	07/25/2037
059523-AT-8	Banc of America Funding -BAFC 2007-D 3A1			4	1.A FM	2,700,002	.58.0673	2,687,229	4,627,782	2,988,103	.0	(322,389)	.0	.0	.5.097	7.015	MON	39,565	293,572	09/26/2017	07/01/2047
05952G-AV-3	Banc of America Funding -BAFC 2007-D 3A3			4	1.A FM	303,616	.87.1328	269,949	309,814	300,373	.0	2,733	16,419	.0	.4.485	3.968	MON	2,330	15,716	03/07/2019	06/01/2037
05952G-AV-3	Banc of America Funding -BAFC 2007-D 3A3			4	3.B FM	436,889	.87.1328	388,443	445,805	453,017	.0	25,161	23,294	.0	.4.485	2.885	MON	3,885	18,374	03/07/2019	06/01/2037
05954D-AL-0	Banc of America Funding -BAFC 2007-E 6A1			4	3.B FM	38,052	.93.4399	41,017	43,896	40,925	.0	3,055	.0	.0	.3.931	9.071	MON	582	1,582	04/24/2008	09/01/2037
05990H-AH-6	Banc of America Funding -BAFC 2010-R2 1A			4	1.A FM	716,550	.88.5998	1,003,378	1,132,483	728,897	.0	(37,129)	.0	.0	.6.000	19.484	MON	5,662	67,947	09/23/2010	08/01/2037
05990H-AQ-6	Banc of America Funding -BAFC 2010-R2 3A			4	1.A FM	832,291	.97.0223	830,608	856,101	847,249	.0	3,745	.0	.0	.6.301	6.244	MON	9,421	49,387	08/24/2016	07/01/2035
05990H-AT-0	Banc of America Funding -BAFC 2010-R2 4A			4	1.A FM	711,120	.86.3751	767,269	888,300	708,144	.0	2,686	103,077	.0	.6.250	8.885	MON	9,564	55,443	11/12/2010	08/01/2036
06744D-AA-7	Barclays Mortgage Loan T-BARC 2022-NQM1			4	1.A	1,129,410	.97.2610	1,119,369	1,150,891	1,137,895	.0	3,637	.0	.0	.4.550	5.052	MON	4,364	52,604	08/29/2022	07/01/2052
06744D-AB-5	Barclays Mortgage Loan T-BARC 2022-NQM1			4	1.D	1,107,239	.97.5869	1,123,119	1,150,891	1,118,916	.0	3,985	.0	.0	.4.550	5.456	MON	4,364	52,576	08/29/2022	07/01/2052
06744D-AC-3	Barclays Mortgage Loan T-BARC 2022-NQM1			4	1.F	3,072,052	.96.1040	3,110,221	3,236,307	3,114,247	.0	13,555	.0	.0	.4.550	5.802	MON	24,625	144,826	08/29/2022	07/01/2052

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
06744D-AD-1	Barclays Mortgage Loan T-BARC 2022-NQM1			4	3.A	3,209,243	81.4509	3,034,860	3,726,000	3,309,520	0	42,162	0	0	4.467	6.323	MON	27,741	166,691	08/29/2022	07/01/2052
06744Y-AA-1	Barclays Mortgage Loan T-BARC 2022-INV1			4	1.A	11,570,742	96.1418	11,124,470	11,570,899	11,570,899	0	0	0	0	4.466	5.001	MON	43,063	516,727	05/16/2022	02/01/2062
07325D-AF-1	Bayview Financial Mortga-BAYV 2006-C 1A5			4	1.A FM	177,807	86.2925	153,434	177,807	155,370	0	6,465	16,148	0	6.352	6.548	MON	1,892	5,679	04/14/2014	11/01/2036
07384M-4K-5	Bear Stearns ARM Trust 2-BSARM 2004-10 2			4	1.A FM	1,312,514	92.3962	1,300,495	1,407,521	1,397,163	0	12,255	0	0	5.251	4.983	MON	12,280	68,957	05/01/2020	01/01/2035
07384M-Q8-8	Bear Stearns ARM Trust 2-BSARM 2004-3 2A			4	1.A FM	355,867	92.7052	328,874	354,752	354,752	0	(26)	0	0	4.887	4.611	MON	1,445	16,502	01/27/2017	07/01/2034
07384M-S7-8	Bear Stearns ARM Trust 2-BSARM 2004-5 2A			4	4.C FM	694,511	91.6388	633,677	691,494	689,321	0	(2,187)	0	0	4.538	4.192	MON	5,245	26,006	01/27/2017	07/01/2034
07384Y-KF-2	Bear Stearns Asset Backe-BSABS 2003-AC4			4	1.A FM	1,618,172	88.9749	1,424,629	1,601,160	1,437,532	0	141	144,770	0	5.500	4.098	MON	14,730	84,276	07/10/2013	09/01/2033
07384Y-TL-0	Bear Stearns Asset Backe-BSABS 2004-SD2			4	1.A FM	245,080	102.6580	248,795	242,354	249,143	0	213	0	0	6.223	5.929	MON	2,513	12,973	01/27/2017	03/01/2044
07386H-PD-7	Bear Stearns ALT-A Trust-BALTA 2004-12 2			4	1.A FM	221,786	92.5736	223,777	241,729	231,995	0	2,232	0	0	5.614	6.058	MON	1,131	12,978	10/25/2016	01/01/2035
07386H-QZ-7	Bear Stearns ALT-A Trust-BALTA 2005-2 2A			4	1.A FM	858,624	90.2998	904,482	1,001,644	861,438	0	33,036	0	0	5.328	9.579	MON	14,267	51,577	02/11/2016	04/01/2035
07386H-UG-4	Bear Stearns ALT-A Trust-BALTA 2005-5 21			4	1.A FM	4,928	95.6452	5,180	5,416	5,237	0	38	0	0	6.115	7.091	MON	28	323	09/14/2016	07/01/2035
07386X-AH-9	Bear Stearns ALT-A Trust-BALTA 2007-1 21			4	4.A FM	1,026,519	47.6375	700,640	1,470,773	883,112	0	54,501	12,260	0	4.631	8.515	MON	16,475	56,680	12/29/2021	01/01/2047
07386Y-AE-4	Bear Stearns ARM Trust 2-BSARM 2007-5 3A			4	1.A FM	1,907,464	86.2776	1,705,403	1,976,647	1,849,052	0	310,098	243,561	0	4.729	5.684	MON	38,572	88,300	01/11/2019	08/01/2047
073870-AG-2	Bear Stearns ALT-A Trust-BALTA 2007-2 2A			4	1.A FM	49,178	71.7093	66,575	92,840	57,491	0	4,879	0	0	4.151	11.586	MON	1,378	(1,918)	09/15/2008	04/01/2037
073879-GN-2	Bear Stearns Asset Backe-BSABS 2004-AC5			4	1.A FM	307,411	88.2268	362,835	411,252	361,306	0	7,868	0	0	4.853	7.529	MON	2,101	18,388	12/05/2011	10/25/2034
073880-AD-8	Bear Stearns ARM Trust 2-BSARM 2007-1 2A			4	3.C FM	978,184	87.4371	863,064	987,068	946,754	0	68,790	57,349	0	5.703	5.667	MON	14,434	48,457	12/29/2021	02/01/2047
073880-AG-1	Bear Stearns ARM Trust 2-BSARM 2007-1 3A			4	1.A FM	451,449	92.2253	493,972	535,615	488,044	0	56,554	0	0	4.475	8.546	MON	9,835	24,860	03/03/2016	02/01/2047
07388N-AC-9	Bear Stearns Asset Backe-BSABS 2006-SD4			4	1.A FM	249,453	76.9167	213,710	277,845	221,205	0	3,177	7,474	0	4.913	9.340	MON	5,287	12,377	08/17/2016	10/01/2036
07401C-AS-2	Bear Stearns ARM Trust 2-BSARM 2007-4 21			4	1.G FM	1,858,532	89.6766	1,754,394	1,956,356	1,794,354	0	328,265	226,479	0	4.625	6.271	MON	34,769	72,178	01/16/2019	06/01/2047
10568K-AA-6	BRAVO Residential Fundin-BRAVO 2022-NQM2			4	1.A FE	2,575,078	97.7435	2,517,009	2,575,117	2,575,117	0	0	0	0	4.272	4.935	MON	9,167	109,975	05/25/2022	11/01/2061
10568K-AB-4	BRAVO Residential Fundin-BRAVO 2022-NQM2			4	1.C FE	1,151,211	97.6248	1,123,885	1,151,229	1,151,213	0	0	0	0	4.883	4.883	MON	4,685	56,197	05/25/2022	11/01/2061
10569F-AC-2	BRAVO Residential Fundin-BRAVO 2022-NQM1			4	1.A	8,169,245	94.3172	7,710,838	8,175,435	8,170,131	0	659	0	0	4.086	4.104	MON	27,837	333,989	03/15/2022	09/01/2061
10569J-AB-6	BRAVO Residential Fundin-BRAVO 2022-NQM3			4	1.A	729,733	98.7880	723,749	732,629	732,629	0	747	0	0	5.500	5.902	MON	3,358	40,287	08/29/2022	07/01/2062
10569J-AD-2	BRAVO Residential Fundin-BRAVO 2022-NQM3			4	1.E	3,757,273	98.2122	3,928,486	4,000,000	3,829,131	0	28,694	37,314	0	5.585	6.580	MON	37,314	205,373	08/29/2022	07/01/2062
10571D-AC-3	BRAVO Residential Fundin-BRAVO 2024-NQM8			4	1.A FE	5,771,874	95.1552	5,709,311	6,000,000	5,773,014	0	1,140	0	0	4.300	4.841	MON	21,500	0	12/05/2024	08/01/2053
10571D-AD-1	BRAVO Residential Fundin-BRAVO 2024-NQM8			4	1.C FE	6,278,028	93.7198	6,133,026	6,544,000	6,279,356	0	1,328	0	0	4.300	4.880	MON	23,449	0	12/05/2024	08/01/2053
10571D-AE-9	BRAVO Residential Fundin-BRAVO 2024-NQM8			4	1.F FE	3,331,624	92.9381	3,240,753	3,487,000	3,332,399	0	775	12,495	0	4.300	4.938	MON	12,495	0	12/05/2024	08/01/2053
105925-AB-7	BRAVO Residential Fundin-BRAVO 2024-NQM5			4	1.A	3,644,523	100.3050	3,655,705	3,644,588	3,644,537	0	14	0	0	6.056	6.057	MON	18,393	73,336	07/31/2024	06/01/2064
125431-AH-9	CHL Mortgage Pass-Through-CIHL 2006-HYB4			4	1.A FM	387,184	91.7344	363,109	395,826	288,247	0	17,900	0	0	5.089	13.036	MON	1,679	19,282	08/29/2007	06/01/2036
12543X-AD-8	CHL Mortgage Pass-Through-CIHL 2006-19 1A			4	4.A FM	1,581,582	49.9319	858,616	1,719,573	972,609	0	(63,269)	43,743	0	6.000	6.824	MON	43,743	74,091	08/29/2011	01/01/2037
12544B-AE-3	CHL Mortgage Pass-Through-CIHL 2007-HY5 3			4	1.A FM	246,273	91.8738	177,995	316,431	169,773	0	13,801	0	0	5.695	17.682	MON	1,813	10,298	08/13/2008	09/01/2037
12544B-AE-3	CHL Mortgage Pass-Through-CIHL 2007-HY5 3			4	2.B FM	0	91.8738	112,722	0	124,075	0	1,959	0	0	5.695	8.816	MON	1,148	6,522	05/23/2017	09/01/2037
12544D-AG-4	CHL Mortgage Pass-Through-CIHL 2007-14 A7			4	4.A FM	89,961	48.4701	60,144	124,084	73,120	0	(3,991)	667	0	6.000	4.705	MON	1,251	7,506	01/10/2022	09/01/2037
12544H-BF-6	CHL Mortgage Pass-Through-CIHL 2007-HY7 A			4	1.A FM	162	5,434.1704	7,053	130	97	0	80	0	0	4.830	3.000	MON	67	4	12/29/2021	11/01/2037
12545E-AK-2	CHL Mortgage Pass-Through-CIHL 2007-J2 2A			4	1.A FM	1,563,324	33.6481	953,301	2,833,150	1,094,635	0	(97,439)	0	0	6.000	16.272	MON	22,817	170,157	01/10/2022	07/01/2037
12546Y-AA-9	CHNGE Mortgage Trust-CHNGE 2022-2 A1			4	1.C FE	35,785,687	94.9392	33,973,148	35,785,995	35,785,995	0	0	0	0	3.757	4.335	MON	112,040	1,344,150	02/22/2022	03/01/2067
12551S-AA-4	CHNGE Mortgage Trust 202-CHNGE 2022-4 A1			4	1.C FE	9,740,133	99.5257	9,892,677	9,939,825	9,877,896	0	63,125	0	0	6.000	6.981	MON	49,699	596,057	09/20/2022	10/01/2057
12551S-AB-2	CHNGE Mortgage Trust 202-CHNGE 2022-4 M1			4	1.F FE	7,119,380	98.8188	7,411,406	7,500,000	7,267,636	0	73,838	0	0	6.950	8.195	MON	86,800	478,722	09/20/2022	10/01/2057
12558M-AG-7	CIT Home Equity Loan Tru-CITHE 2002-1 AF			4	1.A FM	6,600	98.5877	6,356	6,447												

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest				Dates		
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Design- ation, NAIC Design- ation Modifier and SVO Admini- strative Symbol	Actual Cost			Rate Used to Obtain Fair Value	Fair Value												Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
12569C-AB-7	CHNGE Mortgage Trust 202-CHNGE 2022-NQM1			4	1.A	3,560,489	100.4249	3,583,779	3,568,616	3,568,616	0	61	0	0	5.820	6.201	MON	17,308	225,003	08/19/2022	06/01/2067
12569C-AC-5	CHNGE Mortgage Trust 202-CHNGE 2022-NQM1			4	1.A	7,328,878	100.2745	7,455,023	7,434,616	7,405,647	0	36,701	0	0	5.820	6.392	MON	36,058	468,644	08/19/2022	06/01/2067
12569Q-AA-8	CHNGE Mortgage Trust 202-CHNGE 2023-4 A1			4	1.A FE	3,701,456	101.1188	3,735,278	3,693,952	3,698,878	0	(1,806)	0	0	7.573	7.459	MON	59,599	284,169	08/22/2023	09/01/2058
12598R-AA-1	COLT 2021-5 Mortgage Loa-COLT 2021-5 A1			4	1.A FE	3,657,095		3,541,671	4,035,415	3,740,624	0	22,537	0	0	1.726	4.038	MON	5,804	69,634	06/24/2022	11/01/2066
12628L-AD-2	CSAB Mortgage-Backed Tru-CSAB 2006-4 A2A			4	1.A FM	902,446	15.6975	460,173	2,931,508	537,728	0	32,835	135,535	0	5.611	4.945	MON	27,422	29,683	12/29/2021	12/01/2036
12638P-AB-5	CSMC Mortgage-Backed Tru-CSMC 2007-3 1A1			4	1.A FM	701,035	23.0201	453,690	1,970,843	553,226	0	34,857	133,011	0	5.837	15.476	MON	19,177	18,775	12/29/2021	04/01/2037
12640W-AC-4	CSMC Series 2008-3R-CSMC 2008-3R 1A2			4	4.B FM	1,076,984	94.1698	1,106,063	1,174,541	1,123,056	0	14,655	0	0	5.020	6.678	MON	14,831	51,406	12/01/2016	07/01/2037
126416-AB-2	CSMC 2022-NQM1-CSMC 2022-NQM1 A2			4	1.B	12,683,038	86.2550	10,939,928	12,683,243	12,683,062	0	(19)	0	0	2.572	2.572	MON	27,184	326,205	01/24/2022	11/01/2066
126416-AC-0	CSMC 2022-NQM1-CSMC 2022-NQM1 A3			4	1.B	31,059,924	85.3505	26,509,899	31,060,032	31,059,941	0	(9)	0	0	2.675	2.675	MON	69,238	830,835	01/24/2022	11/01/2066
12641T-AB-2	CSMC Series 2009-SR-CSMC 2009-SR 1A2			4	3.C FM	2,748,295	83.7832	3,020,402	3,605,021	3,005,972	0	47,228	0	0	5.984	4.910	MON	35,452	179,235	09/11/2012	06/01/2036
12646U-AK-4	CSMC Trust 2013-IVR1-CSMC 2013-IVR1 A2			4	1.A	1,131,131	87.8555	1,062,845	1,209,765	1,146,050	0	4,187	0	0	3.000	4.065	MON	3,024	36,292	01/28/2014	03/01/2043
12646W-AH-7	CSMC Trust 2013-IVR2-CSMC 2013-IVR2 A2			4	1.A	1,093,389	87.2884	1,021,434	1,170,183	1,106,753	0	3,962	0	0	3.000	4.045	MON	2,925	35,105	02/12/2014	04/01/2043
12646X-AJ-1	CSMC Trust 2013-IVR3-CSMC 2013-IVR3 A2			4	1.A	2,287,583	86.8235	2,097,595	2,415,930	2,321,782	0	4,541	0	0	3.000	3.759	MON	6,062	72,476	04/17/2014	05/01/2043
12647G-BZ-0	CSMC Trust 2013-IVR4-CSMC 2013-IVR4 A20			4	1.A	274,401	91.2573	256,379	280,941	275,433	0	263	0	0	3.494	3.882	MON	818	9,821	03/06/2014	07/01/2043
12647H-BC-9	CSMC Trust 2013-8R-CSMC 2013-8R 4A2			4	1.A FM	6,604,836	93.0031	8,463,229	9,099,942	8,559,714	0	289,575	0	0	4.120	6.728	MON	104,040	323,851	06/01/2016	12/27/2036
12647P-AK-4	CSMC Trust 2013-7-CSMC 2013-7 A6			4	1.A	2,066,584	90.7151	1,945,218	2,144,315	2,072,815	0	(2,568)	0	0	3.500	3.976	MON	56,919	30,294	01/09/2014	08/01/2043
12648H-BB-0	CSMC Trust 2014-IVR2-CSMC 2014-IVR2 B1			4	1.A	666,945	97.9128	666,352	680,557	671,828	0	2,584	0	0	3.816	4.595	MON	2,427	25,876	03/31/2020	04/01/2044
12648T-AQ-2	CSMC Trust 2014-IVR3-CSMC 2014-IVR3 B1			4	1.A	1,264,242	96.3779	1,225,344	1,271,395	1,261,642	0	(1,218)	0	0	4.002	4.124	MON	8,684	46,821	03/31/2020	07/01/2044
12659Y-AB-0	COLT 2022-3 Mortgage Loa-COLT 2022-3 A2			4	1.C FE	11,275,060	93.7464	10,570,105	11,275,216	11,275,122	0	19	0	0	4.156	4.156	MON	39,050	468,557	03/17/2022	06/01/2028
12659Y-AC-8	COLT 2022-3 Mortgage Loa-COLT 2022-3 A3			4	1.F FE	9,015,474	92.7125	8,362,829	9,020,173	9,017,763	0	592	0	0	4.231	4.240	MON	31,804	381,611	03/17/2022	06/01/2028
12660B-AB-7	Credit Suisse Mortgage C-CSMC 2022-ATH1			4	1.A	12,950,696	90.5790	11,730,783	12,950,891	12,950,756	0	10	0	0	3.405	3.405	MON	36,748	440,965	02/17/2022	01/01/2067
12660B-AC-5	Credit Suisse Mortgage C-CSMC 2022-ATH1			4	1.A	19,251,527	90.9582	17,510,992	19,251,700	19,251,586	0	8	0	0	3.559	3.559	MON	57,097	685,148	02/17/2022	01/01/2067
12661N-AB-0	CREDIT SUISSE MORTGAGE T-CSMC 2022-NQM3			4	1.B	13,172,422	92.7839	12,421,997	13,388,100	13,307,078	0	63,375	0	0	4.265	4.690	MON	47,584	571,002	04/27/2022	03/01/2067
12661N-AD-6	CREDIT SUISSE MORTGAGE T-CSMC 2022-NQM3			4	1.C	4,804,705	87.1816	4,359,078	5,000,000	4,855,499	0	16,805	0	0	4.265	4.803	MON	35,542	212,962	04/27/2022	03/01/2067
12661N-AE-4	CREDIT SUISSE MORTGAGE T-CSMC 2022-NQM3			4	1.C	4,778,965	81.2619	4,063,095	5,000,000	4,827,679	0	16,615	0	0	4.265	4.814	MON	35,542	212,962	04/27/2022	03/01/2067
12662Q-AD-8	CSMC 2021-NQM7-CSMC 2021-NQM7 M1			4	1.C	2,999,943	71.0406	2,131,219	3,000,000	2,999,955	0	3	0	0	3.045	3.045	MON	7,613	91,350	11/01/2021	10/01/2066
12663G-AA-5	COLT 2022-7 Mortgage Loa-COLT 2022-7 A1			4	1.A FE	3,506,801	99.0957	3,475,119	3,506,833	3,506,833	0	0	0	0	5.162	5.564	MON	15,085	181,017	07/25/2022	04/01/2067
12663G-AB-3	COLT 2022-7 Mortgage Loa-COLT 2022-7 A2			4	1.C FE	3,331,654	99.7521	3,323,400	3,331,660	3,331,649	0	(11)	0	0	6.027	6.028	MON	16,733	200,793	07/25/2022	04/01/2067
12663G-AC-1	COLT 2022-7 Mortgage Loa-COLT 2022-7 A3			4	1.F FE	1,741,569	99.9934	1,753,389	1,753,505	1,750,616	0	3,318	0	0	6.250	6.559	MON	9,133	109,591	07/25/2022	04/01/2067
12663G-AD-9	COLT 2022-7 Mortgage Loa-COLT 2022-7 M1			4	2.B FE	3,209,584	97.9892	3,331,632	3,400,000	3,287,088	0	49,122	0	0	6.295	12.222	MON	213,895	213,895	07/25/2022	04/01/2067
12664A-AE-9	CSMC 2022-ATH3-CSMC 2022-ATH3 A2			4	1.A	4,250,137	99.2751	4,219,369	4,250,180	4,250,180	0	1	0	0	6.006	5.830	MON	42,661	247,735	08/23/2022	08/01/2067
12664A-AF-6	CSMC 2022-ATH3-CSMC 2022-ATH3 A3			4	1.A	4,429,618	99.3812	4,402,218	4,429,630	4,429,630	0	0	0	0	6.567	6.392	MON	48,615	283,049	08/23/2022	08/01/2067
12664V-AE-3	CSMC 2022-NQM2 Trust-CSMC 2022-NQM2 A3			4	1.F	3,826,318	76.9030	3,025,094	3,933,650	3,846,536	0	6,659	0	0	4.000	4.293	MON	13,112	157,346	03/24/2022	02/01/2067
12665E-AD-2	CSMC 2022-NQM4 Trust-CSMC 2022-NQM4 A2			4	1.C	3,946,752	96.1722	3,900,503	4,055,750	3,995,362	0	16,772	0	0	4.819	5.591	MON	16,287	195,443	07/06/2022	06/01/2067
12665E-AF-7	CSMC 2022-NQM4 Trust-CSMC 2022-NQM4 M1			4	2.A	16,565,576	85.2235	15,988,986	18,761,250	17,065,874	0	172,677	0	0	4.819	6.582	MON	75,342	904,105	07/07/2022	06/01/2067
12665W-AD-2	CSMC 2022-ATH2-CSMC 2022-ATH2 A2			4	1.A	7,492,546	94.7476	7,309,147	7,714,333	7,531,366	0	13,185	0	0	4.980	5.713	MON	64,177	320,389	04/06/2022	05/01/2067
126670-JP-4	CHL Mortgage Pass-Through-CIHL 2005-HYB9			4	1.A FM	662,710	87.9692	668,465	759,885												

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
12667G-AC-7	Alternative Loan Trust 2-CWALT 2005-13CB			4	1.A FM	582,924	.84.1214	533,081	633,704	556,915	.0	.2,241	.2,723	.0	.5.500	6.892	MON	8,998	29,042	09/01/2017	05/01/2035
12668A-4C-6	Alternative Loan Trust 2-CWALT 2005-IM1			4	1.A FM	320,861	.77.7856	380,688	489,407	168,548	.0	(122,151)	.0	.0	.5.153	5.000	MON	420	19,095	07/08/2008	01/25/2036
12668A-PC-3	Alternative Loan Trust 2-CWALT 2005-54CB			4	2.C FM	760,784	.74.3269	658,638	886,137	713,527	.0	(6,323)	14,319	.0	.5.500	5.874	MON	4,061	48,733	12/29/2021	11/01/2035
12668A-XL-4	Alternative Loan Trust 2-CWALT 2005-63 5			4	1.A FM	99,134	.99.3140	108,117	108,863	112,774	.0	21,895	.0	.0	.4.788	47.544	MON	863	4,563	12/03/2018	12/01/2035
12668B-YA-5	Alternative Loan Trust 2-CWALT 2006-7CB			4	1.A FM	242,868	.47.9090	134,720	281,200	134,800	.0	(207)	.0	.0	.6.000	10.565	MON	2,819	15,812	03/25/2008	05/01/2036
126694-2H-0	CHL Mortgage Pass-Through-CIHL 2006-10 1A			4	4.B FM	581,105	.39.2229	352,275	898,135	442,059	.0	(24,797)	18,328	.0	.5.850	15.339	MON	11,793	44,321	12/29/2021	05/01/2036
126694-4F-2	CHL Mortgage Pass-Through-CIHL 2006-HYB3			4	1.A FM	680,397	.92.8865	658,084	708,482	705,587	.0	.5,419	.0	.0	.4.017	4.975	MON	2,370	28,233	12/29/2021	05/01/2036
126694-BE-7	CHL Mortgage Pass-Through-CIHL 2005-HYB6			4	1.A FM	261,950	.90.4204	267,958	296,347	270,074	.0	6,014	.0	.0	.4.845	7.106	MON	1,266	13,706	09/09/2016	10/01/2035
126694-CS-5	CHL Mortgage Pass-Through-CIHL 2005-21 A1			4	4.C FM	2,731,345	.53.8391	1,789,779	3,324,312	2,330,168	.0	(144,746)	38,435	.0	.5.500	2.603	MON	30,606	167,333	01/10/2022	10/01/2035
126694-D7-0	CHL Mortgage Pass-Through-CIHL 2006-HYB2			4	1.A FM	530,045	.87.2179	506,548	580,785	598,935	.0	(39,148)	.0	.0	.3.307	7.620	MON	1,600	15,089	11/03/2016	04/01/2036
126694-HP-6	CHL Mortgage Pass-Through-CIHL 2005-25 A1			4	1.A FM	661,112	.45.5303	392,558	862,190	420,102	.0	(9,116)	6,682	.0	.5.500	17.225	MON	7,527	51,964	01/10/2022	11/01/2035
126694-LC-0	CHL Mortgage Pass-Through-CIHL 2005-24 A3			4	3.C FM	1,369,789	.53.2813	956,653	1,795,477	1,096,712	.0	(34,552)	205,514	.0	.5.500	13.506	MON	73,912	74,055	01/10/2022	11/01/2035
126694-QJ-0	CHL Mortgage Pass-Through-CIHL 2005-HYB8			4	1.A FM	2,317,090	.94.6995	2,417,083	2,552,372	2,532,886	.0	108,705	.0	.0	.4.648	5.860	MON	9,886	125,528	02/01/2017	12/01/2035
126694-UJ-5	CHL Mortgage Pass-Through-CIHL 2005-31 1A			4	1.A FM	700,955	.91.6399	742,281	809,998	711,408	.0	23,899	.0	.0	.5.021	8.638	MON	3,389	42,755	07/15/2016	01/01/2036
126694-UM-8	CHL Mortgage Pass-Through-CIHL 2005-31 2A			4	1.A FM	844,070	.94.4003	828,118	877,241	854,641	.0	8,888	.0	.0	.4.311	5.301	MON	6,246	36,912	07/10/2019	01/01/2036
126694-UN-6	CHL Mortgage Pass-Through-CIHL 2005-31 2A			4	1.A FM	1,303,717	.89.0380	1,206,421	1,354,951	1,319,400	.0	13,806	.0	.0	.4.311	5.484	MON	9,648	55,453	07/10/2019	01/01/2036
12669D-US-5	CHL Mortgage Pass-Through-CIHL 2002-39 A1			4	1.A FM	479,656	.96.6343	464,167	480,333	467,604	.0	.6	.0	.0	.5.750	5.750	MON	2,302	27,608	08/31/2012	02/01/2033
12669G-AK-6	CHL Mortgage Pass-Through-CIHL 2004-11 2A			4	1.A FM	1,956,402	.93.5450	2,259,403	2,415,311	2,222,527	.0	58,118	.0	.0	.5.457	8.573	MON	22,037	112,664	03/23/2020	07/01/2034
12669F-VH-3	CHL Mortgage Pass-Through-CIHL 2004-6 2A1			4	1.A FM	333,658	.94.8091	315,753	333,040	326,095	.0	(499)	.0	.0	.6.117	6.300	MON	1,698	18,856	01/27/2017	05/01/2034
12669G-3S-8	CHL Mortgage Pass-Through-CIHL 2005-16 A2			4	4.A FM	1,193,062	.64.4386	912,994	1,416,843	1,024,251	.0	(36,612)	22,247	.0	.5.500	4.216	MON	6,677	77,853	01/10/2022	09/01/2035
12669G-4K-4	CHL Mortgage Pass-Through-CIHL 2005-J3 1A			4	2.C FM	2,522,966	.72.5699	2,163,219	2,980,877	2,331,132	.0	(39,431)	19,143	.0	.5.500	5.741	MON	13,662	163,917	01/10/2022	09/01/2035
12669G-A5-0	CHL Mortgage Pass-Through-CIHL 2005-HYB3			4	1.A FM	18,307	.98.6266	19,842	20,118	20,118	.0	169	.0	.0	.3.780	3.839	MON	63	747	04/11/2016	06/01/2035
12669G-BY-6	CHL Mortgage Pass-Through-CIHL 2004-HYB7			4	1.A FM	273,992	.95.1512	259,575	272,802	270,796	.0	2,179	.0	.0	.4.990	5.040	MON	1,134	12,985	01/27/2017	11/01/2034
12669G-BZ-3	CHL Mortgage Pass-Through-CIHL 2004-HYB7			4	1.A FM	798,035	.95.1512	756,042	794,569	788,538	.0	6,463	.0	.0	.4.990	5.052	MON	3,304	37,820	01/27/2017	11/01/2034
12669G-GH-8	CHL Mortgage Pass-Through-CIHL 2004-HYB8			4	1.A FM	1,309,067	.90.4309	1,448,076	1,601,305	1,481,205	.0	41,530	.0	.0	.4.518	5.973	MON	6,029	75,298	03/23/2020	01/01/2035
12669G-R4-5	CHL Mortgage Pass-Through-CIHL 2005-15 A8			4	2.B FM	709,155	.50.4470	383,378	759,963	441,610	.0	16,369	48,207	.0	.5.500	15.238	MON	7,043	38,244	07/19/2013	08/01/2035
152314-KJ-8	Centex Home Equity Loan -CHHE 2002-C AF5			4	1.A FM	1,919,893	.92.6477	1,783,194	1,924,704	1,913,205	.0	(2,322)	.0	.0	.4.801	4.894	MON	15,519	85,953	08/11/2010	06/01/2034
161546-CW-4	Chase Funding Trust Seri-CFAB 2002-3 1A5			4	1.A FM	521,297	.97.3405	512,537	526,541	523,942	.0	(209)	.0	.0	.5.907	6.143	MON	2,592	31,103	01/03/2012	06/01/2032
16159W-AC-8	Chase Home Lending Mortg-CHASE 2019-1 A3			4	1.A	1,403,965	.85.2884	1,169,639	1,371,394	1,403,670	.0	(729)	.0	.0	.3.500	3.149	MON	4,000	47,997	01/14/2020	03/01/2050
16159X-AV-4	Chase Home Lending Mortg-CHASE 2024-8 A9			4	1.A	9,104,734	.96.5273	8,827,175	9,144,743	9,107,181	.0	.2,447	41,913	.0	.5.500	5.733	MON	41,913	125,740	09/17/2024	08/01/2055
16162W-PV-5	Chase Mortgage Finance T-CHASE 2005-A2 1			4	1.A FM	69,305	.87.7633	70,788	80,657	70,303	.0	.2,231	.0	.0	.4.843	7.422	MON	2,059	2,620	09/05/2008	01/01/2036
16162X-AD-9	Chase Mortgage Finance T-CHASE 2006-S3 1			4	1.E FM	630,944	.42.4268	305,445	719,934	325,155	.0	253,161	.0	.0	.6.000	4.404	MON	4,095	40,494	08/31/2012	11/25/2036
16162Y-AL-9	Chase Mortgage Finance T-CHASE 2006-S4 A			4	2.C FM	420,388	.43.4921	283,995	420,292	292,192	.0	(30,340)	3,695	.0	.6.000	4.858	MON	13,126	35,337	08/31/2012	12/25/2036
161630-BA-5	Chase Mortgage Finance T-CHASE 2007-A1 1			4	1.A FM	151,493	.96.3731	150,806	156,481	155,822	.0	763	.0	.0	.5.756	5.263	MON	751	8,402	05/28/2020	02/01/2037
16165M-AG-3	ChaseFlex Trust Series 2-CFKX 2006-2 A5			4	1.A FM	1,487,114	.79.9512	1,214,862	1,519,504	1,413,991	.0	14,455	.0	.0	.4.285	5.300	MON	15,015	56,708	12/29/2021	09/01/2036
169926-AA-0	CHNGE Mortgage Trust 202-CHNGE 2023-2 A1			4	1.A FE	3,038,012	.99.8669	3,084,084	3,088,195	3,057,275	.0	14,134	.0	.0	.6.525	7.492	MON	16,792	155,443	08/22/2023	06/01/2058
170257-AE-9	CHL Mortgage Pass-Through-CIHL 2006-16 3A			4	1.A FM	2,948,234	.22.9957	1,342,095	5,836,290	1,793,779	.0	(179,730)	103,022	.0	.6.500	18.224	MON	83,762	253,375	12/29/2021	11/01/2036
17025A-AH-5	CHL Mortgage Pass-Through-CIHL 2006-17 A8			4	1.A FM	1,083,563	.42.8847	746,479	1,740,664	726,548	.0	87,677	.0	.0	.6.000	8.122	MON	9,836	65,716	01/10/2022	12/25/2036
17025R-AA-3	COUNTRYWIDE HOME LOANS-SERIES 2007-HV4 C			4	1.A FM	1,244,948	.88.1278	1,323,854	1,502,198	1,213,240	.0	57,361	.0	.0	.4.937	9.933	MON	34,367	53,343	04/15/2020	09/01/2047
17030A-AA-3	CHNGE Mortgage Trust 202-CHNGE 2023-3 A1			4	1.A FE	2,505,266	.100.4881	2,534,124	2,521,815	2,511,324	.0	6,058	.0	.0	.7.100	7.495	MON	333,710	44,762	08/22/2023	07/01/2058
17030J-AA-4	CHNGE Mortgage Trust 202-CHNGE 2022-1 A1			4	1.A FE	9,236,634	.92.2102	8,517,177	9,236,702	9,236,702	.0	.0	.0	.0	.3.007	3.600	MON	23,146	277,721	01/21/2022	01/01/2067
17307G-E8-7	Citigroup Mortgage Loan -CMLT1 2005-8 1A			4	1.A FM	2,239,323	.93.0543	2,458,405	2,641,904	2,460,434	.0	84,453	.0	.0	.4.347	6.373	MON	29,262	71,237	03/23/2016	10/01/2035
17307G-ED-6	Citigroup Mortgage Loan -CMLT1 2004-HYB2			4	1.A FM	1,272,452	.96.0768	1,285,323	1,337,807	1,228,382	.0	25,153	16,521	.0	.5.981	7.800	MON	13,362	75,540	01/10/2020	03/01/2034
17307G-TY-4	Citigroup Mortgage Loan -CMLT1 2005-3 24			4	1.A FM	1,287,211	.80.8101	1,093,504	1,353,178	1,143,393	.0	3,076	.0	.0	.5.632	7.773	MON	43,483	47,846	02/13/2019	08/01/2035
17309A-AD-1	CitiMortgage Alternative-CMALT 2006-A1 1			4	1.D FM	797,017	.87.2977	731,794	838,274	795,913	.0	8,477	.0	.0	.5.750	6.235	MON	12,331	40,038	07/17/2013	04/01/2036

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
17309A-AF-6	CitiMortgage Alternative-CMALT 2006-A1 1		4		1.A FM	1,096,279	.88.1558	1,019,514	1,156,491	1,050,845	.0	(12,336)	.0	.0	.6.000	7.605	MON	19,273	63,613	09/13/2012	04/01/2036
17309B-AB-3	Citigroup Mortgage Loan -CMLT1 2006-WF2		4		1.A FM	212,329	.35.7945	158,338	442,352	177,046	.0	3,707	16,700	.0	.4.271	5.024	MON	3,164	9,548	01/10/2022	05/01/2036
17309N-AG-6	Citicorp Residential Mor-CRMS1 2006-1 M1		4		1.A FM	853,140	.98.5798	877,780	890,426	885,777	.0	3,187	.0	.0	.4.540	6.256	MON	7,020	37,250	01/11/2016	07/01/2036
17309V-AH-6	CitiMortgage Alternative-CMALT 2006-A4 1		4		4.A FM	694,320	.84.2218	596,600	708,368	682,655	.0	(8,070)	.0	.0	.6.000	5.337	MON	12,935	39,530	12/29/2021	09/01/2036
17312H-AF-6	Citicorp Residential Mor-CRMS1 2007-2 A6		4		1.A FM	.7	.98.8022	.7	.7	.7	.0	.0	.0	.0	.4.530	11.335	MON	.0	.0	04/12/2011	06/01/2037
17312V-AA-6	Citigroup Mortgage Loan -CMLT1 2007-6 1A		4		1.A FM	29,017	.88.2640	73,395	83,154	53,790	.0	5,898	.0	.0	.4.873	19.708	MON	2,344	2,589	11/18/2008	03/01/2037
17314Q-AD-9	Citigroup Mortgage Loan -CMLT1 2009-11 2		4		1.A FM	255,731	.49.4589	372,004	752,149	190,866	.0	(46,982)	.0	.0	.6.000	17.232	MON	7,522	45,085	11/13/2009	01/01/2036
17315X-AF-8	Citigroup Mortgage Loan -CMLT1 2009-9 2A		4		1.A FM	423,460	.94.4741	528,108	558,998	492,071	.0	4,812	.0	.0	.4.779	7.735	MON	4,453	26,037	11/01/2016	11/01/2035
17322N-AD-6	Citigroup Mortgage Loan -CMLT1 2014-J1 A		4		1.A	332,781	.91.9645	307,868	334,769	327,847	.0	(352)	.0	.0	.3.500	3.831	MON	976	11,717	06/24/2014	06/01/2044
17323M-AE-5	Citigroup Mortgage Loan -CMLT1 2015-A B3		4		1.A	3,190,987	.98.8829	3,472,175	3,511,402	3,268,008	.0	26,453	.0	.0	.4.500	8.080	MON	13,168	157,816	03/26/2020	06/01/2058
19685G-AA-4	COLT Funding LLC-COLT 2022-4 A1		4		1.A FE	4,070,734	.96.8297	4,027,258	4,159,116	4,133,064	.0	29,654	.0	.0	.4.301	5.144	MON	14,907	178,877	09/01/2022	03/01/2067
19685G-AC-0	COLT Funding LLC-COLT 2022-4 A3		4		1.F FE	5,517,732	.93.7559	5,217,561	5,565,049	5,530,142	.0	3,492	.0	.0	.4.500	4.691	MON	20,869	250,417	04/14/2022	03/01/2067
19687Y-AA-3	COLT 2020-RPL1 Trust-COLT 2020-RPL1 A1		4		1.A FE	20,472,110	.86.5214	17,712,775	20,472,134	20,471,886	.0	.33	.0	.0	.1.390	1.390	MON	23,708	284,483	10/06/2020	01/01/2065
19688E-AA-6	COLT 2021-1 Mortgage Loa-COLT 2021-1 A1		4		1.A FE	7,671,269	.82.2500	7,170,020	8,717,351	7,974,113	.0	4,253	.0	.0	.0.910	4.040	MON	6,611	79,320	07/06/2022	06/01/2066
19688F-AB-3	COLT 2021-3 Mortgage Loa-COLT 2021-3 A1		4		1.A FE	4,958,143	.81.0403	4,679,002	5,773,675	5,111,760	.0	53,090	.0	.0	.0.956	3.682	MON	4,600	55,195	07/12/2022	09/01/2066
19688H-AA-9	COLT 2022-1 Mortgage Loa-COLT 2022-1 A1		4		1.A FE	13,837,337	.88.3199	12,221,239	13,837,474	13,837,389	.0	(7)	.0	.0	.2.284	2.284	MON	54,372	289,436	01/25/2022	12/01/2066
19688L-AA-0	COLT 2022-5 Mortgage Loa-COLT 2022-5 A1		4		1.A FE	6,749,910	.97.8292	6,605,430	6,752,003	6,752,003	.0	.0	.0	.0	.4.550	5.250	MON	25,601	307,205	05/03/2022	04/01/2067
19688L-AB-8	COLT 2022-5 Mortgage Loa-COLT 2022-5 A2		4		1.C FE	11,094,048	.95.3440	10,733,873	11,258,048	11,126,141	.0	(22,669)	.0	.0	.4.550	4.857	MON	42,687	512,223	05/03/2022	03/01/2067
19688M-AB-6	COLT 2022-8 Mortgage Loa-COLT 2022-8 A2		4		1.C FE	3,946,143	.100.1703	3,986,199	3,979,423	3,969,802	.0	17,692	.0	.0	.6.500	6.859	MON	21,555	258,662	09/28/2022	08/01/2067
19688M-AC-4	COLT 2022-8 Mortgage Loa-COLT 2022-8 A3		4		1.F FE	4,057,471	.99.9262	4,117,931	4,120,971	4,102,558	.0	34,277	.0	.0	.6.500	7.164	MON	22,322	267,851	09/28/2022	08/01/2067
19688Q-AB-7	COLT 2024-INV4 Mortgage -COLT 2024-INV4		4		1.C FE	4,928,978	.99.6333	4,910,908	4,928,984	4,928,984	.0	.6	.0	.0	.5.910	5.910	MON	24,275	24,275	11/15/2024	05/01/2069
19688X-AA-4	COLT 2024-6 Mortgage Loa-COLT 2024-6 A1		4		1.A FE	3,959,644	.99.6478	3,945,767	3,959,712	3,959,712	.0	67	.0	.0	.5.390	5.426	MON	17,786	35,571	10/11/2024	11/01/2069
19688Y-AA-2	COLT 2024-7 Mortgage Loa-COLT 2024-7 A1		4		1.A FE	11,999,993	.99.8969	11,987,624	12,000,000	12,000,000	.0	.7	.0	.0	.5.538	5.538	MON	55,380	.0	12/05/2024	12/01/2069
19688Y-AB-0	COLT 2024-7 Mortgage Loa-COLT 2024-7 A2		4		1.C FE	9,999,843	.98.9765	9,997,646	10,000,000	9,999,870	.0	27	.0	.0	.5.791	5.791	MON	48,258	.0	12/05/2024	12/01/2069
196919-AA-2	COLT 2024-INV3 Mortgage -COLT 2024-INV3		4		1.A FE	12,819,503	.99.1894	12,715,606	12,819,517	12,819,517	.0	14	.0	.0	.5.443	5.443	MON	58,147	232,589	08/12/2024	09/01/2069
196919-AB-0	COLT 2024-INV3 Mortgage -COLT 2024-INV3		4		1.C FE	7,108,136	.99.1880	7,050,545	7,108,264	7,108,167	.0	31	.0	.0	.5.695	5.696	MON	33,735	134,939	08/12/2024	09/01/2069
20753Y-AA-9	Connecticut Avenue Secur-CAS 2022-R04 1M		4		1.A	3,641,621	.101.0619	3,682,018	3,643,328	3,643,328	.0	(1,619)	.0	.0	.6.569	5.977	MON	3,989	268,009	08/31/2022	03/25/2042
20755D-AA-4	Connecticut Avenue Secur-CAS 2022-R08 1M		4		1.A	14,686,100	.102.3722	14,955,855	14,609,295	14,609,295	.0	57,374	.0	.0	.7.119	6.416	MON	17,333	1,156,635	08/24/2022	07/25/2042
21075W-CJ-2	ContiMortgage Home Equit-COMHE 1996-1 A7		4		1.A FM	233,732	.71.2810	166,737	233,915	31,221	.0	(11,761)	.0	.0	.7.000	31.847	MON	1,365	13,876	02/02/1996	03/01/2027
22541Q-FV-9	CSFB MORTGAGE-BACKED PAS-CSFB 2003-17 1A		4		4.B FM	583,528	.87.2372	474,692	578,148	525,153	.0	(17,287)	.0	.0	.5.500	3.978	MON	2,494	29,927	05/17/2005	06/01/2033
22541Q-FV-9	CSFB MORTGAGE-BACKED PAS-CSFB 2003-17 1A		4		4.C FM	.0	.87.2372	29,668	.0	33,677	.0	(1,140)	.0	.0	.5.500	3.329	MON	156	1,870	08/31/2012	06/01/2033
22541S-PJ-1	CSFB Mortgage-Backed Tru-CSFB 2004-AR6 C		4		1.A FM	3,329,273	.99.2425	4,156,045	4,187,765	3,911,220	.0	62,055	.0	.0	.5.653	7.934	MON	3,946	233,613	11/04/2016	10/25/2034
225458-LD-8	CSFB MORTGAGE-BACKED PAS-CSFB 2005-3 6A1		4		4.C FM	1,255,622	.95.1030	1,353,135	1,422,801	1,350,159	.0	(51,712)	.0	.0	.5.750	6.690	MON	6,852	81,810	05/17/2012	01/01/2035
225470-Q8-9	CSMC Mortgage-Backed Tru-CSMC 2006-3 5A5		4		1.A FM	639,994	.23.7019	316,228	1,334,189	350,813	.0	(31,198)	110,442	.0	.6.000	2.537	MON	20,790	97,505	12/29/2021	04/01/2036
225470-VF-7	CSMC Mortgage-Backed Tru-CSMC 2006-1 3A1		4		3.B FM	1,261,199	.42.8322	846,731	1,976,855	1,028,115	.0	(31,241)	62,488	.0	.5.750	5.725	MON	9,571	126,818	12/29/2021	02/01/2036
22757H-AA-9	Cross 2024-H5 Mortgage T-CROSS 2024-H5 A		4		1.A	4,706,764	.100.2497	4,718,559	4,706,807	4,706,778	.0	14	.0	.0	.5.854	5.854	MON	47,098	91,845	07/31/2024	08/01/2069
22757H-AB-7	Cross 2024-H5 Mortgage T-CROSS 2024-H5 A		4		1.A	7,060,141	.99.9281	7,055,136	7,060,210	7,060,162	.0	22	.0	.0	.6.006	6.006	MON	35,336	141,292	07/31/2024	08/01/2069
22942M-BF-2	CSMC Mortgage-Backed Tru-CSMC 2006-8 5A1		4		4.A FM	456,748	.98.7270	462,496	468,460	486,990	.0	30,366	.0	.0	.5.489	6.585	MON	4,329	23,628	01/03/2019	10/01/2026
23242L-AB-9	CIHIEQ Revolving Home Equ-CIHIEL 2006-F 2A		4		1.A FM	101,495	.93.7006	136,102	145,252	136,055	.0	104	.0	.0	.4.652	5.429	MON	300	8,084	03/13/2008	07/15/2036
23332U-AD-6	DSLA Mortgage Loan Trust-DSLA 2004-AR1 A		4		1.A FM	795,293	.93.3202	846,078	906,639	870,817	.0	(43,903)	.0	.0	.5.321	5.007	MON	5,128	43,878	08/11/2016	09/19/2044
24380X-AA-5	Deephaven Residential Mo-DRMT 2022-2 A1		4		1.A	2,099,992	.94.8161	2,112,606	2,228,109	2,112,352	.0	10,662	.0	.0	.4.300	5.889	MON	16,311	95,804	12/07/2023	03/01/2067
24381J-AD-9	Deephaven Residential Mortgag		4		1.G FE	6,755,852	.771.5847	6,836,264	6,756,000	6,755,885	.0	9	.0	.0	.3.257	3.257	MON	18,337	256,717	11/19/2021	11/01/2066
24382J-AB-2	Deephaven Residential Mo-DRMT 2022-1 A2		4		1.A	10,296,707	.77.4133	7,971,249	10,297,000	10,296,793	.0	22	.0	.0	.2.961	2.961	MON	25,408	304,894	01/24/2022	01/01/2067
25150M-AC-0	Deutsche Alt-A Securitie-DBALT 2007-RMP1		4		1.A FM	795,040	.90.2907	911,552	1,009,574	979,845	.0	(143,716)	.0	.0	.4.753	2.419	MON	9,889	14,664	09/23/2013	12/25/2036
25150N-AB-0	Deutsche Alt-A Securitie-DBALT 2006-AR5		4		1.A FM	2,052,477	.29.3901	1,132,815	3,854,417	1,324,552	.0	(5,144)	71,746	.0	.4.833	2.144	MON	54,748	51,532	03/18/2016	10/25/2036

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
251510-CV-3	Deutsche Alt-A Securitie-DBALT 2005-1 1A			4	.. 1.A FM	419,527	..97.4240	..562,781	..577,662	..502,166	0	20,023	0	0	..4.953	8.641	MON	477	31,103	09/16/2011	02/25/2035
251510-EP-4	DEUTSCHE ALT-A SECURITIE-DBALT 2005-3 5A			4	.. 5.B FM	770,870	..90.6635	..931,162	1,027,053	..912,106	56,872	(119,374)	0	0	..4.753	5.716	MON	814	57,138	01/06/2011	06/25/2035
251510-MD-2	Deutsche Alt-B Securitie-DBALT 2006-AB1			4	.. 1.A FM	365,660	..87.7183	..321,266	..366,247	..246,541	0	(20,086)	0	0	..5.431	13.994	MON	12,492	16,154	01/25/2006	02/01/2036
251563-FP-2	Deutsche Mortgage Securi-DMSI 2004-4 7AR			4	.. 6. *	114,293	..5.8340	..16,353	..280,312	..1,371	0	(699)	0	0	..1.939	368.592	MON	511	2,244	04/25/2008	06/25/2034
26844L-AB-4	EFMT 2024-INV2-EFMT 2024-INV2 A2			4	.. 1.D FE	3,122,773	..98.8241	..3,086,064	3,122,785	3,122,775	0	3	0	0	..5.289	5.289	MON	13,764	27,471	09/27/2024	10/01/2069
26844L-AC-2	EFMT 2024-INV2-EFMT 2024-INV2 A3			4	.. 1.G FE	4,708,950	..98.8232	4,653,547	4,708,962	4,708,954	0	4	0	0	..5.441	5.441	MON	21,351	42,615	09/27/2024	10/01/2069
26844Q-AA-5	EFMT 2023-1-EFMT 2023-1 A1			4	.. 1.A	4,546,421	..100.2626	4,613,142	4,601,058	4,568,329	0	21,908	0	0	..5.732	6.397	MON	69,774	219,777	12/05/2023	02/01/2068
30259R-AE-5	FMC GMSR Issuer Trust-FMMSR 2020-GT1 A			4	.. 2.C FE	3,498,650	..95.4202	3,339,707	3,500,000	3,499,714	0	286	0	0	..4.450	4.458	MON	2,596	155,750	12/10/2020	01/25/2026
31572Y-AB-4	Ellington Financial Mort-EFMT 2022-2 A2			4	.. 1.B	3,868,364	..92.7817	3,644,414	3,927,943	3,883,341	0	3,496	0	0	..4.299	4.614	MON	28,221	154,278	04/14/2022	04/01/2067
31572Y-AC-2	Ellington Financial Mort-EFMT 2022-2 A3			4	.. 1.B	14,691,160	..91.2020	13,650,237	14,967,034	14,761,141	0	16,718	0	0	..4.299	4.685	MON	107,534	587,862	04/14/2022	04/01/2067
31572Y-AD-0	Ellington Financial Mort-EFMT 2022-2 M1			4	.. 2.C	6,017,297	..76.8916	4,911,063	6,387,000	6,081,649	0	22,421	0	0	..4.278	4.927	MON	45,544	273,733	04/14/2022	04/01/2067
31573E-AA-9	Ellington Financial Mort-EFMT 2022-3 A1			4	.. 1.A	12,006,700	..98.2027	11,921,737	12,139,925	12,052,866	0	15,666	0	0	..5.000	5.257	MON	101,739	557,310	07/22/2022	08/01/2067
31573E-AB-7	Ellington Financial Mort-EFMT 2022-3 A2			4	.. 1.A	8,155,559	..95.3391	8,000,018	8,391,116	8,220,465	0	18,349	0	0	..5.000	5.641	MON	70,034	384,576	07/22/2022	08/01/2067
31573E-AC-5	Ellington Financial Mort-EFMT 2022-3 A3			4	.. 1.A	3,869,558	..92.8532	3,757,438	4,046,642	3,917,151	0	13,999	0	0	..5.000	6.020	MON	33,774	185,463	07/22/2022	08/01/2067
31573J-AD-2	Ellington Financial Mort-EFMT 2021-3 M1			4	.. 1.C	4,281,871	..64.1529	2,747,028	4,282,000	4,281,893	0	0	0	0	..2.530	2.530	MON	9,028	108,335	10/01/2021	09/01/2066
31573J-AE-0	Ellington Financial Mort-EFMT 2021-3 B1			4	.. 1.D	2,883,909	..64.1315	1,849,553	2,884,000	2,883,922	0	1	0	0	..3.235	3.235	MON	7,775	93,297	10/01/2021	09/01/2066
31684D-AA-7	FIGRE Trust 2024-HE6-FIGRE 2024-HE6 A			4	.. 1.A FE	11,999,806	..99.9984	11,999,806	12,000,000	11,999,839	0	33	0	0	..5.724	5.724	MON	57,240	0	12/11/2024	12/01/2054
31684E-AA-5	FIGRE Trust 2023-HE1a2-FIGRE 2023-HE1A2			4	.. 1.A PL	27,086,126	..101.2352	27,698,116	27,360,166	27,112,780	0	26,654	0	0	..7.500	7.656	MON	205,201	2,211,037	10/26/2023	11/25/2053
31684F-AA-2	FIGRE Trust 2024-HE5-FIGRE 2024-HE5 A			4	.. 1.A FE	23,914,308	..99.1330	23,739,399	23,947,029	23,911,150	0	(3,157)	0	0	..5.440	5.263	MON	21,712	220,738	11/04/2024	10/25/2054
31684J-AA-4	FIGRE Trust 2024-SL1-FIGRE 2024-SL1 A1			4	.. 1.A FE	9,043,570	..100.0210	9,046,455	9,044,556	9,043,006	0	(565)	0	0	..5.748	5.822	MON	134,927	0	11/19/2024	07/01/2053
31684J-AB-2	FIGRE Trust 2024-SL1-FIGRE 2024-SL1 M1			4	.. 1.D FE	1,999,954	..99.5380	1,990,759	2,000,000	1,990,306	0	(9,647)	0	0	..6.027	6.139	MON	20,090	0	10/31/2024	07/01/2053
31740J-AA-6	FINANCE OF AMERICA STRUC-FASST 2023-RMF1			4	.. 1.A FE	66,952,862	..95.0938	71,884,533	75,593,330	68,366,340	0	741,232	0	0	..2.500	1.091	MON	31,497	1,982,604	02/22/2023	02/25/2053
32027L-AE-5	First Franklin Mortgage -FFML 2006-FF14			4	.. 1.A FM	88,102	..98.9981	99,626	100,634	100,605	0	221	0	0	..4.613	3.326	MON	77	3,887	11/06/2015	10/25/2036
32051G-SQ-9	First Horizon Alternativ-FHAMS 2005-AA7			4	.. 1.A FM	1,318,519	..88.4109	1,278,622	1,446,228	1,272,330	0	9,612	0	0	..5.904	7.071	MON	29,587	73,225	12/29/2021	09/01/2035
32051G-T7-0	First Horizon Alternativ-FHAMS 2006-FA1			4	.. 3.C FM	427,818	..40.4846	167,939	691,692	195,448	0	1,893	26,067	0	..6.000	2.254	MON	5,875	19,055	12/29/2021	04/01/2036
32051G-T7-0	First Horizon Alternativ-FHAMS 2006-FA1			4	.. 4.A FM	256,570	..40.4846	280,029	414,821	330,694	0	7,132	48,486	0	..6.000	1.938	MON	13,298	31,122	12/29/2021	04/01/2036
32051G-XQ-3	First Horizon Mortgage P-FHASI 2005-AR5			4	.. 1.A FM	363,377	..80.6525	307,984	381,865	302,002	0	(3,044)	0	0	..6.386	8.317	MON	4,071	22,359	07/12/2016	11/01/2035
32051G-XQ-3	First Horizon Mortgage P-FHASI 2005-AR5			4	.. 2.C FM	838,061	..80.6525	707,304	876,977	770,254	0	(8,987)	0	0	..6.386	4.425	MON	9,349	51,350	04/23/2019	11/01/2035
32051G-XV-2	First Horizon Mortgage P-FHASI 2005-AR5			4	.. 1.A FM	694,668	..94.5348	666,225	704,740	684,739	0	9,095	0	0	..5.986	6.423	MON	3,516	38,931	02/06/2014	11/01/2035
32052E-AA-7	First Horizon Mortgage P-FHASI 2006-AR3			4	.. 1.A FM	52,449	..57.3153	35,788	62,440	39,158	0	115	1,307	0	..4.272	5.680	MON	222	2,559	08/15/2017	08/25/2042
32056J-AA-2	First Horizon Mortgage P-FHASI 2007-AR3			4	.. 1.A FM	1,426,258	..44.1666	936,214	2,119,735	917,452	0	(19,908)	35,853	0	..5.144	7.057	MON	36,104	75,697	03/01/2012	11/01/2037
35564K-B2-4	Freddie Mac Structured A-STACR 2022-HQa2			4	.. 1.A	7,589,972	..102.1875	7,749,732	7,583,834	7,583,834	0	5,880	0	0	..7.219	7.489	MON	9,124	608,016	07/26/2022	07/25/2042
35564K-E3-9	Freddie Mac STACR REMIC -STACR 2022-HQa3			4	.. 1.A	5,540,304	..101.8094	5,540,304	5,540,304	5,540,304	0	0	0	0	..6.869	6.868	MON	6,343	424,524	08/08/2022	08/25/2042
36167K-AA-6	GCAT 2021-NQM6 Trust-GCAT 2021-NQM6 A1			4	.. 1.A	2,572,243	..88.7578	2,540,267	2,862,022	2,667,909	0	27,726	0	0	..1.855	4.722	MON	4,424	53,075	06/29/2022	08/01/2066
36168M-AD-5	GCAT 2022-NQM3 Trust-GCAT 2022-NQM3 M1			4	.. 2.C	7,482,720	..78.0385	6,518,552	8,353,000	7,683,392	0	76,814	0	0	..4.327	5.707	MON	60,223	331,572	06/03/2022	04/01/2067
36168V-AA-3	GCAT 2022-NQM1 Trust-GCAT 2022-NQM1 A2			4	.. 1.C	19,533,818	..84.0991	16,427,908	19,534,000	19,533,879	0	11	0	0	..3.889	3.889	MON	63,306	759,677		

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates		
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22	
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost			Rate Used to Obtain Fair Value	Fair Value												Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
362341-DP-1	GSR Mortgage Loan Trust -GSR 2005-6F 1A5			4	1.C FM	212,893	95.9791	203,569	212,098	212,934	0	341	0	0	5.250	4.424	MON	928	11,132		04/21/2020	07/01/2035
362341-FN-4	GSR Mortgage Loan Trust -GSR 2005-AR4 3A			4	3.A FM	707,858	59.7079	453,248	759,110	565,475	0	(22,229)	33,339	0	5.665	10.863	MON	10,815	37,211		03/16/2016	07/01/2035
362341-SG-5	GSR MORTGAGE LOAN TRUST-SERIES 2005-AR6			4	1.D FM	9,320,101	84.4547	8,685,569	10,284,290	9,341,827	0	(50,989)	0	0	6.105	7.271	MON	157,447	586,156		12/03/2020	09/01/2035
362341-XC-8	GSR Mortgage Loan Trust -GSR 2005-AR7 4A			4	3.B FM	1,112,644	51.6798	661,405	1,279,815	723,570	0	(55,438)	31,933	0	5.672	5.198	MON	12,102	68,699		02/26/2016	11/01/2035
362341-XE-4	GSR Mortgage Loan Trust -GSR 2005-AR7 5A			4	1.A FM	399,216	92.8877	427,501	460,235	385,660	0	29,286	0	0	4.769	5.792	MON	8,229	20,494		04/27/2016	11/01/2035
362341-XG-9	GSR Mortgage Loan Trust -GSR 2005-AR7 6A			4	1.A FM	348,163	91.8362	336,213	366,101	363,539	0	2,334	0	0	4.648	4.623	MON	2,867	16,417		02/25/2016	11/01/2035
36242D-4W-0	GSR Mortgage Loan Trust -GSR 2005-AR3 6A			4	3.A FM	401,622	75.4896	23,901	427,426	28,291	0	(125)	0	0	4.484	6.557	MON	244	1,384		10/20/2016	05/01/2035
36242D-4W-0	GSR Mortgage Loan Trust -GSR 2005-AR3 6A			4	3.B FM	0	75.4896	298,762	0	354,623	0	(1,807)	0	0	4.484	6.499	MON	3,044	17,299		12/15/2016	05/01/2035
36242D-BZ-5	GSR MORTGAGE LOAN TRUST-SERIES 2004-9 CL			4	1.A FM	846,939	93.6689	816,801	872,010	865,684	0	(6,188)	0	0	5.790	4.066	MON	8,511	44,063		01/19/2017	08/01/2034
36242D-FS-7	GSR Mortgage Loan Trust -GSR 2004-11 2A1			4	1.A FM	456,156	98.6594	447,672	453,755	453,755	0	(11)	0	0	5.887	5.192	MON	4,463	23,980		01/27/2017	09/01/2034
36242D-FX-6	GSR Mortgage Loan Trust -GSR 2004-11 3A1			4	1.A FM	38,850	98.6985	38,280	38,784	38,784	0	0	0	0	7.820	7.826	MON	253	2,714		01/27/2017	09/01/2034
36242D-H4-8	GSR Mortgage Loan Trust -GSR 2005-AR2 1A			4	1.A FM	527,739	87.9017	505,604	575,193	564,831	0	6,238	0	0	4.354	4.575	MON	4,645	22,642		02/18/2016	04/01/2035
36242D-H9-7	GSR Mortgage Loan Trust -GSR 2005-AR2 4A			4	1.A FM	1,293,184	89.0022	1,184,269	1,330,607	1,330,607	0	187	0	0	4.539	4.405	MON	10,233	64,800		12/09/2016	04/01/2035
36242D-LY-7	GSR Mortgage Loan Trust -GSR 2004-13F 4A			4	6. *	716,830	12.2607	79,374	647,380	9,652	0	2,323	0	0	3.247	84.038	MON	3,504	7,960		06/27/2011	11/25/2034
36242D-QY-2	GSR Mortgage Loan Trust -GSR 2004-15F 2A			4	3.C FM	73,533	83.4386	61,221	73,372	65,228	0	(36)	0	0	5.000	5.567	MON	306	3,668		10/19/2016	12/01/2034
36242D-VA-8	GSR Mortgage Loan Trust -GSR 2005-1F 1A6			4	1.A FM	1,498,682	91.5729	1,393,982	1,522,264	1,474,136	0	(657)	0	0	5.500	5.509	MON	13,970	100,629		01/10/2022	02/01/2035
36244S-AD-0	GSAA Home Equity Trust 2-GSAA 2006-13 AF			4	1.A FM	4,521,138	28.7015	1,880,629	6,552,373	1,751,514	0	163,958	333,711	0	6.619	10.777	MON	218,947	80,792		09/14/2012	07/01/2036
362480-AD-7	GSC CAPITAL CORP MORTGAG-SERIES 2006-2 C			4	1.A FM	609,624	99.9380	787,659	788,147	721,099	0	(89,379)	0	0	4.813	9.923	MON	632	40,669		07/11/2016	05/25/2036
36264E-BD-5	GS Mortgage-Backed Secur-GSMB5 2022-NQM1			4	1.E	22,019,217	89.8265	19,185,599	21,358,504	21,828,259	0	(59,657)	0	0	4.070	3.736	MON	145,046	800,485		03/03/2022	05/01/2062
36830F-AF-3	GCAT 2024-INV3 Trust-GCAT 2024-INV3 A6			4	1.A	7,009,058	99.0490	6,923,758	6,990,233	7,007,006	0	(2,052)	0	0	5.500	5.364	MON	32,039	127,798		08/02/2024	09/01/2054
36830F-AN-6	GCAT 2024-INV3 Trust- 36830FAN6			4	1.A	2,783,765	97.9679	2,722,942	2,779,422	2,783,557	0	(209)	0	0	6.000	5.950	MON	13,897	55,472		08/02/2024	09/01/2054
36831B-CC-6	GCAT 2024-INV1 Trust-GCAT 2024-INV1 B1			4	1.A	7,132,962	104.0917	7,004,548	6,729,210	7,096,344	0	(36,619)	0	0	7.211	6.204	MON	80,932	404,937		01/24/2024	01/01/2054
36831B-CF-9	GCAT 2024-INV1 Trust-GCAT 2024-INV1 B2			4	1.A	5,172,775	104.0917	5,161,138	4,958,261	5,153,016	0	(19,759)	0	0	7.211	6.471	MON	59,633	298,368		01/24/2024	01/01/2054
39538W-BE-7	GreenPoint Mortgage Fund-GPMF 2005-HY1 M			4	1.A FM	2,817,967	97.7843	3,817,184	3,903,678	3,793,608	0	(687,692)	0	0	5.278	7.247	MON	3,434	196,568		04/26/2016	07/25/2035
39678W-AA-6	Greenwich Capital Struct-GCSP 2005-1 A1			4	1.A FM	260,576	95.1060	249,069	261,886	266,069	0	736	0	0	4.521	4.258	MON	1,007	11,918		01/28/2005	09/01/2034
40431H-AD-9	HSI Asset Loan Obligatio-HALO 2006-2 1A4			4	6. FE	1,001,386	5.0774	276,238	5,440,532	0	0	(7)	0	0	0.947	0.000	MON	4,022	4,103		03/07/2008	12/25/2036
41161P-CX-9	HarborView Mortgage Loan-HVMLT 2004-1 1A			4	1.A FM	141,387	97.3522	148,243	148,243	141,381	0	684	38	0	5.081	7.282	MON	251	8,552		01/03/2019	04/19/2034
41161P-EX-7	HarborView Mortgage Loan-HVMLT 2004-5 2A			4	1.A FM	129,591	92.3360	149,108	161,484	157,693	0	1,084	0	0	5.332	5.641	MON	718	8,222		01/06/2012	06/01/2034
41161P-EZ-2	HarborView Mortgage Loan-HVMLT 2004-5 3A			4	1.A FM	613,063	92.1524	567,446	615,770	615,770	0	9	0	0	4.622	4.547	MON	2,372	27,034		01/27/2017	06/01/2034
41161P-FV-0	HarborView Mortgage Loan-HVMLT 2004-6 5A			4	3.A FM	266,277	95.5262	250,919	262,670	266,184	0	(1,912)	0	0	6.281	4.767	MON	14,337	14,337		01/27/2017	09/01/2034
41161P-MV-2	HarborView Mortgage Loan-HVMLT 2005-4 1A			4	1.A FM	247,138	93.9664	255,975	272,411	184,364	0	250	0	0	6.785	6.785	MON	1,540	16,934		11/29/2016	07/01/2035
41161P-TN-3	HARBORVIEW MORTGAGE LOAN-SERIES 2005-10			4	1.A FM	286,268	65.6206	268,495	409,162	250,197	0	5,739	0	0	5.101	13.619	MON	754	20,286		08/31/2012	11/19/2035
41161P-UK-7	HarborView Mortgage Loan-SERIES 05-11 CL			4	1.A FM	238,184	307.480	337,719	316,538	316,538	0	(56,891)	0	0	5.101	5.374	MON	1,801	14,217		08/31/2012	08/19/2045
41161V-AC-4	HarborView Mortgage Loan-HVMLT 2006-7 2A			4	1.A FM	102,215	87.1661	125,409	143,873	132,882	0	5,761	0	0	4.881	6.249	MON	2,155	7,906		04/02/2008	09/19/2046
41162G-AA-0	HarborView Mortgage Loan-HVMLT 2006-11 A			4	3.A FM	884,151	85.2806	836,336	980,687	978,823	0	124,833	0	0	4.821	4.952	MON	9,821	35,430		01/03/2019	12/19/2036
43739E-AP-2	HOMEBANC MORTGAGE TRUST-SERIES 2005-1 CL			4	1.A FM	512,903	79.8410	499,699	563,243	477,201	0	13,765	3,168	0	4.953	5.270	MON	465	25,360		02/15/2017	03/25/2035
43739E-CL-9	HomeBanc Mortgage Trust -HMBT 2006-1 1A1			4	1.A FM	169,302	94.3556	183,066	194,017	180,298	0	7,485	0	0	4.213	8.704	MON	4,043	6,687		03/15/2017	04/01/2037
43741B-AA-7	HomeBanc Mortgage Trust -HMBT 2007-1 11A			4	2.A FM	390,613	90.2122	354,759	393,249	386,692	0	5,066	0	0	4.701	5.795	MON	8,017	16,694		12/29/2021	04/01/2047
43741B-AA-7	HomeBanc Mortgage Trust -HMBT 2007-1 11A			4	2.B FM	129,328	90.2122	117,457	130,201	128,398	0	1,632	0	0	4.701	5.734	MON	2,069	6,534		12/29/2021	04/01/2047
45254																						

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
45276Q-AB-0	Imperial Fund Mortgage T-IMPRL 2022-NQM5			4	1.B	10,161,444	.99.4644	10,107,149	10,161,576	10,161,576	.0	.0	.0	.0	.6.122	.6.122	MON	51,841	622,039	08/02/2022	08/01/2067
45276Q-AC-8	Imperial Fund Mortgage T-IMPRL 2022-NQM5			4	1.E	2,773,419	.99.5448	2,784,394	2,797,127	2,794,959	.0	(2,167)	.0	.0	.6.250	.6.418	MON	14,568	174,820	08/02/2022	08/01/2067
45660K-AA-9	IndyMac INDX Mortgage Lo-INDX 2006-AR39			4		2,049,348	.90.4071	2,299,783	2,543,808	2,351,487	.0	(112,919)	.0	.0	.4.813	.5.412	MON	20,822	90,689	09/22/2015	02/25/2037
45660L-CK-3	IndyMac INDX Mortgage Lo-INDX 2005-AR2 1			4	1.A FM	2,827,737	.68.8490	2,619,070	3,804,078	2,476,010	.0	(352,926)	.88,775	.0	.5.133	.11.096	MON	40,338	218,981	02/16/2016	02/25/2035
45660L-DB-2	IndyMac INDX Mortgage Lo-INDX 2005-AR1 1			4	1.A FM	58,227	.93.6014	54,914	58,667	58,667	.0	.3	.0	.0	.4.384	.4.074	MON	432	2,529	01/30/2017	03/01/2035
45660L-V9-7	IndyMac INDX Mortgage Lo-INDX 2005-AR31			4	5.A FM	309,602	.92.1294	318,633	345,854	357,022	.0	.9,351	.0	.0	.3.614	.5.583	MON	2,088	11,618	11/03/2016	01/01/2036
45660N-X9-1	IndyMac INDX Mortgage Lo-INDX 2004-AR6 5			4	1.A FM	156,005	.96.7697	184,105	190,250	180,517	.0	.3,548	.0	.0	.5.505	.6.514	MON	873	10,022	05/30/2008	10/01/2034
45661X-AB-8	IndyMac INDX Mortgage Lo-INDX 2006-AR13			4	1.A FM	1,192,179	.65.3274	1,299,385	1,989,036	1,286,556	.0	(55,690)	.0	.0	.5.053	.10.981	MON	10,473	74,070	06/01/2012	07/25/2036
45669A-AD-6	IndyMac INDA Mortgage Lo-INDA 2007-AR1 2			4	4.A FM	3,567,945	.77.5798	2,942,010	3,792,237	3,264,572	.0	(2,398)	.0	.0	.5.375	.5.935	MON	33,831	195,428	10/25/2017	03/01/2037
46591K-AC-7	JP Morgan Mortgage Trust-JPMIT 2019-B A3			4	1.A	1,294,929	.85.9545	1,098,799	1,278,350	1,324,763	.0	1,857	.0	.0	.3.500	.2.962	MON	3,729	44,739	10/22/2019	03/01/2050
465983-AA-2	JP Morgan Mortgage Trust-JPMIT 2024-NQM1			4	1.A FE	4,499,945	.99.8871	4,494,921	4,500,000	4,499,947	.0	.2	.0	.0	.5.592	.5.592	MON	20,970	.0	12/18/2024	02/01/2064
465983-AB-0	JP Morgan Mortgage Trust-JPMIT 2024-NQM1			4	1.C FE	3,999,997	.99.7221	3,988,883	4,000,000	3,999,998	.0	.2	.0	.0	.5.846	.5.846	MON	19,487	.0	12/18/2024	02/01/2064
466247-J4-6	JP Morgan Mortgage Trust-JPMIT 2006-A2 2			4	4.B FM	65,062	.86.0579	59,005	68,564	62,190	.0	.996	.0	.0	.5.192	.8.509	MON	1,281	2,997	01/10/2022	04/01/2036
466247-L6-8	JP Morgan Mortgage Trust-JPMIT 2006-A2 1			4	1.A FM	284,244	.98.2462	292,993	298,223	297,150	.0	(1,068)	.0	.0	.7.207	.6.501	MON	9,929	19,150	07/08/2014	08/01/2034
466247-OP-1	JP Morgan Mortgage Trust-JPMIT 2005-A3 7			4	1.A FM	272,091	.84.5631	250,241	295,923	252,218	.0	3,672	.0	.0	.5.975	.7.681	MON	7,269	22,662	04/15/2016	06/01/2035
466247-RP-0	JP Morgan Mortgage Trust-JPMIT 2005-A4 2			4	1.A FM	163,065	.95.8292	176,072	183,735	181,853	.0	4,782	.0	.0	.5.456	.5.597	MON	2,393	10,110	06/05/2012	07/01/2035
466247-UG-6	JP MORGAN MORTGAGE TRUST-SERIES 2005-A6			4	1.D FM	416,580	.90.2819	384,744	426,158	384,189	.0	11,397	10,795	.0	.5.560	.9.365	MON	3,536	22,303	03/21/2017	08/01/2035
466247-ZP-1	JP Morgan Mortgage Trust-JPMIT 2005-S3 1			4	3.C FM	604,798	.42.9055	402,313	937,671	486,087	.0	(27,103)	.0	.0	.5.750	3.173	MON	13,633	53,601	01/10/2022	01/01/2036
46627M-AD-9	JP Morgan Alternative Lo-JPALT 2005-S1 1			4	1.A FM	1,319,255	.28.6247	392,752	1,372,072	457,946	.0	(97,150)	15,024	.0	.6.000	.6.107	MON	19,523	88,080	02/07/2008	12/01/2035
46627M-CU-9	JP Morgan Alternative Lo-JPALT 2006-A1 2			4	1.A FM	176,001	.73.6011	129,608	176,096	123,967	.0	(6,257)	.0	.0	.4.975	14.788	MON	1,508	7,957	02/07/2006	03/01/2036
46627M-CY-1	JP Morgan Alternative Lo-JPALT 2006-A1 3			4	1.A FM	3,602,586	.75.6079	3,199,339	4,231,485	3,249,044	.0	.58,067	67,090	.0	.5.099	.8.357	MON	36,109	210,259	04/06/2017	03/01/2036
46627M-EC-7	JP Morgan Alternative Lo-JPALT 2006-S1 1			4	1.A FM	540,645	.49.2375	285,484	579,810	304,256	.0	(15,308)	22,009	.0	.5.750	.6.452	MON	2,778	36,117	01/31/2008	03/01/2036
46627M-EJ-2	JP Morgan Alternative Lo-JPALT 2006-S1 1			4	4.B FM	1,201,252	.50.0350	802,675	1,604,229	954,953	.0	(55,078)	28,382	.0	.6.000	3.704	MON	8,021	104,278	12/29/2021	03/01/2036
46628K-AC-4	JP Morgan Mortgage Trust-JPMIT 2006-A3 2			4	1.A FM	151,200	.82.9652	142,048	171,214	142,871	.0	3,675	.0	.0	.4.996	.7.291	MON	1,867	8,306	04/20/2016	05/01/2036
46628L-AB-4	JP Morgan Mortgage Trust-JPMIT 2006-A4 1			4	1.A FM	37,276	.68.9715	32,254	46,764	33,683	.0	.558	.0	.0	.5.422	.8.540	MON	380	2,540	08/31/2012	06/01/2036
46628V-AH-9	JP Morgan Alternative Lo-JPALT 2006-S3 A			4	1.A FM	6,843,992	.66.1146	6,771,173	10,241,575	7,479,863	.0	74,142	.0	.0	.6.920	.9.705	MON	166,688	370,271	08/09/2012	08/01/2036
466308-AE-3	JP Morgan Alternative Lo-JPALT 2008-R3 2			4	1.A FM	661,856	.79.9642	584,147	730,511	563,519	.0	(21,861)	.0	.0	.5.843	.7.137	MON	7,146	20,224	11/30/2017	05/01/2037
46630G-AN-5	JP Morgan Mortgage Trust-JPMIT 2007-A1 4			4	1.A FM	.7,438	.98.9261	7,870	7,956	7,956	.0	.43	.0	.0	.7.198	.6.673	MON	48	517	02/09/2012	07/01/2035
46630P-AP-0	JP Morgan Mortgage Trust-JPMIT 2007-A2 3			4	1.A FM	15,057	.79.8827	12,561	15,724	11,952	.0	.334	.0	.0	.4.780	10.246	MON	63	792	06/23/2008	04/01/2037
46630W-AB-6	JP Morgan Mortgage Trust-JPMIT 2007-S2 1			4	4.C FM	942,200	.35.2122	544,350	1,545,915	670,497	.0	(49,897)	.0	.0	.5.500	14.462	MON	7,085	90,215	12/29/2021	06/01/2037
46630W-AL-4	JP Morgan Mortgage Trust-JPMIT 2007-S2 1			4	4.B FM	551,591	.31.2502	268,169	858,134	395,212	.0	(33,547)	16,805	.0	.6.000	14.190	MON	4,291	56,957	01/10/2022	06/01/2037
46631N-AA-7	JP Morgan Mortgage Trust-JPMIT 2007-S3 1			4	3.C FM	787,959	.41.4077	476,523	1,150,809	559,113	.0	(32,759)	58,184	.0	.5.500	.5.160	MON	10,549	64,960	12/29/2021	08/01/2037
46631N-DT-3	JP Morgan Mortgage Trust-JPMIT 2007-S3 1			4	1.A FM	7,602,613	.49.9176	5,350,958	10,719,557	5,315,614	.0	(221,344)	259,572	.0	.7.000	16.277	MON	105,892	816,151	12/29/2021	08/01/2037
46632T-AA-3	JP Morgan Mortgage Trust-JPMIT 2008-R2 1			4	1.A FM	2,366,843	.95.0692	2,795,247	2,940,225	2,836,260	.0	48,468	.0	.0	.4.222	.5.103	MON	20,126	120,306	08/31/2012	07/01/2037
46632Y-AB-0	JP Morgan Mortgage Trust-JPMIT 2008-R3 1			4	1.A FM	205,749	.73.2898	1,186,076	1,618,336	(205,083)	.0	(83,657)	.0	.0	.5.422	.5.422	MON	35,087	80,067	11/19/2008	06/01/2036
46632Y-AC-8	JP Morgan Mortgage Trust-JPMIT 2008-R3 2			4	3.B FM	6,919,805	.29.9316	2,367,099	7,908,349	2,639,655	.0	146,907	.0	.0	.6.250	16.258	MON	164,757	276,327	11/19/2008	08/01/2037
46632Y-AD-6	JP Morgan Mortgage Trust-JPMIT 2008-R3 2			4	1.A FM	286,953	.28.2462	245,298	868,429	240,995	.0	(81,247)	.0	.0	.6.250	.6.250	MON	20,405	35,413	11/19/2008	08/01/2037
46633M-AM-1	JP Morgan Resecuritizati-JPMRR 2009-B 2A			4	1.A FM	23,716	.85.7385	201,309	234,794	(29,605)	.0	(13,264)	.0	.0	.5.741	.5.741	MON	6,089	10,421	06/11/2009	04/01/2035
46634D-AX-6	JP Morgan Resecuritizati-JPMRR 2010-1 3A			4	1.A FM	946,642	.77.6762	1,557,109	2,004,616	1,088,365	.0	(63,781)	.0	.0	.6.000	18.778	MON	10,023	142,404	02/17/2010	04/01/2037
46635B-AD-3	JP Morgan Resecuritizati-JPMRR 2010-7 1A			4	1.A FM	2,940,058	.92.1812	3,853,781	4,180,660	3,458,570	.0	.6,555	.0	.0	.5.045	.9.531	MON	35,414	212,011	09/15/2010	03/01/2039
46651G-AC-3	JP Morgan Mortgage Trust-JPMIT 2019-7 A3			4	1.A	574,964	.85.9511	488,087	557,866	575,123	.0	(581)	.0	.0	.3.463	3.224	MON	1,639	21,347	09/13/2019	02/01/2050
46658G-AT-9	JP Morgan Mortgage Trust-JPMIT 2024-B A9			4	1.A	2,598,320	.97.6127	2,535,102	2,597,103	2,598,247	.0	(73)	.0	.0	.6.000	.5.978	MON	12,986	51,942	08/21/2024	01/01/2055
46658T-AA-2	JP Morgan Mortgage Trust-JPMIT 2024-12 A			4	1.A FE	21,006,563	.99.0076	20,791,604	21,000,000	21,006,606	.0	.44	.0	.0	.6.000	.5.995	MON	105,000	.0	12/17/2024	06/01/2055
472320-AA-8	Jefferies Resecuritizati-JMAC 2008-R1 A			4	1.A FM	1,786,216	.89.3955	1,743,733	1,950,583	1,891,724	.0	(10,296)	.0	.0	.8.452	.9.764	MON	16,961	178,331	07/24/2008	06/25/2047
472321-AA-6	Jefferies Resecuritizati-JMAC 2008-R2 1A			4	1.A FM	544,967	.99.1707	705,170	711,066	671,118	.0	(26,505)	.0	.0	.6.000	11.889	MON	3,555	42,152	08/26/2008	10/01/2035

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost			Rate Used to Obtain Fair Value	Fair Value												Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
472321-AB-4	Jefferies Resecuritizati-JMAC 2008-R2 1A			4	1.A FM	980,784	90.8355	1,955,282	2,152,554	1,000,483	0	127,278	0	0	6.000	36.612	MON	10,763	129,102	08/26/2008	10/01/2035
472321-AD-0	Jefferies Resecuritizati-JMAC 2008-R2 2A			4	1.A FM	29,632	98.9349	67,913	68,644	67,288	0	8,815	0	0	5.854	13.028	MON	693	3,677	08/26/2008	01/01/2037
472321-AG-3	Jefferies Resecuritizati-JMAC 2008-R2 1A			4	1.A FM	169,486	32.6894	252,410	772,148	176,138	0	(69,430)	0	0	6.000	6.000	MON	9,332	46,324	08/26/2008	10/01/2035
472321-AH-1	Jefferies Resecuritizati-JMAC 2008-R2 2A			4	1.A FM	229,718	62.0259	521,406	840,625	172,911	0	28,576	0	0	5.854	47.818	MON	16,225	36,711	08/26/2008	01/01/2037
472321-AK-4	Jefferies Resecuritizati-JMAC 2008-R2 3A			4	1.A FM	860,486	86.6479	2,154,583	2,486,597	1,696,015	0	134,657	0	0	4.396	13.794	MON	17,858	107,624	08/31/2012	01/01/2039
47232A-AC-2	Jefferies Resecuritizati-JMAC 2008-R3 1A			4	1.A FM	365,481	94.1053	914,274	971,544	637,903	0	87,716	0	0	5.308	16.554	MON	14,457	57,699	09/30/2008	03/01/2036
47232A-AE-8	Jefferies Resecuritizati-JMAC 2008-R3 2A			4	1.A FM	9,652	98.9692	13,454	13,594	13,594	0	3,942	0	0	3.561	3.561	MON	40	456	09/30/2008	06/01/2036
47232A-AF-5	Jefferies Resecuritizati-JMAC 2008-R3 2A			4	1.A FM	1,231,846	94.8710	2,042,451	2,152,872	2,201,578	0	(2,406)	0	0	3.561	2.833	MON	12,779	80,308	09/30/2008	06/01/2036
47232A-AH-1	Jefferies Resecuritizati-JMAC 2008-R3 3A			4	1.A FM	246,970	92.0493	1,164,124	1,264,675	622,891	0	120,116	0	0	4.415	29.778	MON	9,321	54,744	09/30/2008	05/01/2037
47232C-AH-7	Jefferies Resecuritizati-JMAC 2009-R1 4A			4	1.A FM	1,501,220	87.9764	1,596,508	1,814,700	1,563,188	0	8,651	36,597	0	4.485	4.485	MON	20,389	65,075	02/23/2016	06/01/2037
47232T-AB-3	Jefferies Resecuritizati-JMAC 2009-R3 1A			4	1.A FM	751,560	87.9502	755,427	858,926	820,897	0	7,525	0	0	5.011	5.383	MON	7,189	40,804	06/02/2016	12/01/2035
47233D-AB-7	Jefferies Resecuritizati-JMAC 2009-R11 1			4	1.A FM	98,163	86.9264	545,922	628,028	434,848	0	245,467	0	0	6.000	94.480	MON	3,140	37,679	08/10/2009	09/01/2036
52520M-CE-1	Lehman Mortgage Trust 20-LMT 2005-2 3A7			4	1.A FM	245,856	51.3472	174,520	339,882	168,150	0	(1,104)	19,568	0	5.500	8.235	MON	1,558	18,705	07/23/2008	12/01/2035
525221-EM-5	Lehman XS Trust Series 2-LXS 2005-7N 1A1			4	1.A FM	976,845	90.6618	1,207,536	1,331,913	1,187,372	0	32,455	0	0	4.993	6.666	MON	1,108	63,486	08/31/2012	12/25/2035
525221-GM-3	LEHMAN XS TRUST-SERIES 2005-9N CLASS 1A1			4	1.A FM	4,927,237	82.3151	4,755,865	5,777,633	5,419,340	0	(798,103)	0	0	4.723	4.984	MON	24,039	199,550	08/03/2016	02/25/2036
52523M-AD-2	Lehman XS Trust 2006-15-LXS 2006-15 A4			4	1.A FM	576,153	91.3184	951,806	1,042,294	802,109	0	(154,942)	0	0	4.793	11.646	MON	833	49,441	10/03/2012	10/25/2036
525241-AL-9	Lehman XS Trust 2007-1-LXS 2007-1 1W1			4	1.A FM	319,045	90.7597	448,323	493,967	339,617	0	(6,037)	0	0	4.494	13.192	MON	3,735	16,831	08/11/2008	01/01/2037
55274Q-AK-1	MASTR Asset Securitizati-MASTR 2006-2 1A			4	4.A FM	1,065,239	64.7616	731,902	1,130,149	776,758	0	(17,933)	0	0	6.000	11.240	MON	12,415	78,729	08/12/2011	06/01/2036
552758-AA-2	MFRA Trust-MFRA 2022-CHM1 A1			4	1.C FE	14,964,288	95.5476	14,298,041	14,964,310	14,964,310	0	0	0	0	3.875	4.826	MON	48,322	579,669	03/03/2022	09/01/2056
55285P-AB-0	MFA 2023-NQM1 Trust-MFRA 2023-NQM1 A2			4	1.A	1,328,921	99.3920	1,339,799	1,347,996	1,340,623	0	6,713	0	0	5.750	6.388	MON	6,459	77,501	01/18/2023	11/01/2067
55286E-AC-2	MFA 2022-NQM3 Trust-MFRA 2022-NQM3 A3			4	1.B	4,916,463	97.9378	4,942,438	5,046,509	4,983,373	0	26,678	0	0	5.570	6.546	MON	23,424	281,049	09/16/2022	09/01/2067
576431-AJ-9	MASTR Adjustable Rate Mo-MARM 2007-1 2A1			4	1.A FM	148,757	52.5959	97,913	186,161	(22,056)	0	(8,829)	0	0	5.101	5.101	MON	2,092	7,999	07/22/2008	11/01/2036
576433-C5-3	MASTR Adjustable Rate Mo-MARM 2005-6 5A2			4	4.A FM	443,222	85.8928	453,497	527,980	462,743	0	18,010	0	0	3.268	5.014	MON	2,775	13,716	07/05/2016	07/01/2035
576433-D5-2	MASTR Adjustable Rate Mo-MARM 2005-7 3A1			4	1.A FM	588,753	56.9503	415,221	729,094	411,610	0	(1,344)	62,606	0	3.825	7.638	MON	6,240	28,204	11/08/2016	09/01/2035
576433-GM-2	MASTR Adjustable Rate Mo-MARM 2003-6 6A1			4	1.A FM	603,194	89.7998	562,771	626,695	606,181	0	2,175	0	0	3.535	3.949	MON	1,846	21,938	02/26/2016	12/01/2033
576433-HM-1	MASTR Adjustable Rate Mo-MARM 2003-7 4A1			4	1.A FM	156,904	95.6052	154,251	161,341	160,458	0	(11)	0	0	6.875	6.761	MON	935	9,717	03/29/2017	01/01/2034
576433-QD-1	MASTR Adjustable Rate Mo-MARM 2004-7 5A1			4	1.A FM	47,763	98.7671	49,657	50,277	49,446	0	200	0	0	7.500	7.342	MON	950	2,796	08/29/2016	07/01/2034
576433-XA-9	MASTR Adjustable Rate Mo-MARM 2005-1 3A1			4	1.A FM	270,143	89.5795	254,729	284,361	272,809	0	1,604	0	0	3.211	4.394	MON	763	9,152	02/07/2017	02/01/2035
576433-XW-1	MASTR Adjustable Rate Mo-MARM 2005-2 3A1			4	1.F FM	338,333	89.9061	316,857	352,431	344,918	0	699	0	0	4.668	4.913	MON	2,861	15,433	03/15/2019	03/01/2035
576434-W5-9	MASTR Alternative Loan T-MALT 2005-6 3A1			4	4.B FM	162,313	76.9322	124,592	161,951	156,472	0	(54)	0	0	5.500	5.699	MON	742	8,907	08/06/2013	12/01/2035
57643M-LZ-5	MASTR Asset Securitizati-MASTR 2006-1 1A			4	1.A FM	293,542	56.4258	169,183	299,833	179,613	0	(5,393)	19,609	0	5.750	5.936	MON	1,595	17,234	08/31/2012	05/01/2036
58004J-AB-8	MFA 2024-NQM2 Trust-MFRA 2024-NQM2 A2			4	1.C FE	6,918,153	99.1849	6,843,584	6,899,825	6,919,839	0	1,686	0	0	5.526	5.611	MON	31,774	63,547	10/03/2024	08/01/2069
585495-AA-2	Mello Mortgage Capital A-MELLO 2021-MTG1			4	1.A	34,036,718	80.4714	27,057,260	33,623,432	34,001,156	0	(17,605)	70,049	0	2.500	2.356	MON	70,049	840,578	03/17/2021	04/01/2051
589929-PL-6	Merrill Lynch Mor Inv Go-GNABS 1998-GN1			4	1.A FM	31,493	100.1222	31,541	31,502	31,629	0	79	0	0	6.687	6.875	MON	0	0	03/05/1998	02/01/2027
59020U-W4-3	MERRILL LYNCH MORTGAGE I-SERIES 2005-A9C			4	1.A FM	612,219	29.7875	203,310	682,535	196,120	0	(23,815)	0	0	5.500	8.769	MON	12,152	32,644	07/19/2013	12/01/2035
59023N-AW-8	Merrill Lynch Mortgage I-MLMI 2006-AF2 P			4	4.C FM	36,359	21.2804	12,895	60,598	9,776	0	(3,321)	0	0	0.000	0.000	N/A	0	0	09/21/2007	10/01/2036
59023P-AB-9	Merrill Lynch Mortgage I-MLCC 2006-3 2A1			4	5.B FM	449,857	87.6517	440,567	502,633	436,492	0	6,654	4,422	0	6.638	9.498	MON	2,786	32,324	09/09/2011	10/01/2036
61748H-AW-1	Morgan Stanley Mortgage -MSM 2004-SAR 4A			4	1.A FM	608,294	95.4692	574,285	601,540	609,733	0	(3,491)	0	0	5.995	5.234	MON	6,119	33,081	01/27/2017	07/01/2034
61748H-FK-2	MORGAN STANLEY MORTGAGE -SERIES 2004-10A			4	1.A FM	2,120,225															

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
617526-AD-0	Morgan Stanley ABS Capit-MSAC 2007-HE1 A	4			1.A FM	2,395,427	.56.8522	2,178,964	3,832,682	2,195,035	.0	(131,700)	.0	.0	4.553	9.102	MON	53,265	58,025	01/04/2012	11/25/2036
61758V-AQ-0	Morgan Stanley Re-REMIC -MSRR 2010-R2 3B	4			5.A FM	1,536,958	.47.5585	1,763,514	3,708,095	2,213,517	.0	15,332	95,531	.0	2.920	3.471	MON	37,201	261,454	02/09/2010	10/01/2037
61759X-AC-6	Morgan Stanley Re-REMIC -MSRR 2010-R8 1C	4			4.C FM	1,806,250	.57.2354	1,529,153	2,671,690	1,716,287	.0	2,120	.0	.0	6.000	12.169	MON	26,731	165,680	08/12/2010	01/01/2037
61776Q-AC-0	Morgan Stanley Residenti-MSRM 2024-3 A2	4			1.A	3,392,976	.99.6015	3,380,725	3,394,250	3,393,028	.0	52	.0	.0	6.000	6.028	MON	16,971	66,704	07/30/2024	07/01/2054
61915R-AK-2	MortgageIT Trust 2005-3-MHL 2005-3 A1	4			1.A FM	4,210	.97.6019	7,146	7,322	6,668	.0	(1,898)	.0	.0	5.053	9.902	MON	.6	.431	09/15/2008	08/25/2035
61915R-AU-0	MortgageIT Trust 2005-5-MHL 2005-5 A1	4			1.A FM	269,666	.98.5596	412,065	418,087	389,051	.0	14,361	.0	.0	4.973	9.114	MON	347	24,695	10/29/2008	12/25/2035
62942K-AA-4	NRP Mortgage Trust 2013--NRPMT 2013-1 A1	4			1.A	6,762,304	.87.0062	6,153,494	7,072,480	6,811,013	.0	(6,640)	.0	.0	3.250	3.764	MON	19,155	229,852	03/11/2014	07/01/2043
643529-AC-4	New Century Alternative -NCAMT 2006-ALT2	4			1.A FM	1,682,392	.19.0890	482,934	2,529,913	485,983	.0	38,203	30,072	.0	4.618	11.548	MON	19,446	29,203	01/11/2013	10/01/2036
643529-AD-2	New Century Alternative -NCAMT 2006-ALT2	4			1.A FM	767,567	.19.0890	220,331	1,154,236	204,713	.0	(16,605)	.0	.0	4.618	22.595	MON	8,872	14,470	01/11/2013	10/01/2036
64352V-MP-3	New Century Home Equity -NCHET 2005-A A5	4			1.A FM	2,634,449	.92.6095	2,588,594	2,795,171	2,688,471	.0	4,381	.0	.0	4.631	5.599	MON	10,787	141,000	02/03/2016	08/01/2035
64831Q-AA-1	New Residential Mortgage-NRZT 2022-NQM3	4			1.A	31,952,270	.92.1187	29,873,690	32,429,578	32,117,391	.0	44,812	.0	.0	3.900	4.211	MON	230,731	1,268,463	04/27/2022	04/01/2062
64831Q-AB-9	New Residential Mortgage-NRZT 2022-NQM3	4			1.B	7,944,171	.90.5398	7,348,798	8,116,651	8,037,340	.0	21,204	54,237	.0	3.988	4.262	MON	54,237	324,446	04/27/2022	04/01/2062
64831T-AA-5	New Residential Mortgage-NRZT 2021-NQM3	4			1.A	6,562,577	.85.6976	6,047,250	7,056,497	6,667,595	.0	29,645	.0	.0	1.156	2.893	MON	6,798	(70,563)	05/03/2022	11/01/2056
64831V-AB-8	New Residential Mortgage-NRZT 2022-NQM5	4			1.A	3,527,601	.99.9345	3,571,890	3,574,232	3,560,784	.0	16,193	.0	.0	6.500	7.068	MON	38,766	211,975	10/04/2022	11/01/2052
64831V-AC-6	New Residential Mortgage-NRZT 2022-NQM5	4			1.A	4,893,037	.99.8868	4,998,261	5,003,924	4,970,504	.0	45,098	.0	.0	6.500	7.483	MON	54,272	296,765	10/04/2022	11/01/2052
65535V-KX-5	Nomura Asset Acceptance -NAA 2005-WF1 2A	4			1.A FM	3,488	.98.0823	3,365	3,431	3,431	.0	(8)	.0	.0	5.659	5.253	MON	33	181	02/28/2013	03/01/2035
65535V-MJ-4	Nomura Asset Acceptance -NAA 2005-AR3 1A	4			1.A FM	460,782	.84.7300	469,679	554,325	440,404	.0	9,659	11,392	.0	4.973	10.735	MON	459	25,223	10/21/2016	07/25/2035
65535V-NL-8	Nomura Asset Acceptance -NAA 2005-AR4 5A	4			1.A FM	1,704,886	.84.8775	2,101,001	2,475,333	1,356,838	.0	64,116	485	.0	5.033	5.033	MON	2,076	98,255	06/15/2016	08/25/2035
65535V-SJ-8	Nomura Asset Acceptance -NAA 2006-AP2 A2	4			1.A FM	1,310,692	.28.9283	920,359	3,181,515	997,914	.0	58,123	259,213	.0	5.515	6.684	MON	29,243	65,121	12/29/2021	01/01/2036
65539C-AK-2	Nomura Resecuritization -NMRR 2011-4RA 1	4			1.A FM	1,357,854	.92.0095	1,503,643	1,634,226	1,453,624	.0	44,386	.0	.0	2.768	6.338	MON	4,171	78,709	06/06/2016	12/01/2036
67113X-AB-6	OBX 2021-J1 Trust-OBX 2021-J1 A2	4			1.A	25,639,052	.77.4655	19,983,186	25,796,246	25,602,145	.0	6,051	.0	.0	2.000	2.094	MON	87,265	472,808	04/27/2021	05/01/2051
67116X-AD-9	OBX 2022-NQM4 Trust-OBX 2022-NQM4 A2	4			1.B	14,300,570	.81.5617	12,234,257	15,000,000	14,509,710	.0	73,121	.0	.0	3.976	4.638	MON	99,375	546,030	04/29/2022	04/01/2062
67117D-AA-8	Onslow Bay Mortgage Loan-OBX 2022-NQM7 A	4			1.A	4,382,753	.97.9091	4,291,116	4,382,754	4,382,754	.0	.0	.0	.0	5.110	5.695	MON	18,663	223,952	08/15/2022	08/01/2062
67117D-AB-6	Onslow Bay Mortgage Loan-OBX 2022-NQM7 A	4			1.A	2,067,356	.98.8310	2,047,868	2,072,091	2,072,091	.0	.0	.0	.0	5.700	6.282	MON	9,842	118,106	08/15/2022	08/01/2062
67117D-AC-4	Onslow Bay Mortgage Loan-OBX 2022-NQM7 A	4			1.B	2,965,895	.98.1767	2,934,102	2,988,593	2,994,500	.0	10,097	.0	.0	5.700	6.309	MON	14,196	161,829	08/15/2022	08/01/2062
67118H-AC-4	OBX 2024-NQM2 Trust-OBX 2024-NQM2 A2	4			1.A	4,113,940	.100.1689	4,120,949	4,113,999	4,113,956	.0	16	.0	.0	6.030	6.031	MON	20,673	227,401	01/25/2024	12/01/2063
67119F-AA-1	OBX 2024-NQM7 Trust-OBX 2024-NQM7 A1	4			1.A	4,274,957	.100.8234	4,310,173	4,274,975	4,274,975	.0	15	.0	.0	6.243	6.243	MON	22,241	177,802	05/06/2024	03/01/2064
67119F-AB-9	OBX 2024-NQM7 Trust-OBX 2024-NQM7 A2	4			1.A	4,274,974	.100.8173	4,309,914	4,274,975	4,274,975	.0	.0	.0	.0	6.446	6.446	MON	22,964	160,642	05/06/2024	03/01/2064
67120G-AD-0	OBX 2024-NQM16 Trust-OBX 2024-NQM16 A2	4			1.A	4,385,735	.99.8748	4,380,326	4,385,817	4,385,717	.0	(17)	.0	.0	5.732	5.810	MON	42,445	.0	10/31/2024	10/01/2064
67120G-AE-8	OBX 2024-NQM16 Trust-OBX 2024-NQM16 A3	4			1.A	2,923,873	.99.7798	2,917,762	2,923,878	2,923,859	.0	(14)	.0	.0	5.885	5.961	MON	29,052	.0	10/31/2024	10/01/2064
673911-AD-5	ONSLow BAY FINANCIAL LLC-OBX 2024-NQM17	4			1.C FE	4,465,147	.100.1052	4,469,888	4,465,191	4,465,155	.0	.8	.0	.0	5.863	5.863	MON	21,816	21,816	11/20/2024	11/01/2064
673913-AA-7	OBX 2024-NQM18 Trust-OBX 2024-NQM18 A1	4			1.C FE	5,249,965	.99.6867	5,233,549	5,200,000	5,249,977	.0	12	.0	.0	5.408	5.408	MON	23,660	.0	12/05/2024	10/01/2064
673913-AB-5	OBX 2024-NQM18 Trust-OBX 2024-NQM18 A2	4			1.C FE	6,008,986	.99.7695	5,995,150	6,009,000	6,009,000	.0	14	.0	.0	5.662	5.662	MON	28,352	.0	12/05/2024	10/01/2064
67448Q-AC-5	OBX 2019-EXP1 Trust-OBX 2019-EXP1 1A3	4			1.A	174,775	.98.2799	172,632	175,653	174,473	.0	(57)	.0	.0	4.000	4.372	MON	741	6,999	03/27/2020	01/01/2059
69337B-AH-7	PHH Alternative Mortgage-PHAMM 2007-1 21	4			4.A FM	1,192,014	.81.8780	1,039,908	1,270,071	1,185,002	.0	(11,774)	.0	.0	6.000	5.470	MON	20,405	58,013	12/29/2021	02/01/2037
693456-AA-3	PMT Loan Trust 2013-J1-PMTLT 2013-J1 A1	4			1.A	2,229,359	.88.7710	2,031,086	2,287,989	2,237,529	.0	2,282	6,673	.0	3.500	3.920	MON	80,773	80,073	02/12/2014	09/01/2043
693684-AA-0	PSMC 2020-1 Trust-PSMC 2020-1 A1	4			1.A	1,189,723	.89.2762	1,038,926	1,163,721	1,202,445	.0	3,081	.0	.0	3.500	2.891	MON	3,394	40,700	01/24/2020	01/01/2050
69374X-AA-8	PSMC 2019-2 Trust-PSMC 2019-2 A1	4			1.A	73,620	.98.9602	71,426	72,177	72,545	.0	(1,039)	.0	.0	3.500	0.027	MON	923	2,536	10/08/2019	10/01/2049
69375B-AA-5	PSMC 2019-3 Trust-PSMC 2019-3 A1	4			1.A	718,127	.91.7752	649,623	707,841	724,021	.0	585	.0	.0	3.500	2.937	MON	2,065	24,765	10/28/2019	11/01/2049
69381J-AA-0	PPPM 2024-RCF5 LLC-PPPM 2024-RCF5 A1	4			1.A	8,739,419	.96.9040	8,683,958	8,961,402	8,747,101	.0	7,683	.0	.0	4.000	5.077	MON	5,974	129,442	08/02/2024	08/25/2054
693984-AB-2	PRKOM 2023-AFC3 Trust-PRKOM 2023-AFC3 A2	4			1.A	7,513,655	.100.8562	7,578,052	7,513,717	7,513,693	.0	.0	.0	.0	6.987	6.987	MON	43,749	566,989	08/31/2023	09/01/2058
743874-AC-1	Provident Funding Mortga-PFMIT 2020-1 A2	4			1.A	1,126,378	.82.9759	921,520	1,110,587	1,125,313	.0	(412)	.0	.0	3.000	2.789	MON	33,916	33,916	02/14/2020	02/01/2050
74387L-AC-5	Provident Funding Mortga-PFMIT 2019-1 A2	4			1.A	2,469,574	.83.0470	2,022,780	2,435,705	2,464,587	.0	(1,497)	.0	.0	3.000	2.762	MON	6,089	73,460	03/04/2020	12/01/2049
74387Y-AD-5	Provident Funding Mortga-PFMIT 2021-1 A2A	4			1.A	43,112,898	.77.5440	33,798,253	43,585,904	43,172,745	.0	14,706	.0	.0	2.000	2.116	MON	146,805	798,957	04/09/2021	04/01/2051
74922M-AA-9	RALI Series 2006-QA6 Tru-RALI 2006-QA6 A	4			1.G FM	766,942	.90.0067	789,529	877,189	851,531	.0	(55,517)	.0	.0	4.833	6.412	MON	716	45,401	09/07/2016	07/25/2036

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
749220-AA-0	RALI Series 2006-QA8 Tru-RALI 2006-QA8 A		4		2.A FM	162,753	.92.5214	196,710	212,610	200,748	.0	(34,528)	.0	.0	4.833	6.519	MON	171	10,186	01/06/2016	09/25/2036
74923G-AQ-7	RALI Series 2007-QA1 Tru-RALI 2007-QA1 A		4		1.A FM	1,172,797	.83.1186	1,240,447	1,492,383	1,248,499	.0	54,930	.0	.0	4.793	7.835	MON	14,093	59,278	10/18/2016	01/25/2037
74923H-AQ-4	RALI Series 2007-QS4 Tru-RALI 2007 QA 3A		4		4.B FM	446,951	.77.4365	360,947	466,119	427,257	.0	(8,443)	.0	.0	6.000	4.589	MON	13,991	27,912	12/29/2021	03/01/2037
74927B-AK-6	RBSSP Resecuritization T-RBSSP 2009-8 7A		4		1.A FM	73,940	.684.4091	469,109	68,542	153,775	.0	37,738	.0	.0	93.019	49.459	MON	59,536	19,317	03/25/2010	09/01/2037
74927T-AC-5	RBSSP Resecuritization T-RBSSP 2010-9 3A		4		1.A FM	3,709,884	.82.5983	3,264,234	3,951,941	3,500,045	.0	27,197	.0	.0	3.978	5.564	MON	14,465	159,949	08/20/2013	10/26/2034
74928D-AV-7	RBSSP Resecuritization T-RBSSP 2009-1 7A		4		1.A FM	678,000	.90.3821	1,326,628	1,467,799	1,165,684	.0	82,812	.0	.0	4.169	8.659	MON	21,038	43,312	07/08/2010	06/01/2037
74928F-AY-6	RBSSP Resecuritization T-RBSSP 2009-3 6A		4		1.A FM	1,627,852	.35.3573	941,556	2,662,977	614,543	.0	(35,975)	.0	.0	2.841	40.467	MON	12,614	127,262	07/08/2010	03/01/2036
74928R-AB-0	RBSSP Resecuritization T-RBSSP 2009-10 1		4		1.A FM	208,552	.71.6684	221,431	308,966	214,336	.0	4,486	.0	.0	5.500	10.099	MON	1,416	16,993	10/24/2011	08/01/2035
74928U-AM-9	RBSSP Resecuritization T-RBSSP 2009-12 5		4		1.A FM	947,815	.86.4780	1,157,386	1,338,358	1,208,705	.0	23,969	.0	.0	5.049	7.475	MON	16,973	55,366	03/21/2013	08/01/2036
74928U-AX-5	RBSSP Resecuritization T-RBSSP 2009-12 8		4		1.A FM	537,675	.89.3655	1,129,648	1,264,076	820,502	.0	71,702	.0	.0	5.732	15.100	MON	18,379	62,072	11/02/2009	06/01/2036
74928U-BV-8	RBSSP Resecuritization T-RBSSP 2009-12 1		4		1.A FM	6,440,782	.99.2759	7,845,576	7,902,800	7,540,716	.0	261,941	.0	.0	6.671	9.300	MON	8,786	520,539	03/23/2020	10/25/2035
74928X-BB-6	RBSSP Resecuritization T-RBSSP 2009-6 3A		4		1.A FM	2,733,365	.90.9724	3,160,558	3,474,195	2,899,430	.0	144,121	.0	.0	4.893	7.820	MON	46,860	154,371	01/24/2017	01/26/2036
74929F-AK-5	RBSSP Resecuritization T-RBSSP 2010-3 4A		4		1.A FM	307,053	.106.1152	331,318	312,225	312,225	.0	37	.0	.0	7.729	7.530	MON	2,011	21,865	12/01/2016	12/01/2035
749357-AA-7	RCKT Mortgage Trust 2019-RCKT 2019-1 A1		4		1.A	3,057,297	.84.8984	2,556,058	3,010,725	3,084,508	.0	3,286	.0	.0	3.500	3.140	MON	8,781	105,371	10/11/2019	09/01/2049
749389-AA-0	RCKT Mortgage Trust 2020-RCKT 2020-1 A1		4		1.A	3,455,544	.83.0947	3,006,673	3,618,371	3,321,420	.0	(3,949)	.0	.0	3.000	4.208	MON	9,046	108,548	03/27/2020	02/01/2050
749574-AC-3	RFMSI Series 2006-SA2 Tr-RFMSI 2006-SA2		4		1.A FM	252,906	.68.3070	238,322	348,898	204,918	.0	10,547	.0	.0	5.684	9.016	MON	6,671	19,382	10/24/2008	08/01/2036
74958T-AB-9	RFMSI Series 2007-SA3 Tr-RFMSI 2007-SA3		4		1.A FM	522,180	.70.9236	420,095	592,320	411,399	.0	(28,172)	.0	.0	5.313	8.244	MON	8,101	14,964	08/03/2016	07/01/2037
74958W-AC-0	RFMSI Series 2007-SA1 Tr-RFMSI 2007-SA1		4		1.A FM	248,969	.56.9785	250,125	438,982	240,794	.0	6,947	.0	.0	4.899	9.944	MON	3,766	22,003	11/13/2008	02/01/2037
74958X-AF-1	RFMSI Series 2007-SA2 Tr-RFMSI 2007-SA2		4		1.A FM	549,363	.99.2014	597,848	602,661	516,520	.0	24,210	.0	.0	6.126	16.857	MON	3,570	36,276	04/07/2020	04/01/2037
74958Y-AE-2	RFMSI Series 2007-S4 Tr-RFMSI 2007-SA 4		4		3.A FE	269,412	.85.8850	247,059	287,663	230,132	.0	(2,020)	.0	.0	6.000	7.882	MON	6,784	14,430	01/10/2022	04/25/2037
74968R-AA-3	RMF Proprietary Issuance-RPIT 2019-1 A		4		1.A FE	12,267,044	.92.4362	11,427,651	12,362,741	12,349,184	.0	55,397	.0	.0	2.750	2.774	MON	6,061	366,119	10/09/2019	10/25/2063
74969M-AA-3	RMF Proprietary Issuance-RPIT 2020-1 A		4		1.A FE	5,569,738	.93.2646	5,194,592	5,569,738	5,569,738	.0	.0	.0	.0	3.250	3.074	MON	17,604	193,991	04/24/2020	04/26/2060
74970F-AA-5	RMF Proprietary Issuance-RPIT 2022-3 A		4		1.A FE	17,165,520	.95.1802	17,560,747	18,450,000	17,864,096	.0	264,284	.0	.0	4.000	6.042	MON	12,300	738,000	08/04/2022	08/25/2062
74970F-AC-1	RMF Proprietary Issuance-RPIT 2022-3 M2		4		1.G FE	11,451,188	.88.1697	13,842,643	15,700,000	13,622,830	.0	977,767	.0	.0	4.000	12.684	MON	10,467	628,000	08/25/2022	08/25/2062
75115B-AC-3	RALI Series 2006-QA5 Tru-RALI 2006-QA5 2		4		6.FM	964,502	.84.8909	945,301	1,113,548	899,437	.0	46,149	3,648	.0	6.450	7.720	MON	28,604	72,368	02/11/2016	07/01/2036
75115D-AA-3	RALI Series 2006-QS13 Tr-RALI 2006-QS13		4		1.A FM	159,029	.71.1506	153,803	216,165	163,291	.0	(5,570)	9,587	.0	4.793	6.484	MON	1,996	8,290	12/29/2021	09/25/2036
75115L-AA-5	RALI Series 2007-QH7 Tru-RALI 2007-QH7 1		4		1.A FM	731,204	.94.6395	752,183	794,787	777,255	.0	4,029	.0	.0	4.953	5.211	MON	751	40,035	12/12/2018	08/25/2037
75116F-BH-1	RALI Series 2007-QS9 Tru-RALI 2007-QS9 A		4		5.A FM	1,280,955	.78.7614	1,049,645	1,332,690	1,226,760	.0	(28,437)	21,638	.0	6.500	4.660	MON	26,608	106,087	12/29/2021	07/01/2037
75156V-AD-7	RAMP Series 2006-RS3 Tru-RAMP 2006-RS3 A		4		1.A FM	2,477,073	.84.1506	2,649,571	3,148,607	2,422,138	.0	92,477	.0	.0	5.053	7.676	MON	2,652	139,658	01/14/2016	05/25/2036
759676-AF-6	RENAISSANCE HOME EQUITY -RAINC 2006-2 AF3		4		3.A FM	811,772	.36.4485	328,754	901,969	345,259	.0	(17,013)	.0	.0	5.797	6.933	MON	8,715	41,355	10/19/2008	08/01/2036
75970J-AX-4	RENAISSANCE HOME EQUITY -RAINC 2007-1 AF1		4		1.A FM	2,655,793	.24.9747	769,016	3,079,180	742,604	.0	57,378	.0	.0	5.784	18.625	MON	44,525	84,837	01/03/2011	04/01/2037
759950-DM-7	Renaissance Home Equity -RAINC 2004-3 AF5		4		1.A FM	4,459,772	.85.7172	4,331,772	5,053,566	4,267,099	.0	(245,503)	.0	.0	5.972	6.912	MON	50,494	190,236	04/10/2012	11/01/2034
759950-EM-6	Renaissance Home Equity -RAINC 2004-4 AF5		4		1.A FM	7,486,635	.87.4928	8,294,784	8,337,833	7,337,833	.0	(235,337)	.0	.0	5.993	5.547	MON	83,064	274,500	08/24/2010	02/01/2035
760985-S6-9	RFSC Series 2004-RP1 Tru-RFSC 2004-RP1A		4		1.A FM	888,954	.90.3415	807,130	893,421	826,015	.0	9,908	.0	.0	6.753	7.390	MON	1,006	81,646	07/23/2019	11/25/2042
76110H-H8-5	RALI Series 2004-QA6 Tru-RALI 2004-QA6 N		4		1.A FM	197,407	.88.1203	194,028	220,185	187,544	.0	9,074	12,105	.0	5.100	10.306	MON	3,921	11,824	11/18/2016	12/01/2034
76110H-T9-0	RALI Series 2005-QA2 Tru-RALI 2005-QA2 N		4		1.A FM	657,326	.87.4877	699,015	1,027,589	643,748	.0	79,459	8,221	.0	4.789	15.427	MON	4,669	44,669	11/13/2012	02/01/2035
76110V-RX-8	Home Equity Loan Trust 2-RFMS2 2005-HS1		4		1.A FM	1,894,902	.1.3401	25,402	1,895,562	23,255	128,598	(159,567)	.0	.0	5.431	25.584	MON	17,169	44,101	09/13/2005	09/01/2035
761118-BU-1	RALI Series 2005-QA8 Tru-RALI 2005-QA8 N		4		5.C FM	340,181	.90.7152	364,678	402,003	349,452	.0	24,229	24,600	.0	5.455	5.003	MON	1,302	20,457	12/03/2015	07/01/2035
761118-FL-7	RALI Series 2005-QA9 Tru-RALI 2005-QA9 C		4		3.B FM	1,072,305	.92.2911	1,020,779	1,106,042	1,079,611	.0	8,582	14,784	.0	5.087	6.005	MON	5,784	57,628	04/28/2017	08/01/2035
761118-FM-5	RESIDENTIAL ACCREDIT LOA-SERIES 2005-QA9		4		1.A FM	1,616,154	.86.0106	1,543,571	1,794,628	1,505,106	.0	68,018	98,156	.0	5.100	7.436	MON	39,568	88,863	02/24/2016	08/01/2035
761118-GS-1	RALI Series 2005-QS13 Tr-RALI 2005-QS13		4		2.B FM	910,506	.73.8939	815,267	1,103,293	903,573	.0	(7,448)	4,623	.0	4.853	6.285	MON	32,142	37,630	12/29/2021	09/25/2035
761118-GT-9	RALI Series 2005-QS13 Tr-RALI 2005-QS13		4		5.C FE	51,856	.3.7457	88,556	2,364,199	0	.0	(261)	.0	.0	0.647	0.000	MON	255	1,530	06/28/2006	09/25/2035
761118-KH-0	RALI Series 2005-QS15 Tr-RALI 2005-QS15		4		1.A FM	476,367	.83.4635	430,431	515,712	361,616	.0	(12,371)	.0	.0	6.000	11.767	MON	18,358	26,422	08/31/2012	10/01/2035
761118-SC-3	RALI Series 2006-QS1 Tru-RALI 2006-QS1 A		4		5.B FM	1,276,908	.77.6612	1,066,702	1,373,534	1,256,188	.0	(44,173)	15,224	.0	5.750	6.003	MON	37,658	66,979	12/29/2021	01/01/2036
761118-UG-1	RALI Series 2006-QS2 Tru-RALI 2006 QS2 1		4		5.A FM	416,351	.78.3859	334,989	427,358	414,035	.0	(8,758)	10	.0	5.500	3.948	MON	12,977	25,366	12/29/2021	02/01/2036

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
761118-U0-9	RALI Series 2006-QS2 Tru-RALI 2006-QS2 1			4	.. 4.A FM	80,547	..78.3859	38,008	86,971	42,555	0	(1,057)	0	0	...5.500	...6.166	MON	928	2,807	02/22/2008	02/01/2036
761118-U0-9	RALI Series 2006-QS2 Tru-RALI 2006-QS2 1			4	.. 4.B FM	0	..78.3859	30,165	0	34,021	0	(2,537)	0	0	...5.500	...6.104	MON	737	2,228	02/13/2006	02/01/2036
76112B-NM-8	GMACM Mortgage Loan Trus-GMACM 2005-AA1			4	.. 1.A FM	3,577,368	..98.1207	3,790,135	3,862,727	3,611,105	0	70,787	0	0	...5.561	...7.788	MON	36,080	215,654	07/05/2016	05/01/2035
76971E-AA-2	RMF Buyout Issuance Trus-RBIT 2020-HB1 A			4	.. 1.A FE	12,050,902	..95.0125	11,449,876	12,050,918	12,063,590	0	(24,040)	0	0	...1.719	...1.549	MON	3,452	207,131	10/14/2020	10/25/2050
78473T-AJ-9	STARM Mortgage Loan Trus-STARM 2007-2 4A			4	.. 1.A FM	292,171	..49.2043	151,923	308,759	155,427	0	(11,466)	0	0	...6.427	...6.697	MON	4,961	15,098	07/15/2016	04/01/2037
79582M-AA-9	Saluda Grade Alternative-GRADE 2024-F1G5			4	.. 1.A FE	8,689,723	101.5937	8,828,225	8,689,735	8,689,735	0	12	0	0	...6.255	...6.255	MON	45,295	362,362	04/05/2024	04/01/2054
795924-AA-7	Saluda Grade Alternative-GRADE 2024-INV1			4	.. 1.A FE	9,380,863	..99.5721	9,340,899	9,381,040	9,380,904	0	41	0	0	...5.582	...5.583	MON	43,637	174,048	08/05/2024	08/01/2059
80382S-AP-3	Sail Net Interest Margin-SAILN 2003-3 A	D		4	.. 1.A FM	0	117.0000	18,311	15,651	911	0	(14,740)	0	0	...7.750	21,382.249	MON	13	8,055	08/31/2012	04/27/2033
805564-EM-9	Saxon Asset Securities T-SAST 1999-3 BF1			4	.. 1.A FM	479,478	101.9933	489,044	479,486	445,838	0	12,061	0	0	...8.640	12.199	MON	8,793	26,701	07/29/1999	12/01/2032
81378E-AA-1	SECURITIZED ASSET BACKED-SERIES 2007-BR4			4	.. 1.A FM	2,538,433	..58.1757	2,734,712	5,798,192	1,937,260	0	309,017	0	0	...4.633	15.455	MON	23,433	86,076	11/09/2011	05/25/2037
81378E-AA-1	SECURITIZED ASSET BACKED-SERIES 2007-BR4			4	.. 1.F FM	0	..58.1757	638,426	0	763,111	0	85,197	0	0	...4.633	6.626	MON	5,471	20,095	11/30/2010	05/25/2037
81743A-AA-7	SEQUOIA MORTGAGE TRUST 2-SEMT 2019-5 A1			4	.. 1.A	3,573,572	..86.3045	3,031,108	3,512,110	3,578,851	0	(703)	0	0	...3.500	3.231	MON	34,646	102,896	11/14/2019	12/01/2049
81743C-AE-5	Sequoia Mortgage Trust 2-SEMT 2024-5 A5			4	.. 1.A	3,805,375	..99.7576	3,817,625	3,826,903	3,810,925	0	5,550	0	0	...6.000	6.435	MON	19,135	133,942	05/07/2024	06/01/2054
81745C-AA-1	Sequoia Mortgage Trust 2-SEMT 2013-7 A1			4	.. 1.A	1,430,914	..86.7507	1,377,565	1,587,959	1,461,316	0	5,664	0	0	...2.500	3.965	MON	3,308	39,696	04/17/2014	06/01/2043
81745M-AA-9	Sequoia Mortgage Trust 2-SEMT 2013-2 A			4	.. 1.A	1,638,422	..83.5645	1,528,395	1,829,001	1,663,101	0	3,946	0	0	...1.874	3.635	MON	2,856	34,274	07/11/2014	02/01/2043
81745R-AB-6	Sequoia Mortgage Trust 2-SEMT 2013-3 A2			4	.. 1.A	2,527,001	..83.6009	2,284,915	2,733,124	2,559,767	0	10,110	0	0	...2.500	3.656	MON	5,694	68,327	10/03/2014	03/01/2043
81746J-AA-3	Sequoia Mortgage Trust 2-SEMT 2019-4 A1			4	.. 1.A	2,826,170	..87.3231	2,417,288	2,768,211	2,860,225	0	1,070	0	0	...3.500	3.031	MON	8,074	96,886	10/08/2019	11/01/2049
81748K-AA-0	Sequoia Mortgage Trust 2-SEMT 2020-2 A1			4	.. 1.A	4,574,256	..85.9223	3,835,613	4,464,050	4,642,651	0	1,397	0	0	...3.500	2.957	MON	13,020	156,230	02/13/2020	03/01/2050
81748M-AA-6	Sequoia Mortgage Trust 2-SEMT 2020-1 A1			4	.. 1.A	3,048,052	..88.7687	2,644,965	2,979,614	3,049,735	0	(2,844)	0	0	...3.500	3.134	MON	8,691	104,284	01/08/2020	02/01/2050
81749N-AB-1	Sequoia Mortgage Trust 2-SEMT 2024-8 A2			4	.. 1.A	13,330,018	..97.3119	13,086,203	13,447,685	13,334,923	0	4,905	0	0	...5.500	5.930	MON	61,635	246,541	08/09/2024	09/01/2054
81749N-AV-7	Sequoia Mortgage Trust 2-SEMT 2024-8 A20			4	.. 1.A	12,110,235	..96.0822	11,812,973	12,294,654	12,117,908	0	7,673	0	0	...5.500	6.241	MON	56,351	225,402	08/09/2024	09/01/2054
83611M-HM-3	Soundview Home Loan Trus-SVHE 2005-B M2			4	.. 1.A FM	193,562	..90.3347	320,098	354,347	297,368	0	44,191	0	0	...6.225	6.115	MON	7,940	(2,797)	03/27/2008	05/01/2035
85571R-AA-8	Starwood Mortgage Reside-STAR 2022-3 A1			4	.. 1.A FE	3,914,036	..96.0419	3,784,455	3,940,420	3,940,420	0	419	0	0	...4.161	4.489	MON	2,733	179,261	04/28/2022	03/01/2067
85571R-AB-6	Starwood Mortgage Reside-STAR 2022-3 A2			4	.. 1.C FE	10,053,370	..92.1398	9,479,743	10,288,437	10,114,614	0	15,086	0	0	...4.161	4.645	MON	35,675	428,079	04/28/2022	03/01/2067
85571R-AC-4	Starwood Mortgage Reside-STAR 2022-3 A3			4	.. 1.F FE	9,361,856	..90.5750	8,702,740	9,608,321	9,425,983	0	15,799	0	0	...4.161	4.705	MON	33,317	399,781	04/28/2022	03/01/2067
85573J-AA-4	Starwood Mortgage Reside-STAR 2021-3 A1			4	.. 1.A	3,948,900	..83.0052	3,538,776	4,263,320	3,992,330	0	2,006	0	0	...1.127	2.624	MON	4,004	48,046	05/03/2022	06/01/2056
85573T-AA-2	Starwood Mortgage Reside-STARWOOD MORTGA			4	.. 1.A FE	34,847,024	..86.3296	30,083,782	34,847,603	34,847,335	0	(1)	0	0	...2.447	2.447	MON	71,060	852,666	01/26/2022	12/01/2066
85573T-AB-0	Starwood Mortgage Reside-STARWOOD MORTGA			4	.. 1.C FE	20,626,777	..72.2281	14,898,480	20,627,000	20,626,597	0	15	0	0	...3.040	3.040	MON	52,255	627,061	01/26/2022	12/01/2066
85573T-AC-8	Starwood Mortgage Reside-STARWOOD MORTGA			4	.. 1.F FE	10,999,665	..69.0073	7,590,800	11,000,925	10,999,629	0	12	0	0	...3.291	3.291	MON	30,168	362,010	01/26/2022	12/01/2066
85573U-AZ-5	Starwood Mortgage Reside-STAR 2022-2 A3			4	.. 1.E	8,750,981	..73.0270	6,390,592	8,751,000	8,750,991	0	1	0	0	...3.875	3.875	MON	28,258	339,101	03/04/2022	02/01/2067
863572-LV-3	Structured Asset Securit-SASC 1996-4 A			4	.. 1.A FM	5,993	..99.1777	6,340	6,393	6,291	0	74	0	0	...7.103	10.386	MON	38	453	09/09/2008	09/01/2031
863579-C3-0	Structured Adjustable Ra-SARM 2005-21 6A			4	.. 1.A FM	529,101	..92.7743	559,122	602,670	567,409	0	19,938	0	0	...4.113	6.899	MON	6,904	24,359	02/10/2016	11/01/2035
863579-JB-0	Structured Adjustable Ra-SARM 2005-22 1A			4	.. 1.E FM	285,037	..76.4530	251,440	281,198	251,198	0	33,525	37,048	0	...5.183	10.207	MON	11,070	(944)	01/04/2017	12/01/2035
863579-RP-5	Structured Adjustable Ra-SARM 2005-11 1A			4	.. 1.A FM	558,078	..82.6305	525,519	635,986	539,141	0	53,941	54,607	0	...5.033	8.509	MON	5,662	38,552	11/18/2016	05/01/2035
863579-SU-3	Structured Adjustable Ra-SARM 2005-12 3A			4	.. 4.C FM	167,799	..88.8832	194,183													

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
86358R-YB-7	Structured Asset Securit-SASC 2002-AL1 A	..0..	4	.....	..6. *	94,310	..64.0055	85,538	133,641	85,538	5,328	(9,785)	0	0	0.000	(9.333)	N/A	0	0	12/04/2002	02/01/2032
86359A-ME-0	Structured Asset Securit-SASC 2003-AL1 A .....	.....	4	.....	..6. *	84,569	..98.9150	95,929	96,982	94,931	0	2,235	0	0	3.357	9.297	MON	271	3,251	06/28/2010	04/01/2031
86359A-MG-5	Structured Asset Securit-SASC 2003-AL1 A	..0..	4	.....	..6. *	32,874	..97.3042	45,415	46,674	45,415	106	1,266	0	0	0.000	6.642	N/A	0	0	02/05/2003	04/01/2031
86359A-WR-0	Structured Asset Securit-SASC 2003-AL2 A .....	.....	4	.....	..6. *	766,698	..95.1502	840,609	883,455	796,835	0	9,821	0	0	3.357	10.274	MON	2,471	29,632	10/19/2015	01/01/2031
86359A-WT-6	Structured Asset Securit-SASC 2003-AL2 A	..0..	4	.....	..6. *	146,817	..88.1004	166,375	188,847	163,194	0	3,174	0	0	0.000	9.061	N/A	0	0	05/20/2003	01/25/2031
86359B-AU-2	Structured Asset Securit-SASC 2005-4XS 1 .....	.....	4	.....	..1.A FM	1,069,868	113.2265	1,295,587	1,144,244	1,144,244	0	910	0	0	5.830	8.664	MON	11,188	57,574	10/18/2012	03/01/2035
86359B-LE-9	Structured Adjustable Ra-SARM 2004-2 4A1 .....	.....	4	.....	..1.A FM	185,262	..94.1775	181,037	192,230	189,075	0	417	0	0	5.792	5.466	MON	1,879	11,390	08/13/2013	03/01/2034
86359F-AB-8	Structured Asset Securit-SASC 2006-S2 A2 .....	.....	4	.....	..1.A FM	88,578	..33.0878	97,696	113,927	96,742	0	(10,041)	0	0	6.000	5.129	MON	685	3,054	12/28/2007	06/25/2036
86359L-NA-3	Structured Asset Securit-SAMI 2005-AR6 2 .....	.....	4	.....	..1.A FM	776,550	..97.3148	1,005,844	1,103,345	930,860	0	(156,423)	0	0	5.073	6.431	MON	884	56,539	12/12/2012	09/25/2045
86359L-NA-3	Structured Asset Mortgage-SAMI 2005-AR6 2 .....	.....	4	.....	..2.C FM	0	..97.3148	67,873	0	65,151	0	(4,076)	0	0	5.073	5.730	MON	60	3,815	05/31/2016	09/25/2045
86360B-AG-3	Structured Adjustable Ra-SARM 2006-4 4A1 .....	.....	4	.....	..1.A FM	1,351,667	..67.4430	1,137,848	1,687,126	1,243,829	0	88,597	126,407	0	3.874	10.750	MON	13,242	81,365	08/03/2016	05/01/2036
86360B-AJ-7	Structured Adjustable Ra-SARM 2006-4 5A1 .....	.....	4	.....	..1.A FM	645,763	..70.5793	556,638	788,670	583,382	0	157,937	156,320	0	4.984	8.265	MON	9,507	51,490	09/27/2012	05/01/2036
86363G-AF-1	Structured Adjustable Ra-SARM 2007-3 3A1 .....	.....	4	.....	..1.A FM	1,524,909	..44.7088	1,153,683	2,580,438	1,087,294	0	(72,474)	0	0	4.783	11.671	MON	17,679	105,274	12/29/2021	04/01/2047
872225-AD-9	TBW Mortgage-Backed Trus-TBW 2006-5 A3 .....	.....	4	.....	..1.A FM	7,456,756	..85.7053	7,037,668	8,211,471	8,047,415	0	272,225	0	0	6.450	6.793	MON	134,589	178,433	12/29/2021	11/01/2036
87222E-AD-3	TBW Mortgage-Backed Trus-TBW 2007-1 A2 .....	.....	4	.....	..1.A FM	891,015	..21.5606	650,670	3,017,863	710,233	0	(36,889)	58,700	0	4.753	17.605	MON	2,391	31,250	01/10/2022	03/25/2037
87222E-AC-2	TBW Mortgage-Backed Trus-TBW 2007-1 A3 .....	.....	4	.....	..1.A FM	1,017,576	..22.7576	638,603	2,806,114	794,291	0	60,283	103,710	0	6.380	5.940	MON	29,879	28,292	01/10/2022	03/01/2037
872635-AC-1	TRK 2022-INV1 Trust-TRK 2022-INV1 A3 .....	.....	4	.....	..1.B	4,700,831	..80.9378	3,804,885	4,701,000	4,700,885	0	13	0	0	3.699	3.699	MON	14,491	173,890	02/02/2022	02/01/2057
87267T-AD-3	TRK 2021-INV2 Trust-TRK 2021-INV2 M1 .....	.....	4	.....	..1.F	7,304,985	..75.8745	6,069,962	8,000,000	7,460,330	0	51,888	0	0	3.280	4.394	MON	21,867	262,400	06/08/2022	11/01/2056
881561-CH-5	Terwin Mortgage Trust Se-TMTS 2003-6HE M .....	.....	4	.....	..1.A FM	205,582	104.3100	226,175	216,830	216,830	0	0	0	0	5.503	2.646	MON	9,110	2,912	12/19/2018	11/25/2033
881561-LE-2	Terwin Mortgage Trust Se-TMTS 2004-11HE .....	.....	4	.....	..1.A FM	144,665	..98.5145	177,867	180,549	172,783	0	(24,953)	0	0	5.233	7.231	MON	157	11,142	09/24/2010	10/25/2035
881561-LR-3	Terwin Mortgage Trust 20-TMTS 2004-19HE .....	.....	4	.....	..1.A FM	144,942	..98.0318	192,991	196,866	187,351	0	(28,364)	0	0	5.193	7.193	MON	170	13,229	09/15/2010	10/25/2034
881561-LS-1	Terwin Mortgage Trust 20-TMTS 2004-19HE .....	.....	4	.....	..1.A FM	276,627	..97.9569	341,982	349,115	348,969	0	146	0	0	5.578	6.027	MON	325	29,946	03/28/2012	10/25/2034
881561-VY-7	Terwin Mortgage Trust Se-TMTS 2005-12AL .....	.....	4	.....	..1.A FM	1,718,322	..94.5078	1,681,918	1,779,662	1,734,215	0	(15,047)	0	0	4.175	5.263	MON	12,462	69,646	03/08/2017	07/01/2036
88156E-AB-2	Terwin Mortgage Trust 20-TMTS 2006-17HE .....	.....	4	.....	..1.A FM	950,717	121.7023	1,340,950	1,101,828	1,138,121	0	(124,630)	0	0	4.853	17.618	MON	973	78,922	10/19/2016	01/25/2038
88157V-AB-3	Terwin Mortgage Trust 20-TMTS 2007-6ALT .....	.....	4	.....	..1.A FM	832,819	..75.5842	1,210,537	1,601,574	1,178,006	0	(220,799)	0	0	5.053	6.693	MON	8,680	18,674	04/30/2010	08/25/2038
885220-DX-8	Thornburg Mortgage Secur-TMST 2003-4 M1 .....	.....	4	.....	..1.A FM	239,432	..96.8917	274,544	283,351	264,978	0	(28,197)	0	0	5.103	8.376	MON	241	22,920	02/09/2011	09/25/2043
885220-GB-3	Thornburg Mortgage Secur-TMST 2004-4 1A .....	.....	4	.....	..1.A FM	215,805	..92.1345	208,472	226,270	221,072	0	178	0	0	5.033	5.193	MON	1,190	11,515	01/03/2019	12/25/2044
885220-GK-3	Thornburg Mortgage Secur-TMST 2004-4 5A .....	.....	4	.....	..1.A FM	1,110,656	..87.9985	1,027,448	1,167,575	1,151,715	0	31,089	0	0	3.031	4.683	MON	6,048	35,383	09/12/2013	12/01/2044
885220-HM-8	Thornburg Mortgage Secur-TMST 2005-2 A1 .....	.....	4	.....	..1.A FM	1,030,209	..93.9498	967,275	1,029,566	1,029,566	0	637	0	0	5.819	5.369	MON	6,146	57,453	04/04/2019	07/25/2045
885220-KW-2	Thornburg Mortgage Secur-TMST 2006-2 3B1 .....	.....	4	.....	..1.A FM	1,779,235	..86.3713	1,571,619	1,819,608	1,681,660	0	45,042	19,640	0	4.483	4.918	MON	14,275	75,591	12/11/2018	04/01/2055
89171U-AG-4	Towd Point Mortgage Trus-TPMT 2015-4 M2 .....	.....	4	.....	..1.A	1,674,966	..99.3458	1,683,045	1,694,129	1,693,537	0	2,204	0	0	3.750	4.076	MON	5,294	62,613	03/28/2017	04/01/2055
89171V-AF-4	Towd Point Mortgage Trus-TPMT 2015-5 B2 .....	.....	4	.....	..1.A	15,612,416	..95.2301	15,236,814	16,000,000	15,807,899	0	33,997	0	0	4.033	4.260	MON	107,286	643,804	10/05/2018	05/01/2055
89172R-AD-7	Towd Point Mortgage Trus-TPMT 2015-6 M2 .....	.....	4	.....	..1.A	11,434,426	..98.1472	11,615,723	11,835,000	11,742,770	0	39,479	0	0	3.750	4.234	MON	36,984	443,813	10/20/2018	04/01/2055
89172Y-AD-2	Towd Point Mortgage Trus-TPMT 2016-3 M2 .....	.....	4	.....	..1.A	5,750,592	..98.7069	5,672,683	5,747,000	5,745,385	0	1,206	0	0	4.000	4.028	MON	19,157	229,880	05/02/2017	04/01/2056
89173H-AC-0	Towd Point Mortgage Trus-TPMT 2017-2 M1 .....	.....	4	.....	..1.A	1,780,875	..97.3093	1,751,568	1,800,000	1,794,679	0	2,029	0	0	3.750	3.920	MON	5,625	67,500	03/08/2019	04/01/2057
89175V-AC-7	Towd Point Mortgage Trus-TPMT 2018-2 M1 .....	.....	4	.....	..1.A	35,720,000	..92.7655	35,250,886	38,000,000	36,941,538	0	98,801	0	0	3.500	4.072	MON	110,833	1,330,000	10/05/2018	03/01/2058
89182Q-AB-1	Towd Point Mortgage Trus-TPMT 2024-CES4 .....	.....	4	.....	..1.C	6,109,876	..97.9750	5,986,269	6,110,000	6,109,892	0	16	0	0	5.173	5.174	MON	26,339	79,018	09/12/2024	09/01/2064
891947-AA-1	TOWD POINT MORTGAGE TRUS-TPMT 2024-CES6 .....	.....	4	.....	..1.A FE	2,952,258	100.0177	2,952,807	2,952,284	2,952,263	0	5	0	0	5.725	5.725	MON	14,085	14,085	11/20/2024	11/01/2064
924921-AD-1	Verus Securitization Tru-VERUS 2022-5 M1 .....	.....	4	.....	..2.B FE	6,931,828	..71.6867	5,752,142	8,024,000	7,175,528	0	96,049	0	0	3.826	5.635	MON	51,163	306,021	06/03/2022	04/01/2067
924925-AD-2	Verus Securitization Tru-VERUS 2024-7 A2 .....	.....	4	.....	..1.A	14,656,932	..99.1720	14,535,755	14,657,115	14,656,986	0	55	0	0	5.298	5.299	MON	64,711	194,133	09/11/2024	09/01/2069
924926-AD-0	Verus Securitization Tru-VERUS 2024-R1 A .....	.....	4	.....	..1.C FE	5,900,212	..99.1046	5,847,471	5,900,303	5,900,223	0	11	0	0	5.470	5.470	MON	26,896	53,791	10/18/2024	09/01/2069
924926-AE-8	Verus Securitization Tru-VERUS 2024-R1 A .....	.....	4	.....	..1.F FE	8,506,142	..99.3243	8,448,797	8,506,271	8,506,159	0	16	0	0	5.621	5.621	MON	39,845	79,690	10/18/2024	09/01/2069
92537M-AA-8	Verus Securitization Tru-VERUS 2019-INV3 .....	.....	4	.....	..1.A	4,106,399	..97.9407	4,067,595	4,153,122	4,150,958	0	1,082	0	0	3.692	3.767	MON	12,778	153,192	05/12/2022	11/01/2059
92538K-AB-9	Verus Securitization Tru-VERUS 2021-5 A2 .....	.....	4	.....	..1.A	3,452,588	..83.3889	3,435,139	4,119,419	3,552,896	0	45,817	0	0	1.218	5.068	MON	4,181	50,175	01/12/2023	09/01/2066
92538N-AC-1	Verus Securitization Tru-VERUS 2022-4 A3 .....	.....	4	.....	..1.B	1,717,109	..94.3957	1,658,717	1,757,195	1,719,551	0	2,441	0	0	4.740	5.396	MON	6,941	27,764	08/15/2024	04/01/2067

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Design- ation, NAIC Design- ation Modifier and SVO Admini- strative Symbol	Actual Cost			Rate Used to Obtain Fair Value	Fair Value												Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
92538N-AD-9	Verus Securitization Tru-VERUS 2022-4 M1			4	1.E	6,236,826	89.3228	5,792,582	6,485,000	6,356,093	0	41,718	0	0	4.778	5.593	MON	51,645	282,985	04/22/2022	04/01/2067
92538Q-AA-8	Verus Securitization Tru-VERUS 2021-7 A1			4	1.A	6,339,414	87.8386	6,026,054	6,860,373	6,529,159	0	65,048	0	0	1.829	3.809	MON	10,456	125,471	05/26/2022	10/01/2066
92539A-AA-2	Verus Securitization Tru-VERUS 2022-6 A1			4	1.A	4,674,061	98.3205	4,638,399	4,717,634	4,699,902	0	13,647	0	0	4.910	5.238	MON	19,303	231,627	06/21/2022	06/01/2067
92539A-AB-0	Verus Securitization Tru-VERUS 2022-6 A2			4	1.A	4,689,617	96.9516	4,655,054	4,801,419	4,724,221	0	10,896	0	0	4.910	5.528	MON	19,646	235,741	06/24/2022	06/01/2067
92539B-AB-8	Verus Securitization Tru-VERUS 2023-1 A2			4	1.A	2,545,666	99.8715	2,542,436	2,545,707	2,545,694	0	(13)	0	0	6.560	6.561	MON	13,917	166,973	01/11/2023	12/01/2067
92539G-AB-7	Verus Securitization Tru-VERUS 2023-3 A2			4	1.A	3,019,797	100.2785	3,028,247	3,019,836	3,019,819	0	9	0	0	6.438	6.439	MON	16,201	194,417	04/14/2023	03/01/2068
92539J-AA-3	Verus Securitization Tru-VERUS 2022-INV1			4	1.A	3,869,755	98.9544	3,829,363	3,869,827	3,869,827	0	0	0	0	5.041	5.527	MON	16,256	195,058	08/18/2022	08/01/2067
92539J-AB-1	Verus Securitization Tru-VERUS 2022-INV1			4	1.C	3,482,863	99.6196	3,469,640	3,482,890	3,482,890	0	0	0	0	5.802	6.286	MON	16,840	202,056	08/18/2022	08/01/2067
92539J-AC-9	Verus Securitization Tru-VERUS 2022-INV1			4	1.C	3,829,774	99.5757	3,853,457	3,869,877	3,869,877	0	19,969	0	0	5.830	6.326	MON	18,801	225,614	08/18/2022	08/01/2067
92539J-AD-7	Verus Securitization Tru-VERUS 2022-INV1			4	2.B	3,154,407	99.2284	3,373,765	3,400,000	3,220,349	0	28,424	0	0	5.815	7.036	MON	16,477	198,273	08/18/2022	08/01/2067
92539N-AA-4	Verus Securitization Tru-VERUS 2022-7 A1			4	1.A	3,877,516	98.9533	3,836,972	3,877,559	3,877,559	0	0	0	0	5.152	5.406	MON	16,648	199,752	07/28/2022	07/01/2067
92539N-AB-2	Verus Securitization Tru-VERUS 2022-7 A2			4	1.A	4,403,267	97.9512	4,367,861	4,459,222	4,423,198	0	6,876	0	0	5.350	5.694	MON	19,881	238,473	07/28/2022	07/01/2067
92539X-AB-0	Verus Securitization Tru-VERUS 2023-6 A2			4	1.A	2,725,467	101.1013	2,755,493	2,725,477	2,725,477	0	0	0	0	6.939	6.939	MON	15,760	189,121	09/07/2023	09/01/2068
92540N-AB-9	Verus Securitization Tru-VERUS 2024-INV2			4	1.A	5,664,201	99.5303	5,637,653	5,664,255	5,664,219	0	18	0	0	5.535	5.535	MON	26,126	104,506	08/14/2024	08/01/2069
92540P-AB-4	VERUS 2024-8-VERUS 2024-8 A2			4	1.A	6,838,474	99.6785	6,816,575	6,838,561	6,837,603	0	(871)	0	0	5.618	5.230	MON	32,016	64,032	10/09/2024	10/01/2069
92540R-AC-8	Verus Securitization Tru-VERUS 2024-9 A1			4	1.A FE	10,999,975	99.9998	10,999,975	11,000,000	11,000,000	0	25	0	0	5.438	5.438	MON	49,848	0	12/05/2024	11/01/2069
92540R-AD-6	Verus Securitization Tru-VERUS 2024-9 A2			4	1.C FE	14,229,768	99.9984	14,229,768	14,230,000	14,229,807	0	39	0	0	5.691	5.691	MON	67,486	0	12/05/2024	11/01/2069
92839H-AA-4	Vista Point Securitizati-VSTA 2024-CES1			4	1.A FE	6,612,010	101.0546	6,681,807	6,612,078	6,612,042	0	31	0	0	6.676	6.676	MON	36,785	257,496	05/10/2024	05/01/2054
92841W-AA-7	Vista Point Securitizati-VSTA 2024-CES3			4	1.A FE	7,999,955	99.9994	7,999,955	8,000,000	7,999,978	0	22	0	0	5.679	5.679	MON	37,860	0	12/10/2024	01/01/2055
929227-4T-0	WalMu Mortgage Pass-Throu-WAMU 2003-S4 2A			4	1.A FM	272,415	98.3730	266,898	271,312	271,717	0	46	0	0	5.500	5.456	MON	2,856	13,665	03/03/2016	06/01/2033
929227-R5-7	WalMu Mortgage Pass-Throu-WAMU 2003-AR5 A			4	3.A FM	2,729,552	98.8430	3,300,271	3,338,902	3,087,538	0	53,069	0	0	6.199	7.696	MON	34,743	190,087	03/23/2020	06/01/2033
92922F-3N-6	WalMu Mortgage Pass-Throu-WAMU 2005-AR12			4	1.A FM	1,910,400	88.8136	1,783,151	2,007,746	1,966,311	0	1,326	0	0	5.042	4.833	MON	16,992	95,025	06/02/2020	10/01/2035
92922F-3Q-9	WalMu Mortgage Pass-Throu-WAMU 2005-AR12			4	1.B FM	61,659	95.1834	60,310	63,362	63,362	0	11	0	0	5.793	5.455	MON	614	3,032	01/02/2019	09/01/2035
92922F-7C-6	WalMu Mortgage Pass-Throu-WAMU 2005-AR16			4	1.A FM	66,464	78.9994	62,176	78,704	63,390	0	1,468	0	0	4.665	10.969	MON	812	10,579	08/24/2016	12/01/2035
92922F-8T-8	WalMu Mortgage Pass-Throu-WAMU 2005-AR18			4	1.A FM	1,569,875	87.4784	1,417,602	1,620,516	1,584,182	0	17,540	0	0	4.552	5.103	MON	19,965	70,910	01/10/2019	01/01/2036
92922F-GY-8	WalMu Mortgage Pass-Throu-WAMU 2003-S11 3			4	1.A FM	90,472	100.9444	91,127	90,275	90,275	0	(1)	0	0	6.003	6.321	MON	90	6,175	01/27/2017	11/25/2033
92922F-J5-8	WalMu Mortgage Pass-Throu-WAMU 2005-AR6 2			4	1.A FM	1,927,785	95.9110	2,223,475	2,318,269	2,240,119	0	(202,441)	0	0	5.133	5.838	MON	12,799	109,729	02/16/2016	04/25/2045
92925C-CC-4	WalMu Mortgage Pass-Throu-WAMU 2006-AR1 1			4	1.A FM	694,235	84.4738	726,250	859,734	734,680	0	(1,966)	0	0	5.895	6.443	MON	4,224	40,202	04/30/2008	01/01/2046
92925G-AD-5	WalMu Mortgage Pass-Throu-WAMU 2006-AR16			4	3.C FM	983,503	82.8191	865,656	1,045,238	1,033,489	0	10,536	0	0	4.541	4.939	MON	16,579	35,146	06/14/2019	12/01/2036
92925V-AF-7	WalMu Mortgage Pass-Throu-WAMU 2007-HY1 2			4	1.A FM	1,700,600	92.2626	1,752,740	1,899,729	1,375,268	0	144,654	542,605	0	4.216	14.740	MON	33,613	72,298	05/20/2016	02/01/2037
92925V-AP-5	WalMu Mortgage Pass-Throu-WAMU 2007-HY1 5			4	4.C FM	1,048,915	94.1497	1,133,862	1,204,318	1,118,428	0	43,385	0	0	4.172	7.394	MON	12,220	48,154	12/29/2021	02/01/2037
92927X-AC-8	WAMU MORTGAGE PASS-THROU-SERIES 2007-HY6			4	4.B FM	1,607,655	88.7428	1,651,128	1,860,577	1,780,355	0	27,635	0	0	4.293	5.367	MON	39,795	65,647	04/07/2020	06/01/2037
92979D-AC-9	Wachovia Mortgage Loan T-WMLT 2007-A 2A1			4	1.A FM	2,093,330	94.1021	2,115,294	2,093,418	2,047,871	0	148,973	53,996	0	5.332	6.953	MON	9,988	112,496	05/12/2020	03/01/2037
92990G-AD-5	WalMu Mortgage Pass-Throu-WAMU 2007-HY5 2			4	1.A FM	925,945	96.8113	936,669	967,520	948,165	0	22,418	0	0	4.419	8.938	MON	7,142	43,947	12/29/2021	05/01/2037
92990G-AG-8	WalMu Mortgage Pass-Throu-WAMU 2007-HY5 2			4	4.C FM	5,686,097	85.0896	6,246,101	7,340,618	6,581,010	0	232,087	0	0	4.673	7.487	MON	85,932	410,512	02/17/2016	05/01/2037
92990G-AJ-2	WalMu Mortgage Pass-Throu-WAMU 2007-HY5 3			4	1.A FM	836,461	86.9029	799,400	919,877	882,733	0	16,793	0	0	3.879	6.786	MON	13,725	(20,909)	04/14/2016	05/01/2037
933636-AA-0	WalMu Mortgage Pass-Throu-WAMU 2007-HY4 1			4	4.B FM	981,956	87.1677	962,312	1,103,977	1,105,205	0	15,457	0	0	3.752	5.832	MON	30,484	32,091	08/04/2016	04/01/2037
933636-AG-7	WalMu Mortgage Pass-Throu-WAMU 2007-HY4 3			4	3.B FM																

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
93363P-AD-2	Walnu Mortgage Pass-Throu-WAMU 2006-AR14			4	1.A FM	91,028	.90.0418	89,566	99,471	94,455	.0	1,754	.0	.0	4.228	3.195	MON	718	4,239	10/06/2016	11/01/2036
93364F-AH-4	Walnu Mortgage Pass-Throu-WAMU 2007-HY7 3			4	5.A FM	1,147,425	.90.5804	1,029,170	1,136,195	1,179,490	.0	4,123	.0	.0	4.486	5.121	MON	24,565	41,305	12/29/2021	07/01/2037
939336-TX-1	Washington Mutual MSC Mo-WAMMS 2003-MS7			4	1.A FM	42	.90.9837	59	65	65	.0	.0	.0	.0	0.000	0.000	N/A	0	0	01/25/2008	03/01/2033
939336-X9-9	Walnu Mortgage Pass-Throu-WAMU 2005-AR1 A			4	1.A FM	1,429,884	.93.0824	1,508,182	1,620,265	1,444,385	.0	(53,043)	.0	.0	5.253	6.992	MON	9,187	79,675	01/22/2016	01/25/2045
93934F-KP-6	Washington Mutual Mortga-WIMALT 2006-1 3A			4	4.C FM	342,421	.97.0348	331,304	341,428	363,277	.0	2,301	.0	.0	5.750	5.868	MON	15,256	13,669	12/29/2021	02/01/2036
93934F-MD-1	Washington Mutual Mortga-WIMALT 2006-2 2C			4	5.A FM	1,605,316	.63.7288	1,356,049	2,127,844	1,422,610	.0	(69,163)	.0	.0	6.500	6.487	MON	30,351	129,550	12/29/2021	03/01/2036
93934N-AC-9	Washington Mutual Mortga-WIMALT 2006-5 1A			4	4.C FM	422,505	.73.5960	333,673	453,385	409,568	.0	(9,952)	11,453	.0	6.000	4.282	MON	10,675	26,860	12/29/2021	07/01/2036
93934N-AR-6	Washington Mutual Mortga-WIMALT 2006-5 2C			4	1.A FM	143,694	.65.8559	119,786	181,891	104,259	.0	34,777	.0	.0	5.053	16.391	MON	2,028	10,774	04/23/2008	07/25/2036
93936N-AA-1	Washington Mutual Mortga-WIMALT 2007-4 1A			4	5.A FM	580,298	.93.6372	525,799	561,528	582,267	.0	13,978	.0	.0	5.500	6.647	MON	7,382	28,394	12/29/2021	06/01/2037
94984D-AC-8	Wells Fargo Mortgage Bac-WIFMBS 2006-AR13			4	1.A FM	231,392	.98.1505	243,977	248,574	144,664	.0	18,981	.0	.0	7.475	27.978	MON	5,143	16,276	02/24/2016	09/01/2036
94985A-AA-7	Wells Fargo Mortgage Bac-WIFMBS 2006-AR10			4	4.A FM	135,151	.97.1044	134,678	138,694	141,543	.0	1,592	417	.0	7.610	7.610	MON	1,673	11,827	10/18/2016	10/01/2036
94986M-AA-0	Wells Fargo Mortgage Bac-WIFMBS 2007-AR15			4	4.B FM	448,633	.93.2448	415,987	446,124	448,048	.0	(22,212)	.0	.0	6.360	2.121	MON	7,026	24,339	08/24/2010	01/01/2038
94986M-AF-9	Wells Fargo Mortgage Bac-WIFMBS 2007-AR10			4	1.A FM	1,015,254	.96.8427	1,191,758	1,230,611	1,080,826	.0	4,029	.0	.0	7.067	7.067	MON	30,948	64,252	05/05/2020	01/01/2038
95002F-AA-2	Wells Fargo Mortgage Bac-WIFMBS 2019-4 A1			4	1.A	1,126,598	.88.2592	976,925	1,106,881	1,136,464	.0	496	.0	.0	3.500	3.089	MON	3,228	38,739	11/19/2019	09/01/2049
95002K-AA-1	Wells Fargo Mortgage Bac-WIFMBS 2020-1 A1			4	1.A	2,540,218	.83.1757	2,088,048	2,510,407	2,554,835	.0	239	.0	.0	3.000	2.759	MON	13,432	69,016	02/14/2020	12/01/2049
97652P-AL-5	WinWater Mortgage Loan T-WIN 2014-1 A11			4	1.A	588,818	.93.2011	552,237	592,522	589,186	.0	325	.0	.0	3.500	3.640	MON	1,728	20,738	06/19/2014	06/01/2044
Q3974A-AC-9	FIRSTMAC MORTGAGE FUNDIN-FMACB 2024-5PP	B			1.A FE	9,775,500	100.0000	9,277,500	15,000,000	9,277,500	.0	.0	.0	(498,000)	5.835	5.835	MON	50,307	.0	11/21/2024	03/19/2056
Q5S46A-AC-8	Liberty Funding Pty Ltd-LBRTY 2024-2 A2	B			1.A FE	5,427,000	100.0548	5,012,594	8,100,000	5,009,850	.0	.0	.0	(417,150)	5.773	5.772	MON	53,826	.0	10/17/2024	08/25/2056
Q5S46A-AD-6	Liberty Funding Pty Ltd-LBRTY 2024-2 B	B			1.B FE	623,100	100.1635	576,145	930,000	575,205	.0	.0	.0	(47,895)	5.973	5.972	MON	3,484	.0	10/17/2024	08/25/2056
Q5S46A-AJ-3	Liberty Funding Pty Ltd-LBRTY 2024-2 C	B			1.E FE	1,005,000	100.1706	929,333	1,500,000	927,750	.0	.0	.0	(77,250)	6.173	6.172	MON	5,807	.0	10/17/2024	08/25/2056
Q738AB-AC-5	Pepper Residential Secur-PEPAU 40 A2	B			1.A FE	3,946,800	100.3031	3,722,246	6,000,000	3,711,000	.0	.0	.0	(235,800)	5.923	5.923	MON	82,988	.0	08/08/2024	11/12/2065
Q738AB-AH-4	Pepper Residential Secur-PEPAU 40 B	B			1.C FE	1,447,160	100.4388	1,366,670	2,200,000	1,360,700	.0	.0	.0	(86,460)	6.123	6.123	MON	31,458	.0	08/08/2024	11/12/2065
Q7444Z-AC-0	SAPPHIRE XXIX SERIES 202-SAPP 2024-2 A2	B			1.A FE	2,594,260	100.0087	2,350,504	3,800,000	2,350,300	.0	.0	.0	(243,960)	5.779	5.779	MON	33,457	.0	09/25/2024	01/14/2066
Q7444Z-AD-8	SAPPHIRE XXIX SERIES 202-SAPP 2024-2 B	B			1.C FE	3,857,255	100.0833	3,497,434	5,650,000	3,494,525	.0	.0	.0	(362,730)	6.029	6.029	MON	51,899	.0	09/25/2024	01/14/2066
Q744GD-AD-1	Crimson Bond Trust 2024-CRIMS 2024-1 A2	B			1.A FE	3,521,880	100.0000	3,339,900	5,400,000	3,339,900	.0	.0	.0	(181,980)	5.783	5.785	MON	12,172	.0	11/29/2024	02/15/2056
Q744GD-AJ-8	Crimson Bond Trust 2024-CRIMS 2024-1 B	B			1.C FE	978,300	100.0000	927,750	1,500,000	927,750	.0	.0	.0	(50,550)	6.083	6.085	MON	3,556	.0	11/29/2024	02/15/2056
Q7S0DQ-AC-9	RedZed Trust Series 2024-REDZE 2024-3 A2	B			1.A FE	1,591,680	100.0199	1,484,695	2,400,000	1,484,400	.0	.0	.0	(107,288)	5.772	5.772	MON	14,790	.0	10/24/2024	03/09/2056
Q7S0DQ-AE-5	RedZed Trust Series 2024-REDZE 2024-3 C	B			1.F FE	795,840	.99.9497	741,826	1,200,000	742,200	.0	.0	.0	(53,640)	6.222	6.222	MON	7,972	.0	10/24/2024	03/09/2056
Q7S0DQ-AH-8	RedZed Trust Series 2024-REDZE 2024-3 B	B			1.C FE	1,989,600	.99.9497	1,854,567	3,000,000	1,855,500	.0	.0	.0	(134,100)	6.072	6.072	MON	19,449	.0	10/24/2024	03/09/2056
Q7S1E6-AC-0	RESIMAC Premier Series 2-RESI 2024-2 AB	B			1.A FE	2,740,000	100.1780	2,478,404	4,000,000	2,474,000	.0	.0	.0	(266,000)	0.000	0.000	MON	0	.0	10/03/2024	02/12/2056
Q7S1E6-AD-8	RESIMAC Premier Series 2-RESI 2024-2 B	B			1.C FE	1,712,500	100.1828	1,549,076	2,500,000	1,546,250	.0	.0	.0	(166,250)	0.000	0.000	MON	0	.0	10/03/2024	02/12/2056
Q7S1E6-AF-3	RESIMAC Premier Series 2-RESI 2024-2 D	B			2.B FE	856,250	100.1791	774,510	1,250,000	773,125	.0	.0	.0	(83,125)	0.000	0.000	MON	0	.0	10/03/2024	02/12/2056
Q7S1E6-AJ-5	RESIMAC Premier Series 2-RESI 2024-2 C	B			1.F FE	1,027,500	100.1761	929,384	1,500,000	927,750	.0	.0	.0	(99,750)	0.000	0.000	MON	0	.0	10/03/2024	02/12/2056
Q7S4CQ-AB-1	Resimac Bastille Trust S-RESI 2024-2NC A	B			1.A FE	5,285,600	100.3729	4,966,452	8,000,000	4,948,000	.0	.0	.0	(337,600)	5.915	5.915	MON	106,559	.0	08/14/2024	03/06/2056
000000-00-0	Merrion Square Residenti-MERRI 2024-1A A	B			1.A FE	11,769,936	.99.6600	11,310,985	10,966,831	11,274,207	.0	(8,449)	.0	(487,279)	3.901	3.563	MON	137,692	121,312	07/03/2024	03/24/2081
000000-00-0	Merrion Square Residenti-MERRI 2024-1A B	B			1.C FE	2,090,694	.99.5900	2,009,781	1,950,000	2,002,600	.0	(1,536)	.0	(86,558)	4.551	4.181	MON	27,264	24,538	07/03/2024	03/24/2081
000000-00-0	Merrion Square Residenti-MERRI 2024-1A C	B			1.G FE	1,670,443	.98.7900	1,610,245	1,575,000	1,601,101	.0	(152)	.0	(69,191)	5.151	5.214	MON	24,710	22,035	07/03/2024	03/24/2081
126694-MH-8	CHL Mortgage Pass-Throu-CIHL 2005-HYB7			4	1.A FM	1,757,370	.88.2176	1,937,886	2,196,713	2,047,541	.0	66,886	.0	.0	4.620	7.730	MON	44,155	71,558	04/08/2020	11/01/2035
83612T-AR-3	Soundview Home Loan Trus-SVHE 2007-OPT1			4	6. FE	850,598	.0.1551	92,774	59,819,277	92,359	.0	(13,862)	.0	.0	0.049	13.610	MON	489	26,300	10/04/2007	06/25/2037
23248A-AJ-0	COUNTRYWIDE ASSET-BACKED-SERIES 2007-SEA				1.A FM	429,901	.98.8096	685,135	693,388	672,318	.0	(226,410)	.0	.0	4.743	5.705	MON	3,624	41,112	06/29/2011	05/25/2047
67098A-AM-1	OBX 2019-INV1 Trust-OBX 2019-INV1 A12				1.A	4,677,351	.93.8659	4,798,290	5,111,859	4,497,088	.0	(434,963)	.0	.0	4.000	6.276	MON	17,363	204,456	03/24/2020	11/01/2048
67113A-AP-5	OBX 2019-EXP3 Trust-OBX 2019-EXP3 1A8			4	1.A	181,253	.90.0344	162,935	180,970	181,484	.0	41	.0	.0	3.500	3.460	MON	529	6,333	03/27/2020	10/01/2059
75971F-AY-9	RENAISSANCE HOME EQUITY -RAINC 2007-3W AF				1.A FM	3,294,772	.73.9000	3,381,717	4,576,072	3,563,006	.0	(17,517)	.0	.0	3.269	5.251	MON	24,931	151,969	09/21/2010	09/01/2037
Q7325V-AE-4	Bayview Financial Acquis-BATV 2007-A 1A4				1.A FM	8,457,280	102.4891	10,318,793	10,068,191	9,329,044	.0	(32,678)	.0	.0	7.225	10.266	MON	247,753	471,051	03/23/2020	05/01/2037
00077B-4W-0	ABN Amro Mortgage Corp-AMAC 2002-9 A30			4	1.A FM	4,216	.98.9685	4,138	4,181	4,074	.0	.0	.0	.0	5.750	6.773	MON	20	240	02/03/2003	12/01/2032

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
000780-NL-6	ABN Amro Mortgage Corp-AMAC 2003-12 2A	4 .....	.....	.....	1.A FM	4,402	98.1189	4,261	4,343	4,278	0	6	0	0	5.500	5.975	MON	20	239	01/21/2004	12/01/2033
05953Y-AH-4	Banc of America Funding -BAFC 2007-4 TA1	4 .....	.....	.....	1.A FM	209,517	84.6710	202,997	239,748	192,320	0	(3,391)	0	0	5.774	9.458	MON	5,646	11,262	04/25/2008	05/01/2037
94986C-AA-2	Wells Fargo Mortgage Bac-WFMS 2007-AR4	4 .....	.....	.....	1.A FM	186,797	93.2557	182,920	196,149	25,594	0	14,086	(758)	0	6.989	171.437	MON	2,435	13,749	12/29/2021	08/01/2037
75116C-ET-9	RESIDENTIAL ACCREDIT LOA-SERIES 2007-OS6	4 .....	.....	.....	1.A FM	219,267	79.4196	181,010	227,916	164,775	0	7,082	0	0	5.750	10.865	MON	3,664	13,091	12/29/2021	04/01/2037
05990E-AD-2	Banc of America Funding -BAFC 2012-R6 2A	4 .....	.....	.....	2.B FM	1,747,783	88.0721	1,768,795	2,008,349	1,966,499	0	(203,564)	0	0	4.497	6.009	MON	9,114	90,169	01/24/2017	07/26/2036
92977Y-BW-0	Wachovia Mortgage Loan T-WMLT 2005-B 2A4	4 .....	.....	.....	1.A FM	184,921	96.8735	193,074	199,306	193,464	0	1,930	0	0	7.549	8.955	MON	2,467	13,182	07/20/2020	10/01/2035
36157N-FL-3	GE Mortgage Services LLC-GECMS 1997-HE4	4 .....	.....	.....	1.A FM	39,515	39.5143	15,208	38,487	(3,935)	0	(17,896)	0	0	7.170	20.774	MON	674	1,410	04/01/2004	12/01/2028
05535D-BG-8	BlackRock Capital Financ-BCF 1997-R2 3B1	4 .....	.....	.....	1.A FM	525,946	36.3449	198,240	545,440	226,054	0	0	0	0	7.000	7.000	MON	38,181	0	06/19/1997	12/01/2035
12489W-JQ-8	Credit-Based Asset Servi-CBASS 2004-CB4	4 .....	.....	.....	1.A FM	5,004	95.5043	4,791	5,017	4,947	0	(36)	0	0	3.731	4.178	MON	16	190	01/19/2017	05/01/2035
17307G-RE-0	Citigroup Mortgage Loan -CMLT1 2005-2 1A	4 .....	.....	.....	1.A FM	194,060	93.1009	194,075	208,457	207,042	0	1,758	0	0	4.673	4.599	MON	812	9,372	06/17/2016	05/01/2035
17307G-VN-5	Citigroup Mortgage Loan -CMLT1 2005-WF2	4 .....	.....	.....	1.A FM	6,351	86.1128	6,569	7,629	1,311	0	(819)	0	0	5.749	154.432	MON	74	405	07/07/2011	08/01/2035
17307G-W9-5	Citigroup Mortgage Loan -CMLT1 2005-11 A	4 .....	.....	.....	1.A FM	51,936	99.3210	53,299	53,664	52,913	0	(868)	0	0	6.310	7.308	MON	282	4,010	12/14/2016	11/01/2035
22541Q-CZ-3	Credit Suisse First Bost-CSFB 2003-AR15	4 .....	.....	.....	1.A FM	395,201	117.7843	465,484	395,201	404,735	0	1,626	0	0	6.903	15.084	MON	455	24,653	03/15/2017	06/25/2033
22541Q-XS-6	Credit Suisse First Bost-CSFB 2003-23 DB	4 .....	.....	.....	1.A FM	1,387,283	97.4701	1,351,341	1,386,416	1,383,635	0	(390)	0	0	5.847	5.903	MON	14,942	74,163	12/19/2018	09/01/2033
225458-2Y-3	Credit Suisse First Bost-CSFB 2005-8 9A1	4 .....	.....	.....	3.C FM	1,111,768	68.1684	878,279	1,288,395	981,382	0	(16,892)	54,457	0	5.250	4.888	MON	18,556	97,416	12/29/2012	09/01/2035
225458-L5-5	Credit Suisse First Bost-CSFB 2005-7 1A1	4 .....	.....	.....	3.C FM	512,075	74.5452	390,443	523,766	461,834	0	3,615	12,298	0	5.250	7.980	MON	6,981	23,151	01/10/2022	08/01/2035
2254W0-FJ-9	Credit Suisse First Bost-CSFB 2003-1 1A1	4 .....	.....	.....	2.B FM	162,017	98.8055	154,482	156,349	158,636	0	254	0	0	7.000	6.434	MON	912	10,943	11/02/2010	02/01/2033
57643A-J7-0	MASTR Alternative Loan T-MALT 2005-2 4A3	4 .....	.....	.....	1.A FM	456,777	98.4873	541,193	549,506	546,198	0	(86,277)	0	0	4.853	5.787	MON	606	29,854	07/09/2012	03/25/2035
78386N-BG-2	SACO I Inc-SACO 1999-3 1B1	4 .....	.....	.....	1.A FM	334,600	98.4180	338,238	343,675	340,162	0	(910)	0	0	4.949	5.164	MON	2,926	16,940	05/13/1999	04/01/2039
81745A-AB-3	Sequoia Mortgage Trust 2-SEMT 2013-5 A2	4 .....	.....	.....	1.A	2,111,445	88.8047	1,980,591	2,230,277	2,133,856	0	4,777	0	0	3.000	3.804	MON	5,602	66,903	03/17/2014	05/01/2043
81745J-AA-6	Sequoia Mortgage Trust 2-SEMT 2013-11 A1	4 .....	.....	.....	1.A	865,454	83.7293	813,460	877,242	867,478	0	602	0	0	3.500	3.736	MON	30,702	30,702	02/27/2014	09/01/2043
855541-AC-2	SUNTRUST ADJUSTABLE RATE-SERIES 2007-S1	4 .....	.....	.....	3.B FM	694,940	72.1980	536,492	743,085	597,588	0	(12,376)	28,629	0	6.581	5.195	MON	8,141	44,217	10/10/2012	01/01/2037
86359D-EY-9	STRUCTURED ASSET SECURIT-SASC 2005-RF2 A	4 .....	.....	.....	5.A FE	1,046,401	5.6710	193,147	3,405,869	194,506	0	(38,375)	0	0	0.751	(21.648)	MON	427	5,499	02/03/2015	04/25/2035
1029999999. Subtotal - Bonds - Industrial and Miscellaneous (Unaffiliated) - Residential Mortgage-Backed Securities						2,404,243,351	XXX	2,247,423,976	2,661,742,528	2,384,302,184	204,636	5,287,045	6,909,746	(4,092,548)	XXX	XXX	XXX	15,270,112	87,199,508	XXX	XXX
00110X-AD-6	AFN ABSPROPO01 LLC-SERIES 2021-1A CLASS .....	.....	.....	.....	1.F FE	2,938,068	68.3238	2,049,512	2,999,703	2,954,615	0	10,117	0	0	3.600	3.866	MON	3,300	107,989	03/09/2022	05/20/2051
03882L-AS-9	Arbor Multifamily Mortga-AMST 2022-MF-4 .....	.....	.....	.....	1.A	9,830,130	83.7223	8,372,230	10,000,000	9,874,372	0	15,579	0	0	3.285	3.549	MON	27,376	334,388	02/08/2022	02/01/2055
05359A-AG-8	Aventura Mall Trust-AVMT 2018-AVM C .....	.....	.....	.....	1.A	9,246,875	91.9143	9,191,428	10,000,000	9,524,717	0	119,533	0	0	4.112	5.671	MON	34,269	418,086	07/25/2022	07/01/2040
05359A-AJ-2	Aventura Mall Trust-SERIES 2018 AVM CLAS .....	.....	.....	.....	1.B	13,340,625	87.9326	13,189,895	15,000,000	13,947,665	0	260,084	0	0	4.112	6.414	MON	51,404	627,129	07/15/2022	07/01/2040
05490T-AA-0	BBCORE Trust 2015-GTP-BBCOR 2015-GTP A .....	.....	.....	.....	1.A	31,657,344	97.9291	30,113,207	30,750,000	30,812,956	0	(102,455)	0	0	3.966	3.619	MON	84,691	1,219,545	09/09/2015	08/06/2033
054976-AL-9	BBCMS Trust-BBCMS 2022-C17 C .....	.....	.....	.....	1.D	4,489,610	94.0173	4,230,777	4,500,000	4,491,568	0	873	0	0	5.450	5.480	MON	20,438	245,250	08/16/2022	09/01/2055
054976-AR-6	BBCMS Trust-BBCMS 2022-C17 D .....	.....	.....	.....	2.A	5,528,951	67.8165	5,539,930	8,169,000	5,992,999	0	209,827	0	0	2.500	7.044	MON	17,019	204,225	08/16/2022	09/01/2055
05550M-AC-8	Barclays Commercial Mort-BBCMS 2019-C3 D .....	.....	.....	.....	3.B	4,501,925	4.311,027	5,719,000	4,888,431	4,888,431	0	159,045	0	0	3.000	6.886	MON	14,298	171,570	06/07/2022	05/01/2052
05552F-AE-7	BBCMS Trust-BBCMS 2022-C15 D .....	.....	.....	.....	3.A	1,842,339	64.8386	1,544,455	2,382,000	1,962,916	0	46,476	0	0	2.500	5.472	MON	4,963	59,550	03/23/2022	04/01/2055
05552F-BG-1	BBCMS Trust-BBCMS 2022-C15 C .....	.....	.....	.....	1.F	19,531,500	82.1207	16,424,140	20,000,000	19,677,651	0	57,084	0	0	3.828	4.242	MON	65,932	842,389	03/23/2022	04/01/2055
05552X-AJ-7	BBCMS Mortgage Trust 202-BBCMS 2021-C12 .....	.....	.....	.....	4.A	9,121,875	61.3529	8,589,410	14,000,000	10,122,831	0	414,884	0	0	2.500	7.730	MON	29,167	350,000	06/08/2022	11/01/2054
05591U-AA-5	BSREP Commercial Mortgage-BSREP 2021-DC A .....	.....	.....	.....	1.A	5,307,391	93.2023	5,206,959	5,586,728	5,586,728	0	(8,067)	0	0	5.462	5.720	MON	14,411	356,259	11/30/2022	08/15/2038
05605N-AA-5	BX Commercial Mortgage T-BX 2020-V1V2 C .....	.....	.....	.....	1.A	41,934,966	88.4317	43,932,888	49,680,000	44,272,249	0	994,350	0	0	3.542	6.433	MON	146,654	1,789,234	07/12/2022	03/01/2044
05606D-AC-2	BX TRUST - BX 2022-PSB B-BX 2022-PSB B .....	.....	.....	.....	1.A	3,476,712	99.9002	3,496,508	3,500,000	3,500,000	0	38,976	0	0	7.346	7.605	MON	12,141	290,159	08/04/2022	08/15/2039
05608B-AA-8	BX Commercial Mortgage T-BX 2019-IMC A .....	.....	.....	.....	1.A	8,477,630	99.1347	8,404,274	8,477,630	8,477,630	0	0	0	0	5.443	5.443	MON	21,791	538,979	05/02/2019	04/15/2034
05608R-AL-9	BX Trust 2021-ARIA-BX 2021-ARIA E .....	.....	.....	.....	1.A	19,911,338	99.0146	21,614,877	21,830,000	20,540,714	0	323,413	0	0	6.756	8.115	MON	69,645	1,679,226	12/14/2022	10/15/2036
05608W-AG-9	BX Commercial Mortgage T-BX 2021-SOAR B .....	.....	.....	.....	1.A	2,319,053	98.6845	2,402,672	2,434,701	2,434,701	0	(70,413)	0	0	5.382	5.640	MON	6,188	153,261	11/15/2022	06/15/2038
05608W-AN-4	BX Trust-BX 2021-SOAR E .....	.....	.....	.....	1.A	8,767,378	100.0618	8,772,797	8,767,378	8,767,378	0	0	0	0	6.312	6.570	MON	26,135	634,791	06/11/2021	06/15/2038
05609D-AA-3	BX Trust 2023-LIFE-BX 2023-LIFE A .....	.....	.....	.....	1.A FE	5,000,000	96.8103	4,840,514	5,000,000	5,000,000	0	0	0	0	5.045	5.045	MON	21,022	252,265	01/31/2023	02/01/2028
05609D-AC-9	BX Trust 2023-LIFE-BX 2023-LIFE B .....	.....	.....	.....	1.D FE	5,000,000	95.6777	4,783,887	5,000,000	5,000,000	0	0	0	0	5.391	5.391	MON	22,462	269,540	01/31/2023	02/01/2028

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
05609K-AC-3	BX Commercial Mortgage T-BX 2021-XL2 B				1.A	3,361,641	.99.0259	3,465,908	3,500,000	3,470,929	.0	91,888	.0	.0	5.509	6.254	MON	9,105	224,865	04/26/2023	10/15/2038
05609K-AJ-8	BX Commercial Mortgage T-BX 2021-XL2 E				1.A	3,482,495	.98.5234	3,448,319	3,500,000	3,495,254	.0	12,964	.0	.0	6.357	6.695	MON	10,507	255,032	10/14/2021	10/15/2038
05609K-AL-3	BX Commercial Mortgage T-BX 2021-XL2 F				1.A	8,706,219	.98.5604	8,624,038	8,750,000	8,738,215	.0	31,383	.0	.0	6.756	7.094	MON	27,915	673,066	10/14/2021	10/15/2038
05609K-AN-9	BX Commercial Mortgage T-BX 2021-XL2 G				1.A	10,447,461	.98.5488	10,347,627	10,500,000	10,485,716	.0	38,596	.0	.0	7.354	7.693	MON	36,465	871,558	10/14/2021	10/15/2038
05609M-BJ-3	BMO 2022-C1 Mortgage Tru-BMO 2022-C1 D				2.C	10,815,577	.64.4957	9,029,391	14,000,000	11,575,523	.0	279,544	.0	.0	2.000	4.898	MON	23,333	280,000	02/10/2022	02/01/2055
05609M-BL-8	BMO 2022-C1 Mortgage Tru-BMO 2022-C1 E				3.B	7,148,792	.57.7911	5,779,109	10,000,000	7,806,027	.0	243,662	.0	.0	2.000	5.782	MON	16,667	200,000	02/10/2022	02/01/2055
05609M-CH-6	BMO 2022-C1 Mortgage Tru-BMO 2022-C1 C				1.E	12,465,874	.79.8409	9,952,960	12,466,000	12,465,909	.0	11	.0	.0	3.617	3.617	MON	37,575	450,895	02/10/2022	02/01/2055
05609R-AL-8	BX Trust-BX 2021-BXMF D				1.A	8,634,216	.98.5814	8,580,977	8,704,460	8,692,312	.0	9,869	.0	.0	6.342	6.682	MON	26,067	632,896	10/28/2021	10/15/2026
05609R-AN-4	BX Trust-BX 2021-BXMF E				1.A	16,159,620	.99.2901	16,175,771	16,291,419	16,268,616	.0	18,107	.0	.0	6.939	7.280	MON	53,379	1,283,421	10/28/2021	10/15/2026
05609V-AG-0	BX Commercial Mortgage T-BX 2021-VOLT B				1.A	8,011,656	.99.4971	8,407,505	8,450,000	8,438,581	.0	(267,258)	.0	.0	5.462	5.803	MON	21,793	538,790	12/15/2022	09/15/2036
05609V-AL-9	BX Commercial Mortgage T-BX 2021-VOLT D				1.A	2,800,313	.99.0125	2,970,374	3,000,000	2,987,774	.0	2,892	.0	.0	6.162	6.670	MON	8,729	212,636	11/07/2022	09/15/2036
05609V-AN-5	BX Commercial Mortgage T-BX 2021-VOLT E				1.A	4,997,000	100.0065	4,997,326	4,997,000	4,997,000	.0	.0	.0	.0	6.512	6.770	MON	15,365	371,962	09/15/2021	09/15/2036
05609V-AQ-8	BX Commercial Mortgage T-BX 2021-VOLT F				1.D	4,996,000	.97.8190	4,887,039	4,996,000	4,996,000	.0	.0	.0	.0	6.912	7.170	MON	16,306	392,205	09/15/2021	09/15/2036
05609V-AS-4	BX Commercial Mortgage T-BX 2021-VOLT G				1.G	5,002,000	.99.3922	4,971,599	5,002,000	5,002,000	.0	.0	.0	.0	7.362	7.620	MON	17,388	415,560	09/15/2021	09/15/2036
06539W-BG-0	BANK 2020-BNK25-BANK 2020-BN25 C				1.G	2,705,060	.83.7877	2,640,149	3,151,000	2,829,484	.0	53,599	.0	.0	3.350	5.739	MON	9,094	107,431	07/27/2022	01/01/2063
06540D-AJ-4	BANK 2021-BNK36-BANK 2021-BN36 D				2.A	4,657,028	.71.2226	3,739,188	5,250,000	4,819,899	.0	54,681	.0	.0	2.500	3.882	MON	10,938	131,250	09/24/2021	09/01/2064
06540D-BV-6	BANK 2021-BNK36-BANK 2021-BN36 C				1.E	10,292,369	.80.1242	8,013,221	10,001,000	10,195,108	.0	(30,765)	.0	.0	3.199	2.875	MON	26,660	351,956	09/24/2021	09/01/2064
06540M-CA-1	BANK 2022-BNK41-BANK 2022-BNK41 C				1.F	10,397,538	.82.1225	9,086,029	11,064,000	10,547,693	.0	59,393	.0	.0	3.790	4.608	MON	34,943	426,328	04/25/2022	04/01/2065
06541K-AJ-7	BANK 2018-BNK12-BANK 2018-BN12 D				1.G	2,282,344	.69.6933	2,090,799	3,000,000	2,555,524	.0	111,675	.0	.0	3.000	8.085	MON	7,500	90,000	05/19/2022	05/01/2061
06541L-AJ-5	Bank-22-BNK40 D SUB				1.F	7,692,512	.72.8034	7,067,757	9,708,000	8,159,463	.0	174,073	.0	.0	2.500	5.168	MON	20,225	242,700	02/25/2022	03/01/2064
06541L-BZ-8	Bank-2022-BNK40 C				1.A	22,025,411	.80.8860	18,498,637	22,870,000	22,226,748	.0	75,527	.0	.0	3.393	3.887	MON	66,821	853,653	02/25/2022	03/01/2064
06541M-CF-9	BANK-BANK 2022-BNK42 C				1.B	7,556,960	.87.1220	6,969,757	8,000,000	7,639,570	.0	34,073	.0	.0	4.723	5.473	MON	31,485	384,099	05/20/2022	06/01/2055
06541Q-BQ-7	BANK 2022-BNK43-BANK 2022-BNK43 C				1.C	25,752,670	.87.9905	24,196,508	27,499,000	26,056,061	.0	140,664	.0	.0	5.229	6.156	MON	123,818	1,461,922	09/27/2022	08/01/2055
06541T-AJ-8	BANK 2020-BNK29-BANK 2020-BN29 D				1.E	2,067,723	.74.0479	2,147,388	2,900,000	2,261,448	.0	84,001	.0	.0	2.500	7.064	MON	6,042	72,500	07/27/2022	11/01/2053
06541U-BE-5	BANK 2020-BNK30-BANK 2020-BN30 MCOE				1.A	1,245,542	.65.6295	1,033,665	1,575,000	1,325,551	.0	34,467	.0	.0	2.918	6.204	MON	7,916	42,898	07/25/2022	12/01/2053
06644E-AM-0	BANK5 2023-5YR1-BANK5 2023-5YR1 AS				1.A	6,074,934	102.3173	6,139,038	6,000,000	6,051,292	.0	(13,260)	.0	.0	6.410	6.218	MON	32,051	423,102	03/30/2023	04/01/2056
08161Y-BL-6	Benchmark 2022-B34 Mortg-BMARK 2022-B34				1.G	29,196,386	.86.1022	25,451,679	31,000,000	29,590,471	.0	158,284	.0	.0	3.830	4.619	MON	98,931	1,207,233	06/29/2022	04/01/2055
08163B-BH-3	Benchmark 2020-B22 Mortg-BMARK 2020-B22				1.E	766,836	80.6187	806,187	1,000,000	821,895	.0	23,626	.0	.0	2.694	6.310	MON	2,245	27,515	07/20/2022	01/01/2054
08163P-AL-4	Benchmark 2022-B33 Mortg-BMARK 2022-B33				3.A	9,163,678	.65.8832	8,494,315	12,893,000	9,981,113	.0	318,560	.0	.0	2.000	5.393	MON	21,488	257,860	02/24/2022	03/01/2055
08163P-BN-9	Benchmark 2022-B33 Mortg-BMARK 2022-B33				1.G	25,819,223	.76.6667	20,454,684	26,680,000	25,988,589	.0	52,743	.0	.0	3.614	4.015	MON	80,356	980,409	06/24/2022	03/01/2055
12477B-AG-9	CAMB Commercial Mortgage-CAMB 2021-CX2 C				1.A	26,608,240	.77.1970	21,229,164	27,500,000	26,836,267	.0	83,698	.0	.0	2.771	3.010	MON	63,776	830,206	10/22/2021	11/01/2046
12477B-AJ-3	CAMB Commercial Mortgage-CAMB 2021-CX2 D				1.D	16,148,962	.74.2647	12,624,996	17,000,000	16,381,498	.0	79,368	.0	.0	2.771	3.409	MON	39,259	518,214	10/22/2021	11/01/2046
12482B-AJ-3	CAMB 2019-LIFE C				1.A	6,678,438	.6.99975	6,999,754	7,000,000	6,947,131	.0	(12,877)	.0	.0	6.145	7.214	MON	20,313	494,941	10/13/2022	12/15/2037
12593F-BC-7	COMM 2015-LC21 Mortgage -COMM 2015-LC21				1.A	4,938,039	.99.5802	4,886,428	4,907,028	4,907,884	.0	(4,197)	.0	.0	3.445	3.352	MON	14,087	184,732	01/07/2016	07/01/2048
12598E-AD-4	COMM 2020-SBX Mortgage T-COMM 2020-SBX B				1.A	4,483,789	.87.7827	4,389,136	5,000,000	4,939,571	.0	255,221	.0	.0	1.802	5.983	MON	7,508	90,100	08/10/2022	01/01/2038
12598E-AJ-9	COMM 2020-SBX Mortgage T-COMM 2020-SBX C				1.D	4,703,254	.86.6336	4,678,215	5,400,000	5,231,135	.0	272,525	.0	.0	2.056	6.885	MON	9,252	111,024	02/25/2022	01/01/2038
12598E-AH-5	COMM 2020-SBX Mortgage T-COMM 2020-SBX D				3.B	2,099,609	.84.5164	2,112,910	2,500,000	2,325,657	.0	87,319	.0	.0	2.321	7.315	MON	4,836	58,995	10/13/2022	01/01/2038
12635R-AW-8	CSAIL 2015-C4 Commercial-CSAIL 2015-C4 A				1.A	1,944,997	.99.2452	1,856,352	1,870,470	1,874,368	.0	(8,163)	.0	.0	3.544	3.074	MON	11,048	66,281	02/12/2016	11/01/2048
12655T-AG-4	COMM 2019-GC44 Mortgage -COMM 2019-GC44				3.C	4,631,698	.72.0993	4,437,714	6,155,000	5,075,862	.0	182,629	.0	.0	2.500	6.763	MON	153,829	153,875	06/07/2022	08/01/2057
12659J-AE-7	COLEM 2021-HLNE Mortgage-COLEM 2022-HLNE				1.A	6,707,605	.80.3684	5,625,785	7,000,000	6,986,550	.0	173,530	.0	.0	2.461	4.017	MON	14,356	175,141	03/01/2022	04/01/2042
12659J-AJ-6	COLEM 2021-HLNE Mortgage-COLEM 2022-HLNE				1.A	19,584,081	.75.0034	16,500,737	22,000,000	21,045,895	.0	618,671	.0	.0	2.461	5.313	MON	45,118	548,940	04/05/2022	04/01/2042
14576A-AA-0	Cars Net Lease Mortgage -CARM 2020-1A A1				1.A FE	13,574,379	.90.3580	12,270,611	13,580,000	13,576,837	.0	827	.0	.0	2.010	2.017	MON	12,131	273,716	11/18/2020	12/15/2050
14576A-AB-8	Cars Net Lease Mortgage -CARM 2020-1A A2				1.A FE	1,454,119	.82.0048	1,193,170	1,455,000	1,454,389	.0	11	.0	.0	2.480	2.488	MON	1,604	36,184	11/18/2020	12/15/2050
14576A-AC-6	Cars Net Lease Mortgage -CARM 2020-1A A3				1.F FE	2,772,190	.92.6641	2,633,513	2,842,000	2,783,783	.0	11,431	.0	.0	3.100	3.111	MON	3,916	81,765	11/18/2020	12/15/2050
200474-AE-4	COMM 2015-LC19 Mortgage -COMM 2015-LC19				1.A	6,611,485	.87.1250	6,630,213	7,610,000	7,201,560	.0	22,097	.0	.0	2.867	6.636	MON	18,182	218,179	07/08/2022	02/01/2048

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
238021-AA-7	DATA 2023-QNTR Mortgage -DATA 2023-QNTR				1.A	9,743,160	101.1502	10,115,018	10,000,000	9,770,089	0	20,084	0	0	5.728	6.157	MON	47,734	630,089	06/30/2023	08/01/2043
238021-AE-9	DATA 2023-QNTR Mortgage -DATA 2023-QNTR				1.A	4,730,220	97.9442	4,897,211	5,000,000	4,758,568	0	20,483	0	0	5.728	6.548	MON	23,867	291,177	06/30/2023	08/01/2043
238021-AG-4	DATA 2023-QNTR Mortgage -DATA 2023-QNTR				1.A	1,123,769	97.2376	1,215,469	1,250,000	1,136,715	0	9,241	0	0	5.728	7.232	MON	5,967	72,794	06/30/2023	08/01/2043
25402J-AA-7	DBRG 2021-1A A2				2.B FE	8,275,000	95.1516	7,873,792	8,275,000	8,275,000	0	0	0	0	3.933	3.933	MJSD	5,424	325,456	06/30/2021	09/25/2051
29426V-AJ-5	Citigroup Commercial Mor-CGOMT 2022-GC48				1.E	11,259,322	88.1064	10,643,258	12,080,000	11,455,599	0	82,074	0	0	4.874	5.951	MON	49,070	647,744	06/06/2022	05/01/2054
30227F-AJ-9	Extended Stay America Tr-ESA 2021-ESH D				1.A	13,211,862	99.8730	13,195,085	13,211,862	13,211,862	0	0	0	0	6.761	7.020	MON	42,184	1,016,933	06/24/2021	07/15/2038
30288L-AN-3	FREMF 2016-K53 Mortgage -FREMF 2016-K53				1.A	5,857,500	98.4677	5,908,061	6,000,000	5,982,266	0	20,466	0	0	4.024	4.437	MON	40,925	245,564	06/16/2016	03/01/2049
30288R-AG-5	FREMF 2016-K54 Mortgage -FREMF 2016-K54				1.C	3,279,566	98.0081	3,742,931	3,819,000	3,702,891	0	103,105	0	0	4.051	7.125	MON	26,228	144,492	03/26/2020	04/01/2048
30295D-AG-7	FREMF 2016-K57 Mortgage -FREMF 2016-K57				1.A	3,835,384	97.2306	3,889,226	4,000,000	3,965,165	0	20,249	0	0	3.916	4.526	MON	26,548	159,350	09/15/2016	08/01/2049
30295R-AS-0	FREMF 2016-K59 Mortgage -FREMF 2016-K59				1.A	3,147,218	96.4974	3,377,409	3,500,000	3,423,469	0	42,188	0	0	3.580	4.971	MON	21,234	127,405	11/15/2016	11/01/2049
337964-AP-5	FIVE 2023-V1 Mortgage Tr-FIVE 2023-V1 D				2.B	2,202,462	97.7562	2,443,906	2,500,000	2,296,125	0	52,787	0	0	6.297	9.450	MON	13,118	160,280	02/10/2023	02/01/2056
337964-AR-1	FIVE 2023-V1 Mortgage Tr-FIVE 2023-V1 E				3.A	1,041,688	87.1078	1,088,847	1,250,000	1,106,109	0	36,534	0	0	6.297	10.796	MON	6,559	80,140	02/10/2023	02/01/2056
35709C-AS-2	FREMF 2019-K87 Mortgage -FREMF 2019-K87				1.A	4,023,546	94.6791	4,023,863	4,250,000	4,213,510	0	8,499	0	0	4.324	4.626	MON	31,150	186,934	01/23/2019	01/01/2051
36255N-AZ-8	GS Mortgage Securities C-GS MORTGAGE SECU				1.F	11,872,043	90.2248	11,688,625	12,955,000	12,299,740	0	183,483	0	0	4.346	6.184	MON	46,920	619,612	07/14/2022	03/01/2051
36262M-AG-3	GS Mortgage Securities C-GSMS 2021-IP D				1.A	4,250,000	97.3004	4,135,269	4,250,000	4,250,000	0	0	0	0	6.612	6.870	MON	13,271	320,707	09/29/2021	10/15/2036
36262M-AJ-7	GS Mortgage Securities C-GSMS 2021-IP E				1.A	2,858,000	97.7945	2,794,966	2,858,000	2,858,000	0	0	0	0	8.062	8.320	MON	10,881	257,798	09/29/2021	10/15/2036
36262M-AL-2	GS Mortgage Securities C-GSMS 2021-IP F				1.F	1,500,000	100.0560	1,500,840	1,500,000	1,500,000	0	0	0	0	9.062	9.320	MON	6,419	150,553	09/29/2021	10/15/2036
36264K-BB-5	GS Mortgage Securities T-GSMS 2020-GSA2				2.A	4,375,775	76.8605	4,344,924	5,653,000	4,664,847	0	131,015	0	0	2.989	6.531	MON	14,081	168,968	09/09/2022	12/01/2053
46590K-AD-6	JP Morgan Chase Commerci-JPMCC 2015-JP1				1.A	11,828,533	98.8407	11,575,736	11,711,512	11,720,957	0	(11,031)	0	0	3.650	3.547	MON	71,241	427,447	12/15/2015	01/01/2049
465972-AC-1	JP Morgan Chase Commerci-JPMCC 2022-DATA				1.A	4,614,461	88.7163	4,435,816	5,000,000	4,695,332	0	33,305	0	0	3.916	4.956	MON	16,316	199,053	06/08/2022	06/01/2042
465972-AG-2	JP Morgan Chase Commerci-JPMCC 2022-DATA				1.A	3,523,442	84.8823	3,480,173	4,100,000	3,640,245	0	48,248	0	0	3.916	5.839	MON	13,379	163,224	06/08/2022	06/01/2042
465972-AJ-6	JP Morgan Chase Commerci-JPMCC 2022-DATA				1.E	1,528,778	81.0710	1,499,814	1,850,000	1,592,566	0	26,423	0	0	3.916	6.328	MON	6,037	73,650	06/08/2022	06/01/2042
46654B-AJ-6	JP Morgan Chase Commerci-JPMCC 2021-1MEM				5.A	3,862,561	63.6367	2,545,468	4,000,000	3,901,353	0	12,994	0	0	2.654	3.097	MON	8,845	125,895	09/27/2021	10/01/2042
46654B-AL-1	JP Morgan Chase Commerci-JPMCC 2021-1MEM				6.	5,940,621	61.1307	3,959,434	6,477,000	3,959,434	(2,129,553)	49,784	0	0	2.654	3.696	MON	14,322	203,856	09/27/2021	10/01/2042
482606-AJ-9	KIND Trust 2021-KIND-KNDR 2021-KIND B				1.C FE	5,520,713	98.8245	5,773,354	5,842,025	5,842,025	0	(7,456)	0	0	5.864	6.120	MON	16,179	396,592	01/12/2023	08/15/2038
53218D-AE-8	Life Mortgage Trust US-LIFE 2022-BMR2 B				1.A	19,899,991	95.4008	19,080,166	20,000,000	20,000,000	0	159,287	0	0	6.191	6.450	MON	58,471	1,423,589	05/03/2022	05/15/2039
55316T-AE-9	MFT 2020-B6 Mortgage Tru-MOFT 2020-B6 C				4.B FE	8,340,938	62.3605	6,547,850	10,500,000	8,866,031	0	233,923	0	0	3.283	6.677	MON	28,724	350,437	08/24/2022	08/01/2040
55317B-AG-2	MFT Trust 2020-ABC-SERIES 2020-ABC CLASS				3.C	3,305,399	55.1568	2,227,782	4,039,000	3,502,913	0	88,583	0	0	3.477	6.647	MON	11,702	142,764	09/13/2022	02/06/2030
61690A-AD-6	Morgan Stanley Bank of A-MSBAM 2015-C27				1.A	3,832,976	99.4788	3,732,518	3,752,072	3,753,918	0	(7,024)	0	0	3.473	3.243	MON	10,859	141,229	02/17/2016	12/01/2047
61690F-AL-7	Morgan Stanley Bank of A-MSBAM 2015-C22				1.A	7,691,826	99.7702	7,663,979	7,687,021	7,686,901	0	1,305	0	0	3.046	3.064	MON	19,512	253,659	02/12/2016	04/01/2048
61690Q-AD-1	Morgan Stanley Bank of A-MSBAM 2015-C23				1.A	10,924,730	99.4221	10,465,967	10,526,802	10,538,650	0	(43,645)	0	0	3.451	3.005	MON	92,412	333,007	02/17/2016	07/01/2050
61690V-AZ-1	Morgan Stanley Bank of A-MSBAM 2015-C26				1.A	5,084,375	98.8603	4,943,013	5,000,000	5,005,528	0	(8,900)	0	0	3.531	3.346	MON	29,425	176,550	01/27/2016	10/01/2048
61764R-BJ-6	Morgan Stanley Bank of A-MSBAM 2015-C20				1.A	2,558,984	99.6100	2,490,250	2,500,000	2,500,000	0	(6,189)	0	0	4.160	3.905	MON	8,667	104,000	02/17/2015	02/01/2048
61774L-AG-4	Morgan Stanley Capital I-MISC 2022-L8 D				1.G	4,821,499	65.0433	4,203,100	6,462,000	5,183,140	0	140,946	0	0	2.500	5.887	MON	13,463	161,550	03/25/2022	04/01/2055
61774L-BY-4	Morgan Stanley Capital I-MISC 2022-L8 C				1.C	20,986,465	83.0836	18,365,619	22,105,000	21,263,070	0	119,798	0	0	3.793	4.511	MON	69,865	852,477	03/25/2022	04/01/2055
64016N-AC-1	Neighborly Issuer 2022-1-NBLY 2022-1A A2				2.B FE	3,439,307	90.5782	3,523,493	3,890,000	3,589,892	0	61,614	0	0	3.695	5.880	JAJO	24,355	143,736	06/02/2022	01/30/2052
67118A-AN-5	OPG Trust 2021-PORT-OPG 2021-PORT E				1.A	16,114,834	99.3899	16,150,857	16,250,000	16,226,824	0	19,268	0	0	6.041	6.383	MON	46,360	1,222,467	09/30/2021	10/15/2036
67118A-AQ-8	OPG Trust 2021-PORT-OPG 2021-PORT F				1.A	6,475,903	99.6284	6,468,072	6,492,200	6,484,333	0	31,834	0	0	6.460	6.789	MON	19,806	479,872,		

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
92257B-AC-6	Velocity Commercial Capi-VCC 2022-3 M2				1.G FE	4,893,115	.97.9534	4,812,987	4,913,545	4,901,251	.0	2,526	.0	.0	6.490	6.579	MON	26,574	318,889	06/08/2022	06/01/2052
92257B-AD-4	Velocity Commercial Capi-VCC 2022-3 M3				2.B FE	6,173,465	.95.5418	6,068,097	6,351,248	6,246,865	.0	18,093	.0	.0	6.705	7.281	MON	71,000	390,247	06/08/2022	06/01/2052
92257B-AE-2	Velocity Commercial Capi-VCC 2022-3 M4				3.B FE	11,493,065	.90.4867	11,380,484	12,576,963	11,782,868	.0	10,898	.0	.0	6.705	8.656	MON	140,596	843,551	06/08/2022	06/01/2052
92257B-AF-9	Velocity Commercial Capi-VCC 2022-3 M5				4.B FE	7,070,985	.87.7352	7,111,584	8,105,734	7,436,090	.0	109,841	.0	.0	6.705	9.502	MON	90,613	498,050	06/08/2022	06/01/2052
92257C-AA-8	Velocity Commercial Capi-VCC 2019-1 A				1.A FE	1,049,358	.95.3739	1,001,043	1,049,599	1,049,629	.0	(5)	.0	.0	3.760	3.759	MON	3,289	39,430	03/11/2019	03/01/2049
92257P-AA-9	Velocity Commercial Capi-VCC 2022-5 A				1.A FE	4,273,181	100.1399	4,250,600	4,244,662	4,275,266	.0	2,383	.0	.0	6.930	6.756	MON	24,513	294,155	07/27/2023	10/01/2052
92257P-AC-5	Velocity Commercial Capi-VCC 2022-5 M3				2.B FE	12,417,836	.98.2465	12,410,344	12,631,839	12,518,600	.0	41,333	.0	.0	8.279	8.656	MON	175,959	1,048,878	10/04/2022	10/01/2052
92257P-BA-8	Velocity Commercial Capi-VCC 2022-5 M2				1.G FE	2,693,759	.99.7051	2,742,677	2,750,788	2,715,662	.0	6,931	.0	.0	7.500	8.032	MON	17,192	206,309	10/04/2022	10/01/2052
92258X-AA-1	Velocity Commercial Capi-VCC 2022-1 A				1.A FE	1,503,800	.84.8209	1,284,331	1,514,169	1,507,026	.0	715	.0	.0	3.380	3.530	MON	4,265	51,176	02/14/2022	02/01/2052
92258X-AB-9	Velocity Commercial Capi-VCC 2022-1 M1				1.D FE	10,477,143	.86.9139	9,183,591	10,566,314	10,502,236	.0	5,658	.0	.0	3.760	3.929	MON	33,108	397,279	02/14/2022	02/01/2052
92259K-AD-2	Velocity Commercial Capi-VCC 2022-4 M1				1.D FE	2,445,492	.99.4014	2,430,863	2,445,503	2,445,501	.0	.0	.0	.0	6.590	6.590	MON	13,430	161,127	08/05/2022	08/01/2052
92259K-AE-5	Velocity Commercial Capi-VCC 2022-4 M2				1.G FE	5,997,226	.98.7786	5,924,909	5,998,168	5,997,606	.0	126	.0	.0	6.970	6.974	MON	34,839	418,072	08/05/2022	08/01/2052
92259U-AA-6	Velocity Commercial Capi-VCC 2022-2 A				1.A FE	3,849,699	.92.8622	3,575,548	3,850,381	3,849,906	.0	56	.0	.0	4.670	4.674	MON	14,984	179,799	04/05/2022	04/01/2052
92259U-AB-4	Velocity Commercial Capi-VCC 2022-2 M1				1.D FE	4,798,332	.97.0553	4,658,080	4,799,408	4,798,550	.0	(22)	.0	.0	5.410	5.414	MON	21,637	259,632	04/05/2022	04/01/2052
92259U-AC-2	Velocity Commercial Capi-VCC 2022-2 M2				1.G FE	4,823,841	.96.4059	4,650,732	4,824,115	4,823,936	.0	5	.0	.0	5.640	5.641	MON	22,673	272,080	04/05/2022	04/01/2052
92259U-AE-8	Velocity Commercial Capi-VCC 2022-2 M4				3.A FE	15,014,491	.88.4045	14,150,177	16,006,178	15,166,864	.0	(113,603)	.0	.0	5.758	7.008	MON	154,089	939,319	04/05/2022	04/01/2052
92259U-AF-5	Velocity Commercial Capi-VCC 2022-2 M5				4.A FE	4,578,126	.84.7580	4,343,769	5,124,909	4,689,190	.0	(31,740)	.0	.0	5.758	7.869	MON	49,358	299,108	04/05/2022	04/01/2052
92259V-AA-4	Velocity Commercial Capi-VCC 2022-1 A				1.A FE	6,891,985	100.7615	6,946,080	6,893,588	6,892,083	.0	(15)	.0	.0	6.470	6.476	MON	37,168	445,743	01/10/2023	01/01/2053
92259W-AA-2	Velocity Commercial Capi-VCC 2024-4 A				1.A FE	9,443,577	.98.6663	9,317,952	9,443,905	9,443,626	.0	49	.0	.0	6.030	6.031	MON	47,456	189,753	08/06/2024	08/01/2054
92261A-BA-5	Velocity Commercial Capi-VCC 2024-5 A				1.A FE	4,980,160	.98.6592	4,913,620	4,980,399	4,980,185	.0	25	.0	.0	5.490	5.492	MON	22,785	45,598	10/03/2024	10/01/2054
94989D-AW-9	Wells Fargo Commercial M-WFCM 2015-C27 A				1.A	4,527,000	.99.7048	4,471,713	4,484,953	4,485,147	.0	(4,086)	.0	.0	3.451	3.358	MON	12,898	167,674	01/22/2016	02/01/2048
94989J-AZ-9	Wells Fargo Commercial M-WFCM 2015-C28 A				1.A	695,175	.99.4651	686,309	690,000	690,117	.0	(459)	.0	.0	3.540	3.472	MON	2,036	24,426	01/05/2016	05/01/2048
94989N-BD-8	Wells Fargo Commercial M-WFCM 2015-C30 A				1.A	1,839,437	.99.2992	1,834,285	1,847,230	1,846,644	.0	1,385	.0	.0	3.411	3.490	MON	5,251	68,260	12/29/2015	09/01/2058
94989Q-AV-2	Wells Fargo Commercial M-WFCM 2015-S61 A				1.A	9,728,881	.99.0713	9,356,378	9,444,082	9,457,199	.0	(31,181)	.0	.0	3.789	3.443	MON	29,820	387,656	12/28/2015	09/01/2048
94989Y-AY-9	Wells Fargo Commercial M-WFCM 2016-C32 A				1.A	5,680,816	.98.6520	5,548,883	5,624,704	5,629,370	.0	(5,293)	.0	.0	3.294	3.188	MON	15,440	200,718	02/03/2016	01/01/2059
05S469-AB-3	Liberty Series 2024-1 SM-LBRTY 2024-1SME	B			1.A FE	10,087,500	100.3459	9,309,593	15,000,000	9,277,500	.0	.0	.0	(810,000)	5.915	5.915	MON	169,705	.0	09/04/2024	07/10/2056
065404-AA-3	BANK 2018-BNK10-BANK 2018-BN10 D				3.A	1,758,641	.83.2941	2,040,706	2,450,000	1,985,115	.0	123,246	.0	.0	2.600	9.750	MON	5,308	63,700	01/26/2023	02/01/2061
05602N-AK-6	BMO 2022-C2 C-BMO 2022-C2 C				1.C	19,265,945	.89.4909	19,304,986	21,572,000	19,774,538	.0	217,192	.0	.0	4.808	6.460	MON	86,435	1,141,825	06/28/2022	07/01/2054
08163N-AL-9	Benchmark 2022-B32 Mortg-BMARK 2022-B32				3.A	7,712,926	.59.0595	5,905,945	10,000,000	8,268,448	.0	202,195	.0	.0	2.000	4.930	MON	16,667	200,000	02/01/2022	01/01/2055
08163N-BQ-7	Benchmark 2022-B32 Mortg-BMARK 2022-B32				1.G	19,999,952	.73.8364	14,767,278	20,000,000	19,984,528	.0	(11,576)	.0	.0	3.454	3.450	MON	57,565	702,546	02/01/2022	01/01/2055
12531W-BA-9	CFRE 2016-3 MTG TR PASS THRU CTF CL A-2		4		1.A	13,824,112	.98.9700	13,546,429	13,687,405	13,699,131	.0	(12,937)	.0	.0	3.597	3.484	MON	41,028	533,364	01/22/2016	01/01/2048
17328R-AG-4	Citigroup Commercial Mor-CGOMT 2020-GC46				3.B	2,283,867	.50.0132	1,500,395	3,000,000	2,485,350	.0	82,556	.0	.0	2.600	6.580	MON	6,500	78,000	06/03/2022	02/01/2053
1039999999. Subtotal - Bonds - Industrial and Miscellaneous (Unaffiliated) - Commercial Mortgage-Backed Securities						1,142,525,578	XXX	1,068,163,894	1,224,882,826	1,162,091,811	(2,129,553)	8,553,903	0	(810,000)	XXX	XXX	XXX	4,530,867	55,163,999	XXX	XXX
000842-AA-2	ABPCI DIRECT LENDING FUN-ABPCI 2023-15A	D			1.A FE	5,000,000	100.7324	5,036,620	5,000,000	5,000,000	.0	.0	.0	.0	6.989	6.988	JAJO	61,155	393,705	10/03/2023	10/30/2035
000842-AE-4	ABPCI DIRECT LENDING FUN-ABPCI 2023-15A	D			1.C FE	5,350,000	101.3617	5,422,851	5,350,000	5,350,000	.0	.0	.0	.0	7.989	.0	JAJO	73,862	470,083	10/03/2023	10/30/2035
000842-AG-9	ABPCI DIRECT LENDING FUN-ABPCI 2023-15A	D			1.F FE	7,000,000	101.4999	7,104,993	7,000,000	7,000,000	.0	.0	.0	.0	8.789	8.788	JAJO	107,667	678,936	10/03/2023	10/30/2035
000849-AA-7	ABPCI Direct Lending Fun-ABPCI 2023-16A				1.A FE	7,000,000	101.0334	7,072,338	7,000,000	7,000,000	.0	.0	.0	.0	7.071	7.070	FIAN	83,871	473,090	11/28/2023	02/01/2036
00085U-AL-5	ABPCI Direct Lending Fun-ABPCI 2017-2A A	D			1.A FE	50,000,000	100.0436	50,021,800	50,000,000	50,000,000	.0	.0	.0	.0	6.409	6.408	JAJO	578,574	3,627,187	10/01/2021	10/27/2033
00091U-AQ-6	ABPCI Direct Lending Fun-ABPCI 2022-11A				1.A FE	45,000,000	100.0334	45,015,030	45,000,000	45,000,000	.0	.0	.0	.0	5.986	5.986	JAJO	216,990	.0	11/14/2024	01/27/2038
00111G-AC-4	ABPCI Direct Lending Fun-ABPCI 2023-12A	D			1.C FE	8,021,000	100.7236	8,057,888	8,000,000	8,000,000	.0	(5,844)	.0	.0	8.105	6.562	JAJO	115,266	715,751	09/26/2023	04/29/2035
00118X-AS-5	AGL CLO 22 LTD-AGL 2022-22A A1R	D			1.A FE	20,000,000	100.0234	20,004,680	20,000,000	20,000,000	.0	.0	.0	.0	5.750	5.750	JAJO	115,003	.0	11/08/2024	01/20/2037
00119E-AA-5	AGL CLO 23 LTD-AGL 2022-23A A	D			1.A FE	7,700,000	100.1908	7,714,692	7,700,000	7,700,000	.0	.0	.0	.0	6.817	6.817	JAJO	104,988	591,370	12/08/2022	01/20/2036
00119H-AS-9	AGL CLO 1 LTD-AGL 2019-1A BRR	D			1.C FE	10,000,000	100.2649	10,026,490	10,000,000	10,000,000	.0	.0	.0	.0	6.268	6.268	JAJO	111,433	.0	10/16/2024	10/20/2034
00119V-AN-9	AGL CLO 6 LTD-AGL 2020-6A AR	D			1.A FE	19,995,000	100.0989	20,019,780	20,000,000	19,995,283	.0	283	.0	.0	6.079	6.749	JAJO	243,160	340,927	08/05/2024	07/20/2034

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor-tization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
00120B-AA-8	AGL CLO 12 Ltd-AGL 2021-12A A1	D			1.A FE	7,414,100	100.1917	7,564,473	7,550,000	7,309,659	0	(43,907)	0	0	6.039	5.611	JAUJ	91,189	520,098	01/19/2023	07/20/2034
00120N-AC-8	AGL CLO Ltd-AGL 2023-25A B	D			1.C FE	4,200,000	100.8610	4,236,162	4,200,000	4,200,000	0	0	0	0	7.217	7.216	JAUJ	60,626	457,895	05/09/2023	07/21/2036
00121G-AA-6	AGL Core CLO 15 Ltd-AGL 2021-15A A1	D			1.A FE	19,070,541	100.0960	19,317,527	19,299,000	18,941,538	0	(85,492)	0	0	6.029	4.999	JAUJ	232,708	601,372	08/06/2024	01/20/2035
00140L-AJ-3	Aimco CLO 12 Ltd-AIMCO 2020-12A CR	D			1.F FE	1,762,588	100.0630	1,851,166	1,850,000	1,755,422	0	(7,058)	0	0	6.697	6.546	JAUJ	26,157	138,817	05/26/2022	01/17/2032
00140M-AC-6	Aimco CLO 12 Ltd-AIMCO 2020-12A ER	D			3.C FE	920,800	100.2099	1,002,099	1,000,000	918,871	0	(2,807)	0	0	10.747	11.221	JAUJ	22,689	116,211	09/14/2022	01/17/2032
00176C-AU-5	AMMC CLO XII Ltd-AMMC 2013-12A DR	D			2.A FE	490,000	100.2736	491,341	490,000	490,000	0	0	0	0	7.483	5.999	FIAN	5,093	51,684	11/01/2017	11/10/2030
00176E-AG-2	AMMC CLO XII Ltd-AMMC 2013-12A ER	D			4.A FE	480,200	98.3740	482,033	490,000	490,000	0	0	0	0	10.963	9.468	FIAN	7,461	73,473	11/01/2017	11/10/2030
00176E-AJ-6	AMMC CLO XII Ltd-AMMC 2013-12A FR	D			5.A FE	266,589	70.8926	198,499	280,000	245,008	0	(2,275)	0	0	13.148	10.467	FIAN	5,113	49,802	11/01/2017	11/10/2030
00178L-AE-9	AMMC CLO 21 LTD-AMMC 2017-21A D	D			2.A FE	752,500	100.5762	756,836	752,500	752,500	0	0	0	0	7.921	6.422	FIAN	9,603	66,753	09/14/2017	11/02/2030
00178X-AB-9	AMSR 2019-SFR1 Trust-AMSR 2019-SFR1 B	D			1.A FE	4,999,754	96.4637	4,823,183	5,000,000	4,999,561	0	210	0	0	3.023	3.028	MON	12,596	151,150	11/26/2019	01/01/2039
00179T-AA-9	AMMC CLO 21 LTD-AMMC 2017-21A E	D			4.A FE	532,589	100.3195	543,531	541,800	524,859	0	(5,488)	0	0	11.321	10.944	FIAN	9,882	66,893	09/14/2017	11/02/2030
00436M-AA-3	Accelerated Assets 2018--AALLC 2018-1 A	D			1.F FE	1,021,933	99.9440	1,021,619	1,022,191	1,022,094	0	28	0	0	3.870	3.878	MON	3,187	39,506	06/13/2018	12/02/2033
00792F-AA-6	Affirm Asset Securitizat-AFFRM 2023-B A	D			1.A FE	760,547	101.1333	758,500	750,000	755,401	0	(5,084)	0	0	6.820	6.077	MON	2,273	51,150	12/21/2023	09/15/2028
00792F-AF-5	Affirm Asset Securitizat-AFFRM 2023-B 1A	D			1.A FE	9,541,390	101.1333	9,607,667	9,500,000	9,517,222	0	(23,370)	0	0	6.820	6.556	MON	28,796	647,900	12/07/2023	09/15/2028
00839Q-AB-1	Affirm Asset Securitizat-AFFRM 2024-X2 B	D			1.C FE	6,582,548	100.0584	6,586,846	6,583,000	6,582,557	0	9	0	0	5.330	5.333	MON	27,290	0	11/22/2024	12/17/2029
00835A-AB-4	Affirm Asset Securitizat-AFFRM 2024-B B	D			1.C FE	9,999,593	98.7620	9,876,199	10,000,000	9,999,748	0	155	0	0	4.880	4.881	MON	21,689	119,289	09/06/2024	09/15/2029
00835A-AC-2	Affirm Asset Securitizat-AFFRM 2024-B C	D			1.F FE	8,498,178	98.9414	8,410,022	8,500,000	8,498,469	0	291	0	0	5.060	5.068	MON	19,116	105,136	09/06/2024	09/15/2029
008511-AN-7	AGL CLO 7 Ltd-AGL 2020-7A BR	D			1.C FE	4,624,800	100.0484	4,702,275	4,700,000	4,537,260	0	(46,896)	0	0	6.618	5.774	JAUJ	67,388	347,684	05/02/2022	07/15/2034
00889B-AC-5	Aimco CLO 15 Ltd-AIMCO 2021-15A C	D			1.F FE	3,063,125	100.0809	3,252,629	3,250,000	3,029,943	0	(12,353)	0	0	6.859	6.537	JAUJ	47,061	249,208	05/26/2022	10/17/2034
00900C-AQ-7	AIMCO CLO Series 2017-A-AIMCO 2017-AA CR	D			1.F FE	7,984,000	100.1215	8,009,720	8,000,000	8,000,000	0	(16,000)	0	0	6.979	5.423	JAUJ	111,664	627,759	04/22/2022	04/20/2034
009088-AA-3	AIR CANADA 2015-2AA PTT-FIRST LIEN	A			1.E FE	4,130,828	95.6688	3,951,913	4,130,830	4,131,150	0	(275)	0	0	3.750	3.745	JD	6,885	154,906	12/01/2015	12/15/2027
009088-AB-1	Air Canada 2015-2 Class -2ND LIEN	A			2.B FE	2,655,592	95.5188	2,536,587	2,655,589	2,655,841	0	(178)	0	0	4.125	4.119	JD	4,869	109,367	12/01/2015	12/15/2027
009089-AA-1	AIR CANADA 2013-1A PTT-FIRST LIEN	A			2.A FE	1,426,087	99.4150	1,417,744	1,426,087	1,426,092	0	(163)	0	0	4.125	4.113	MM	7,517	60,404	04/24/2013	05/15/2025
01448Q-AA-8	ALESCO Preferred Funding-ALESC 4A A1	D			1.C FE	1,186,570	99.2399	1,252,250	1,261,841	1,261,330	0	20,256	0	0	5.331	5.811	JAUJ	11,772	77,802	11/08/2018	07/30/2034
01448T-AB-0	ALESCO Preferred Funding-ALESC 5A A2	D			1.B FE	2,609,112	90.3867	3,300,049	3,651,034	3,092,686	0	31,777	0	0	5.249	7.909	MJSD	4,791	283,698	11/01/2018	12/23/2034
01448X-AA-3	ALESCO Preferred Funding-ALESC 6A A1	D			1.D FE	3,652,293	97.8189	3,959,393	4,047,677	3,801,287	0	69,817	0	0	5.069	7.915	MJSD	5,129	311,390	01/17/2019	03/23/2035
01448X-AC-9	ALESCO Preferred Funding-ALESC 6A B1	D			2.A FE	9,866,130	82.1723	8,812,202	10,724,055	10,056,767	0	(120,033)	0	0	5.799	5.590	MJSD	184,020	739,370	05/23/2019	03/23/2035
014495-AB-1	ALESCO Preferred Funding-ALESC 13A A1	D			1.A FE	2,482,351	91.2153	2,940,628	3,223,832	2,650,586	0	72,178	0	0	4.919	8.164	MJSD	3,964	236,957	11/04/2016	09/23/2037
014498-AB-5	ALESCO Preferred Funding-ALESC 14A A1	D			1.B FE	26,794,515	89.0159	33,613,436	37,761,159	29,100,415	0	(1,733,023)	0	0	4.919	8.158	MJSD	46,436	2,776,678	09/02/2016	09/23/2037
01449C-AA-8	ALESCO Preferred Funding-ALESC 8A A1A	D			1.A FE	2,322,097	97.1410	3,953,464	3,040,389	2,688,557	0	158,834	0	0	4.969	10.756	MJSD	3,777	225,455	04/24/2016	03/23/2035
01449C-AB-6	ALESCO Preferred Funding-ALESC 8A A1B	D			1.A FE	4,149,062	97.1732	5,077,950	5,225,669	4,434,003	0	264,575	0	0	4.979	12.568	MJSD	6,505	388,161	11/17/2017	12/23/2035
01449T-AA-1	ALESCO Preferred Funding-ALESC 9A A1	D			1.A FE	20,407,929	93.2583	26,071,060	27,955,753	22,321,705	0	595,620	0	0	4.959	9.683	MJSD	34,658	2,069,794	04/14/2016	06/23/2036
01449W-AA-4	ALESCO Preferred Funding-ALESC 10A A1	D			1.A FE	4,208,828	96.7211	4,575,796	4,730,918	4,402,747	0	(94,652)	0	0	4.939	7.014	MJSD	5,841	349,073	07/11/2019	09/23/2036
01449W-AB-2	ALESCO Preferred Funding-ALESC 10A A2A	D			1.C FE	25,123,683	83.5943	25,246,542	30,201,272	26,613,890	0	(224,694)	0	0	5.099	5.599	MJSD	38,498	2,289,487	06/12/2019	09/23/2036
01450A-AA-8	ALESCO Preferred Funding-ALESC 11A A1A	D			1.A FE	373,394	98.5772	489,144	496,204	436,876	0	53,664	0	0	4.929	20.862	MJSD	611	35,129	05/13/2015	12/23/2036
01749K-AA-7	Allegro CLO Ltd-ALLEG 2022-1A E	D			3.C FE	6,930,000	100.5314	7,037,198	7,000,000	7,000,000	0	0	0	0	11.967	10.435	JAUJ	167,544	905,266	04/29/2022	07/20/2035
01750W-AE-9	Allegro CLO XIII Ltd-ALLEG 2021-1A B	D			1.C FE	4,806,500	100.1192	5,005,960	5,000,000	4,741,490	0	(7,185)	0	0	6.579	6.154	JAUJ	65,790	371,961	04/04/2023	07/20/2034
01751A-AE-6	Allegro CLO XIV Ltd-ALLEG 2021-2A B	D			1.C FE	4,784,150	100.1146	5,005,730	5,000,000	4,719,078	0	(8,712)	0	0	6.618	6.186	JAUJ	71,690	369,876	04/04/2023	10/15/2034
02007W-AA-8	Ally Auto Receivables Tr-ALLYA 2023-1 B	D			1.A FE	3,536,694	101.0924	3,536,891	3,560,000	3,543,573	0	5,875	0	0	5.760	5.968	MON	9,114	205,056	11/17/2023	01/15/2029
02007W-AF-5	Ally Auto Receivables Tr-ALLYA 2023-1 C	D			1.D FE	3,123,964	102.0025	3,206,959	3,144,000	3,129,441	0	4,644	0	0	5.960	6.151	MON	8,328	187,382	11/17/2023	03/15/2029
02008N-AD-9	ALLY AUTO RECEIVABLES Tr-ALLYA 2023-A C	D			1.F FE	3,948,925	100.7856	4,031,423	4,000,000	3,972,180	0	21,670	0	0	6.080	6.652	MON	10,809	243,200	10/31/2023	01/17/2034
02377A-AA-6	American Airlines 2014-1-SECURED NOTE	D	1		2.B FE	4,343,524	96.8212	4,205,452	4,343,524	4,343,880	0	(293)	0	0	3.700	3.693	AO	40,178	160,710	09/02/2014	10/01/2026
02666A-AB-4	American Homes 4 Rent 20-AH4R 2015-SFR1	D			1.A FE	4,649,786	99.4598	4,624,883	4,650,000	4,649,519	0	1,880	0	0	3.813	3.855	MON	14,775	177,305	02/26/2015	04/01/2052
02666A-AC-2	American Homes 4 Rent 20-AH4R 2015-SFR1	D			1.A FE	8,568,280	99.5102	8,478,271	8,520,000	8,520,630	0	(2,460)	0	0	4.110	4.080	MON	29,181	350,172	05/05/2015	04/01/2052
02666B-AB-2	American Homes 4 Rent 20-AH4R 2015-SFR2	D			1.A FE	2,657,821	99.2126	2,637,072	2,658,000	2,657,553	0	573	0	0	4.295	4.318	MON	9,513	114,161	09/11/2015	10/01/2052

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
02666B-A6-1	American Homes 4 Rent 20-AHAR 2015-SFR2 .....	.....	.....	.....	6. *	1	0.0000	0	10,506,046	0	(3)	0	0	0	0.000	0.000	MON	0	0	09/11/2015	10/01/2052
03217R-AA-1	AMSR 2023-SFR3 Trust-AMSR 2023-SFR3 A .....	.....	.....	.....	1.A FE	58,650,717	96.6765	61,045,438	63,144,000	61,064,546	0	3,720,444	0	0	4.235	7.502	MON	222,846	3,082,699	08/25/2023	10/01/2028
03217R-AB-9	AMSR 2023-SFR3 Trust-AMSR 2023-SFR3 B .....	.....	.....	.....	1.D FE	20,052,493	96.1703	21,276,227	22,123,500	21,164,053	0	845,053	0	0	4.235	8.608	MON	78,078	1,080,072	08/25/2023	10/01/2028
03217R-AC-7	AMSR 2023-SFR3 Trust-AMSR 2023-SFR3 C .....	.....	.....	.....	1.G FE	8,281,304	95.8345	8,834,023	9,218,000	8,783,901	0	382,348	0	0	4.235	9.013	MON	32,532	450,024	08/25/2023	10/01/2028
03217R-AD-5	AMSR 2023-SFR3 Trust-AMSR 2023-SFR3 D .....	.....	.....	.....	2.C FE	9,720,569	95.1671	10,527,387	11,062,000	10,439,838	0	548,083	0	0	4.235	10.027	MON	39,040	540,048	08/25/2023	10/01/2028
03217R-AE-3	AMSR 2023-SFR3 Trust-AMSR 2023-SFR3 E1 .....	.....	.....	.....	2.B FE	16,243,404	92.8745	17,978,644	19,358,000	17,911,503	0	3,164,208	0	0	4.235	12.176	MON	68,318	945,060	08/25/2023	10/01/2028
03217R-AF-0	AMSR 2023-SFR3 Trust-AMSR 2023-SFR3 E2 .....	.....	.....	.....	2.C FE	6,432,801	91.4354	7,164,419	7,835,500	7,183,738	0	575,120	0	0	4.235	13.209	MON	27,653	382,530	08/25/2023	10/01/2028
03217R-AG-8	AMSR 2023-SFR3 Trust-AMSR 2023-SFR3 F1 .....	.....	.....	.....	3.B FE	7,015,946	90.0228	8,298,298	9,218,000	8,193,931	0	907,344	0	0	4.235	16.876	MON	32,532	390,382	08/25/2023	10/01/2028
03217R-AH-6	AMSR 2023-SFR3 Trust-AMSR 2023-SFR3 F2 .....	.....	.....	.....	3.C FE	3,990,772	88.7889	4,910,915	5,531,000	4,814,841	0	637,334	0	0	4.235	19.545	MON	19,520	270,024	08/25/2023	10/01/2028
03236Y-AC-9	Amur Equipment Finance R-AXIS 2023-1A B .....	.....	.....	.....	1.B FE	6,998,773	102.1647	7,151,528	7,000,000	6,999,232	0	345	0	0	6.030	6.036	MON	12,898	422,100	06/22/2023	12/20/2029
03328J-AA-5	Anchorage Capital CLO 19-ANCHC 2021-19A	D	.....	.....	1.A FE	4,887,500	100.1846	5,009,230	5,000,000	4,838,521	0	(21,733)	0	0	6.128	5.558	JAJO	66,381	345,036	06/15/2023	10/15/2034
03329L-AS-0	Anchorage Credit Funding-ANCHF 2015-2A A	D	.....	.....	1.A FE	5,000,000	96.2368	4,811,840	5,000,000	5,000,000	0	0	0	0	3.928	3.927	AO	36,007	196,400	01/17/2020	04/25/2038
03329X-AA-3	Anchorage Capital CLO 25-ANCHC 2022-25A	D	.....	.....	3.C FE	9,846,000	100.1064	10,010,640	10,000,000	9,662,415	0	(65,000)	0	0	11.787	10.855	JAJO	235,748	1,274,888	02/11/2022	04/20/2035
03330E-AJ-3	Anchorage Credit Funding-ANCHF 2016-3A A	D	.....	.....	1.A FE	6,250,000	95.0893	5,943,081	6,250,000	6,250,000	0	0	0	0	2.871	2.871	JAJO	31,402	224,297	12/24/2020	01/28/2039
03330P-AA-7	ANCHORAGE CREDIT FUNDING-SERIES 18-5A CL	D	.....	.....	1.A FE	16,685,416	98.4643	16,429,178	16,685,416	16,685,416	0	0	0	0	4.100	4.098	AO	125,419	684,102	01/26/2018	04/25/2036
03330Y-AN-0	Anchorage Capital Clo 20-ANCHC 2021-20A	D	.....	.....	1.B FE	8,100,000	100.0000	8,100,000	8,100,000	8,100,000	0	0	0	0	6.020	6.020	JAJO	12,191	0	12/16/2024	01/20/2035
03331F-AJ-9	Anchorage Credit Funding-ANCHF 2019-7A B	D	.....	.....	1.A FE	9,000,000	90.8012	8,172,108	9,000,000	9,000,000	0	0	0	0	3.133	3.133	AO	51,695	281,970	04/13/2021	04/25/2037
03332Q-AA-3	Anchorage Capital CLO Lt-ANCHC 2024-29A	D	.....	.....	1.A FE	15,000,000	100.5103	15,076,545	15,000,000	15,000,000	0	6,217	0	0	6.217	6.217	JAJO	186,522	459,892	04/09/2024	07/20/2037
03665J-AS-7	Antares CLO 2017-1 Ltd-ANTR 2017-1A BRR	D	.....	.....	1.C FE	25,000,000	100.0175	25,004,375	25,000,000	25,000,000	0	0	0	0	0.000	0.000	JAJO	0	0	12/13/2024	01/20/2037
03665T-AN-6	Antares CLO 2018-2 Ltd-ANTR 2018-2A A2R	D	.....	.....	1.A FE	9,000,000	100.1364	9,012,276	9,000,000	9,000,000	0	0	0	0	6.567	6.567	JAJO	118,213	668,464	04/21/2022	04/20/2034
03665T-AQ-9	Antares CLO 2018-2 Ltd-ANTR 2018-2A BR	D	.....	.....	1.C FE	18,000,000	100.0940	18,016,920	18,000,000	18,000,000	0	0	0	0	6.917	6.917	JAJO	249,026	1,401,153	04/21/2022	04/20/2034
03666L-AL-6	Antares CLO 2020-1 Ltd-ANTR 2020-1A A1R	D	.....	.....	1.A FE	8,000,000	100.0359	8,002,872	8,000,000	8,000,000	0	0	0	0	6.348	6.347	JAJO	98,745	573,885	11/16/2021	10/23/2033
03762Y-BD-8	Apidos Clo Xxv-APID 2016-25A A1R3	D	.....	.....	1.A FE	6,190,000	100.0000	6,190,000	6,190,000	6,190,000	0	0	0	0	5.471	5.470	JAJO	4,703	0	12/17/2024	01/20/2037
03768C-AS-8	Apidos CLO XXX-APID XXXA A2R	D	.....	.....	1.C FE	15,000,000	100.0550	15,008,250	15,000,000	15,000,000	0	0	0	0	6.132	6.132	JAJO	331,117	0	08/15/2024	10/18/2031
03768R-AQ-9	Apidos CLO XXXII-APID 2019-32A A1R	D	.....	.....	1.A FE	4,002,000	100.1427	4,005,708	4,000,000	4,000,000	0	(2,000)	0	0	5.717	4.333	JAJO	45,739	64,529	08/02/2024	01/20/2033
03837Q-AA-0	Aqua Finance Trust 2019-AQFIT 2019-A A .....	.....	.....	.....	1.A FE	740,813	95.1291	704,838	740,928	740,793	0	16	0	0	3.140	3.148	MON	1,034	23,251	09/16/2019	07/16/2040
038413-AA-8	Aqua Finance Trust 2020-AQFIT 2020-AA A .....	.....	.....	.....	1.A FE	816,065	90.3737	737,645	816,216	816,027	0	(43)	0	0	1.900	1.909	MON	603	15,453	08/19/2020	07/17/2046
03842V-AC-1	Aqua Finance Trust 2021-AQFIT 2021-A C .....	.....	.....	.....	2.C FE	16,057,581	83.7630	13,826,765	16,507,000	16,224,732	0	53,921	0	0	3.140	3.584	MON	20,157	561,513	03/04/2022	07/17/2046
039937-AE-7	ARES CLO-ARES 2022-63A B1	D	.....	.....	1.C FE	10,000,000	100.0493	10,004,930	10,000,000	10,000,000	0	0	0	0	6.567	6.567	JAJO	131,348	742,738	03/10/2022	04/20/2035
039937-AG-2	ARES CLO-ARES 2022-63A C	D	.....	.....	1.F FE	4,850,000	100.2146	4,860,408	4,850,000	4,850,000	0	0	0	0	7.017	7.017	JAJO	68,069	382,477	03/10/2022	04/20/2035
039938-AA-3	ARES CLO-ARES 2022-63A E	D	.....	.....	3.C FE	8,415,000	100.2767	8,523,520	8,500,000	8,256,796	0	(61,170)	0	0	11.867	10.828	JAJO	201,746	1,090,587	03/10/2022	04/20/2035
039948-AE-4	Ares LXXV CLO Ltd-ARES 2024-75A B	D	.....	.....	1.D Z	15,000,000	100.0171	15,002,565	15,000,000	15,000,000	0	0	0	0	0.000	0.000	JAJO	0	0	11/27/2024	01/15/2037
039951-AG-3	Ares LXX CLO Ltd-ARES 2023-70A C	D	.....	.....	1.F FE	5,000,000	101.0734	5,053,670	5,000,000	5,000,000	0	0	0	0	7.526	7.525	JAJO	71,078	399,652	09/29/2023	10/25/2035
04009G-AW-7	Ares LIII CLO Ltd-ARES 2019-53A CR	D	.....	.....	1.F FE	4,500,000	100.1072	4,504,824	4,500,000	4,500,000	0	0	0	0	6.635	6.634	JAJO	57,225	0	10/02/2024	10/24/2036
04016P-AW-8	Ares XLIII CLO Ltd-ARES 2017-43A BR2	D	.....	.....	1.B FE	4,000,000	100.0169	4,000,676	4,000,000	4,000,000	0	0	0	0	6.145	6.145	JAJO	13,655	0	11/22/2024	01/15/2038
04018X-AA-9	ARES CLO-ARES 2021-ALFA B	D	.....	.....	1.C FE	15,000,000	100.1118	15,016,770	15,000,000	15,000,000	0	0	0	0	6.568	6.567	JAJO	213,444	1,102,024	08/03/2021	10/15/2034
04018X-AG-4	ARES CLO-ARES 2021-ALFA C	D	.....	.....	1.F FE	2,750,000	100.1747	2,754,804	2,750,000	2,750,000	0	0	0	0	6.918	6.917	JAJO	41,217	211,796	08/03/2021	10/15/2034
04018X-AJ-8	ARES CLO-ARES 2021-ALFA D	D	.....	.....	2.C FE	1,725,000	100.1931	1,728,331	1,725,000	1,725,000	0	0	0	0	7.918	7.916	JAJO	29,592	150,344	08/03/2021	10/15/2034
04019F-AE-7	Ares LXV CLO Ltd-ARES 2022-65A B	D	.....	.....	1.C FE	10,000,000	100.2295	10,022,950	10,000,000	10,000,000	0	0	0	0	6.626	6.625	JAJO	125,155	744,991	04/27/2022	07/10/2037
04019G-AA-3	Ares LXV CLO Ltd-ARES 2022-65A E	D	.....	.....	3.C FE	5,700,000	100.4031	5,722,977	5,700,000	5,700,000	0	0	0	0	11.726	10.188	JAJO	126,249	720,190	04/27/2022	07/25/2034
04020R-AA-6	Ares Direct Lending CLO -ARESDL 2024-1A .....	.....	.....	.....	1.A FE	15,000,000	100.4165	15,062,475	15,000,000	15,000,000	0	0	0	0	6.426	6.425	JAJO	182,066	456,000	04/26/2024	04/25/2036
04020T-AE-4	Ares Loan Funding VI Ltd-ARES 2024-ALF6A	D	.....	.....	1.C FE	10,000,000	100.4967	10,049,670	10,000,000	10,000,000	0	0	0	0	6.761	6.769	JAJO	343,665	0	05/24/2024	07/10/2037
04362V-AA-3	Ascent Education Funding-ASCONT 2024-A A .....	.....	.....	.....	1.C FE	13,383,729	100.8742	13,284,851	13,169,721	13,380,479	0	(3,250)	0	0	6.140	5.642	MON	13,477	67,385	12/06/2024	10/25/2050
05335J-AG-8	Auxilior Term Funding 20-XCAP 2023-1A A3 .....	.....	.....	.....	1.A FE	2,299,442	100.6959	2,316,005	2,300,000	2,299,604	0	161	0	0	5.700	5.708	MON	5,827	131,100	12/01/2023	02/15/2030
05358R-AA-5	Avant Loans Funding Trus-AVNT 2023-REV1				1.D FE	6,999,394	101.3250	7,092,750	7,000,000	7,000,000	0	0	0	0	7.670	7.892	MON	23,862	536,900	06/22/2023	09/15/2032

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Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost			Rate Used to Obtain Fair Value	Fair Value												Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
05358R-AB-3	Avant Loans Funding Trus-AVNT 2023-REV1				.. 1.G FE	999,895	102.0808	1,020,808	1,000,000	1,000,000	0	0	0	0	...8.510	...8.779	MON	...3,782	...85,100	...06/22/2023	...09/15/2032
055328-AL-2	BCC Middle Market CLO 20-BCMM 2018-1A A1				.. 1.A FE	16,500,000	100.9351	16,654,292	16,500,000	16,500,000	0	0	0	0	...6.867	...6.867	JAJ0	...226,624	...765,669	...01/31/2024	...04/20/2036
05553D-AB-7	BHG Securitization Trust-BHG 2022-B B				.. 1.D FE	5,722,369	..99.6899	5,704,773	5,722,517	5,722,486	0	43	0	0	...4.840	...4.841	MON	...10,771	...276,970	...05/25/2022	...06/18/2035
05554Q-AA-9	BCC MIDDLE MARKET CLO-BCMM 2023-2A A1				.. 1.A FE	10,000,000	101.1787	10,117,870	10,000,000	10,000,000	0	0	0	0	...7.117	...7.116	JAJ0	...142,348	...740,792	...10/23/2023	...10/21/2035
05592X-AD-2	BMW Vehicle Owner Trust -BMNOT 2023-A A3				.. 1.A FE	10,030,350	100.7589	10,095,037	10,019,000	10,023,346	0	(5,142)	0	0	...5.470	...5.414	MON	...9,134	...548,039	...08/22/2023	...02/25/2028
05682C-AE-7	BCC 2023-3A C-BCC 2023-3A C	D.....			.. 1.F FE	7,000,000	101.1324	7,079,268	7,000,000	7,000,000	0	0	0	0	...7.885	...7.884	JAJ0	...105,787	...739,044	...06/27/2023	...07/24/2036
05682G-AJ-7	Bain Capital Credit CLO-BCC 2022-2A C	D.....			.. 1.F FE	9,000,000	100.2427	9,021,843	9,000,000	9,000,000	0	0	0	0	...7.132	...7.131	JAJ0	...126,586	...714,847	...03/11/2022	...04/22/2035
05682G-AL-2	Bain Capital Credit CLO-BCC 2022-2A D1	D.....			.. 2.B FE	5,000,000	100.1817	5,009,085	5,000,000	5,000,000	0	0	0	0	...8.282	...8.280	JAJ0	...81,666	...455,436	...03/11/2022	...04/22/2035
05683E-AU-6	Bain Capital Credit CLO -BCC 2020-2A DR	D.....			.. 2.C FE	2,400,000	100.6327	2,415,185	2,400,000	2,400,000	0	0	0	0	...8.179	...8.178	JAJ0	...39,259	...218,089	...07/02/2021	...07/19/2034
05683N-AJ-1	Bain Capital Credit CLO -BCC 2021-3A AR	D.....			.. 1.A Z	9,878,750	100.0000	9,878,750	9,878,750	9,878,750	0	0	0	0	...0.000	...0.000	JAJ0	0	0	...12/20/2024	...07/24/2034
05684G-AE-6	BCC 2023-2A B1-BCC 2023-2A B1	D.....			.. 1.C FE	10,000,000	100.6977	10,069,770	10,000,000	10,000,000	0	0	0	0	...7.232	...7.231	JAJ0	...150,674	...1,064,562	...05/09/2023	...07/18/2036
05684P-AL-0	Bain Capital Credit CLO -BCC 2021-6A A1R	D.....			.. 1.A FE	12,500,000	100.0225	12,502,813	12,500,000	12,500,000	0	0	0	0	...5.485	...5.486	JAJ0	...36,189	0	...12/03/2024	...10/21/2034
05684P-AQ-9	Bain Capital Credit CLO -BCC 2021-6A BR	D.....			.. 1.C FE	4,000,000	100.0223	4,000,892	4,000,000	4,000,000	0	0	0	0	...5.945	...5.946	JAJ0	...12,552	0	...12/03/2024	...10/21/2034
05684W-AA-9	Bain Capital Credit CLO -BCC 2022-1A E	D.....			.. 3.C FE	5,000,000	..97.2758	4,863,790	5,000,000	5,000,000	0	0	0	0	...11.132	...11.130	JAJ0	...115,962	...601,096	...02/03/2022	...04/18/2035
05685N-AA-8	Bain Capital Credit CLO -BCC 2023-1A AN	D.....			.. 1.A FE	5,652,017	100.1959	5,652,914	5,641,862	5,641,862	0	...10,117	0	0	...6.477	...4.896	JAJ0	...78,164	...410,716	...08/25/2023	...04/16/2036
05692Q-AA-9	Bain Capital CLO 2024-1 -BCC 2024-1A A1	D.....			.. 1.A FE	8,400,000	100.1493	8,412,541	8,400,000	8,400,000	0	0	0	0	...6.197	...6.197	JAJ0	...111,345	...355,670	...01/25/2024	...04/16/2037
05874V-AA-1	Ballyrock CLO 23 Ltd-BALLY 2023-23A A1	D.....			.. 1.A FE	10,000,000	100.4587	10,045,870	10,000,000	10,000,000	0	0	0	0	...6.606	...6.605	JAJ0	...124,778	...1,224,632	...01/26/2023	...04/25/2036
05874W-AG-6	Ballyrock CLO 19 Ltd-BALLY 2022-19A B	D.....			.. 1.F FE	7,500,000	100.1784	7,513,380	7,500,000	7,500,000	0	0	0	0	...6.967	...6.967	JAJ0	...104,511	...587,637	...03/03/2022	...04/20/2035
05874W-AJ-0	Ballyrock CLO 19 Ltd-BALLY 2022-19A C	D.....			.. 2.C FE	5,000,000	100.3631	5,018,155	5,000,000	5,000,000	0	0	0	0	...8.117	...8.116	JAJ0	...81,174	...450,376	...03/03/2022	...04/20/2035
05876K-AC-9	Ballyrock CLO 16 Ltd-BALLY 2021-16A A2	D.....			.. 1.C FE	4,407,160	100.0780	4,558,553	4,555,000	4,344,102	0	...(35,196)	0	0	...6.529	...6.013	JAJ0	...59,479	...420,786	...05/04/2023	...07/20/2034
05876N-AA-7	Ballyrock CLO 26 Ltd-BALLY 2024-26A A1A	D.....			.. 1.A FE	12,950,000	100.6940	13,039,873	12,950,000	12,950,000	0	0	0	0	...6.844	...6.844	JAJ0	...529,294	0	...04/29/2024	...07/25/2037
06744N-BG-1	Bardot CLO Ltd-BARDT 2019-2A AR	D.....			.. 1.A FE	10,284,750	100.1182	10,512,411	10,500,000	10,250,020	0	...22,466	0	0	...5.983	...6.058	JAJ0	...123,903	...711,732	...12/05/2022	...10/22/2032
06744N-BJ-5	Bardot CLO Ltd-BARDT 2019-2A BR	D.....			.. 1.C FE	1,189,063	100.0538	1,250,673	1,250,000	1,181,898	0	...(255)	0	0	...6.493	...6.485	JAJ0	...16,008	...91,194	...11/04/2022	...10/22/2032
07336P-AA-2	Bayview Opportunity Mast-BVQLN 2024-EDU1	D.....			.. 1.A FE	11,512,792	..99.5220	11,457,764	11,512,792	11,512,792	0	0	0	0	...6.019	...6.291	MON	...11,549	...507,484	...04/23/2024	...06/25/2047
07336P-AC-8	Bayview Opportunity Mast-BVQLN 2024-EDU1	D.....			.. 1.F FE	2,131,999	..98.6479	2,103,172	2,131,999	2,131,999	0	0	0	0	...6.369	...6.641	MON	...2,263	...98,932	...04/23/2024	...06/25/2047
07355V-AL-1	Beechwood Park CLO Ltd-BCHPK 2019-1A ER	D.....			.. 3.C FE	10,000,000	100.2584	10,025,840	10,000,000	10,000,000	0	0	0	0	...11.147	...11.145	JAJ0	...235,335	...1,202,780	...02/11/2022	...01/17/2035
08181F-AE-0	Benefit Street Partners -BSP 2023-32A B	D.....			.. 1.C FE	6,500,000	101.0779	6,570,064	6,500,000	6,500,000	0	0	0	0	...7.026	...7.025	JAJ0	...86,262	...473,251	...10/04/2023	...10/25/2036
08182Y-AA-6	Benefit Street Partners -BSP 2024-35A A	D.....			.. 1.A FE	16,000,000	100.9034	16,144,544	16,000,000	16,000,000	0	0	0	0	...6.156	...6.155	JAJ0	...186,044	...428,051	...04/25/2024	...04/25/2037
08182Y-AC-2	Benefit Street Partners -BSP 2024-35A B	D.....			.. 1.C FE	10,000,000	100.9316	10,093,160	10,000,000	10,000,000	0	0	0	0	...6.576	...6.575	JAJ0	...124,211	...283,982	...04/25/2024	...04/25/2037
08186K-AA-2	Benefit Street Partners -BSP 2023-30A A	D.....			.. 1.A FE	18,036,000	100.5550	18,099,900	18,000,000	18,000,000	0	...36,000	0	0	...6.726	...5.166	JAJ0	...228,680	...1,359,284	...06/14/2023	...04/25/2036
087598-AE-8	BETHPAGE PARK CLO LTD-BETHP 2021-1A C	D.....			.. 1.F FE	3,600,000	100.1027	3,603,697	3,600,000	3,600,000	0	0	0	0	...6.918	...6.917	JAJ0	...53,957	...277,261	...09/24/2021	...10/15/2036
08860D-AB-9	BHG Securitization Trust-BHG 2022-C B	D.....			.. 1.D FE	7,499,213	100.3766	7,528,244	7,500,000	7,499,784	0	...325	0	0	...5.930	...5.934	MON	...17,296	...444,750	...09/12/2022	...10/17/2035
08860D-AC-7	BHG Securitization Trust-BHG 2022-C C	D.....			.. 1.G FE	9,996,527	102.2724	10,227,243	10,000,000	9,997,961	0	...766	0	0	...6.560	...6.569	MON	...25,511	...656,000	...09/12/2022	...10/17/2035
08862G-AA-2	BHG Securitization Trust-BHG 2023-B A	D.....			.. 1.A FE	3,644,516	102.2303	3,726,296	3,645,001	3,644,584	0	...36	0	0	...6.920	...6.926	MON	...9,809	...252,234	...10/31/2023	...12/17/2036
09077R-AE-9	Birch Grove CLO 7 Ltd-BGCL0 2023-7A B	D.....			.. 1.C FE	8,600,000	101.4450	8,724,270	8,600,000	8,600,000	0	0	0	0	...7.467	...7.466	JAJ0	...128,439	...663,063	...10/27/2023	...10/20/2036
09077T-AA-3	Birch Grove CLO 8 Ltd-BGCL0 2024-8A A1	D.....			.. 1.A FE	15,000,000	100.7367														

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
12478C-AU-5	CBAM 2018-8 Ltd/KY-CBAM 2018-8A B1R	D.....			.. 1.C FE	7,750,000	100.1837	7,764,237	7,750,000	7,750,000	0	0	0	0	6.706	6.705	JAUJ	112,603	218,706	05/10/2024	07/15/2037
12510H-AB-6	CARS-DB4 LP-CAUTO 2020-1A A2				.. 1.A FE	5,301,045	95.4103	5,058,581	5,301,923	5,301,633	0	388	0	0	3.030	3.035	MON	7,140	161,094	01/15/2020	02/15/2050
12510H-AC-4	Capital Automotive Reit-CAUTO 2020-1A A3				.. 1.A FE	6,840,708	89.1124	6,269,637	7,035,651	6,866,501	0	24,483	0	0	3.250	3.260	MON	10,162	225,060	01/15/2020	02/15/2050
12510H-AF-7	Capital Automotive Reit-CAUTO 2020-1A A6				.. 1.E FE	2,097,294	88.1421	2,034,659	2,308,385	2,153,489	0	31,423	0	0	3.810	5.329	MON	3,909	88,194	09/02/2022	02/15/2050
12510H-AL-4	CARS-DB5 LP-CAUTO 2021-1A A2				.. 1.A FE	737,294	79.8828	755,090	945,248	758,063	0	20,769	0	0	2.280	5.970	MON	19,756	19,756	01/18/2024	08/15/2051
12510H-AM-2	CARS-DB5 LP-CAUTO 2021-1A A3				.. 1.E FE	2,687,148	93.9919	2,836,821	3,018,155	2,857,143	0	132,326	0	0	1.920	4.855	MON	2,576	53,433	06/01/2022	08/15/2051
12510H-AN-0	Capital Automotive REIT-CAUTO 2021-1A A4				.. 1.E FE	17,003,808	73.3697	13,077,227	17,823,750	17,218,701	0	77,981	0	0	2.760	3.338	MON	21,864	493,302	03/04/2022	08/15/2051
12510H-AQ-3	Capital Automotive REIT-CAUTO 2022-1A A2				.. 1.E FE	50,241,898	90.9395	45,955,708	50,534,375	50,336,618	0	57,993	0	0	3.700	3.710	MON	83,101	1,874,969	03/11/2022	03/15/2052
12510H-AR-1	Capital Automotive REIT-CAUTO 2022-1A B				.. 2.B FE	999,584	91.9513	919,513	1,000,000	999,676	0	155	0	0	4.680	4.687	MON	2,080	46,930	03/08/2022	03/15/2052
12510H-AT-7	CARS-DB7 LP-CAUTO 2023-1A A2				.. 1.E FE	2,007,587	100.8318	1,985,126	1,968,750	2,006,634	0	(953)	0	0	6.500	6.179	MON	5,688	21,684	10/15/2024	09/15/2053
12511A-AA-2	CBAM 2020-13 Ltd-CBAM 2020-13A A	D.....			.. 1.A FE	4,914,000	100.0985	5,004,925	5,000,000	4,851,303	0	10,951	0	0	6.300	5.934	JAUJ	63,090	358,198	01/05/2023	01/20/2034
12530M-AA-3	CF Hippolyta LLC-SORT 2020-1 A1				.. 1.E FE	13,705,492	97.5389	14,037,042	14,391,232	14,239,753	0	488,324	0	0	1.690	1.695	MON	10,810	243,888	07/14/2020	07/15/2060
12530M-AB-1	CF Hippolyta Issuer LLC-SERIES 20-1 CLAS				.. 1.E FE	8,705,673	90.6593	7,896,189	8,709,741	8,707,767	0	1,437	0	0	1.990	1.998	MON	7,703	173,799	07/14/2020	07/15/2060
12530M-AE-5	CF Hippolyta LLC-SORT 2021-1A A1				.. 1.E FE	12,238,488	94.6330	12,486,128	13,194,266	12,818,660	0	516,082	0	0	1.530	1.535	MON	8,972	202,434	03/10/2021	03/15/2061
12555Q-AN-6	CIFC Funding 2020-1 Ltd-CIFC 2020-1A A1R	D.....			.. 1.A FE	10,459,578	100.1731	10,668,435	10,650,000	10,324,724	0	(3,609)	0	0	6.068	5.537	JAUJ	140,008	728,448	04/17/2023	07/15/2036
12555Q-AW-6	CIFC Funding 2020-1 Ltd-CIFC 2020-1A DR	D.....			.. 2.C FE	3,000,000	100.1440	3,004,320	3,000,000	3,000,000	0	0	0	0	8.018	8.016	JAUJ	52,114	264,509	07/22/2021	07/15/2036
12555X-AN-1	CIFC Funding 2019-VI Ltd-CIFC 2019-6A A1	D.....			.. 1.A FE	10,000,000	100.4869	10,048,690	10,000,000	10,000,000	0	0	0	0	6.097	6.097	JAUJ	130,414	238,044	05/22/2024	07/16/2037
12560E-AQ-9	CIFC Funding 2020-1III LT-CIFC 2020-3A BR	D.....			.. 1.C FE	6,571,025	100.1435	6,709,615	6,700,000	6,443,255	0	(65,867)	0	0	6.529	5.731	JAUJ	87,489	495,012	05/03/2022	07/15/2034
12563E-AN-3	CIFC Funding 2021-1 Ltd-CIFC 2021-1A AR	D.....			.. 1.A FE	12,000,000	100.4750	12,057,000	12,000,000	12,000,000	0	0	0	0	6.046	6.045	JAUJ	137,040	282,249	05/31/2024	07/25/2037
12563L-AS-6	CLI Funding VI LLC-2020-3A A				.. 1.F FE	5,446,974	91.5575	5,438,513	5,940,000	5,541,857	0	62,060	0	0	2.070	2.075	MON	4,441	122,933	10/02/2020	10/18/2045
12564D-AA-2	CIFC Funding 2021-1III LT-CIFC 2021-3A A	D.....			.. 1.A FE	19,995,000	100.2020	20,040,400	20,000,000	19,995,509	0	509	0	0	6.058	6.707	JAUJ	262,492	342,597	08/06/2024	07/15/2036
12565E-AC-5	CIFC Funding 2021-V Ltd-CIFC 2021-5A B	D.....			.. 1.C FE	1,413,750	100.1349	1,502,024	1,500,000	1,401,331	0	(1,363)	0	0	6.568	6.459	JAUJ	21,344	110,202	10/20/2022	07/15/2034
12565K-AA-5	CLI Funding VIII LLC-CLIF 2021-1A A				.. 1.F FE	2,718,583	90.0642	2,859,247	3,174,675	2,818,073	0	49,379	0	0	1.640	5.983	MON	1,881	52,065	12/09/2022	02/18/2046
12565K-AA-7	CLI Funding VIII LLC-CLIF 2022-1A A				.. 1.F FE	6,453,314	89.1569	6,759,280	7,581,333	6,570,392	0	100,452	0	0	2.720	6.364	MON	7,447	206,212	11/14/2023	01/18/2047
12567X-AA-5	CIFC Funding 2022-IV Ltd-CIFC 2022-4A E	D.....			.. 3.B FE	4,250,000	100.5095	4,271,654	4,250,000	4,250,000	0	0	0	0	11.647	11.645	JAUJ	105,877	532,779	04/20/2022	07/16/2035
12575A-AA-5	CMFT Net Lease Master Is-CIMNL 2021-1 A1				.. 1.A FE	4,464,518	87.3614	4,325,555	4,951,334	4,495,621	0	31,103	0	0	2.090	4.919	MON	3,162	25,871	09/24/2024	07/20/2051
12575A-AB-3	CMFT Net Lease-CIMNL 2021-1 A2				.. 1.A FE	9,572,884	80.1387	7,674,921	9,577,049	9,574,014	0	298	0	0	2.570	2.575	MON	7,521	246,130	07/22/2021	07/20/2051
12575A-AC-1	CMFT Net Lease-CIMNL 2021-1 A3				.. 1.C FE	1,749,354	87.0696	1,523,719	1,750,000	1,749,641	0	175	0	0	2.510	2.516	MON	1,342	43,925	07/22/2021	07/20/2051
12575A-AD-9	CMFT Net Lease-CIMNL 2021-1 A4				.. 1.C FE	1,999,037	79.7376	1,594,751	2,000,000	1,999,314	0	118	0	0	3.040	3.046	MON	1,858	60,800	07/22/2021	07/20/2051
12575A-AE-7	CMFT Net Lease-CIMNL 2021-1 A5				.. 1.F FE	10,892,843	84.2085	9,683,981	11,500,000	11,138,055	0	173,482	0	0	2.910	3.853	MON	10,225	334,650	03/25/2022	07/20/2051
12575A-AF-4	CMFT Net Lease-CIMNL 2021-1 A6				.. 1.F FE	8,132,937	83.6601	7,111,106	8,500,000	8,225,892	0	51,327	0	0	3.440	3.994	MON	8,934	292,400	04/05/2022	07/20/2051
12575R-AC-4	CIFC Funding 2023-1 Ltd-CIFC 2023-1A C	D.....			.. 1.F FE	4,125,000	100.9815	4,165,487	4,125,000	4,125,000	0	0	0	0	7.356	7.355	JAUJ	65,743	326,520	09/14/2023	10/15/2037
12807C-AA-1	CAL Funding IV Ltd-CAI 2020-1A A	D.....			.. 1.F FE	4,847,781	92.3380	4,804,597	5,203,271	4,987,227	0	104,511	0	0	2.220	1.925	MON	1,925	115,500	09/01/2022	09/25/2045
13876G-AL-2	Canyon Capital CLO 2017--CANVC 2017-1A B	D.....			.. 1.B FE	13,968,000	100.1955	14,027,370	14,000,000	13,920,506	0	(35,112)	0	0	6.518	5.193	JAUJ	197,698	1,021,459	03/01/2022	07/15/2030
13876L-AW-7	Canyon CLO 2020-1 Ltd-CANYC 2020-1A AR2	D.....			.. 1.A FE	6,250,000	100.0000	6,250,000	6,250,000	6,250,000	0	0	0	0	5.514	5.514	JAUJ	1,915	0	12/19/2024	07/15/2034
13876N-AC-2	Canyon CLO 2020-2 Ltd-CANYC 2020-2A CR	D.....			.. 1.F FE	3,800,000	100.1227	3,804,663	3,800,000	3,800,000	0	0	0	0	6.968	6.967	JAUJ	57,366	294,591	09/15/2024	10/15/2034
13877E-AG-7	Canyon Capital CLO 2021--CANVC 2021-1A C	D.....			.. 1.F FE	3,994,800	100.0941	4,003,764	4,000,000	4,000,000	0	(5,200)	0	0	6.868	5.273	JAUJ	59,518	306,040	09/01/2021	04/15/2034
13877J-AA-9	Canyon Capital CLO 2022--CANVC 2022-1A A	D.....			.. 1.A FE	1,975,198	100.0343	2,041,700	2,041,000	1,949,639	0	3,164	0	0	5.977	5.652	JAUJ	26,433	137,889	01/03/2023	04/15/2035
13877J-AC-1	Canyon Capital CLO 2022--CANVC 2022-1A B	D.....			.. 1.C FE	2,265,156	100.1230	2,237,921	2,375,000	2,232,916	0	(3,993)	0	0	6.497	6.056	JAUJ	33,434	172,975	05/24/2022	04/15/2035
13877L-AC-0	Canyon Capital CLO 2022--CANVC 2022-2A B	D.....			.. 1.C FE	7,500,000	100.4148	7,531,110	7,500,000	7,500,000	0	0	0	0	7.847	7.846	JAUJ	127,519	648,893	12/08/2022	01/15/2036
13877P-AA-5	Canyon CLO 2021-4 Ltd-CANYC 2021-4A A	D.....			.. 1.A FE	2,489,777	100.1211	2,565,103	2,562,000	2,460,119	0	4,299	0	0	6.088	5.772	JAUJ	33,792	175,757	01/03/2023	10/15/2034
13877P-AC-1	CANYC-2021-4A B	D.....			.. 1.C FE	1,426,875	100.0772	1,501,158	1,500,000	1,408,364	0	(9,453)	0	0	6.618	6.316	JAUJ	21,507	110,963	11/28/2022	10/15/2034
13887A-AE-8	Canyon CLO 2023-2 Ltd-CANYC 2023-2A B	D.....			.. 1.C FE	5,000,000	100.9457	5,047,285	5,000,000	5,000,000	0	0	0	0	6.706	6.705	FIAN	72,647	156,370	04/03/2024	05/15/2037
13887W-AN-0	Canyon Capital CLO 2019--CANVC 2019-2A C	D.....			.. 1.F FE	5,000,000	100.1831	5,009,155	5,000,000	5,000,000	0	0	0	0	7.068	7.067	JAUJ	76,565	392,689	10/22/2021	10/15/2034
138927-AG-3	Canyon Capital CLO 2023--CANVC 2023-1A C	D.....			.. 1.F FE	4,000,000	101.1261	4,045,044	4,000,000	4,000,000	0	0	0	0	7.656	7.655	JAUJ	66,351	375,577	07/28/2023	10/15/2036

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor-tization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
14074E-AE-1	Captree Park CLO Ltd-CPTPK 2024-1A B1	D.....			.. 1.C FE	7,300,000	100.8116	7,359,247	7,300,000	7,300,000	0	0	0	0	6.517	6.517	JAJ0	95,154	211,710	04/26/2024	07/20/2037
14310Q-AN-8	Carlyle Direct Lending C-CGFM 2015-1A A1				.. 1.A FE	50,000,000	100.1137	50,056,850	50,000,000	50,000,000	0	0	0	0	6.456	6.455	JAJ0	699,389	1,037,563	05/30/2024	07/15/2036
14310Q-AS-7	Carlyle Direct Lending C-CGFM 2015-1A A2				.. 1.C FE	15,000,000	100.1966	15,029,490	15,000,000	15,000,000	0	0	0	0	6.806	6.805	JAJ0	221,192	326,582	05/30/2024	07/15/2036
14311U-BC-1	Carlyle Global Market St-CGMS 2016-3A BR	D.....			.. 1.B FE	12,925,000	100.0147	12,926,900	12,925,000	12,925,000	0	0	0	0	6.044	6.044	JAJ0	45,570	0	11/27/2024	07/20/2034
14311U-BE-7	Carlyle Global Market St-CGMS 2016-3A CR	D.....			.. 1.E FE	4,852,500	100.0147	4,853,213	4,852,500	4,852,500	0	0	0	0	6.244	6.244	JAJ0	17,675	0	11/27/2024	07/20/2034
143133-AE-6	CGMS 2021-6A B-CGMS 2021-6A B	D.....			.. 1.C FE	5,144,180	100.0000	5,300,000	5,300,000	5,063,467	0	(12,366)	0	0	6.618	5.938	JAJ0	75,991	392,069	04/26/2023	07/15/2034
14316B-AQ-8	CARLYLE US CLO 2019-1 LT-CGMS 2019-1A A2	D.....			.. 1.A FE	7,555,000	100.2131	8,017,048	8,000,000	7,536,401	0	(8,854)	0	0	6.479	6.647	JAJ0	103,664	586,981	10/13/2022	04/20/2031
14316W-AC-3	Carlyle Global Market St-CGMS 2021-7A A2	D.....			.. 1.C FE	10,000,000	100.1349	10,013,490	10,000,000	10,000,000	0	0	0	0	6.568	6.567	JAJ0	142,296	734,683	08/11/2021	10/15/2035
14316W-AE-9	Carlyle Global Market St-CGMS 2021-7A B	D.....			.. 1.F FE	3,000,000	100.1198	3,003,594	3,000,000	3,000,000	0	0	0	0	7.018	7.017	JAJ0	45,614	234,092	08/11/2021	10/15/2035
14318M-AH-2	Carmax Auto Owner Trust -CARMX 2022-3 D				.. 2.B FE	7,497,647	101.7478	7,631,087	7,500,000	7,498,992	0	572	0	0	6.200	6.209	MON	20,667	465,000	07/12/2022	01/16/2029
14318R-AE-8	CARLYLE US CLO 2023-1 LT-CGMS 2023-1A B	D.....			.. 1.C FE	7,500,000	100.6288	7,547,160	7,500,000	7,500,000	0	0	0	0	7.217	7.216	JAJ0	108,261	837,365	04/21/2023	07/20/2035
14686G-AD-8	Carvana Auto Receivables-CRVNA 2022-N1 C				.. 1.D FE	1,787,462	97.8691	1,749,569	1,787,663	1,787,563	0	(32)	0	0	3.320	3.326	MON	3,462	57,657	03/11/2022	12/11/2028
14856G-AA-8	Castlelake Aircraft Stru-CLAST 2021-1A A				.. 1.G FE	1,462,076	94.6614	1,384,060	1,462,117	1,462,092	0	(25)	0	0	3.474	3.475	MON	2,258	50,794	01/20/2021	01/15/2046
14987V-AQ-2	CBAM 2019-9 Ltd-CBAM 2019-9A B1R	D.....			.. 1.C FE	10,000,000	100.6619	10,066,190	10,000,000	10,000,000	0	0	0	0	6.806	6.805	JAJ0	147,461	379,465	04/08/2024	07/15/2037
15674V-AA-2	Cerberus Onshore CLO LLC-CERB 2023-2A A1				.. 1.A FE	21,000,000	102.3862	21,501,102	21,000,000	21,000,000	0	0	0	0	7.206	7.205	JAJ0	327,868	1,678,758	05/11/2023	07/15/2035
15674V-AD-6	Cerberus Onshore CLO LLC-CERB 2023-2A B				.. 1.B FE	5,000,000	100.9897	5,049,485	5,000,000	5,000,000	0	0	0	0	8.256	8.255	JAJ0	89,439	452,933	05/11/2023	07/15/2035
156940-AA-6	Cerberus Loan Funding XL-CERB 2023-4A A				.. 1.A FE	10,000,000	102.3871	10,238,710	10,000,000	10,000,000	0	0	0	0	7.081	7.080	JAJ0	153,420	693,293	11/10/2023	10/15/2035
16144C-AG-1	Chase Auto Owner Trust-CHAOT 2024-2A D				.. 2.C FE	7,259,499	103.0510	7,481,500	7,260,000	7,260,000	0	501	0	0	6.150	6.299	MON	7,442	297,660	04/18/2024	08/25/2031
16144Q-AF-2	Chase Auto Owner Trust 2-CHAOT 2024-5A C				.. 1.F FE	6,498,044	96.3183	6,260,689	6,500,000	6,500,000	0	1,957	0	0	4.620	5.145	MON	5,005	75,909	09/13/2024	08/26/2030
16144Q-AG-0	Chase Auto Owner Trust 2-CHAOT 2024-5A D				.. 2.C FE	2,849,343	95.9748	2,735,283	2,850,000	2,850,000	0	657	0	0	4.970	5.485	MON	2,361	35,805	09/13/2024	01/26/2032
16409T-AE-9	Chenango Park CLO Ltd-CHPPK 2018-1A A2	D.....			.. 1.C FE	5,928,000	100.2014	6,012,084	6,000,000	5,863,555	0	(28,141)	0	0	6.468	5.789	JAJ0	84,078	434,726	04/28/2022	04/15/2030
171512-AQ-9	Churchill Middle Market -CHMML 2019-1A A	D.....			.. 1.A FE	10,000,000	100.7989	10,079,890	10,000,000	10,000,000	0	0	0	0	6.556	6.555	JAJ0	127,483	391,147	03/08/2024	04/23/2036
17181T-AE-1	CIFC Funding 2018-IV Ltd-CIFC 2018-4A B	D.....			.. 1.D FE	864,270	100.2304	902,074	900,000	859,180	0	(2,977)	0	0	7.009	6.825	JAJ0	13,317	70,384	05/24/2022	10/17/2031
17182X-AL-5	CIFC Funding 2019-IV Ltd-CIFC 2019-4A A1	D.....			.. 1.A FE	10,422,660	100.1298	10,633,785	10,620,000	10,284,360	0	(76,132)	0	0	6.078	5.489	JAJ0	139,844	727,472	06/15/2023	10/15/2034
171937-AA-3	CIFC-LBC MIDDLE MKT CLO 2023-1 LLC - CLB				.. 1.A FE	15,000,000	100.7223	15,108,345	15,000,000	15,000,000	0	0	0	0	7.217	7.216	JAJ0	216,522	1,334,790	08/31/2023	10/20/2035
171937-AE-5	CIFC-LBC MIDDLE MKT CLO 2023-1 LLC - CLB				.. 1.C FE	7,500,000	101.2972	7,597,290	7,500,000	7,500,000	0	0	0	0	8.167	8.166	JAJ0	122,511	747,156	08/31/2023	10/20/2035
171937-AG-0	CIFC-LBC MIDDLE MKT CLO 2023-1 LLC - CLB				.. 1.F FE	5,000,000	101.4026	5,070,130	5,000,000	5,000,000	0	0	0	0	8.917	8.916	JAJ0	89,174	540,083	08/31/2023	10/20/2035
17275G-AA-4	CIRUS-2018-1A A	D.....			.. 1.A FE	32,378,781	99.6250	32,257,361	32,378,781	32,378,781	0	0	0	0	4.800	4.799	JJ	673,479	1,554,182	11/02/2018	01/25/2037
18915F-AA-0	Clover CLO 2021-3 LLC-CLVR 2021-3A AR				.. 1.A Z	7,500,000	100.0000	7,500,000	7,500,000	7,500,000	0	0	0	0	0.000	0.000	JAJ0	0	0	12/19/2024	01/25/2035
193938-AB-3	College Ave Student Loan-CASL 2023-A A2				.. 1.A FE	1,966,386	99.4540	1,966,034	1,966,773	1,966,471	0	(3)	0	0	5.330	5.334	MON	1,747	105,019	05/09/2023	05/25/2055
193938-AC-1	College Ave Student Loan-CASL 2023-A B				.. 1.C FE	2,499,500	98.1728	2,454,320	2,500,000	2,499,669	0	53	0	0	5.820	5.823	MON	2,425	145,500	05/09/2023	05/25/2055
19421U-AB-0	College Avenue Student L-CASL 2019-A A2				.. 1.A FE	1,971,169	93.2815	1,839,410	1,971,891	1,971,469	0	61	0	0	3.280	3.289	MON	1,078	64,661	06/26/2019	12/28/2048
19424K-AB-9	College Avenue Student L-CASL 2021-A A2				.. 1.A FE	4,104,217	88.0142	3,613,014	4,105,036	4,104,452	0	71	0	0	1.600	1.606	MON	1,115	65,663	02/09/2021	07/25/2051
19424K-AD-5	College Ave Student Loan-CASL 2021-A C				.. 1.F FE	2,012,988	89.5057	1,958,411	2,188,030	2,065,815	0	24,707	0	0	2.920	6.029	MON	1,065	63,873	07/25/2022	07/25/2051
19425A-AD-6	College Avenue Student L-CASL 2021-B C				.. 1.F FE	2,547,888	89.7185	2,286,264	2,548,265	2,548,050	0	10	0	0	2.720	2.723	MON	1,155	69,313	06/23/2021	06/25/2052
19425A-AE-4	College Avenue Student L-CASL 2021-B D				.. 2.B FE	2,054,915	89.6704	1,843,494	2,055,245	2,055,245	0	(47)	0	0	3.780	3.789	MON	1,295	77,711	06/23/2021	06/25/2052
20267U-AA-7	COMMONBOND STUDENT LOAN -SERIES 16-B CLA				.. 1.A FE	302,189	95.0571	287,330	302,271	302,245	0	12	0	0	2.730	2.740	MON	138	8,241	10/13/2016	10/25/2040
20268W-AB-0	Commonbond Student Loan -CBSLT 2021-AGS				.. 1.D FE	577,970	78.7160	598,625	760,487	576,960	0	(1,010)	0	0	1.400	6.673	MON	177	10,644	01/04/2024	03/25/2052
21872M-AG-7	CoreVest American Financ-CAPL 2018-2 B				.. 1.A FE	329,600	99.2234	327,052	329,612	329,612	0	5	0	0	4.559	4.623	MON	1,252	20,532	12/06/2018	11/01/2052
22284H-AC-7	Covenant Credit Partners-COV 2017-1A B	D.....			.. 1.A FE	1,620,669	100.0302	1,621,158	1,620,669	1,620,669	0	0	0	0	6.768	6.382	JAJ0	23,764	122,354	08/09/2017	10/15/2029
22284H-AJ-2	Covenant Credit Partners-COV 2017-1A C2	D.....			.. 1.A FE	4,998,386	99.4905	4,974,525	5,000,000	4,999,944	0	302	0	0	4.539	4.539	JAJ0	47,912	225,689	08/09/2017	10/15/2029
224092-AA-4	CP EF Asset Securitizati-CPEF 2023-1A A				.. 1.C FE	7,521,703	101.7220	7,538,356	7,559,190	7,538,254	0	15,515	0	0	7.480	7.901	MON	25,130	564,316	11/10/2023	03/15/2032
22549N-AA-9	Credit Suisse ABS Repack-CSRT 2018-PS1 A				.. 1.D FE	34,017,254	95.8148	33,601,599	35,069,334	34,616,491	0	(974,705)	0	0	6.187	5.603	JAJ0	569,933	2,456,331	07/25/2018	01/01/2037
225914-AG-5	Creeksource 2024-1 Dunes-CKSRC 2024-1A C	D.....			.. 1.F FE	2,000,000	100.0184	2,000,368	2,000,000	2,000,000	0	0	0	0	6.384	6.379	JAJ0	4,256	0	12/09/2024	01/15/2038
22846M-AC-7	Crown Point CLO 7 Ltd-CRNPT 2018-7A B	D.....			.. 1.A FE	19,000,000	100.1678	19,031,882	19,000,000	19,000,000	0	0	0	0	6.829	5.327	JAJ0	259,502	1,461,874	10/11/2018	10/20/2031

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
23284B-AA-2	CyrusOne Data Centers Is-CYRUS 2023-1A A				1.G FE	7,210,402	.95.8102	7,664,816	8,000,000	7,446,289	0	145,124	0	0	4.300	6.639	MON	10,511	344,000	04/19/2023	04/20/2048
23345A-AE-3	DT Auto Owner Trust 2022-DTAOT 2022-2A C				1.A FE	7,101,091	.99.8547	7,091,007	7,101,328	7,101,285	0	88	0	0	4.720	4.721	MON	14,897	335,183	05/12/2022	03/15/2028
24703G-AD-6	Dell Equipment Finance T-DEFT 2023-2 B				1.C FE	3,299,746	100.9604	3,331,694	3,300,000	3,299,852	0	73	0	0	5.770	5.773	MON	4,760	190,410	06/12/2023	01/22/2029
24703G-AE-4	Dell Equipment Finance T-DEFT 2023-2 C				1.F FE	4,499,356	100.6694	4,530,122	4,500,000	4,499,630	0	182	0	0	6.060	6.065	MON	6,818	272,700	06/12/2023	01/22/2029
24736Y-AA-4	Delta Air Lines 2015-1 C-DAL 3 7/8 07/30				2.B FE	2,126,725	.96.0425	2,042,559	2,126,725	2,126,185	0	299	0	0	3.875	3.890	JJ	34,567	82,307	08/10/2015	07/30/2027
25255N-AS-7	Diameter Capital CLO 4 L-DCLO 2022-4A A2	D			1.C FE	6,500,000	100.8579	6,555,764	6,500,000	6,500,000	0	0	0	0	7.056	7.055	JAJO	99,371	380,265	12/13/2023	01/15/2037
25255R-AA-7	Diameter Capital Clo 1 L-DCLO 2023-5A A1	D			1.A FE	15,000,000	100.4343	15,065,145	15,000,000	15,000,000	0	0	0	0	6.506	6.505	JAJO	211,442	1,146,387	09/20/2023	10/15/2036
25255W-AA-6	Diameter Capital CLO 7 L-DCLO 2024-7A A1	D			1.A FE	15,000,000	100.8121	15,121,815	15,000,000	15,000,000	0	0	0	0	6.806	6.808	JAJO	538,793	0	05/21/2024	07/20/2037
25255W-AE-8	Diameter Capital CLO 7 L-DCLO 2024-7A A2	D			1.C FE	10,000,000	100.2192	10,021,920	10,000,000	10,000,000	0	0	0	0	7.176	7.178	JAJO	378,723	0	05/21/2024	07/20/2037
25273C-AB-6	Diamond Resorts Owner Tr-DROT 2021-1A B				1.F FE	755,307	.92.7498	704,841	759,938	758,631	0	1,668	0	0	2.050	2.412	MON	476	15,562	01/21/2022	11/21/2033
26209X-AC-5	DRIVEN BRANDS FUNDING LL-HONK 2020-2A A2				2.C FE	4,696,363	.92.8651	4,361,282	4,696,363	4,696,363	0	0	0	0	3.237	3.237	JAJO	29,982	152,021	10/29/2020	01/20/2051
26209X-AF-8	DRIVEN BRANDS FUNDING LL-HONK 2022-1A A2				2.C FE	33,472,301	101.0700	33,830,442	33,472,301	33,472,301	0	0	0	0	7.393	7.394	JAJO	488,048	2,493,781	09/28/2022	10/20/2052
26249M-AO-0	Dryden 37 Senior Loan Fu-DRSLF 2015-37A	D			1.A FE	3,682,438	100.1093	3,804,153	3,800,000	3,705,117	0	(87,012)	0	0	6.318	5.543	JAJO	52,014	269,547	12/07/2018	01/15/2031
26929H-AB-1	EWIC Master Issuer LLC-WAX 2022-1A A2				2.B FE	7,025,988	.97.0923	7,099,877	7,312,500	7,097,601	0	27,206	0	0	5.500	6.064	MJSD	17,875	402,188	03/28/2022	03/15/2052
28166L-AA-2	EDvestinU Private Educat-EDVES 2021-A A				1.A FE	3,324,796	.90.7460	3,452,605	3,804,692	3,390,389	0	53,253	0	0	1.800	6.443	MON	1,141	68,484	12/06/2023	11/25/2045
282523-AK-5	1828 CLO Ltd-GUG64 2016-1A A1S2	D			1.A FE	3,777,144	.99.5398	3,759,762	3,777,144	3,777,144	0	0	0	0	4.442	4.442	JAJO	35,420	178,353	10/05/2018	10/15/2031
28416L-AA-0	Elara HGV Timeshare Issu-EHGV 2021-A A				1.A FE	1,271,789	.93.0998	1,320,637	1,418,517	1,295,499	0	12,216	0	0	1.360	6.475	MON	322	19,292	01/11/2023	08/27/2035
28416L-AB-8	Elara HGV Timeshare Issu-EHGV 2021-A B				1.F FE	1,066,528	.93.3858	1,013,001	1,084,748	1,071,487	0	1,390	0	0	1.740	2.419	MON	315	18,875	01/21/2022	08/27/2035
28416T-AA-3	Elara HGV Timeshare Issu-EHGV 2019-A A				1.A FE	1,441,419	.97.3675	1,498,038	1,538,540	1,481,834	0	24,927	0	0	2.610	6.100	MON	829	40,196	01/11/2023	01/25/2034
28628C-AB-2	ELFI Graduate Loan Progr-ELFI 2022-A B				1.C FE	7,857,464	.78.7581	7,657,678	9,723,037	8,316,806	0	109,603	0	0	0.000	4.352	MON	0	0	06/09/2022	08/26/2047
28852L-AA-1	Ellington Clo III Ltd-ECLC 2018-3A A1	D			1.A FE	3,407,806	100.1520	3,412,986	3,407,806	3,407,806	0	(1,698)	0	0	6.529	6.459	JAJO	44,499	218,853	06/06/2018	07/20/2030
289913-AC-9	Logan CLO I Ltd-LOGN1 2021-1A AR1	D			1.A FE	10,000,000	100.6946	10,069,460	10,000,000	10,000,000	0	0	0	0	6.137	6.137	JAJO	122,748	314,454	04/24/2024	04/20/2037
29002G-AL-5	Elmwood CLO IV Ltd-ELMW4 2020-1A AR				1.A FE	15,000,000	100.5481	15,082,215	15,000,000	15,000,000	0	0	0	0	6.092	6.092	JAJO	190,386	425,078	05/06/2024	04/18/2037
29003U-AA-7	Elmwood CLO IX Ltd-ELMW9 2021-2A A1	D			1.A FE	3,367,875	100.1868	3,506,538	3,500,000	3,347,805	0	2,239	0	0	6.009	5.994	JAJO	42,063	240,035	10/07/2022	07/20/2034
29004J-AO-6	Elmwood CLO 19 Ltd-ELM19 2022-6A CR	D			1.F FE	5,850,000	101.1625	5,918,006	5,850,000	5,850,000	0	0	0	0	7.547	7.546	JAJO	93,211	506,963	08/15/2023	10/17/2036
29244P-AE-9	Empower CLO 2024-2 Ltd-EMPIR 2024-2A B	D			1.C FE	10,000,000	100.0950	10,009,500	10,000,000	10,000,000	0	0	0	0	7.126	7.134	JAJO	374,121	0	05/24/2024	07/15/2037
29244R-AA-3	Empower CLO 2024-1 Ltd-EMPIR 2024-1A A1	D			1.A FE	15,000,000	100.8819	15,132,285	15,000,000	15,000,000	0	0	0	0	6.226	6.225	JAJO	176,400	629,600	02/07/2024	04/25/2037
29247B-AG-2	Empower CLO 2023-2 Ltd-EMPIR 2023-2A B	D			1.C FE	4,300,000	100.7616	4,332,749	4,300,000	4,300,000	0	0	0	0	7.406	7.405	JAJO	68,998	405,620	07/18/2023	07/15/2036
29375N-AC-9	Enterprise Fleet Financi-EFF 2023-2 A3				1.A FE	7,998,223	101.4873	8,118,980	8,000,000	7,998,872	0	437	0	0	5.500	5.506	MON	13,444	440,000	05/23/2023	04/22/2030
29977F-AA-2	EverBright Solar Trust 2-EVBRT 2024-A A				1.G FE	7,491,698	.96.6900	7,308,029	7,558,208	7,494,753	0	3,055	0	0	6.430	6.600	MON	14,850	353,695	03/20/2024	06/22/2054
30165B-AF-0	Exeter Automobile Receiv-EART 2024-5A C				1.F FE	1,999,860	.98.7728	1,975,456	2,000,000	2,000,000	0	140	0	0	4.640	5.062	MON	4,124	19,333	09/24/2024	01/15/2030
30259A-AA-0	FDI I Ltd-SERIES 17-3A CLASS A1	D			1.A FE	6,454,868	.99.7739	6,440,273	6,454,868	6,454,868	0	0	0	0	3.900	3.899	JJ	109,087	251,740	11/29/2017	01/25/2036
302637-AG-8	FS KKR MM CLO 1 LLC-FSKMM 2019-1A A1R				1.A FE	8,623,109	100.1468	8,635,767	8,623,109	8,623,109	0	0	0	0	6.768	6.767	JAJO	126,440	643,528	12/14/2020	01/15/2031
302637-AJ-2	FS KKR MM CLO 1 LLC-FSKMM 2019-1A A2R				1.A FE	2,250,000	100.1512	2,253,402	2,250,000	2,250,000	0	0	0	0	7.168	7.167	JAJO	34,942	178,991	12/14/2020	01/15/2031
302637-AL-7	FS KKR MM CLO 1 LLC-FSKMM 2019-1A B1R				1.C FE	5,000,000	100.1250	5,006,250	5,000,000	5,000,000	0	0	0	0	7.518	7.516	JAJO	81,440	415,501	12/14/2020	01/15/2031
31425B-AA-5	FCI Funding 2024-1 LLC-FCITL 2024-A A				1.A FE	22,282,796	.99.8617	22,252,773	22,283,592	22,282,857	0	61	0	0	5.440	5.442	MON	53,877	407,443	08/07/2024	08/15/2036
33768D-AE-4	FirstKey Homes 2022-SFRA-FKH 2022-SFRA C				1.F FE	8,244,637	.96.2383	7,939,663	8,250,000	8,247,529	0	1,074	0	0	3.800	3.814	MON	26,125	313,500	03/10/2022	03/01/2039
33768N-AC-6	FIRSTKEY HOMES TRUST-FKH 2022-SFRI B				1.D FE	4,999,886	.97.8499	4,892,496	5,000,000	4,999,954	0	18	0	0	4.493	4.493	MON	18,7			

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
345285-AB-6	Ford Credit Auto Owner T-FORDR 2021-2 B				1.C FE	10,125,000	93.7626	10,548,294	11,250,000	10,509,467	0	370,871	0	0	1.910	5.622	MON	9,550	214,875	12/07/2023	05/15/2034
345295-AG-4	Ford Credit Auto Owner T-FORDO 2022-D C				1.A FE	6,998,231	102.0336	7,142,349	7,000,000	6,999,195	0	481	0	0	6.460	6.468	MON	20,098	452,200	11/17/2022	05/15/2030
34534L-AE-7	Ford Credit Auto Owner T-FORDO 2022-B A4				1.A FE	4,937,164	99.2056	5,009,884	5,050,000	5,002,316	0	60,991	0	0	3.930	5.226	MON	8,821	198,465	12/05/2023	08/15/2027
34535C-AB-2	Ford Credit Auto Owner T-FORDR 2023-2 B				1.C FE	10,595,400	103.9096	10,993,630	10,580,000	10,594,176	0	(1,275)	0	0	5.920	5.878	MON	27,837	606,307	08/06/2024	02/15/2036
34535C-AC-0	Ford Credit Auto Owner T-FORDR 2023-2 C				1.F FE	9,997,274	102.6847	10,268,471	10,000,000	9,997,946	0	483	0	0	6.160	6.166	MON	27,378	616,000	08/01/2023	02/15/2036
34535Q-AC-9	Ford Credit Auto Owner T-FORDR 2023-1 C				1.F FE	2,967,773	100.0299	3,000,896	3,000,000	2,972,844	0	5,071	0	0	5.580	5.898	MON	7,440	111,600	05/02/2024	08/15/2035
34955Y-AN-9	Fortress Credit BSL VI L-FCBSL 2018-1A B	D			1.A FE	24,000,000	95.7196	22,972,704	24,000,000	24,000,000	0	0	0	0	2.904	2.904	JAJQ	131,643	696,936	08/05/2020	07/23/2031
34960N-AN-6	Fortress Credit BSL III -FCBSL 2015-1A B	D			1.C FE	10,993,375	100.0693	11,107,692	11,100,000	11,007,043	0	(32,416)	0	0	6.624	5.671	JAJQ	153,179	825,662	01/17/2019	04/18/2031
361528-AC-6	GBX Leasing 2023-1 LLC-GBXL 2023-1A A				1.C FE	1,958,442	100.6457	1,958,401	1,959,401	1,958,556	0	111	0	0	6.420	6.429	MON	3,844	125,793	11/07/2023	11/20/2053
361528-AD-4	GBX Leasing 2023-1 LLC-GBXL 2023-1A B				1.F FE	5,081,684	98.3657	4,853,042	4,933,673	5,076,399	0	(5,285)	0	0	7.280	6.663	MON	10,975	89,793	09/23/2024	11/20/2053
36169E-AE-0	GECU Auto Receivables Tr-GECU 2023-1A B				1.C FE	4,099,583	103.6235	4,248,563	4,100,000	4,099,693	0	90	0	0	5.870	5.873	MON	10,696	240,670	08/07/2023	01/15/2030
36169E-AF-7	GECU Auto Receivables Tr-GECU 2023-1A C				1.F FE	3,649,317	103.7423	3,786,592	3,650,000	3,649,484	0	133	0	0	6.330	6.335	MON	10,269	231,045	08/07/2023	04/15/2030
361886-CX-0	GMF Floorplan Owner Revo-GFORT 2023-2 B				1.C FE	9,544,529	102.1007	9,748,573	9,548,000	9,545,432	0	645	0	0	5.830	5.839	MON	24,740	556,648	06/21/2023	06/15/2030
361886-DA-9	GMF Floorplan Owner Revo-GFORT 2024-1 A1				1.A FE	19,247,526	100.8254	19,408,886	19,250,000	19,248,050	0	524	0	0	5.130	5.135	MON	43,890	707,726	03/19/2024	03/15/2029
361886-DC-5	GMF Floorplan Owner Revo-GFORT 2024-1 B				1.C FE	4,749,953	100.4417	4,770,980	4,750,000	4,749,944	0	(9)	0	0	5.330	5.330	MON	11,252	181,442	03/19/2024	03/15/2029
36267K-AE-7	GM Financial Consumer Au-GMCAR 2023-3 A4				1.A FE	11,727,450	100.9761	11,794,010	11,680,000	11,708,876	0	(13,730)	0	0	5.340	5.205	MON	25,988	623,713	08/21/2023	12/18/2028
36320T-BF-9	Galaxy XII CLO Ltd-GALXY 2016-22A BRRR	D			1.C FE	15,000,000	100.0260	15,003,900	15,000,000	15,000,000	0	0	0	0	6.297	6.297	JAJQ	202,038	33,906	09/16/2024	04/16/2034
37147X-AC-7	Generate CLO 15 Ltd-GNRT 2024-15A B	D			1.C FE	9,500,000	100.8040	9,576,380	9,500,000	9,500,000	0	0	0	0	6.667	6.667	JAJQ	126,681	310,265	04/03/2024	07/20/2037
37149Y-AG-4	Generate CLO 16 Ltd-GNRT 2024-16A B	D			1.C FE	10,000,000	100.8141	10,081,410	10,000,000	10,000,000	0	0	0	0	6.857	6.859	JAJQ	358,069	0	05/17/2024	07/20/2037
379929-AE-2	GM Financial Automobile -GMALT 2023-3 A4				1.A FE	4,249,435	100.9280	4,289,442	4,250,000	4,249,734	0	228	0	0	5.440	5.446	MON	7,064	231,200	08/08/2023	08/20/2027
379930-AD-2	GM Financial Consumer Au-GMCAR 2023-4 A3				1.A FE	10,177,344	101.2089	10,120,893	10,000,000	10,100,759	0	(71,457)	0	0	5.780	4.987	MON	24,083	578,000	08/16/2028	08/16/2028
38012R-AA-4	GM Financial Revolving R-GMREV 2023-1 A				1.A FE	24,796,898	101.6742	25,316,876	24,900,000	24,824,747	0	21,436	0	0	5.120	5.218	MON	70,827	1,274,880	08/01/2023	04/11/2035
38012R-AB-2	GM Financial Revolving R-GMREV 2023-1 B				1.C FE	4,999,088	101.5273	5,076,366	5,000,000	4,999,361	0	203	0	0	5.560	5.564	MON	15,444	278,000	05/23/2023	04/11/2035
38012R-AC-0	GM Financial Revolving R-GMREV 2023-1 C				1.F FE	4,998,717	99.4449	4,972,246	5,000,000	4,999,096	0	285	0	0	5.900	5.906	MON	16,389	295,000	05/23/2023	04/11/2035
380241-AA-7	Goddard Funding LLC-GDRD 2022-1 A2				2.C FE	16,651,348	99.2609	16,523,462	16,646,500	16,649,885	0	(23,073)	0	0	6.864	6.859	JAJQ	193,610	1,142,616	08/17/2022	10/30/2052
38090A-AA-6	Goldentree Loan Managem-GLM 2022-16A XR	D			1.A FE	1,562,500	99.9995	1,562,492	1,562,500	1,562,500	0	0	0	0	5.867	5.867	JAJQ	18,336	77,899	11/15/2023	01/20/2034
38138K-AL-4	Goldentree Loan Managem-GLM 2021-11A AR	D			1.A FE	10,000,000	100.0215	10,002,150	10,000,000	10,000,000	0	0	0	0	5.591	5.591	JAJQ	45,040	0	11/18/2024	10/20/2034
38138K-AN-0	Goldentree Loan Managem-GLM 2021-11A BR	D			1.C FE	15,000,000	100.0212	15,003,180	15,000,000	15,000,000	0	0	0	0	6.061	6.061	JAJQ	73,239	0	11/18/2024	10/20/2034
38138K-AQ-3	Goldentree Loan Managem-GLM 2021-11A CR	D			1.F FE	5,500,000	100.0210	5,501,155	5,500,000	5,500,000	0	0	0	0	6.311	6.311	JAJQ	27,962	0	11/18/2024	10/20/2034
38150Y-AD-5	Goldman Home Improvement-GHIT 2022-GRN1				2.A FE	5,087,627	97.2052	5,053,924	5,199,235	5,120,945	0	(597)	0	0	7.300	8.103	MON	6,326	378,798	07/21/2022	06/25/2052
38172U-AE-5	Golub Capital Partners C-GOCAP 2018-38A	D			1.C FE	20,000,000	100.2977	20,059,540	20,000,000	20,000,000	0	0	0	0	6.567	6.566	JAJQ	237,149	433,447	06/07/2024	07/28/2036
38174Z-AC-9	Golub Capital Partners C-GOCAP 2019-42RA				1.A FE	8,000,000	101.1842	8,094,736	8,000,000	8,000,000	0	0	0	0	7.367	7.366	JAJQ	106,415	510,045	12/08/2023	01/20/2036
38175C-AC-6	Golub Capital Partners C-GOCAP 2014-21A	D			1.C FE	7,000,000	100.0003	7,000,021	7,000,000	7,000,000	0	0	0	0	6.687	5.442	JAJQ	88,423	525,878	12/07/2017	01/25/2031
38175J-AA-5	Golub Capital Partners C-GOCAP 2013-17A	D			1.A FE	3,164,165	100.0513	3,165,788	3,164,165	3,164,165	0	0	0	0	6.537	5.902	JAJQ	39,073	212,421	08/07/2017	10/25/2030
38175J-AC-1	Golub Capital Partners C-GOCAP 2013-17A	D			1.A FE	7,200,000	100.1017	7,207,322	7,200,000	7,200,000	0	0	0	0	7.037	5.922	JAJQ	95,710	566,523	08/07/2017	10/25/2030
38179N-AB-6	Golub Capital Partners C-GOCAP 2024-71A				1.A FE	16,000,000	100.5752	16,092,032	16,000,000	16,000,000	0	0	0	0	6.472	6.471	FIAN	143,814	798,901	02/05/2024	02/09/2037
38179Q-AC-1	GCBSL 2023-68A B-GCBSL 2023-68A B	D			1.C FE	10,000,000	100.9164	10,091,640	10,000,000	10,000,000	0	0	0	0	7.426	7.425	JAJQ	140,266	1,045,405	06/16/2023	07/25/2036
38179Q-AE-7	GCBSL 2023-68A C-GCBSL 2023-68A C	D			1.F FE	7,000,000	100.9684	7,067,788	7,000,000	7,000,000	0	0	0	0	8.076	8.075	JAJQ	106,781	790,175	06/16/2023	07/25/2036
38180P-AE-6	Golub Capital Partners C-GCBSL 2019-43A	D			1.C FE	3,900,000	99.9992	3,899,969	3,900,000	3,900,000	0	0	0	0	6.299	6.295	JAJQ	29,342	0	10/31/2024	10/20/2037
38180V-AA-1	Golub Capital Partners C-GOCAP 2013-17A	D			1.A Z	50,000,000	100.0000	50,000,000	50,000,000	50,000,000	0	0	0	0	0.000	0.000	FIAN	0	0	12/23/2024	02/09/2039
38190B-AA-3	Golub Capital Partners C-GCBSL 2024-74A	D			1.A FE	11,250,000	100.4446	11,300,018	11,250,000	11,250,000	0	0	0	0	6.815	6.828	JAJQ	415,281	0	05/20/2024	07/25/2037
38190B-AC-9	Golub Capital Partners C-GCBSL 2024-74A	D			1.C FE	6,500,000	100.4586	6,529,809	6,500,000	6,500,000	0	0	0	0	7.165	7.178	JAJQ	252,263	0	05/20/2024	07/25/2037
381935-AA-3	GoodLeap Home Improvemen-GDLP 2024-1A A				1.G FE	12,434,126	99.3556	12,384,588	12,464,907	12,435,016	0	889	0	0	5.350	5.351	MON	20,377	69,472	10/18/2024	10/20/2046
381938-AB-5	GOLUB CAPITAL PARTNERS A-GCPAF 2023-1A A				1.F FE	12,500,000	100.3667	12,545,833	12,500,000	12,500,000	0	0	0	0	7.458	7.457	JAJQ	170,913	932,250	06/20/2023	07/25/2033
381939-AC-1	Golub Capital Partners C-GCBSL 2023-70A	D			1.C FE	4,150,000	101.0980	4,195,567	4,150,000	4,150,000	0	0	0	0	7.126	7.125	JAJQ	55,859	309,180	10/20/2023	10/25/2036

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
38217U-AC-6	Goodgreen 2021-1 Trust-GOODG 2021-1A C .....	.....	.....	.....	.. 2.B FE	1,401,435	..81.8015	1,256,323	1,535,819	1,381,407	0	(25,116)	0	0	...5.740	...7.897	MON	18,611	126,629	05/13/2022	10/15/2056
38218J-AA-4	Goodgreen 2022-1-GOODG 2022-1A A	D.....	.....	.....	.. 1.A FE	15,231,498	..85.4445	13,018,855	15,236,616	15,236,616	0	0	0	0	...3.840	...3.873	MON	124,594	586,528	03/11/2022	10/15/2056
38218J-AB-2	Goodgreen 2022-1-GOODG 2022-1A B	D.....	.....	.....	.. 1.C FE	3,567,369	..87.1148	3,112,109	3,572,424	3,571,602	0	377	0	0	...4.590	...4.647	MON	34,686	164,086	03/15/2022	10/15/2056
38218J-AC-0	Goodgreen 2022-1-GOODG 2022-1A C	D.....	.....	.....	.. 2.B FE	2,959,391	..96.5335	2,864,923	2,967,803	2,967,803	0	0	0	0	...0.000	...3.258	MON	0	416,362	03/11/2022	10/15/2056
38237G-AA-7	GoodLeap Sustainable Hom-GOOD 2021-4GS A .....	.....	.....	.....	.. 1.F FE	7,238,535	..76.0037	7,203,342	9,477,623	7,308,837	0	70,303	0	0	...1.930	...6.379	MON	5,589	182,918	01/16/2024	07/20/2048
387422-AC-2	Granite Park Equipment Leasing 2023-1 LL .....	.....	.....	.....	.. 1.A FE	1,449,880	103.2568	1,497,223	1,450,000	1,449,914	0	32	0	0	...6.460	...6.463	MON	2,862	102,517	10/11/2023	09/20/2032
39154T-CM-8	GreatAmerica Leasing Rec-GALC 2024-1 C .....	.....	.....	.....	.. 1.F FE	1,949,715	100.4645	1,959,057	1,950,000	1,949,756	0	41	0	0	...5.430	...5.434	MON	4,706	92,649	01/23/2024	12/15/2031
39571M-AD-0	GreenSky Home Improvemen-GSKY 2024-1 A4 .....	.....	.....	.....	.. 1.A FE	8,560,543	..99.8252	8,545,947	8,560,910	8,560,910	0	367	0	0	...5.670	...5.974	MON	8,090	187,420	07/30/2024	06/25/2059
39571X-AE-4	GreenSky Home Improvemen-GSKY 2024-2 B .....	.....	.....	.....	.. 1.D FE	8,199,228	..99.1014	8,126,316	8,200,000	8,199,266	0	38	0	0	...5.260	...5.261	MON	7,189	82,670	10/23/2024	10/27/2059
39573A-AE-2	GreenState Auto Receivab-GRNST 2024-1A B .....	.....	.....	.....	.. 1.C FE	2,399,222	101.4184	2,434,040	2,400,000	2,399,363	0	141	0	0	...5.420	...5.429	MON	5,781	97,921	03/11/2024	01/15/2030
39573A-AF-9	GreenState Auto Receivab-GRNST 2024-1A C .....	.....	.....	.....	.. 1.F FE	2,999,979	100.4351	3,013,053	3,000,000	2,999,975	0	(4)	0	0	...5.770	...5.770	MON	7,693	130,306	03/11/2024	02/15/2030
40170F-AA-4	Guggenheim MM CLO 2018-1-GPIM 2018-1A A1	D.....	.....	.....	.. 1.A FE	6,903,037	100.1375	6,912,528	6,903,037	6,903,037	0	0	0	0	...7.093	...5.702	JAJO	106,087	446,939	11/20/2018	01/15/2031
40170F-AJ-5	Guggenheim MM CLO 2018-1-GPIM 2018-1A A2	D.....	.....	.....	.. 1.A FE	2,208,972	..99.6058	2,200,264	2,208,972	2,209,003	0	(51)	0	0	...4.550	...4.545	JAJO	21,218	100,508	11/20/2018	01/15/2031
40256G-AC-5	Gulf Stream Meridian-GSM 2021-6A A2	D.....	.....	.....	.. 1.C FE	10,000,000	100.0000	10,000,000	10,000,000	10,000,000	0	0	0	0	...6.668	...6.667	JAJO	144,463	744,822	09/27/2021	01/15/2037
40436T-BG-0	HPS Loan Management 10-2-HLM 10A-16 A2R3	D.....	.....	.....	.. 1.C FE	14,750,000	100.0217	14,753,201	14,750,000	14,750,000	0	0	0	0	...6.217	...6.218	JAJO	58,590	0	11/15/2024	04/20/2034
40440X-AE-1	Highbridge Loan Manageme-HLM 2021-16A C	D.....	.....	.....	.. 1.F FE	4,500,000	100.0007	4,500,032	4,500,000	4,500,000	0	0	0	0	...6.988	...6.987	JAJO	61,144	352,090	11/12/2021	01/23/2035
40443Q-AA-1	HPS Private Credit CLO 2-HSPR 2024-2A A .....	.....	.....	.....	.. 1.A FE	7,700,000	100.2318	7,717,849	7,700,000	7,700,000	0	0	0	0	...6.503	...5.002	FIAN	65,378	371,373	02/14/2024	05/15/2036
406371-AE-8	Halsey Point Clo 5 Ltd-HLSY 2021-5A B	D.....	.....	.....	.. 1.C FE	10,000,000	100.2115	10,021,150	10,000,000	10,000,000	0	0	0	0	...6.651	...6.650	JAJO	116,389	750,776	11/19/2021	01/30/2035
40637L-AC-4	Halsey Point CLO Ltd-SERIES 2021-4A CLAS	D.....	.....	.....	.. 1.C FE	2,991,000	100.0467	3,001,401	3,000,000	2,953,197	0	(37,803)	0	0	...6.629	...5.367	JAJO	39,774	224,706	01/05/2024	04/20/2034
40638L-AA-7	Halsey Point CLO 7 LTD-HLSY 2023-7A A	D.....	.....	.....	.. 1.A FE	15,000,000	100.8750	15,131,250	15,000,000	15,000,000	0	0	0	0	...6.867	...6.867	JAJO	206,022	1,513,527	05/31/2023	07/20/2036
40638L-AE-9	Halsey Point CLO 7 LTD-HLSY 2023-7A B	D.....	.....	.....	.. 1.C FE	5,000,000	101.1080	5,055,400	5,000,000	5,000,000	0	0	0	0	...7.567	...7.566	JAJO	75,674	551,176	05/31/2023	07/20/2036
40639G-AA-7	Halsey Point Clo 6 Ltd-HLSY 2022-6A A1	D.....	.....	.....	.. 1.A FE	34,912,500	100.1360	35,047,600	35,000,000	34,301,997	0	103,494	0	0	...7.067	...6.146	JAJO	446,620	2,777,985	08/19/2022	10/20/2034
41755W-AE-0	Harvest US Clo 2024-1 Lt-HARUS 2024-1A B	D.....	.....	.....	.. 1.C FE	9,600,000	100.6702	9,664,339	9,600,000	9,600,000	0	0	0	0	...6.782	...6.781	JAJO	135,647	422,972	02/07/2024	04/18/2037
42086N-AJ-7	Hayfin Kingsland XI Ltd-HAYFN 2019-2A BR	D.....	.....	.....	.. 1.C FE	6,130,000	100.0676	6,134,144	6,130,000	6,130,000	0	0	0	0	...6.779	...6.778	JAJO	83,111	468,522	10/21/2021	10/20/2034
42710B-AA-9	Hercules Capital Funding Trust 2022-1 -S .....	.....	.....	.....	.. 1.F PL	7,462,500	..96.8750	7,265,625	7,500,000	7,485,465	0	9,406	0	0	...4.950	...5.089	MON	104,156	340,313	06/22/2022	07/20/2031
42770Q-AA-0	HERO Funding Trust 2014-HERO 2014-2A A .....	.....	.....	.....	.. 1.A FE	712,764	..91.1383	650,043	713,249	713,070	0	11	0	0	...3.990	...3.998	MS	7,984	28,459	10/16/2014	09/21/2040
42770R-AA-8	HERO Funding Trust 2014-HERO 2014-1A A .....	.....	.....	.....	.. 1.A FE	454,332	..93.7181	425,795	454,336	454,336	0	0	0	0	...4.750	...4.748	MS	6,055	21,581	03/06/2014	09/20/2038
43133A-AA-5	Hildene TruPS Financials-HITR 2018-1A A1	D.....	.....	.....	.. 1.B FE	50,192,284	..94.6299	48,466,233	51,216,617	50,069,660	0	(457,984)	0	0	...6.298	...6.050	JAJO	743,633	3,621,578	08/13/2018	10/10/2038
43133J-AA-6	Hildene TruPS Securitized-HITR 2019-2A A1	D.....	.....	.....	.. 1.C FE	39,460,455	..95.5475	37,835,904	39,599,052	39,599,052	0	(138,597)	0	0	...6.535	...5.246	FIAN	287,551	2,941,992	06/13/2019	05/22/2039
43133R-AA-8	Hildene TruPS Rescuritized-HITR 2019-P10B .....	.....	.....	.....	.. 1.E FE	11,940,000	..96.9382	11,632,584	12,000,000	12,000,000	0	0	0	0	...7.004	...6.917	JAJO	191,435	947,324	07/01/2019	07/11/2033
43283B-AB-9	Hilton Grand Vacations T-HGVT 2022-10 B .....	.....	.....	.....	.. 1.G FE	1,438,681	..97.6923	1,480,914	1,515,897	1,447,632	0	2,519	0	0	...4.100	...6.631	MON	1,899	62,067	08/02/2023	06/20/2034
43283G-AD-4	Hilton Grand Vacations T-HGVT 2022-2A D .....	.....	.....	.....	.. 3.C FE	3,206,004	101.5094	3,254,835	3,206,438	3,206,099	0	11	0	0	...8.730	...8.735	MON	4,665	279,922	08/01/2022	01/25/2037
43283N-AB-3	Hilton Grand Vacations T-HGVT 2024-3A B .....	.....	.....	.....	.. 1.G FE	9,997,414	..99.4627	9,946,273	10,000,000	9,997,554	0	140	0	0	...5.270	...5.345	MON	8,783	70,267	10/29/2024	08/27/2040
43283Y-AA-1	Hilton Grand Vacations T-HGVT 2024-1B A .....	.....	.....	.....	.. 1.A FE	3,343,120	..99.7053	3,270,915	3,280,584	3,342,631	0	(489)	0	0	...5.750	...4.915	MON	8,384	47,158	09/18/2024	09/15/2039
43283Y-AB-9	Hilton Grand Vacations T-HGVT 2024-1B B .....	.....	.....	.....	.. 1.F FE	1,381,814	101.5754	1,403,844	1,382,071	1,381,805	0	(9)	0	0	...5.990	...5.999	MON	3,679	52,891	04/15/2024	09/15/2039
432917-AB-8	Hilton Grand Vacations T-HGVT 2023-1A B .....	.....	.....	.....	.. 1.G FE	17,986,839	100.8606	18,051,647	17,897,626	17,984,298	0	(2,840)	0	0	...6.110	...6.138	MON	18,226	700,150	09/07/2023	01/25/2038
433674-AA-6	NRZ Excess Spread-Collat-NZES 2020-PLS1 .....	.....	.....	.....	.. 2.C FE	2,016,314	..97.3644	1,963,178	2,016,319	2,016,317	0	1	0	0	...3.844	...3.844	MON	1,292	77,507	12/14/2020	12/25/2025
43739K-AA-1	HOME 2024-1 BARCLAYS LN TR - HOME IMPT .....	.....	.....	.....	.. 1.A Z	14,643,664	106.4280	14,624,001	13,740,746	14,631,954	0	(11,710)	0	0	...0.000	(0.823)	MON	0	0	11/26/2024	07/20/2046
43739K-AB-9	HOME 2024-1 BARCLAYS LN-HOME IMPT LN BA .....	.....	.....	.....	.. 1.F Z	6,803,112	105.7990	6,793,884	6,421,501	6,798,169	0	(4,943)	0	0	...0.000	(0.747)	MON	0	0	11/26/2024	07/20/2046
43739K-AC-7	HOME 2024-1 BARCLAYS LN-HOME IMPT LN BA .....	.....	.....	.....	.. 2.B Z	2,237,998	107.9660	2,234,992	2,070,089	2,235,814	0	(2,184)	0	0	...0.000	(1.004)	MON	0	0	11/26/2024	07/20/2046
43739K-AD-5	HOME 2024-1 BARCLAYS LN-HOME IMPT LN BA .....	.....	.....	.....	.. 3.B Z	1,375,790	105.7590	1,373,901	1,299,087	1,374,799	0	(993)	0	0	...0.000	(0.743)	MON	0	0	11/26/2024	07/20/2046
43739K-AE-3	HOME 2024-1 BARCLAYS LN-HOME IMPT LN BA .....	.....	.....	.....	.. 4.C Z	1,111,555	108.3560	1,110,089	1,024,483	1,110,421	0	(1,134)	0	0	...0.000	(1.049)	MON	0	0	11/26/2024	07/20/2046
437927-AC-0	Honda Auto Receivables 2-HAROT 2023-2 A3 .....	.....	.....	.....	.. 1.A FE	5,842,765	100.4327	5,887,364	5,862,000	5,853,197	0	9,772	0	0	...4.930	...5.115	MON	12,844	288,997	12/05/2023	11/15/2027
442911-AG-8	HPS Loan Management 2023-HLM 2023-18A C	D.....	.....	.....	.. 1.F FE	5,375,000	101.2340	5,441,328	5,375,000	5,375,000	0	0	0	0	...8.267	...8.266	JAJO	88,875	645,386	05/23/2023	07/20/2036
44330G-AE-3	Highbridge Loan Manageme-SERIES 4A-2014	D.....	.....	.....	.. 1.A FE	4,126,667	100.1643	4,237,952	4,231,000	4,153,018	0	(12,308)	0	0	...6.379	...6.260	JAJO	48,730	303,145	12/10/2018	01/28/2030

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
44331D-AJ-8	Highbridge Loan Managemen-MLM 5A-2015 B2R	D			1.C FE	8,000,000	.98.1552	7,852,416	8,000,000	8,000,646	.0	(197)	.0	.0	4.830	4.827	JAUJ	81,573	386,400	10/02/2018	10/15/2030
45783N-AA-5	InStar Leasing III LLC-INSTR 2021-1A A	D			1.F FE	4,143,806	.90.8628	3,767,228	4,146,060	4,144,763	.0	366	.0	.0	2.300	2.311	MON	4,238	95,359	02/03/2021	02/15/2054
46091R-AC-7	Invesco US CLO 2023-3 LT-INVC0 2023-3A B	D			1.C FE	4,900,000	100.7798	4,938,210	4,900,000	4,900,000	.0	.0	.0	.0	7.306	7.305	JAUJ	77,564	462,872	07/06/2023	07/15/2036
46091R-AE-3	Invesco US CLO 2023-3 LT-INVC0 2023-3A C	D			1.F FE	5,000,000	100.9097	5,045,485	5,000,000	5,000,000	.0	.0	.0	.0	7.806	7.805	JAUJ	84,564	501,833	07/06/2023	07/15/2036
46146J-AC-0	Invesco CLO 2021-3 Ltd-INVC0 2021-3A B	D			1.C FE	6,953,425	100.1429	7,260,360	7,250,000	6,855,979	.0	(52,310)	.0	.0	6.543	6.113	JAUJ	93,559	532,598	04/05/2023	10/22/2034
46148H-AC-2	Invesco US CLO 2024-3 LT-INVC0 2024-3A B	D			1.C FE	3,800,000	100.7452	3,828,318	3,800,000	3,800,000	.0	.0	.0	.0	7.169	7.168	JAUJ	158,161		05/02/2024	07/20/2037
46616M-AA-8	J G WENTWORTH RECV XXII-ASSET BKD NT 10-	D			1.A FE	270,555	.97.8683	264,841	270,609	269,961	.0	262	.0	.0	3.820	4.038	MON	459	10,324	10/29/2010	12/15/2048
46616M-AB-6	JG Wentworth XXII LLC-HENDR 2010-3A B	D			1.A FE	104,456	100.0007	104,460	104,459	104,463	.0	(2)	.0	.0	6.850	6.846	MON	318	7,146	10/29/2010	12/15/2050
46616P-AA-1	JGWPT XXIII LLC-HENDR 2011-1A A	D			1.A FE	1,857,015	.95.6014	1,775,796	1,857,499	1,857,061	.0	31	.0	.0	4.700	4.705	MON	3,880	87,294	06/08/2011	10/15/2056
46616Q-AA-9	321 HENDERSON RECEIVABLE-SERIES 2011-2A	D			1.A FE	2,831,576	.96.4004	2,731,221	2,833,205	2,831,722	.0	51	.0	.0	4.940	4.950	MON	6,220	139,950	12/01/2011	09/15/2056
46616V-AA-8	J G WENTWORTH RECV XXV-ASSET BKD NT 12-1	D			1.A FE	1,741,588	.90.6907	1,579,815	1,741,981	1,752,823	.0	(1,869)	.0	.0	4.210	4.022	MON	3,259	73,753	03/13/2012	02/16/2065
46617A-AA-3	JGWPT XXVII LLC-ASSET BKD SERIES 2012-3	4			1.A FE	2,639,438	.87.6765	2,337,595	2,666,159	2,644,685	.0	(4,517)	.0	.0	3.220	3.366	MON	11,014	78,674	01/28/2016	09/15/2065
46617F-AA-2	JGWPT XXVIII LLC-HENDR 2013-1A A	D			1.A FE	3,012,434	.88.0159	2,659,084	3,021,141	3,011,695	.0	.0	.0	.0	3.220	3.241	MON	4,324	97,545	04/19/2018	04/15/2067
46617J-AA-4	JGWPT XXIX LLC-HENDR 2013-2A A	D			1.A FE	3,211,417	.92.2666	2,963,762	3,212,171	3,212,123	.0	.0	.0	.0	4.210	4.210	MON	6,010	135,597	07/23/2013	03/15/2062
46617L-AA-9	JGWPT XXX LLC-HENDR 2013-3A A	D			1.A FE	5,506,987	.92.8924	5,119,719	5,511,449	5,507,806	.0	167	.0	.0	4.080	4.092	MON	9,994	225,465	10/10/2013	01/17/2073
46617T-AA-2	JGWPT XXXI LLC-ASSET BKD SERIES 2014-1 C	4			1.A FE	3,698,852	.90.6861	3,356,239	3,700,940	3,698,866	.0	80	.0	.0	3.960	3.970	MON	6,514	146,551	02/10/2014	03/15/2063
46619R-AA-4	J G WENTWORTH XXXV LLC-ASSET BKD NT 15-	4			1.A FE	6,995,596	.89.0112	6,217,295	6,984,846	6,992,756	.0	(396)	.0	.0	3.870	3.851	MON	12,014	270,295	09/17/2015	03/15/2058
46619L-AA-9	JG Wentworth XXXVI LLC-HENDR 2015-3A A	D			1.A FE	4,655,971	.87.2772	4,067,163	4,660,052	4,656,527	.0	52	.0	.0	4.080	4.090	MON	8,450	190,117	11/20/2015	03/17/2070
46620J-AA-9	J.G. Wentworth XXXVIII L-HENDR 2017-1A A	D			1.A FE	4,600,355	.88.7616	4,086,500	4,603,905	4,601,290	.0	1,027	.0	.0	3.990	3.999	MON	8,164	183,908	03/15/2017	08/16/2060
46620V-AA-2	J.G. Wentworth XXXIX LLC-HENDR 2017-2A A	D			1.A FE	6,657,532	.86.0756	5,733,096	6,660,538	6,660,538	.0	.0	.0	.0	3.530	3.530	MON	10,450	235,765	08/01/2017	09/15/2072
466365-AC-7	Jack in the Box Funding -JACK 2019-1A A2	D			2.B FE	29,111,799	.94.4579	29,179,461	30,891,499	29,618,029	.0	(115,312)	.0	.0	4.970	5.872	FIAN	153,531	1,535,308	07/25/2022	08/25/2049
466365-AD-5	Jack in the Box Funding -JACK 2022-1A A2	D			2.B FE	6,615,000	.94.2176	6,232,496	6,615,000	6,615,000	.0	.0	.0	.0	3.445	3.445	FIAN	22,789	227,887	02/02/2022	02/26/2052
466365-AE-3	Jack in the Box Funding -JACK 2022-1A A2	D			2.B FE	4,334,799	.87.3820	4,248,537	4,862,025	4,433,372	.0	(74,541)	.0	.0	4.136	5.763	FIAN	20,109	201,093	07/29/2022	02/26/2052
46651N-AA-2	JOL Air Ltd-JOLAR 2019-1 A	D			1.G FE	9,984,041	.97.6766	9,730,074	9,961,520	9,962,939	.0	(463)	.0	.0	3.967	3.959	MON	17,563	395,173	09/10/2019	04/15/2044
46655H-AB-9	JCP Direct Lending CLO 2-JCPDL 2022-11 A	D			1.A PL	17,432,686	100.7767	17,568,086	17,432,686	17,432,686	.0	.0	.0	.0	6.741	6.740	FIAN	1,470,929		12/05/2022	05/19/2035
46655H-AD-5	JCP Direct Lending CLO 2-JCPDL 2022-11 B	D			1.C PL	2,103,945	100.5073	2,114,618	2,103,945	2,103,945	.0	.0	.0	.0	7.041	7.040	FIAN	184,679		12/05/2022	05/19/2035
46655H-AF-0	JCP Direct Lending CLO 2-JCPDL 2022-11 C	D			1.F PL	2,254,227	100.6602	2,269,109	2,254,227	2,254,227	.0	.0	.0	.0	7.491	7.490	FIAN	209,367		12/05/2022	05/19/2035
46655H-AH-6	JCP Direct Lending CLO 2-JCPDL 2022-11 D	D			2.B PL	3,005,636	101.0458	3,037,069	3,005,636	3,005,636	.0	.0	.0	.0	9.241	9.240	FIAN	338,768		12/05/2022	05/19/2035
46656T-AD-8	JCP Direct Lending CLO 2-JCPDL 2023-11 A	D			1.A FE	24,875,000	100.9690	25,242,250	25,000,000	24,875,430	.0	955	.0	.0	7.767	6.376	JAUJ	2,229,415		06/11/2024	07/20/2036
46656T-AK-2	JCP Direct Lending CLO 2-JCPDL 2023-11 B	D			1.C FE	7,762,000	101.2591	7,859,731	7,762,000	7,762,000	.0	.0	.0	.0	8.567	8.566	JAUJ	751,048	181,138	11/22/2024	07/20/2036
46656T-AM-8	JCP Direct Lending CLO 2-JCPDL 2023-11 C	D			1.F FE	5,000,001	101.2248	5,061,241	5,000,001	5,000,001	.0	.0	.0	.0	9.767	9.766	JAUJ	679,164		06/11/2024	07/20/2036
47048R-AN-5	Jamestown CLO XVI Ltd-JTWIN 2021-16A BR	D			1.B FE	15,000,000	100.0215	15,003,225	15,000,000	15,000,000	.0	.0	.0	.0	6.113	6.113	JAUJ	56,033		11/22/2024	07/25/2034
47048R-AQ-8	Jamestown CLO XVI Ltd-JTWIN 2021-16A CR	D			1.F FE	3,350,000	100.0213	3,350,714	3,350,000	3,350,000	.0	.0	.0	.0	6.413	6.413	JAUJ	13,128		11/22/2024	07/25/2034
481938-AA-6	KKR CLO 38 Ltd-KKR 38A E	D			3.C FE	9,900,000	100.1927	10,019,270	10,000,000	9,707,753	.0	(29,058)	.0	.0	11.836	11.209	JAUJ	256,445	1,268,839	03/07/2022	04/15/2033
481950-AE-3	KKR CLO 44 Ltd-KKR 44A B	D			1.C FE	10,000,000	101.1148	10,111,480	10,000,000	10,000,000	.0	.0	.0	.0	7.317	7.316	JAUJ	146,348	660,443	11/22/2023	01/20/2036
481952-AC-3	KKR CLO 50 Ltd-KKR 2024-50A B	D			1.C FE	10,000,000	101.0726	10,107,260	10,000,000	10,000,000	.0	.0	.0	.0	6.717	6.717	JAUJ	134,348	357,815	03/27/2024	04/20/2037
48251T-AG-6	KKR CLO 20 Ltd-KKR 20 BR	D			1.A FE	10,000,000	100.0457	10,004,570	10,000,000	10,000,000	.0	.0	.0	.0	6.197	6.197	JAUJ	132,553	60,895	08/29/2024	10/16/2030
48252Y-AQ-2	KKR CLO 23 Ltd-KKR 23 BR	D			1.A FE	10,000,000	100.0041	10,000,410	10,000,000	10,000,000	.0	.0	.0	.0	6.167	6.167	JAUJ	123,348	87,414	08/16/2024	10/20/2031
48255A-AA-6	KKR CLO 36 Ltd-KKR 36A A	D			1.A FE	4,305,263	100.1466	4,416,465	4,410,000	4,266,011	.0	(20,168)	.0	.0	6.098	5.562	JAUJ	58,262	302,980	05/05/2023	10/15/2034
48255A-AE-8	KKR CLO 36 Ltd-KKR 36A C	D			1.F FE	4,800,000	100.1716	4,808,237	4,800,000	4,800,000	.0	.0	.0	.0	7.068	7.067	JAUJ	73,502	376,981	09/20/2021	10/15/2034
48255E-AC-4	KKR FINANCIAL CLO LTD-KKR 42A B	D			1.C FE	9,000,000	100.0492	9,004,428	9,000,000	9,000,000	.0	.0	.0	.0	6.667	6.667	JAUJ	120,013	677,639	04/27/2022	07/20/2034
48255E-AE-0	KKR FINANCIAL CLO LTD-KKR 42A C	D			1.E FE	5,000,000	100.1116	5,005,580	5,000,000	5,000,000	.0	.0	.0	.0	7.167	7.167	JAUJ	71,674	401,952	04/27/2022	07/20/2034
48255F-AA-5	KKR FINANCIAL CLO LTD-KKR 42A E	D			3.C FE	7,412,750	100.4050	7,480,173	7,450,000	7,450,000	.0	.0	.0	.0	12.037	10.498	JAUJ	179,357	968,778	04/27/2022	07/20/2034
48255M-AA-0	KKR CLO 41 Ltd-KKR 2022-41A E	D			3.C FE	3,465,000	.99.7308	3,490,578	3,500,000	3,403,428	.0	(46,295)	.0	.0	11.347	10.243	JAUJ	86,050	427,060	02/09/2022	04/15/2035
48255X-AJ-7	KKR FINANCIAL CLO LTD-KKR 2023-52A C	D			1.E FE	6,150,000	101.0240	6,212,976	6,150,000	6,150,000	.0	.0	.0	.0	8.047	8.046	JAUJ	105,856	697,133	05/24/2023	07/16/2036

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
48259B-AL-6	KKR CLO 38 Ltd-KKR 38A C	D			1.E FE	7,000,000	100.2315	7,016,205	7,000,000	7,000,000	0	0	0	0	7.156	7.155	JAUJ	108,531	556,037	04/19/2022	04/15/2033
48555H-AA-8	Kapitus Asset Securitized-KAPT 2022-1A A				1.C FE	6,749,987	99.8939	6,742,841	6,750,000	6,749,993	0	5	0	0	3.382	3.382	MON	13,317	228,285	02/02/2022	07/10/2028
49255P-AA-1	Kestrel Aircraft Funding-KSTRL 2018-1A A	D			2.B FE	2,784,250	98.1515	2,812,118	2,865,079	2,840,546	0	9,190	0	0	4.250	4.933	MON	5,412	121,575	12/11/2018	12/15/2038
50223*-AA-8	LSS FUNDING 2024 1 LLC Senior Term Note				2.B Z	10,000,000	100.0000	10,000,000	10,000,000	10,000,000	0	0	0	0	7.680	7.688	MAR	29,867	0	12/04/2024	03/30/2044
50543L-AA-0	LABRADOR AVIATION FINANC-SERIES 2016-1A				3.A FE	6,738,135	96.1191	6,604,785	6,871,460	6,841,296	0	5,869	0	0	4.300	4.506	MON	13,132	295,651	12/08/2016	01/15/2042
53950T-AA-3	Loan Asset Issuer LLC, Series 2021 M-2				1.D PL	55,144,456	97.8600	53,964,365	55,144,456	55,144,456	0	0	0	0	2.981	2.981	MON	95,892	1,643,856	06/16/2022	11/10/2033
53950T-AB-1	Loan Asset Issuer LLC, Series 2021 M-2				1.G PL	22,280,588	97.9400	21,821,608	22,280,588	22,280,588	0	0	0	0	3.868	3.868	MON	50,272	900,539	06/16/2022	11/10/2033
53950T-AC-9	Loan Asset Issuer LLC, Series 2021 M-2				2.C PL	11,140,294	98.1600	10,935,313	11,140,294	11,140,294	0	0	0	0	4.752	4.752	MON	30,881	551,520	06/16/2022	11/10/2033
53950T-AD-7	Loan Asset Issuer LLC, Series 2021 M-2				3.C PL	8,912,235	96.1600	8,570,006	8,912,235	8,912,235	0	0	0	0	6.023	6.023	MON	31,312	536,784	06/16/2022	11/10/2033
53950T-AE-5	Loan Asset Issuer LLC, Series 2021 M-2				4.C PL	8,912,235	94.8300	8,451,473	8,912,235	8,912,235	0	0	0	0	8.063	8.063	MON	41,918	718,594	06/16/2022	11/10/2033
551925-AC-4	M&T Equipment 2023-LEAF1-MTLRF 2023-1A A				1.A FE	2,999,107	100.8971	3,026,913	3,000,000	2,999,429	0	246	0	0	5.750	5.759	MON	7,667	172,500	08/08/2023	07/15/2030
55280H-AW-7	MCF CLO IV LLC-MCFCL 2014-1A ARR				1.A FE	41,237,500	100.0418	41,254,737	41,237,500	41,237,500	0	0	0	0	6.379	6.378	JAUJ	526,109	2,983,667	09/28/2021	10/20/2033
55283A-AA-7	MCA Fund Holding LLC-MCA 2020-1 A				1.E FE	7,770,554	97.5382	7,563,355	7,754,251	7,756,301	0	(4,944)	0	0	3.250	3.146	FINA	42,002	252,013	01/19/2022	11/01/2035
55312H-AA-7	MMcapS Funding XVII Ltd-MMCAP 17A A1	D			1.A FE	235,152	99.3745	245,225	246,769	246,769	0	1,807	0	0	5.111	5.111	MJSD	1,051	14,800	03/07/2019	12/01/2035
55312H-AC-3	MMcapS Funding XVII Ltd-MMCAP 17A B	D			1.B FE	3,738,281	86.9101	6,300,982	7,250,000	4,825,939	0	487,600	0	0	5.361	38.313	MJSD	32,389	566,243	03/25/2020	12/01/2035
55389Q-AB-3	MVW 2024-2 LLC-MVWOT 2024-2A B				1.F FE	5,757,075	97.5272	5,614,946	5,757,316	5,757,120	0	44	0	0	4.580	4.581	MON	8,057	59,329	09/24/2024	03/20/2042
55389Q-AC-1	MVW 2024-2 LLC-MVWOT 2024-2A C				2.B FE	3,837,664	96.8242	3,716,318	3,838,211	3,837,712	0	48	0	0	4.920	4.924	MON	5,770	42,081	09/24/2024	03/20/2042
55400U-AB-9	MVW 2022-1 LLC-MVWOT 2022-1A B				1.F FE	4,140,751	97.8598	4,052,584	4,141,213	4,140,772	0	(4)	0	0	4.400	4.404	MON	5,568	181,865	05/12/2022	11/21/2039
55400W-AA-7	MVW 2023-2 LLC-MVWOT 2023-2A A				1.A FE	5,719,667	101.9886	5,730,441	5,618,706	5,719,518	0	(149)	0	0	6.180	5.573	MON	10,610	231,491	05/07/2024	11/20/2040
55446W-AA-5	MACH 1 Cayman 2019-1 Ltd	D			2.A FE	3,473,125	95.7441	3,325,421	3,473,239	3,473,214	0	3	0	0	3.474	3.474	MON	5,363	120,642	10/04/2019	10/15/2039
55817B-AB-8	Madison Park Funding Ltd-MP25 2024-58A B	D			1.C FE	5,080,000	100.6728	5,114,178	5,080,000	5,080,000	0	0	0	0	6.576	6.575	JAUJ	63,099	188,337	03/27/2024	04/25/2037
55817H-AN-9	Madison Park Funding LXI-MDPK 2022-62A A	D			1.A FE	9,999,000	100.3561	10,035,610	10,000,000	9,840,744	0	(135,082)	0	0	6.497	5.201	JAUJ	137,168	730,030	10/10/2023	07/17/2036
55819M-AN-6	Madison Park Funding XXX-MDPK 2019-35A A	D			1.A FE	3,340,240	100.1535	3,394,933	3,389,730	3,334,755	0	2,658	0	0	5.869	5.734	JAUJ	39,789	227,634	04/04/2023	04/20/2032
55819M-AU-0	Madison Park Funding XXX-MDPK 2019-35A B	D			1.C FE	6,911,475	100.1250	7,008,750	7,000,000	6,861,356	0	(28,510)	0	0	6.279	5.275	JAUJ	87,906	257,318	08/07/2024	04/20/2032
55822A-AQ-0	Madison Park Funding XLV-MDPK 2020-46A C	D			1.F FE	3,870,000	100.0796	3,873,081	3,870,000	3,870,000	0	0	0	0	6.968	6.967	JAUJ	58,423	300,017	08/20/2021	10/15/2034
55954N-AN-9	Magnetite XXIII Ltd-MAGNE 2019-23A CR	D			1.F FE	5,000,000	100.1401	5,007,005	5,000,000	5,000,000	0	0	0	0	6.937	6.937	JAUJ	65,521	388,336	11/24/2021	01/25/2035
55954T-AS-5	Magnetite XXXV Ltd-MAGNE 2022-35A BR	D			1.C FE	5,000,000	100.8472	5,042,360	5,000,000	5,000,000	0	0	0	0	7.026	7.025	JAUJ	66,355	392,829	10/10/2023	10/25/2036
56577L-AC-2	Maranon Loan Funding 202-MRNON 2021-1RA	D			1.A FE	12,000,000	95.4329	11,451,948	12,000,000	12,000,000	0	0	0	0	2.720	2.720	JAUJ	68,907	326,400	04/27/2021	07/15/2034
56577L-AJ-7	Maranon Loan Funding 202-MRNON 2021-1RA	D			1.C FE	4,000,000	92.8229	3,712,916	4,000,000	4,000,000	0	0	0	0	3.330	3.330	JAUJ	28,120	133,200	04/27/2021	07/15/2034
565923-AC-2	Marble Point Clo XXV LTD-MP25 2022-2A A1	D			1.A FE	15,000,000	100.7890	15,118,350	15,000,000	15,000,000	0	0	0	0	6.547	6.547	JAUJ	196,422	1,008,392	11/09/2023	10/20/2036
567928-AA-4	Mariner Finance Issuance-MFIT 2024-AA A				1.A FE	2,999,632	99.7098	2,991,293	3,000,000	2,999,815	0	183	0	0	5.130	5.145	MON	4,703	56,430	07/30/2024	09/22/2036
567928-AB-2	Mariner Finance Issuance-MFIT 2024-AA B				1.D FE	999,981	99.3471	993,471	1,000,000	999,988	0	7	0	0	5.680	5.681	MON	1,736	20,827	07/30/2024	09/22/2036
57109N-AB-5	Marlette Funding Trust 2-MFT 2022-3A B				1.A FE	1,205,065	100.1440	1,215,421	1,213,673	1,213,038	0	2,821	0	0	5.950	6.294	MON	3,209	72,214	09/12/2022	11/15/2032
57109N-AC-3	Marlette Funding Trust 2-MFT 2022-3A C				1.E FE	3,799,011	100.9781	3,837,166	3,800,000	3,799,771	0	286	0	0	6.890	6.899	MON	11,636	261,820	09/12/2022	11/15/2032
57430U-30-1	Maryland Trust 2006-I-MDIBS 2006-1A A				5.C FE	2,843,625	69.3400	2,333,885	3,365,856	1,094,555	0	140,063	0	0	5.550	13.771	MON	73,165	834,322	06/17/2011	12/10/2065
58853B-AC-8	Merchants Fleet Funding LLC / Series 202	C			2.B PL	2,854,063	100.0000	2,854,063	2,854,063	2,854,063	0	0	0	0	7.580	7.580	MON	170,066	250,918	10/18/2023	10/18/2037
58862B-AA-1	Merchants Mobility Funding LLC / Series	C			2.B PL	9,645,937	100.0000	9,645,937	9,645,937	9,645,937	0	0	0	0	7.580	7.580	MON	266,062	949,171	10/18/2022	10/20/2037
58940B-AR-7	Mercury Financial Credit-MFOC 2023-1A A				1.F FE	63,992,698	100.0620	64,039,686	64,000,000	63,998,054	0	510	0	0	8.040	8.041	MON	157,227	6,690,043	01/31/2023	09/20/2027
59170J-AA-1	MetroNet Infrastructure -MNET 2022-1A A2				1.F FE	10,550,451	101.4070	11,409,407	11,250,000	10,821,158	0	131,561	0	0	6.350	7.870	MON	21,828	714,375	10/26/2022	10/20/2052
59170J-AB-4	MetroNet Infrastructure -MNET 2022-1A B				2.B FE	1,171,455	102.4202	1,280,252	1,250,000	1,201,313	0	14,602	0	0	7.460	9.038	MON	2,849	93,250	10/26/2022	10/20/2052
595491-AA-0	Mid-State Capital Corp 2-MDST 2005-1 A				1.E FE	241,054	100.0789	251,296	251,098	251,098	0	0	0	0	5.745	5.745	MON	1,202	14,410	03/01/2010	01/01/2040
59549W-AA-1	Mid-State Trust XI-MDST 11 A1				1.E FE	462,248	97.9003	462,555	462,262	462,262	0	0	0	0	4.864	4.864	MON	999	22,463	06/18/2003	07/15/2038
59801A-BG-8	MidOcean Credit CLO XI L-MIDO 2022-11A C	D			1.F FE	3,475,000	100.0179	3,475,622	3,475,000	3,475,000	0	0	0	0	6.274	6.260	JAUJ	9,690	0	11/25/2024	01/18/2036
59801F-AE-3	MidOcean Credit CLO XV L-MIDO 2024-15A B	D			1.C FE	7,000,000	101.3308	7,093,156	7,000,000	7,000,000	0	0	0	0	6.567	6.567	JAUJ	91,944	171,911	05/10/2024	07/21/2037
59803D-AE-6	MidOcean Credit CLO XII L-MIDO 2023-13A B	D			1.C FE	10,000,000	101.7040	10,170,400	10,000,000	10,000,000	0	0	0	0	7.417	7.416	JAUJ	148,348	687,572	11/16/2023	01/21/2037

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
59803F-AA-9	MidOcean Credit CLO XIV -MIDO 2024-14A A	D.....			1.A FE	15,000,000	100.7058	15,105,870	15,000,000	15,000,000	0	0	0	0	6.236	6.235	JAUJ	202,667	575,988	02/15/2024	04/15/2037
59803F-AE-1	MidOcean Credit CLO XIV -MIDO 2024-14A B	D.....			1.C FE	8,300,000	100.6731	8,355,867	8,300,000	8,300,000	0	0	0	0	6.756	6.755	JAUJ	121,494	342,811	02/15/2024	04/15/2037
60510M-AN-8	Mission Lane Credit Card-MLANE 2023-A A				1.C FE	29,997,105	100.3047	30,091,401	30,000,000	29,998,235	0	398	0	0	7.230	7.232	MON	96,400	2,488,325	05/16/2023	07/17/2028
610331-AA-8	Monroe Capital ABS Fundi-MCAF 2021-1A A2	D.....			1.F FE	10,782,527	96.2234	10,375,316	10,782,527	10,782,527	0	0	0	0	2.815	2.815	JAUJ	58,176	465,295	02/18/2021	04/22/2031
61033M-AB-0	Monroe Capital Income PI-MCIP 2022-1A A				1.F FE	4,262,223	95.0106	4,116,316	4,332,483	4,303,344	0	15,375	0	0	4.050	4.445	JAUJ	33,631	174,230	03/16/2022	04/30/2032
61033W-AC-6	Monroe Capital MML CLO I-MCML 2019-2A A	D.....			1.A FE	2,588,422	98.2399	2,544,416	2,588,422	2,588,422	0	0	0	0	3.279	3.279	JAUJ	16,268	84,874	10/16/2019	10/22/2031
61774K-AA-9	Morgan Stanley Eaton Van-MSEV 2022-16A E	D.....			3.C FE	5,760,000	100.2306	6,013,836	6,000,000	5,668,257	0	(66,539)	0	0	11.506	10.935	JAUJ	149,577	741,228	09/15/2022	04/15/2035
618933-AA-3	Mosaic Solar Loan Trust -MSAIC 2023-3A A				1.D FE	10,737,340	100.3566	10,967,944	10,928,966	10,737,263	0	5,017	0	0	5.910	6.464	MON	19,736	645,902	05/25/2023	11/20/2053
61946K-AA-2	Mosaic Solar Loan Trust -MSAIC 2022-3A A				1.D FE	4,806,984	98.3224	4,726,541	4,807,187	4,807,013	0	17	0	0	6.100	6.101	MON	8,960	293,220	12/12/2022	06/20/2053
61946Q-AB-7	Mosaic Solar Loan Trust -MSAIC 2022-1A B				1.G FE	20,536,896	77.0261	16,436,245	21,338,540	20,626,389	0	31,541	0	0	3.160	3.879	MON	20,604	674,240	03/10/2022	01/20/2053
61946U-AB-8	Mosaic Solar Loan Trust -MSAIC 2022-2A B				1.G FE	4,814,234	85.1580	4,142,544	4,864,537	4,819,072	0	2,464	0	0	5.130	5.343	MON	7,625	249,551	08/16/2022	01/21/2053
62847R-AA-5	MVI 2024-1 LLC-MVIOT 2024-1A A				1.A FE	4,562,952	100.2603	4,510,692	4,498,983	4,562,437	0	(516)	0	0	5.320	4.837	MON	7,313	99,727	08/12/2024	02/20/2043
62878H-AA-9	NATF AMERICA LLC-AUTO LOAN				6. *	67,655,502	55.0000	37,210,526	67,655,502	37,210,526	0	0	25,391,152	0	5.210	5.210	MAJD	156,660	3,527,760	05/18/2022	06/15/2029
62878Y-AA-2	NOTHING BUNDT CAKES-BUNDT 2021-1 A2				2.C FE	4,925,000	95.5584	4,706,251	4,925,000	4,925,000	0	0	0	0	2.989	2.989	JAUJ	24,944	147,208	07/16/2021	07/30/2051
62947A-AB-9	NP SPE II LLC-NPRL 2019-2A A2				1.F FE	1,747,508	90.2372	1,576,968	1,747,581	1,747,499	0	15	0	0	3.098	3.099	MON	1,805	54,101	11/01/2019	11/19/2049
62947A-AC-7	NP SPE II LLC-NPRL 2019-2A A3				1.F FE	19,998,762	88.4940	17,698,800	20,000,000	19,999,532	0	86	0	0	3.802	3.803	MON	25,347	823,767	11/01/2019	11/19/2049
62947A-AF-0	NP SPE X LP-NPRL 2021-1A A1				1.F FE	26,690,194	94.0600	25,112,424	26,698,303	26,698,303	0	0	0	0	2.230	2.073	MON	19,846	595,372	03/23/2021	03/19/2051
62955M-AA-4	NRZ FHT Excess LLC-NZES 2020-FHT1 A				2.C FE	1,449,866	98.2993	1,425,241	1,449,900	1,449,900	0	33	0	0	4.212	4.213	MON	1,018	76,144	11/12/2020	11/25/2025
63890B-AC-0	Navient Student Loan Tru-NAVSL 2018-EA B				1.B FE	5,353,262	97.1117	5,341,142	5,500,000	5,361,463	0	8,201	0	0	4.440	5.296	MON	10,853	40,700	10/15/2024	12/15/2059
638961-AA-0	Navient Private Educatio-NAVSL 2023-A A				1.A FE	4,702,880	100.6138	4,738,604	4,709,696	4,704,052	0	476	0	0	5.510	5.549	MON	11,534	259,457	04/18/2023	10/15/2071
63935B-AB-9	Navient Private Educatio-NAVSL 2020-HA B				1.B FE	1,380,680	85.3197	1,480,297	1,380,297	1,444,965	0	46,588	0	0	2.780	6.748	MON	2,144	48,233	08/16/2023	01/15/2069
63939X-AD-3	Navient Private Educatio-NAVSL 2017-A B				1.A FE	3,835,871	98.3457	3,934,723	4,000,909	3,913,689	0	77,202	0	0	3.910	7.074	MON	6,953	156,436	12/13/2023	12/16/2058
63940Q-AD-5	Navient Private Educatio-NAVSL 2018-BA B				1.B FE	6,646,719	95.2859	6,670,014	7,000,000	6,804,293	0	59,571	0	0	4.130	5.209	MON	12,849	289,100	05/27/2022	12/15/2059
63940V-AC-6	Navient Private Educatio-NAVSL 2018-CA B				1.A FE	8,165,797	97.6540	8,553,440	8,758,923	8,443,731	0	148,375	0	0	4.220	6.630	MON	16,428	369,627	08/24/2023	06/16/2042
63941F-AD-8	Navient Private Education Ref				1.B FE	970,063	89.7026	986,729	1,100,000	1,009,025	0	14,939	0	0	3.160	5.046	MON	1,545	34,760	06/01/2022	11/15/2068
63941U-AB-9	Navient Private Educatio-NAVSL 2020-GA B				1.B FE	1,091,125	79.2909	1,114,037	1,405,000	1,120,106	0	28,981	0	0	2.500	5.977	MON	1,561	32,198	01/19/2024	09/16/2069
63941X-AB-3	Navient Private Educatio-NAVSL 2020-FA B				1.B FE	4,292,494	81.3051	4,463,651	5,490,000	4,447,790	0	118,524	0	0	2.690	6.110	MON	6,564	147,681	09/07/2023	07/15/2069
63942A-AB-2	Navient Private Educatio-NAVSL 2020-IA A				1.A FE	3,599,067	99.7716	3,692,387	3,700,840	3,605,910	0	10,539	0	0	5.512	7.224	MON	9,066	238,391	12/14/2022	04/15/2069
63942G-AA-1	Navient Private Educatio-NAVSL 2021-FA A				1.A FE	3,592,620	87.7233	3,686,039	4,201,894	3,687,323	0	94,703	0	0	1.110	7.119	MON	2,073	34,981	03/27/2024	02/18/2070
63942J-AB-3	Navient Private Educatio-SERIES 21-CA CL				1.C FE	4,211,875	71.3128	4,100,486	5,750,000	4,317,826	0	105,951	0	0	2.300	5.700	MON	5,878	121,229	10/11/2024	10/15/2069
63942M-AA-8	Navient Private Educatio-NAVSL 2022-A A				1.A FE	2,265,655	88.1836	2,308,397	2,617,717	2,308,575	0	26,288	0	0	2.230	5.929	MON	2,594	58,366	08/22/2023	07/15/2070
63942P-AB-9	Navient Private Educatio-NAVSL 2022-BA B				1.C FE	9,997,504	88.8162	8,881,622	10,000,000	9,998,063	0	175	0	0	4.920	4.923	MON	21,867	492,000	05/17/2022	10/15/2070
64016N-AA-5	Neighborly Issuer LLC-NBLY 2021-1A A2				2.B FE	1,352,025	92.0773	1,421,673	1,544,000	1,458,931	0	22,477	0	0	3.584	5.440	JAUJ	9,377	55,444	11/07/2022	04/30/2051
64033Q-AB-5	Nelnet Student Loan Trus-NSLT 2015-2A A2				1.B FE	3,802,096	97.8708	3,851,115	3,934,899	3,774,417	0	(357)	0	0	5.283	6.730	MON	3,465	236,982	12/15/2022	09/25/2042
64034D-AB-3	Nelnet Student Loan Trus-NSLT 2018-4 B				1.C FE	8,038,313	92.0674	7,917,796	8,600,000	8,008,891	0	(29,422)	0	0	6.083	7.578	MON	8,719	443,196	03/28/2024	10/25/2066
64034Y-AA-5	Nelnet Student Loan Trus-NSLT 2021-DA B				1.C FE	6,298,819	86.3730	5,441,497	6,300,000	6,299,271	0	128	0	0	2.900	2.903	MON	5,882	182,700	11/26/2024	04/20/2062
64130T-BA-2	Neuberger Berman CLO XX -NEUB 2015-20A A	D.....			1.A FE	18,913,250	100.2175	19,432,173	19,390,000	18,690,568	0	25,472	0	0	6.078	5.741	JAUJ	255,326	1,328,219	03/23/2023	07/15/2034
64130X-AW-6	Neuberger Berman Loan Ad-NEUB 2018-29A B	D.....			1.C FE	13,000,000	100.0171	13,022,223	13,000,000	13,000,000	0	0	0	0	6.141	6.139	JAUJ	44,351	0	11/26/2024	01/19/2039
64130X-AY-2	Neuberger Berman Loan Ad-NEUB 2018-29A C	D.....			1.F FE	8,850,000	100.0181	8,851,602	8,850,000	8,850,000	0	0	0	0	6.391	6.389	JAUJ	31,422	0	11/26/2024	01/19/2039
64132J-AN-5	Neuberger Berman Loan Ad-NEUB 2019-31A A	D.....			1.A FE	3,820,761	100.0445	3,924,499	3,922,753	3,840,852	0	5,282	0	0	5.919	5.908	JAUJ	46,438	265,428	10/07/2022	04/20/2031
64133V-AC-1	Neuberger Berman CLO Ltd-NEUB 2021-44A B	D.....			1.C FE	13,000,000	100.2153	13,027,989	13,000,000	13,000,000	0	0	0	0	6.509	4.922	JAUJ	180,984	950,552	08/17/2021	10/16/2034
64134M-AC-0	Neuberger Berman Loan Ad-NEUB 2021-45A B	D.....			1.C FE	2,829,000	100.1052	3,003,156	3,000,000	2,801,092	0	(4,366)	0	0	6.568	6.416	JAUJ	42,689	220,405	10/07/2022	10/14/2035
64134Q-AC-1	Neuberger Berman Loan Ad-NEUB 2021-46A B	D.....			1.C FE	3,843,200	100.1465	4,005,860	4,000,000	3,789,008	0	(7,258)	0	0	6.529	6.060	JAUJ	52,232	295,530	05/26/2022	01/20/2036
64135D-AA-3	Neuberger Berman Loan Ad-NEUB 2022-47A A	D.....			1.A FE	3,832,000	100.0887	4,003,548	4,000,000	3,799,603	0	(602)	0	0	5.947	5.805	JAUJ	51,543	269,069	10/07/2022	04/14/2035
64135D-AC-9	Neuberger Berman Loan Ad-NEUB 2022-47A B	D.....			1.C FE	6,085,300	100.0918	6,205,692	6,200,000	5,963,001	0	(9,468)	0	0	6.447	5.563	JAUJ	86,609	448,487	05/02/2022	04/14/2035

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
64830Y-AC-1	NRZ Excess Spread-Collat-NZES 2021-FNT1				.. 2.C FE	2,748,696	.. 96.6106	2,655,561	2,748,726	2,748,713	0	7	0	0	.. 2.981	2.981	MON	1,366	90,509	03/12/2021	03/25/2026
65252B-AC-7	NewStar Fairfield Fund C-FSSLF 2015-2A A	D.....			.. 1.B FE	3,600,000	100.0654	3,602,354	3,600,000	3,600,000	0	0	0	0	.. 6.629	5.388	JAJ0	47,729	269,647	04/11/2018	04/20/2030
65345X-AA-2	GENESIS AIRCRAFT SERVICE Class A Certifi	C.....			.. 1.F PL	28,602,380	101.1726	28,938,498	28,603,098	28,602,308	0	(71)	0	0	.. 6.730	6.731	MON	413,895	559,521	06/07/2024	12/17/2030
65345X-AB-0	GENESIS AIRCRAFT SERVICE Class B Certifi	C.....			.. 2.B PL	9,709,518	100.4975	9,866,273	9,817,431	9,719,128	0	9,610	0	0	.. 8.050	8.339	MON	35,125	353,821	06/07/2024	12/17/2030
670891-AC-4	OCF CLO 2023-28 Ltd-OCF 2023-28A B	D.....			.. 1.B FE	6,850,000	100.6883	6,897,149	6,850,000	6,850,000	0	0	0	0	.. 7.297	7.296	JAJ0	106,916	648,350	06/29/2023	07/16/2036
670891-AE-0	OCF CLO 2023-28 Ltd-OCF 2023-28A C	D.....			.. 1.E FE	6,562,500	100.9204	6,622,901	6,562,500	6,562,500	0	0	0	0	.. 7.797	7.796	JAJ0	109,446	659,967	06/29/2023	07/16/2036
67092B-AG-8	OCF CLO 2015-9 Ltd-OCF 2015-9A ER	D.....			.. 3.C FE	6,812,500	100.1422	6,822,187	6,812,500	6,812,500	0	0	0	0	.. 11.447	11.445	JAJ0	168,967	838,149	02/02/2022	01/15/2033
67092D-BK-4	OCF CLO 2015-10 Ltd-OCF 2015-10A CR3	D.....			.. 1.F FE	4,000,000	100.0183	4,000,732	4,000,000	4,000,000	0	0	0	0	.. 6.224	6.226	JAJ0	8,299	0	12/04/2024	01/26/2038
67097L-AX-4	OCF CLO 2017-13 Ltd-OCF 2017-13A B1R2	D.....			.. 1.C FE	10,000,000	100.9880	10,098,800	10,000,000	10,000,000	0	0	0	0	.. 6.260	6.260	FIAN	62,602	0	11/05/2024	11/26/2037
67098W-AN-1	OHA Credit Funding 7 Ltd-OAKC 2020-7A AR	D.....			.. 1.A FE	3,841,320	100.1847	4,007,388	4,000,000	3,805,743	0	(17,497)	0	0	.. 5.917	5.783	FIAN	45,367	271,007	10/06/2022	02/24/2037
67108L-BE-2	OZLM VI Ltd-OZLM 2014-6A A2BS	D.....			.. 1.A FE	9,000,000	98.3126	8,848,134	9,000,000	9,000,000	0	0	0	0	.. 4.490	4.490	JAJ0	83,065	404,100	04/11/2018	04/17/2031
67113G-AS-6	OHA Credit Funding 5 Ltd-OAKC 2020-5A AR	D.....			.. 1.A FE	3,000,000	100.1903	3,005,709	3,000,000	3,000,000	0	0	0	0	.. 6.131	6.130	JAJ0	38,318	0	09/30/2024	10/18/2037
67181D-AA-9	Oak Street Investment Gr-OAKIG 2020-1A A	D.....			.. 1.A FE	10,656,505	96.0290	10,435,265	10,866,782	10,706,611	0	50,160	0	0	.. 1.850	1.851	MON	6,142	136,374	11/06/2020	11/20/2050
67181D-AB-7	Oak Street Investment Gr-SERIES 20-1A CL	D.....			.. 1.A FE	5,968,262	89.6553	5,353,105	5,970,759	5,969,876	0	943	0	0	.. 2.210	2.219	MON	4,032	131,954	11/06/2020	11/20/2050
67181D-AH-4	Oak Street Investment Gr-OAKIG 2020-1A B	D.....			.. 2.B FE	3,089,063	86.0561	2,581,682	3,000,000	3,048,207	0	(29,905)	0	0	.. 5.570	4.979	MON	5,106	167,100	02/18/2022	11/20/2050
67181D-AM-3	Oak Street Investment Gr-OAKIG 2021-2A A	D.....			.. 2.A FE	2,998,560	78.6237	2,357,727	2,998,750	2,998,544	0	91	0	0	.. 3.240	3.241	MON	2,969	97,160	11/19/2021	11/20/2051
67181D-AP-6	Oak Street Investment Gr-OAKIG 2021-2A B	D.....			.. 2.B FE	4,499,160	78.3367	3,525,150	4,500,000	4,499,298	0	398	0	0	.. 4.520	4.523	MON	6,215	203,400	11/19/2021	11/20/2051
67190A-AA-4	Oak Street Investment Gr-OAKIG 2021-1A A	D.....			.. 1.A FE	7,794,190	95.2438	7,738,770	8,125,222	8,002,540	0	166,159	0	0	.. 1.480	5.931	MON	3,675	120,253	12/07/2022	01/20/2051
67190A-AB-2	Oak Street Investment Gr-OAKIG 2021-1A A	D.....			.. 1.A FE	10,251,639	87.8859	9,521,229	10,833,630	10,294,326	0	42,656	0	0	.. 1.930	5.217	MON	6,389	124,146	09/25/2024	01/20/2051
67190A-AC-0	Oak Street Investment Gr-OAKIG 2021-1A A	D.....			.. 2.A FE	8,155,200	93.0943	8,154,751	8,759,667	8,567,397	0	339,323	0	0	.. 2.800	4.947	MON	7,494	245,271	08/18/2022	01/20/2051
67190A-AD-8	Oak Street Investment Gr-OAKIG 2021-1A A	D.....			.. 2.A FE	8,893,864	85.5615	7,780,222	8,983,896	8,983,896	0	61,565	0	0	.. 3.260	3.679	MON	9,058	296,436	03/08/2022	01/20/2051
67401Q-AC-0	Oaktree CLO 2023-2 Ltd-OAKCL 2023-2A B	D.....			.. 1.C FE	11,000,000	100.9793	11,107,723	11,000,000	11,000,000	0	0	0	0	.. 7.317	7.316	JAJ0	160,983	1,159,441	05/26/2023	07/20/2036
67401Q-AE-6	Oaktree CLO 2023-2 Ltd-OAKCL 2023-2A C	D.....			.. 1.F FE	5,000,000	101.0707	5,053,535	5,000,000	5,000,000	0	0	0	0	.. 7.867	7.866	JAJ0	78,674	563,074	05/26/2023	07/20/2036
67570A-AA-4	OCF CLO 2024-31 Ltd-OCF 2024-31A A1	D.....			.. 1.A FE	15,000,000	100.6073	15,091,095	15,000,000	15,000,000	0	0	0	0	.. 6.247	6.247	JAJ0	187,422	657,235	01/16/2024	04/20/2037
67570A-AE-6	OCF CLO 2024-31 Ltd-OCF 2024-31A B1	D.....			.. 1.B FE	7,000,000	100.1332	7,009,324	7,000,000	7,000,000	0	0	0	0	.. 6.617	6.617	JAJ0	92,644	323,113	01/16/2024	04/20/2037
67577N-AG-6	Octagon Investment Partn-OCT45 2019-1A E	D.....			.. 3.C FE	4,975,000	96.3960	4,819,800	5,000,000	5,000,000	0	(25,000)	0	0	.. 11.476	9.903	JAJ0	124,322	616,169	02/01/2022	04/15/2035
67590B-AU-4	Octagon Investment Partn-OCT16 2013-1A B	D.....			.. 1.B FE	3,941,250	100.1329	4,005,316	4,000,000	3,918,085	0	(49,778)	0	0	.. 6.509	5.659	JAJ0	54,965	292,484	12/07/2018	07/17/2030
675922-AE-8	Octagon Investment Partn-OCT34 2017-1A B	D.....			.. 1.A FE	5,365,743	100.0744	6,001,462	5,997,000	5,608,866	0	(117,307)	0	0	.. 6.279	7.894	JAJ0	75,310	427,789	06/27/2022	01/20/2030
675922-AJ-7	Octagon Investment Partn-OCT34 2017-1A C	D.....			.. 1.A FE	6,371,435	100.0709	7,126,048	6,620,618	6,620,618	0	(150,402)	0	0	.. 6.579	7.839	JAJ0	93,698	529,746	06/27/2022	01/20/2030
675922-AL-2	Octagon Investment Partn-OCT34 2017-1A C	D.....			.. 1.C FE	7,002,667	99.9985	7,826,383	7,826,500	7,246,657	0	36,771	0	0	.. 6.629	7.648	JAJ0	103,764	586,219	03/31/2023	01/20/2030
675929-AA-1	OCTAGON 58 LTD-OCT58 2022-1A E	D.....			.. 3.C FE	6,000,000	100.0871	6,005,226	6,000,000	6,000,000	0	0	0	0	.. 11.856	11.853	JAJ0	154,127	762,520	04/21/2022	07/15/2037
67592X-AC-4	Octagon 57 Ltd-OCT57 2021-1A A	D.....			.. 1.A FE	9,805,100	100.1442	10,014,420	10,000,000	9,697,456	0	(76,903)	0	0	.. 6.068	5.422	JAJ0	131,463	683,988	06/15/2023	10/15/2034
675935-AU-4	Octagon 60 Ltd-OCT60 2022-1A BR	D.....			.. 1.C FE	9,000,000	101.0532	9,094,788	9,000,000	9,000,000	0	0	0	0	.. 6.347	6.347	JAJ0	114,253	0	09/27/2024	10/20/2037
67707L-AJ-7	Oak Hill Credit Partners	D.....			.. 1.F FE	5,000,000	100.1220	5,006,100	5,000,000	5,000,000	0	0	0	0	.. 6.994	6.993	JAJ0	72,854	390,728	11/22/2021	01/18/2036
68267E-AD-6	OnellMain Direct Auto Rece-ODART 2019-1A D	D.....			.. 2.A FE	4,398,930	98.7700	4,543,422	4,600,000	4,521,087	0	51,954	0	0	.. 4.680	5.988	MON	10,166	215,280	08/16/2022	04/14/2031
68267H-AD-9	OnellMain Financial Issuan-OMFIT 2022-S1 D	D.....			.. 2.B FE																

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor-tization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
69120B-AG-0	Owl Rock CLO IX LLC-OR 2022-9A AR				1.A FE	51,500,000	.99.9957	51,497,786	51,500,000	51,500,000	.0	.0	.0	.0	.6.089	.6.087	FIAN	365,847	.0	11/12/2024	11/22/2037
69120Y-AA-3	Owl Rock CLO Ltd-OR 2024-16A A				1.A FE	5,300,000	.101.2052	5,363,876	5,300,000	5,300,000	.0	.0	.0	.0	.6.617	.6.617	JAJO	70,144	245,274	02/07/2024	04/20/2036
69144A-AA-7	Oxford Finance Funding 2-OXFIN 2020-1A A				1.F FE	1,208,405	.99.0077	1,201,577	1,213,620	1,213,023	.0	.0	.0	.0	.3.101	.3.504	MON	1,673	37,634	06/01/2022	02/15/2028
69145*-AG-6	Oxford Finance Funding XIII, LLC/Class A				1.F PL	6,603,000	.99.1324	6,545,715	6,603,000	6,603,000	.0	.0	.0	.0	.4.285	.4.285	MON	154,044	410,065	03/25/2022	04/15/2030
69145*-AH-4	Oxford Finance Funding XIII, LLC/Class B				2.B PL	897,000	.99.3114	890,823	897,000	897,000	.0	.0	.0	.0	.5.085	.5.085	MON	24,833	65,710	03/25/2022	04/15/2030
69145B-AA-4	OXFORD FINANCE FUNDING T-OXFIN 2022-1A A				1.F FE	15,371,000	.97.5071	14,987,818	15,371,000	15,371,000	.0	.0	.0	.0	.3.602	.3.602	MON	24,607	553,663	02/08/2022	02/15/2030
69145D-AA-0	Oxford Finance Credit Fu-OXFINF 2024-A A				1.F FE	5,500,000	.99.7628	5,486,956	5,500,000	5,500,000	.0	.0	.0	.0	.6.675	.6.675	MON	17,336	324,294	01/18/2024	01/14/2032
693696-AA-4	Pvone 2023-1 LLC-PVONE 2023-1A A				1.A FE	7,334,365	.99.9671	7,336,115	7,338,532	7,336,235	.0	.0	.0	.0	.7.250	.7.294	MON	23,646	532,044	06/26/2023	07/16/2035
693699-AA-8	PVONE 2023-1 LLC-PVONE 2023-2A A				1.A FE	40,769,837	.100.1545	40,832,879	40,769,890	40,769,597	.0	.0	.0	.0	.7.670	.7.670	MON	138,980	3,185,315	09/15/2023	09/17/2035
69392B-AD-8	PEAC Solutions Receivabl-PEAC 2024-2A B				1.C FE	3,749,807	.99.0094	3,712,851	3,750,000	3,749,811	.0	.0	.0	.0	.4.830	.4.832	MON	5,534	40,250	09/24/2024	10/20/2031
69544Q-AB-6	Pagaya AI Debt Grantor T-PAID 2024-8 B				1.D FE	9,829,167	.99.8976	9,814,497	9,824,562	9,829,065	.0	.0	.0	.0	.5.456	.5.440	MON	23,823	44,669	12/03/2024	01/15/2032
69700G-AL-6	Palmer Square CLO 2019-1-PLMRS 2019-1A A	D			1.C FE	940,000	.100.0635	1,000,635	1,000,000	929,758	.0	.0	.0	.0	.6.478	.6.527	FIAN	8,638	73,627	10/11/2022	11/14/2034
69916K-AC-7	Parallel CLO Ltd-PARL 2021-2A A2	D			1.C FE	9,450,000	.100.0435	9,454,111	9,450,000	9,450,000	.0	.0	.0	.0	.6.729	.6.728	JAJO	127,178	717,456	10/26/2021	10/20/2034
70019K-AE-7	Park Blue CLO 2024-VI Lt-PKBLU 2024-6A B	D			1.D Z	20,000,000	.100.0000	20,000,000	20,000,000	20,000,000	.0	.0	.0	.0	.0.000	.0.000	JAJO	.0	.0	12/16/2024	01/25/2038
70019K-AG-2	Park Blue CLO 2024-VI Lt-PKBLU 2024-6A C	D			1.F Z	12,750,000	.100.0000	12,750,000	12,750,000	12,750,000	.0	.0	.0	.0	.0.000	.0.000	JAJO	.0	.0	12/16/2024	01/25/2038
70470M-AC-9	Peace Park CLO Ltd-PCEPK 2021-1A A	D			1.A FE	4,332,375	.100.1381	4,506,215	4,500,000	4,299,928	.0	.0	.0	.0	.6.009	.5.946	JAJO	54,081	308,616	11/04/2022	10/20/2034
70470M-AE-5	Peace Park CLO Ltd-PCEPK 2021-1A B1	D			1.C FE	4,139,152	.100.1436	4,281,239	4,275,100	4,077,046	.0	.0	.0	.0	.6.479	.5.918	JAJO	55,397	313,676	05/10/2022	10/20/2034
70470M-AJ-4	Peace Park CLO Ltd-PCEPK 2021-1A C	D			1.F FE	4,200,000	.100.0674	4,202,831	4,200,000	4,200,000	.0	.0	.0	.0	.6.879	.6.878	JAJO	57,784	325,292	08/17/2021	10/20/2034
706874-AG-9	PenFed Auto Receivables -PNFED 2022-A D				1.C FE	1,899,636	.100.3131	1,905,949	1,900,000	1,899,860	.0	.0	.0	.0	.5.850	.5.856	MON	4,940	120,413	08/19/2022	06/17/2030
70687F-AE-9	PenFed Auto Receivables -PNFED 2024-A B				1.C FE	4,199,968	.97.8761	4,110,795	4,200,000	4,200,000	.0	.0	.0	.0	.4.970	.5.560	MON	9,277	65,521	08/13/2024	05/15/2030
72703P-AC-7	Planet Fitness Master Is-2019-1A A2 FIXE				2.B FE	10,579,438	.91.6450	9,576,903	10,450,000	10,535,463	.0	.0	.0	.0	.3.858	.3.359	MJSD	29,117	403,161	07/15/2021	12/05/2049
73052V-AA-3	Point Au Roche Park CLO -PARPK 2021-1A A	D			1.A FE	3,361,400	.100.2231	3,507,809	3,500,000	3,344,289	.0	.0	.0	.0	.5.959	.5.980	JAJO	41,713	238,251	10/06/2022	07/20/2034
74040T-AC-7	Preferred Term Securitie-PRETSL FLOAT 12	D			3.A FE	579,548	.97.9617	594,682	607,055	588,954	.0	.0	.0	.0	.6.849	.9.601	MJSD	1,039	47,377	12/21/2017	12/23/2031
74040Y-AB-8	Preferred Term Securitie-SECURED	D			1.A FE	777,679	.95.3147	749,914	786,777	786,777	.0	.0	.0	.0	.5.780	.5.780	JAJO	11,370	51,792	09/07/2018	07/03/2033
74041E-AL-9	Preferred Term Securitie-SECURED	D			1.C FE	9,097,050	.86.3881	8,917,752	10,322,894	9,027,261	.0	.0	.0	.0	.5.237	.3.208	MJSD	13,515	634,026	10/26/2018	03/23/2035
74041N-AC-9	Preferred Term Securitie-SECURED	D			1.A FE	3,121,621	.92.8037	3,009,850	3,243,243	3,127,951	.0	.0	.0	.0	.5.490	.5.338	MJSD	3,957	209,494	10/26/2018	12/24/2033
74041N-AD-7	Preferred Term Securitie-SECURED	D			1.A FE	15,537,795	.92.8037	14,981,453	16,143,164	15,533,545	.0	.0	.0	.0	.5.490	.5.395	MJSD	19,696	1,042,753	10/26/2018	12/24/2033
74041P-AB-6	Preferred Term Securitie-SECURED	D			1.C FE	18,141,623	.91.6244	21,609,996	23,585,416	19,469,421	.0	.0	.0	.0	.5.820	.8.042	JAJO	343,194	1,632,603	08/02/2017	01/03/2033
74042D-AA-4	Preferred Term Securitie-SECURED	D			1.A FE	5,249,078	.90.7232	5,172,716	5,701,646	5,288,380	.0	.0	.0	.0	.5.020	.5.322	MJSD	7,156	343,647	11/29/2018	03/22/2038
74042E-AA-2	Preferred Term Securitie-SECURED	D	2		1.A FE	4,463,906	.93.7195	5,198,415	5,546,781	4,776,801	.0	.0	.0	.0	.5.010	.7.717	MJSD	6,948	422,893	04/04/2017	06/23/2035
74042F-AA-9	Preferred Term Securitie-SECURED	D			1.E FE	6,529,320	.89.7442	7,303,700	8,138,354	7,133,262	.0	.0	.0	.0	.4.910	.6.264	MJSD	9,990	481,385	09/18/2018	06/22/2037
74042H-AA-5	Preferred Term Securitie-SECURED	D			1.A FE	12,438,926	.94.9215	15,306,819	16,125,767	16,125,767	.0	.0	.0	.0	.4.970	.4.970	MJSD	20,037	963,706	05/06/2019	12/22/2035
74042H-AB-3	Preferred Term Securitie-SECURED	D			1.A FE	4,268,868	.86.3068	4,330,894	5,018,022	5,018,022	.0	.0	.0	.0	.5.050	.5.050	MJSD	6,335	303,979	12/20/2018	12/22/2035
74042J-AA-1	Preferred Term Securitie-SECURED	D			1.A FE	22,858,724	.92.5449	25,044,774	27,062,295	24,474,096	.0	.0	.0	.0	.4.709	.6.094	MJSD	1,208,323	840,484	05/31/2019	03/22/2038
74042T-AA-9	Preferred Term Securitie-SECURED	D			1.B FE	2,684,256	.91.3442	3,502,731	3,834,651	2,618,956	.0	.0	.0	.0	.4.920	10.450	MJSD	4,717	227,211	04/14/2016	12/22/2037
74042W-AA-2	Preferred Term Securitie-SECURED	D			1.C FE	568,886	.97.1103	581,840	599,154	599,154	.0	.0	.0	.0	.5.037	.5.037	MJSD	10,265	34,133	07/11/2019	09/23/2035
74043A-AC-5	Preferred Term Securitie-FIRST LIEN	D			1.A FE	1,967,899	.90.7642	1,553,266	1,711,320	1,711,320	.0	.0	.0	.0	.4.820	.4.820	MJSD	2,062	99,655	08/03/2017	12/22/2036
74043A-AD-3	Preferred Term Securitie-SECURED	D			1.A FE	13,156,549	.93.2505	13,218,637	14,175,406	14,175,406	.0	.0	.0	.0	.4.930	.4.930	MJSD	17,472	841,368	04/30/2019	12/22/2036
74043C-AA-5	Preferred Term Securitie-SECURED	D			1.E FE	9,321,291	.91.2088	11,130,177	12,202,964	10,279,166	.0	.0	.0	.0	.4.920	.7.198	MJSD	15,010	723,723	06/09/2017	03/22/2037
74166Y-AC-4	Primrose Schools 22-1A A2				2.B FE	2,673,000	.99.5805	2,661,786	2,673,000	2,673,000	.0	.0	.0	.0	.5.709	.5.709	JAJO	25,857	152,602	05/25/2022	04/30/2052
74331U-AC-2	PROG 2022-SFR3 B-PROG 2022-SFR3 B				1.C FE	5,281,482	.96.2776	5,295,270	5,500,000	5,394,584	.0	.0	.0	.0	.3.600	.4.497	MON	16,500	198,000	04/05/2022	04/01/2039
74332V-AE-5	Progress Residential 202-PROG 2022-SFR2				1.C FE	5,933,852	.96.2837	5,777,020	6,000,000	5,969,360	.0	.0	.0	.0	.3.750	.3.996	MON	18,750	225,000	03/14/2022	04/01/2027
74332Y-AC-3	Progress Residential 202-PROG 2022-SFR5				1.D FE	2,484,454	.98.6968	2,467,419	2,500,000	2,491,915	.0	.0	.0	.0	.4.896	.5.038	MON	10,200	122,400	06/10/2022	06/01/2039
74333W-AJ-1	Progress Residential Trust-PROG 2021-SFR				2.A FE	9,107,585	.90.6144	8,253,093	9,107,929	9,107,717	.0	.0	.0	.0	.3.567	.3.568	MON	27,073	324,878	11/19/2021	12/01/2040
74334D-AG-8	Progress Residential 202-PROG 2022-SFR6				2.C FE	10,499,652	.100.1594	10,516,733	10,500,000	10,499,793	.0	.0	.0	.0	.6.035	.6.036	MON	52,806	633,675	07/25/2022	07/01/2039

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
749529-AA-1	REVL 2024 2 LTD REVL 2024-2 LTD	C.....			1.E PL	6,469,311	99.5800	6,442,140	6,469,311	6,469,311	0	0	0	0	6.950	6.950	MON	159,864	0	08/22/2024	01/05/2048
74980E-AS-7	RR 7 Ltd-RRAM 2019-7A A2B	D.....			1.C FE	3,374,000	100.0480	3,501,680	3,500,000	3,323,475	0	(28,865)	0	0	6.506	5.917	JAJ0	49,336	254,953	03/28/2023	01/15/2037
74980P-AC-7	ALM Ltd/KY-SERIES 21-14A CLASS A2	D.....			1.C FE	2,308,710	100.0486	2,461,196	2,460,000	2,295,166	0	(7,749)	0	0	6.418	6.483	JAJ0	34,205	176,991	10/07/2022	04/15/2036
74980Q-AE-1	ALM Ltd/KY-RRAM 2021-17A A2	D.....			1.C FE	8,947,900	100.1147	9,010,323	9,000,000	8,879,234	0	(20,918)	0	0	6.568	5.255	JAJ0	128,066	386,039	08/06/2024	07/15/2034
74983A-AC-7	RR 19 Ltd-RRAM 2021-19A A2	D.....			1.C FE	2,545,560	100.1089	2,702,940	2,700,000	2,527,426	0	(12,960)	0	0	6.568	6.427	JAJ0	38,420	198,364	07/12/2022	10/15/2035
74983D-AA-0	Race Point X CLO Ltd-RACEP 2016-10A A2R	D.....			1.A FE	17,500,000	100.1255	17,521,963	17,500,000	17,500,000	0	0	0	0	6.337	4.899	JAJ0	209,489	1,252,425	07/12/2018	07/25/2031
74989A-AC-1	RRAM 2024-36RA A2R-RRAM 2024-36RA A2R	D.....			1.D Z	15,000,000	100.0000	15,000,000	15,000,000	15,000,000	0	0	0	0	0.000	0.000	JAJ0	0	0	12/13/2024	01/15/2040
749979-AE-0	Rad CLO 20 Ltd-RAD 2023-20A C	D.....			1.F FE	5,000,000	100.3402	5,017,010	5,000,000	5,000,000	0	0	0	0	7.617	7.616	JAJ0	76,174	476,072	07/27/2023	07/20/2036
75000G-AV-8	RR 23 Ltd-RRAM 2022-23A A2R	D.....			1.C FE	11,120,000	100.7720	11,205,846	11,120,000	11,120,000	0	0	0	0	7.306	7.305	JAJ0	176,023	1,018,822	08/02/2023	10/15/2035
75009A-AJ-9	Rad CLO 18 Ltd-RAD 2023-18A A1	D.....			1.A FE	10,500,875	100.4000	10,542,000	10,500,000	10,357,435	0	(34,570)	0	0	6.606	5.295	JAJ0	150,284	775,504	11/01/2023	04/15/2036
75009L-AL-0	Rad CLO 16 Ltd-RAD 2022-16A A1R	D.....			1.A FE	25,500,000	100.4259	25,608,605	25,500,000	25,500,000	0	0	0	0	6.206	6.205	JAJ0	342,876	714,208	05/03/2024	07/15/2037
75009P-AE-7	Rad CLO 12 Ltd-RAD 2021-12A C	D.....			1.F FE	4,500,000	100.1186	4,505,337	4,500,000	4,500,000	0	0	0	0	6.901	6.900	JAJ0	54,344	349,287	10/01/2021	10/30/2034
75009R-AA-1	Rad CLO 14 Ltd-RAD 2021-14A A	D.....			1.A FE	19,427,250	100.1125	19,772,219	19,750,000	19,176,226	0	(169,047)	0	0	6.088	5.362	JAJ0	260,495	1,354,882	11/02/2023	01/15/2035
75009R-AC-7	Rad CLO 14 Ltd-RAD 2021-14A B	D.....			1.C FE	2,097,000	100.0196	2,250,441	2,250,000	2,079,387	0	(9,918)	0	0	6.568	6.596	JAJ0	32,017	165,304	10/19/2022	01/15/2035
750103-AA-1	Rad CLO 15 Ltd-RAD 2021-15A A	D.....			1.A FE	19,254,500	100.1566	19,630,694	19,600,000	19,126,657	0	47,393	0	0	5.969	5.870	JAJ0	233,985	1,336,201	05/08/2023	01/20/2034
750103-AE-3	Rad CLO 15 Ltd- 2021-15A C	D.....			1.F FE	5,500,000	100.1126	5,506,193	5,500,000	5,500,000	0	0	0	0	6.929	6.928	JAJ0	76,219	428,781	11/23/2021	01/20/2034
75973H-AA-5	Renew 2023-1-RENEW 2023-1A A	C.....			1.A FE	8,100,509	94.7643	8,164,628	8,615,717	7,876,005	0	(297,265)	0	0	5.900	7.734	MON	58,139	658,395	07/31/2023	11/20/2058
75973V-AA-4	Renew 2024-1-RENEW 2024-1A A	C.....			1.A FE	11,079,825	96.8104	10,710,935	11,063,829	11,063,829	0	(15,996)	0	0	6.208	6.347	MON	78,520	570,473	01/29/2024	11/20/2059
761923-AA-9	REVL 2023-2 Ltd-REVL 2023-2A A1	C.....			1.E PL	6,480,389	102.7200	6,656,655	6,480,389	6,480,389	0	0	0	0	8.480	8.480	MON	45,795	606,287	10/19/2023	10/01/2048
761923-AB-7	REVL 2023-2 Ltd-REVL 2023-2A A2	C.....			1.E PL	18,348,650	102.6000	18,825,715	18,348,650	18,348,650	0	0	0	0	8.450	8.450	MON	260,881	1,582,370	10/19/2023	02/01/2049
761925-AA-4	REVL 2024-1, Ltd Class A Notes	C.....			1.E PL	7,583,333	100.7400	7,639,450	7,583,333	7,583,333	0	0	0	0	7.540	7.539	MON	346,247	0	05/28/2024	06/05/2029
76761R-AY-5	Riserva Clo Ltd-RSRVA 2016-3A AFR	D.....			1.A FE	6,321,562	100.0496	6,473,209	6,470,000	6,263,312	0	2,208	0	0	5.954	5.657	JAJ0	80,254	437,193	04/25/2023	01/18/2034
77587A-AU-0	Romark WM-R Ltd-RMRK 2018-1A B2R	D.....			1.C FE	8,000,000	91.1666	7,293,328	8,000,000	8,000,000	0	0	0	0	2.540	2.540	JAJ0	40,077	203,208	09/17/2020	04/20/2031
77588E-AA-5	Romark Credit Funding I -RCF 2020-1A AV	D.....			1.A FE	10,000,000	95.9381	9,593,810	10,000,000	10,000,000	0	0	0	0	3.572	3.572	AO	62,510	357,200	01/30/2020	04/28/2038
78111F-AL-2	RR 23 Ltd-RRAM 2022-23A DR	D.....			3.B FE	15,306,250	102.1193	15,828,492	15,500,000	15,500,000	0	(193,750)	0	0	12.956	11.400	JAJ0	435,102	2,424,800	08/02/2023	10/15/2035
78397W-AC-0	SCF Equipment Leasing 20-SCFET 2022-2A A	C.....			1.A FE	7,280,520	100.4316	7,335,352	7,303,829	7,292,467	0	2,791	0	0	6.500	6.599	MON	14,506	474,749	11/08/2022	10/21/2030
78398A-AG-8	SFS Auto Receivables Sec-SFAST 2023-1A C	C.....			1.F FE	6,749,706	100.3269	6,772,064	6,750,000	6,749,775	0	72	0	0	5.970	5.971	MON	12,313	402,975	06/22/2023	02/20/2031
78433X-AA-8	Stonepeak 2021-1 ABS-SALTT 2021-1A AA	C.....			1.C FE	707,408	94.6315	718,008	758,741	728,570	0	12,201	0	0	2.301	5.513	MON	776	17,459	07/06/2022	02/28/2033
78433X-AC-4	Stonepeak 2021-1 ABS-SALTT 2021-1A B	C.....			2.B FE	914,774	92.5518	919,753	993,772	935,689	0	(9,274)	0	0	3.821	7.263	MON	1,688	37,972	07/06/2022	02/28/2033
78444R-AF-7	SMB Private Education Lo-SMB 2015-A C	C.....			1.A FE	2,346,680	97.0847	2,427,119	2,500,000	2,411,353	0	44,116	0	0	4.500	6.628	MON	5,000	112,500	10/15/2022	10/15/2048
78444R-AE-6	SMB Private Education Lo-SMB 2015-C B	C.....			1.A FE	1,621,381	96.6156	1,635,504	1,692,796	1,660,978	0	21,452	0	0	3.500	6.690	MON	2,633	59,248	05/17/2023	09/15/2043
78444R-AF-3	SMB 2015-C C	C.....			1.A FE	1,244,531	97.2377	1,312,709	1,350,000	1,282,170	0	26,996	0	0	4.500	7.010	MON	2,700	60,750	08/18/2023	09/17/2046
78449H-AC-1	SMB Private Education Lo-SMB 2023-B B	C.....			1.C FE	4,990,242	98.8001	4,940,006	5,000,000	4,988,691	0	245	0	0	5.770	5.777	MON	245	288,500	05/12/2023	10/16/2056
78449L-AC-2	SMB 2018-B A2B	C.....			1.A FE	455,067	99.6034	461,555	463,393	459,457	0	2,610	0	0	5.232	6.607	MON	1,077	28,486	04/04/2023	01/15/2037
78449X-AA-0	SMB Private Education Lo-SMB 2020-B A1A	C.....			1.A FE	3,209,272	92.7920	3,035,817	3,271,637	3,238,474	0	10,927	0	0	1.290	2.019	MON	1,876	42,204	01/19/2022	07/15/2053
78449X-AC-6	SMB Private Education Lo-SMB 2020-B B	C.....			1.B FE	2,233,429	85.2489	2,110,762	2,476,000	2,320,913	0	31,608	0	0	2.760	4.443	MON	3,037	68,338	04/27/2022	07/15/2053
78450F-AD-9	SMB Private Education Lo-SMB 2022-A B	C.....			1.D FE	2,508,776	90.8998	2,308,559	2,539,676	2,510,454	0	(7,419)	0	0	3.250	3.546	MON	3,668	82,170	03/08/2022	11/16/2054
78450F-AE-7	SMB Private Education Lo-SMB 2022-A C	C.....			1.G FE	6,870,652	89.6407	6,161,504	6,873,554	6,871,583	0	210	0	0	3.940	3.948	MON	12,036	270,818	03/08/2022	11/16/2054
78450P-AB-1	SMB Private Education Lo-SMB 2023-D A1B	C.....			1.A FE	8,504,299	100.6331	8,558,135	8,504,299	8,504,299	0	0	0	0	6.248	6.970	MON	23,614	661,603	10/27/2022	09/15/2053
78450Q-AC-7	SMB 2023-A B-SMB 2023-A B	C.....			1.C FE	7,081,102	98.7954	6,968,041	7,053,000	7,079,408	0	(1,694)	0	0	5.880	5.825	MON	18,432	311,037	03/27/2024	01/15/2053
78450X-AA-6	SMB Private Education Lo-SMB 2024-E A1A	C.....			1.A FE	12,453,077	98.6403	12,588,565	12,457,961	12,453,502	0	425	0	0	5.090	5.099	MON	28,183	213,132	08/07/2024	10/16/2056
78662A-AB-8	Sagard-Halseypoint Clo 8-HLSY 2024-8A B	D.....			1.C FE	13,000,000	100.0172	13,002,236	13,000,000	13,000,000	0	0	0	0	6.114	(1.357)	JAJ0	0	0	12/02/2024	01/30/2038
78662A-AC-6	Sagard-Halseypoint Clo 8-HLSY 2024-8A C	D.....			1.F FE	7,500,000	100.0182	7,501,365	7,500,000	7,500,000	0	0	0	0	6.414	(0.994)	JAJ0	12,027	0	12/02/2024	01/30/2038
80280B-AC-2	Santander Bank Auto Cred-SBCLN 2024-B C	C.....			1.G FE	5,000,000	99.4338	4,971,689	5,000,000	5,000,000	0	0	0	0	5.141	5.141	MON	9,282	0	12/10/2024	01/18/2033
80280B-AD-0	SBCLN 2024-B D	C.....			2.C FE	5,000,000	99.3932	4,969,659	5,000,000	5,000,000	0	0	0	0	5.483	5.483	MON	9,900	0	12/10/2024	01/18/2033

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
80285U-AF-8	Santander Drive Auto Rec-SDART 2022-3 C				.. 1.A FE	9,998,088	99.6005	9,960,051	10,000,000	9,999,436	0	588	0	0	4.490	4.496	MON	19,956	449,000	05/11/2022	08/15/2029
81761T-AA-3	ServiceMaster Funding LL-SERV 2020-1 A2I				.. 2.C FE	2,674,728	90.8185	2,569,145	2,828,880	2,770,753	0	9,751	0	0	2.841	3.562	JAJ0	13,618	80,422	02/18/2022	01/30/2051
81761T-AC-9	ServiceMaster Funding LL-SERIES 20-1 CLA				.. 2.C FE	4,136,988	84.9533	4,005,139	4,714,516	4,288,922	0	(43,087)	0	0	3.337	5.135	JAJ0	67,640	169,882	04/21/2022	01/30/2051
81761T-AE-5	ServiceMaster Funding LL-SERV 2021-1 A2I				.. 2.C FE	12,083,182	89.2954	12,744,553	14,272,353	12,826,689	0	199,902	0	0	2.865	4.993	JAJ0	69,286	408,903	04/19/2022	07/30/2051
81761T-AG-0	ServiceMaster Funding LL-SERV 2021-1 A2I				.. 2.C FE	7,611,921	81.7993	6,226,501	7,611,921	7,611,921	0	0	0	0	3.113	3.113	JAJ0	40,151	236,959	07/26/2021	07/30/2051
817743-AA-5	SERVPRO Master Issuer LL-SPRO 2019-1A A2				.. 2.C FE	17,445,117	96.7944	16,781,726	17,337,500	17,367,299	0	(15,394)	0	0	3.882	3.782	JAJ0	123,391	673,042	01/22/2020	10/25/2049
82652R-AB-5	Sierra Timeshare 2021-2 -SRFC 2021-2A B				.. 1.F FE	243,653	94.1176	248,923	264,481	249,045	0	2,421	0	0	1.800	7.034	MON	145	5,706	11/16/2022	09/20/2038
82653B-AC-7	Sierra Timeshare 2024-3 -SRFC 2024-3A C				.. 2.B FE	3,161,118	99.2320	3,140,152	3,164,455	3,161,140	0	23	0	0	5.320	5.340	MON	5,144	14,029	12/11/2024	08/20/2041
82667C-AC-9	Signal Rail I LLC-SRL 2024-1A A				.. 1.C FE	8,958,521	100.3940	8,998,541	8,963,226	8,958,819	0	298	0	0	5.670	5.679	MON	19,764	289,400	05/13/2024	05/17/2054
82667C-AD-7	Signal Rail I LLC-SRL 2024-1A B				.. 1.F FE	6,052,045	100.2580	5,990,901	5,975,484	6,050,418	0	(1,627)	0	0	6.110	5.868	MON	14,198	60,850	10/30/2024	05/17/2054
82667F-AG-3	Signal Peak CLO 14 Ltd-SPEAK 2024-14A C	D.....			.. 1.F Z	7,000,000	100.0000	7,000,000	7,000,000	7,000,000	0	0	0	0	0.000	0.000	JAJ0	0	0	12/20/2024	01/22/2038
82670Q-AU-3	Signal Peak CLO 9 Ltd-SPEAK 2021-9A CR	D.....			.. 1.F FE	4,000,000	100.0182	4,000,728	4,000,000	4,000,000	0	0	0	0	6.439	6.437	JAJ0	14,309	0	12/02/2024	01/21/2038
82671C-AC-3	Signal Peak CLO 10 Ltd-SPEAK 2021-10A B	D.....			.. 1.C FE	13,899,200	100.0012	14,000,168	14,000,000	14,000,000	0	(100,800)	0	0	6.646	5.073	JAJ0	178,344	1,045,083	03/01/2022	01/24/2035
826934-AC-5	Sierra Timeshare 2022-3 -SRFC 2022-3A C				.. 2.B FE	1,245,045	99.9156	1,244,283	1,245,334	1,245,018	0	10	0	0	7.630	7.644	MON	2,903	94,846	10/12/2022	07/20/2039
827925-AA-6	Silver Point Clo 3 Ltd-SPCLO 2023-3A A1	D.....			.. 1.A FE	15,000,000	100.6576	15,098,640	15,000,000	15,000,000	0	0	0	0	6.551	6.550	FIAN	185,608	1,002,793	11/02/2023	11/29/2036
827925-AE-8	Silver Point Clo 3 Ltd-SPCLO 2023-3A B	D.....			.. 1.C FE	10,000,000	101.7473	10,174,730	10,000,000	10,000,000	0	0	0	0	7.576	7.575	FIAN	143,100	762,772	11/02/2023	11/29/2036
828085-AU-4	Silver Point CLO 1 Ltd-SPCLO 2022-1A CR	D.....			.. 1.F Z	8,000,000	100.0000	8,000,000	8,000,000	8,000,000	0	0	0	0	0.000	0.000	JAJ0	0	0	12/23/2024	01/20/2038
82808E-AA-9	Silver Point CLO 2 Ltd-SPCLO 2023-2A A1	D.....			.. 1.A FE	9,950,000	100.4868	10,048,680	10,000,000	9,765,686	0	(101,300)	0	0	6.867	5.971	JAJ0	137,348	773,321	04/14/2023	04/20/2035
829929-AE-8	Sixth Street CLO XXIII L-SIXST 2023-23A	D.....			.. 1.F FE	4,000,000	101.1883	4,047,532	4,000,000	4,000,000	0	0	0	0	7.326	7.325	JAJ0	56,982	317,355	09/21/2023	10/23/2036
83004M-AA-1	610 Funding CLO 2 Ltd-SIX10 2016-2RA DR2	D.....			.. 3.C FE	1,540,313	100.0499	1,550,773	1,550,000	1,507,390	0	(5,386)	0	0	12.129	11.129	JAJ0	37,600	203,006	02/07/2022	01/20/2034
83011V-AC-8	Sixth Street CLO XXV Ltd-SIXST 2024-25A	D.....			.. 1.C FE	8,300,000	100.6524	8,354,149	8,300,000	8,300,000	0	0	0	0	7.123	7.129	JAJ0	312,019	0	05/15/2024	07/24/2037
83012Q-AE-4	Sixth Street CLO-SIXST 2021-20A C	D.....			.. 1.F FE	3,400,000	100.0674	3,402,292	3,400,000	3,400,000	0	0	0	0	6.879	6.878	JAJ0	46,777	263,332	09/08/2021	10/20/2034
83012V-AC-7	SIXST 2017-8A A2R2-SIXST 2017-8A A2R2	D.....			.. 1.C FE	7,000,000	100.0191	7,001,337	7,000,000	7,000,000	0	0	0	0	6.094	6.094	JAJ0	30,809	0	11/21/2024	10/20/2034
83189D-AD-2	SMB PRIVATE EDUCATION LO-SMB 2017-B B				.. 1.B FE	2,296,875	95.5420	2,340,779	2,450,000	2,358,597	0	33,507	0	0	3.500	5.326	MON	3,811	85,750	05/16/2023	12/16/2041
831943-AC-9	SMB Private Education Lo-SMB 2024-A B				.. 1.C FE	9,013,307	100.4064	9,036,577	9,000,000	9,011,984	0	(1,322)	0	0	5.880	5.854	MON	23,520	399,840	03/12/2024	03/15/2056
83206E-AA-5	SMB Private Education Lo-SMB 2024-C A1A				.. 1.A FE	9,339,308	100.0927	9,349,652	9,340,989	9,339,399	0	91	0	0	5.500	5.505	MON	22,834	299,690	05/07/2024	06/17/2052
83206N-AC-1	SMB Private Education Lo-SMB 2022-B B				.. 1.D FE	1,285,804	96.3134	1,309,503	1,359,628	1,292,433	0	6,629	0	0	4.550	6.175	MON	2,749	41,242	04/17/2024	02/16/2055
83207D-AA-6	SMB Private Education Lo-SMB 2023-C A1A				.. 1.A FE	7,823,993	100.2414	7,913,672	7,894,613	7,834,121	0	6,879	0	0	5.670	5.950	MON	19,894	454,088	08/22/2023	11/15/2052
83401B-AC-0	SoFi PROFESSIONAL LOAN P-SoFi 2017-F BFX				.. 1.B FE	2,262,012	92.0055	2,300,137	2,500,000	2,318,288	0	53,925	0	0	3.620	6.250	MON	1,508	90,500	12/01/2023	01/25/2041
83401C-AC-8	SoFi Professional Loan P-SoFi 2019-C				.. 1.B FE	3,724,453	84.7905	3,815,572	4,500,000	3,885,057	0	3,515	0	0	3.050	6.676	MON	6,100	137,250	10/10/2023	11/16/2048
83404K-AD-5	SoFi Professional Loan P-SoFi 2017-E B				.. 1.A FE	3,249,454	97.5122	3,302,790	3,387,053	3,295,391	0	45,121	0	0	3.490	6.350	MON	1,970	118,041	12/13/2023	11/26/2040
83436J-AA-4	Soloso CDO 2007-1 Ltd-SERIES 2007-1A CLA	D.....			.. 1.E FE	7,920,545	88.2141	7,584,301	8,597,607	8,280,483	0	255,097	0	0	5.111	21.074	JAJ0	104,980	502,038	07/25/2018	10/07/2037
83608G-AQ-9	Sound Point CLO II Ltd-SNDPT 2013-1A A2R	D.....			.. 1.C FE	7,008,750	100.0658	7,204,738	7,200,000	7,031,610	0	(41,141)	0	0	6.329	5.804	JAJ0	82,275	518,011	12/07/2018	01/26/2031
83609Y-AE-6	Sounds Point CLO IV-R LT-SERIES 13-3RA C	D.....			.. 1.B FE	1,770,786	100.1298	1,802,336	1,800,000	1,761,968	0	(24,288)	0	0	6.644	5.755	JAJ0	24,915	134,257	12/10/2018	04/18/2031
83615P-AC-1	Sound Point Clo XXXI Ltd-SNDPT 2021-3A B	D.....			.. 1.C FE	11,000,000	100.0200	11,002,200	11,000,000	11,000,000	0	0	0	0	6.537	6.537	JAJ0	135,834	809,605	08/06/2021	10/25/2034
85572R-AA-7	Start Ltd/Bermuda-STARR 2018-1 A	D.....			.. 1.F FE	8,640,650	97.6374	8,462,462	8,667,234	8,656,732	0	3,211	0	0	4.089	4.147	MON	15,751	354,317	04/17/2019	05/15/2043
85573L-AA-9	START Ireland-STARR 2019-1 A	D.....			.. 1.F FE	3,132,535	97.6495	3,059,042	3,132,675	3,132,652	0	3	0	0	4.089	4.089	MON	5,693	128,083	04/12/2019	03/15/2044
86212V-AA-2	Store Master Funding I-V-STR 2016-1A A1				.. 1.C FE	8,745,345	95.9003	8,391,262	8,749,985	8,749,006	0										

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
863931-AD-3	Structured Carbon Level -SCLM3 2023-1 D .....	.....	.....	.....	..2.C PL	854,831	..57.9000	1,003,986	1,734,000	1,076,879	0	199,484	0	0	0.000	9.627	MON	0	0	09/29/2023	09/20/2050
86744V-AA-9	Helios Issuer LLC-SNVA 2022-B A .....	.....	.....	.....	..1.G FE	7,199,232	..94.7517	6,868,982	7,249,454	7,208,886	0	100	0	0	5.000	5.120	MON	11,076	362,464	08/12/2022	08/20/2049
86744V-AB-7	Helios Issuer LLC-SNVA 2022-B B .....	.....	.....	.....	..2.C FE	8,389,547	..91.5432	8,093,152	8,840,798	8,429,984	0	(42,065)	0	0	6.000	6.771	MON	16,208	530,435	08/12/2022	08/20/2049
86744Y-AA-3	Sunnova SOL VI Issuer LL-SNVA 2024-1A A .....	.....	.....	.....	..1.G FE	9,972,170	..90.8573	9,400,221	10,346,140	10,001,492	0	29,322	0	0	5.650	6.268	JAJO	99,050	418,651	03/27/2024	01/30/2059
86745Q-AA-9	Sunnova Sol III Issuer L-SNVA 2021-1 A .....	.....	.....	.....	..1.D FE	10,083,575	..78.2654	9,378,601	11,983,081	10,164,776	0	81,201	0	0	2.580	5.261	JAJO	52,386	309,052	01/12/2024	04/28/2056
86745X-AA-4	Sunnova Sol V Issuer LLC-SNVA 2023-1A A .....	.....	.....	.....	..1.G FE	12,797,366	..92.3597	12,473,870	13,505,746	12,862,668	0	(1,683)	0	0	5.400	6.088	JAJO	123,578	729,310	04/21/2023	04/30/2058
86745Y-AA-2	Sunnova Helios XII Issue-SNVA 2023-B A .....	.....	.....	.....	..1.D FE	8,539,317	..97.1439	8,661,882	8,916,545	8,588,468	0	24,007	0	0	5.300	6.184	MON	14,440	472,577	08/18/2023	08/22/2050
86746B-AA-1	Helios Issuer LLC-SNVA 2023-GRID1 1A .....	.....	.....	.....	..1.B FE	16,712,653	..98.6855	16,733,664	16,956,566	16,724,353	0	7,271	0	0	5.750	6.157	MON	29,792	957,261	10/18/2023	12/20/2050
86746F-AA-2	Sunnova Hestia II Issuer-SNVA 2024-GRID1 .....	.....	.....	.....	..1.B FE	9,628,807	..99.3337	9,564,991	9,629,150	9,628,866	0	59	0	0	5.630	5.630	MON	16,565	296,661	05/22/2024	07/20/2051
86772R-AA-3	Sunrun Jupiter Issuer 20-SUNRN 2022-1A A .....	.....	.....	.....	..1.G FE	13,548,489	..89.8016	12,266,568	13,659,636	13,579,624	0	14,394	0	0	4.750	4.898	JAJO	109,941	648,813	04/26/2022	07/30/2057
86909#-AA-5	Susquehanna (18 Properti Trust Certifica .....	.....	.....	.....	..1.G YE	5,365,113	..97.7098	5,242,240	5,365,112	5,365,118	0	0	0	0	5.730	5.730	MON	111,261	264,074	12/23/2013	12/23/2036
869507-AA-1	SUTTONPARK STRUCTURED SE-SERIES 17-1A CL .....	.....	.....	.....	..1.A FE	12,701,117	..85.2193	11,533,103	13,533,440	12,747,387	0	45,601	0	0	4.190	4.195	MON	25,202	538,789	02/09/2017	01/15/2071
87165V-AP-4	Symphony CLO XVI Ltd-SYMP 2015-16A C2R	D .....	.....	.....	..1.E FE	4,000,000	..97.6822	3,907,288	4,000,000	4,000,507	0	(116)	0	0	5.150	5.146	JAJO	43,489	227,145	08/29/2018	10/15/2031
87167G-OM-0	Symphony CLO XXII Ltd-SYMP 2020-22A BR	D .....	.....	.....	..1.C FE	15,000,000	100.0312	15,004,680	15,000,000	15,000,000	0	0	0	0	6.312	6.312	JAJO	197,261	59,868	09/13/2024	04/18/2033
87168B-AE-0	SYMP-SYMP 2021-28A B	D .....	.....	.....	..1.C FE	5,848,668	100.2559	6,230,904	6,215,000	5,794,274	0	1,052	0	0	6.538	6.489	JAJO	79,008	457,842	12/09/2022	10/23/2034
87168B-AG-5	SYMP 2021-28A C-SYMP 2021-28A C	D .....	.....	.....	..1.F FE	7,000,000	100.1804	7,012,628	7,000,000	7,000,000	0	0	0	0	6.988	6.987	JAJO	95,113	547,696	08/03/2021	10/23/2034
87168G-AG-4	Symphony CLO XXIX Ltd-SYMP 2021-29A C	D .....	.....	.....	..1.F FE	3,700,000	100.1716	3,706,349	3,700,000	3,700,000	0	0	0	0	7.068	7.067	JAJO	56,658	290,590	12/01/2021	01/15/2034
87169T-AQ-3	Symphony CLO 39 Ltd-SYMP 2023-39A CR	D .....	.....	.....	..1.F FE	4,500,000	99.9985	4,499,933	4,500,000	4,500,000	0	0	0	0	6.483	6.483	JAJO	28,365	0	11/14/2024	01/25/2038
87169V-AW-5	Symphony CLO 37 Ltd-SYMP 2022-37A B1R	D .....	.....	.....	..1.C FE	7,250,000	100.8878	7,314,366	7,250,000	7,250,000	0	0	0	0	7.017	7.017	JAJO	101,752	478,459	12/07/2023	01/20/2037
87170A-AQ-1	Symphony CLO 34-PS Ltd-SYMP 2022-34A B1R	D .....	.....	.....	..1.C FE	10,000,000	100.7941	10,079,410	10,000,000	10,000,000	0	0	0	0	7.285	7.284	JAJO	139,625	811,391	07/13/2023	07/24/2036
871987-AA-1	Symphony CLO 42 Ltd-SYMP 2024-42A A1	D .....	.....	.....	..1.A FE	15,000,000	100.4358	15,065,370	15,000,000	15,000,000	0	0	0	0	6.177	6.177	JAJO	195,619	605,950	03/12/2024	04/17/2037
871989-AT-6	Symphony CLO 40 Ltd-SYMP 2023-40A CR	D .....	.....	.....	..1.F FE	4,300,000	100.0183	4,300,787	4,300,000	4,300,000	0	0	0	0	6.370	6.373	JAJO	9,891	0	12/03/2024	01/05/2038
87246M-AS-1	TICP CLO VI 2016-2 Ltd-TICP 2016-6A AR2	D .....	.....	.....	..1.A FE	15,375,250	100.2107	15,783,185	15,750,000	15,252,864	0	(4,773)	0	0	6.038	5.758	JAJO	206,030	1,072,491	05/05/2023	01/15/2034
872480-AA-6	Tif Funding II LLC-SERIES 20-1A CLASS A .....	.....	.....	.....	..1.F FE	1,200,944	91.9906	1,211,210	1,316,667	1,213,176	0	12,232	0	0	2.090	5.478	MON	841	11,466	07/25/2024	08/20/2045
872480-AE-8	TIF Funding II LLC-TIF 2021-1A A .....	.....	.....	.....	..1.E FE	4,201,904	87.8465	4,223,767	4,808,125	4,243,280	0	41,376	0	0	1.650	5.424	MON	2,424	33,056	07/25/2024	02/20/2046
87249Q-AL-4	TICP CLO XI Ltd-Ticp 2018-11A AR	D .....	.....	.....	..1.A FE	15,000,000	100.1306	15,019,590	15,000,000	15,000,000	0	0	0	0	6.156	6.155	JAJO	174,416	562,284	03/26/2024	04/25/2037
87250C-AL-1	TICP CLO XIV Ltd-TICP 2019-14A A1R	D .....	.....	.....	..1.A FE	13,723,700	100.1783	14,024,962	14,000,000	13,681,965	0	30,641	0	0	5.959	6.005	JAJO	166,852	953,002	03/24/2023	10/20/2032
87250C-AN-7	TICP CLO XIV Ltd-TICP 2019-14A A2R	D .....	.....	.....	..1.C FE	6,728,750	100.0921	7,006,447	7,000,000	6,664,699	0	(29,065)	0	0	6.529	6.348	JAJO	91,406	517,177	12/20/2022	10/20/2032
87251P-AG-2	TCW CLO 2023-2 Ltd-TCW 2023-2A C	D .....	.....	.....	..1.F FE	7,000,000	101.1731	7,082,117	7,000,000	7,000,000	0	0	0	0	7.717	7.716	JAJO	108,044	654,455	08/14/2023	10/20/2036
87267C-AA-6	TRP 2021 LLC-TRP 2021-1 A .....	.....	.....	.....	..1.F FE	35,019,866	92.7697	37,167,700	40,064,504	37,039,441	0	991,590	0	0	2.070	5.270	MON	32,253	796,259	06/28/2022	06/19/2051
87267J-AA-1	TruPS Financials Note Se-TFINS 2018-2A A	D .....	.....	.....	..1.B FE	45,758,138	97.2836	44,515,164	45,758,138	45,758,138	0	0	0	0	6.386	5.255	MJSD	929,164	3,339,760	11/20/2018	09/30/2039
87268R-AA-2	TruPS Financials Note Se-TFINS 2019-2A A	D .....	.....	.....	..1.B FE	5,215,517	96.9393	5,055,886	5,215,517	5,215,517	0	0	0	0	7.076	7.075	FIAN	33,827	416,903	12/18/2019	02/28/2039
87342R-AC-8	TACO BELL FUNDING LLC-SERIES 2016-1A CLA	4 .....	.....	.....	..2.B FE	11,194,468	99.6133	11,066,413	11,109,375	11,116,344	0	(4,916)	0	0	4.970	4.922	FIAN	55,214	582,136	06/22/2018	05/25/2046
87342R-AF-1	Taco Bell Funding LLC-BELL 2018-1AW A2W .....	.....	.....	.....	..1.C FE	6,667,500	95.2215	6,348,896	6,667,500	6,667,500	0	(982)	0	0	4.590	4.586	FIAN	30,604	306,038	12/10/2018	11/25/2048
88035K-AA-7	TENET 2024-1A A1-TENET 2024-1A A1 .....	.....	.....	.....	..1.C FE	4,894,757	98.1838	4,809,059	4,898,018	4,894,259	0	(498)	0	0	5.490	5.308	MON	8,216	38,841	10/15/2024	10/20/2054
88164A-AA-8	Tesla Sustainable Energy-TSET 2024-1A A3 .....	.....	.....	.....	..1.A FE	4,997,573	98.7611	4,938,053	5,000,000	4,997,609	0	37	0	0	5.290	5.297	MON	8,082	27,919	11/01/2024	06/20/2050
88167P-AE-8	Tesla Auto Lease Trust 2-TESLA 2023-A B .....	.....	.....	.....	..1.C FE	9,999,861	100.8491	10,084,908	10,000,000	9,999,903	0	72	0	0	6.410	6.411	MON	19,586	641,000	07/19/2023	07/20/2027
881943-AF-1	TEVT 2023-1 B .....	.....	.....	.....	..1.C FE	6,567,049	100.4534	6,529,470	6,500,000	6,561,792	0	(5,201)	0	0	5.820	5.472	MON	11,559	281,300	09/18/2024	05/20/2031
88238C-AA-0	Texas Debt Capital CLO 2-TCIFC 2023-1A A .....	.....	.....	.....	..1.A FE	14,970,000	100.4059	15,060,885	15,000,000	14,651,805	0	(34,056)	0	0	6.417	5.345	JAJO	192,522	1,091,169	04/27/2023	04/20/2036
88240J-AA-1	TCIFC 2024-1A A1-TCIFC 2024-1A A1	D .....	.....	.....	..1.A FE	10,000,000	100.3113	10,031,130	10,000,000	10,000,000	0	0	0	0	6.132	6.131	JAJO	120,929	419,676	01/29/2024	04/22/2037
88315L-AJ-7	Textainer Marine Contain-SERIES 2020-3A	D .....	.....	.....	..1.F FE	5,803,491	92.3255	6,114,812	6,623,100	5,990,953	0	141,330	0	0	2.110	6.431	MON	4,270	139,729	09/07/2023	09/20/2045
88315L-AL-2	Textainer Marine Contain-TMCL 2021-1A A	D .....	.....	.....	..1.F FE	5,537,149	90.4961	5,662,642	6,257,333	5,598,928	0	59,430	0	0	1.680	5.261	MON	3,212	69,039	12/05/2023	02/20/2046
88315L-AQ-1	Textainer Marine Contain-TMCL 2021-2A A	D .....	.....	.....	..1.F FE	5,739,957	91.2325	5,989,354	6,564,934	5,874,402	0	127,902	0	0	2.230	6.018	MON	4,473	146,400	12/05/2023	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Desig-nation, NAIC Desig-nation Modifier and SVO Admini-strative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor-tization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
88432U-AC-0	Wind River CLO Ltd-SERIES 18-3A CLASS A2	D			1 A FE	6,400,000	100.0321	6,402,054	6,400,000	6,400,000	0	0	0	0	6.329	4.901	JAJ0	81,011	459,799	10/26/2018	01/20/2031
88517Q-AB-9	Thor 2024-A LLC-THOR 2024-A B				2 B FE	5,773,450	98.8578	5,708,408	5,774,362	5,773,462	0	12	0	0	5.710	5.719	MON	14,654	72,354	09/16/2024	08/15/2041
88607A-AA-7	Thunderbolt III Aircraft-TBOLT 2019-1 A	D			3 B FE	3,755,373	93.8692	3,525,272	3,755,515	3,755,484	0	4	0	0	3.671	3.671	MON	6,127	137,592	10/31/2019	11/15/2039
891941-AD-8	Toyota Auto Receivables -TAOT 2023-B A3				1 A FE	13,680,625	100.1240	14,017,356	14,000,000	13,867,539	0	154,940	0	0	4.710	5.976	MON	29,307	659,400	10/19/2023	02/15/2028
894127-AE-9	Trapeza CDO LLC-TRAP 2002-1A B1	C			1 F FE	5,413,876	96.8035	5,320,631	5,496,321	5,496,321	0	0	0	0	2.707	10.649	MM	164,514	0	05/18/2018	11/30/2032
89413A-AA-9	Trapeza Cdo IX Ltd-TRAP 2005-9A A1	D			1 B FE	5,053,700	92.8843	5,224,866	5,625,134	5,388,088	0	121,480	0	0	5.209	27.690	JAJ0	52,903	339,254	11/06/2020	01/27/2040
89413C-AA-5	Trapeza CDO X Ltd-TRAP 2006-10A A1	D			1 A FE	22,884,267	93.5169	22,980,571	24,573,709	24,491,291	0	3,215,032	0	0	5.191	30.096	JAJ0	304,751	1,467,809	05/30/2019	07/06/2041
89609M-AA-7	Tribute Rail LLC-TRP 2022-1 A				1 F FE	15,283,368	98.6115	15,330,037	15,545,892	15,414,133	0	82,859	0	0	4.760	6.750	MON	28,777	735,161	07/12/2023	05/17/2052
89609M-AB-5	Tribute Rail LLC-TRP 2022-1 B				2 B FE	1,649,770	97.1094	1,602,306	1,650,000	1,649,905	0	57	0	0	5.750	5.754	MON	3,690	94,875	05/19/2022	05/17/2052
89641X-AL-9	Trinitas CLO XV Ltd-TRNTS 2021-15A A2	D			1 A FE	23,000,000	92.7104	21,323,392	23,000,000	23,000,000	0	0	0	0	2.313	2.313	JAJ0	101,947	531,898	03/25/2021	04/22/2034
89656G-AB-0	Trinity Rail Leasing 202-TRL 2021-1A B				1 F FE	3,499,514	84.3870	2,953,545	3,500,000	3,499,732	0	70	0	0	3.080	3.082	MON	3,593	107,800	06/22/2021	07/19/2051
89656Y-AB-1	Trinity Rail Leasing 202-TRL 2020-2A A2				1 F FE	7,614,464	91.8109	7,569,809	8,245,000	7,647,006	0	32,542	0	0	2.560	5.302	MON	7,036	38,923	12/02/2024	11/19/2050
89657B-AA-2	Trinity Rail Leasing 201-TRL 2019-1A A				1 F FE	33,751,861	97.7280	34,907,359	35,718,881	35,095,853	0	420,102	0	0	3.820	6.531	MON	53,062	1,362,884	11/16/2022	04/17/2049
89657B-AB-0	Trinity Rail Leasing 201-TRL 2019-2A A1				1 F FE	3,706,917	97.0775	3,599,434	3,707,795	3,707,529	0	138	0	0	2.390	2.398	MON	3,446	88,494	10/08/2019	10/18/2049
89657B-AC-8	Trinity Rail Leasing 201-TRL 2019-2A A2				1 F FE	3,877,500	95.9328	3,837,313	4,000,000	3,970,802	0	26,212	0	0	3.100	3.678	MON	4,822	124,000	03/11/2020	10/18/2049
89680H-AA-0	Triton Container Finance-TCF 2020-1A A				1 F FE	20,149,841	89.7676	20,991,836	23,384,638	20,825,303	0	432,841	0	0	2.110	6.357	MON	15,076	555,847	11/16/2022	09/20/2045
89680H-AB-8	Triton Container Finance-TCF 2020-1A B				2 B FE	1,880,480	92.5183	1,891,075	2,044,000	1,927,354	0	19,967	0	0	3.740	5.862	MON	2,336	89,776	07/28/2022	09/20/2045
89680H-AE-2	Triton Container Finance-TCF 2021-1A A				1 F FE	13,459,533	89.0126	13,748,259	15,445,300	13,660,223	0	197,213	0	0	1.860	6.004	MON	8,778	214,970	05/11/2020	07/15/2034
89683L-AA-8	TRP - TRIP Rail Master F-TRP 2021-2 A				1 F FE	24,696,621	92.6589	25,965,506	28,022,666	25,736,641	0	658,741	0	0	2.150	5.024	MON	23,430	526,617	08/16/2022	06/19/2051
89707W-AB-4	Tropic CDO III Ltd-TROPIC 2004-1A A2L	D			1 A FE	3,942,780	96.4026	4,628,522	4,801,242	4,751,009	0	440,441	0	0	5.798	33.778	JAJ0	60,310	168,957	05/11/2020	07/15/2034
89707W-AC-2	Tropic CDO III Ltd-TROPIC 2004-1A A3L	D			2 A FE	24,579,900	96.0541	29,776,771	31,000,000	27,113,457	0	708,839	0	0	6.118	59.913	JAJ0	410,893	2,136,276	07/15/2020	07/15/2034
89707Y-AA-2	Tropic CDO IV Ltd-TROPIC 2004-4A A1L	D			1 A FE	526,084	99.7819	676,129	677,607	672,720	0	57,397	0	0	5.348	24.395	JAJ0	7,851	41,405	11/02/2016	04/15/2035
89708B-AA-1	Tropic CDO V Ltd-TROPIC 2006-5A A1L1	D			1 E FE	30,629,793	88.4869	30,092,171	34,007,487	33,315,101	0	4,508,815	0	0	5.208	46.835	JAJ0	383,704	2,029,526	07/26/2018	07/15/2036
898203-AA-2	TruPS Financials Note Se-TFINS 2017-2A A	D			1 C FE	6,719,885	96.4073	6,610,673	6,857,025	6,771,207	0	(93,219)	0	0	6.186	7.632	MJSD	14,138	491,288	10/02/2017	09/20/2039
898203-AB-0	TruPS Financials Note Se-TFINS 2017-2A A	D			1 C FE	3,071,947	96.4073	3,022,022	3,134,640	3,066,314	0	(121,500)	0	0	6.186	5.601	MJSD	6,463	224,589	10/02/2017	09/20/2039
89820U-AB-0	TruPS Financials Note Se-TFINS 2018-1A A	D			1 D FE	3,291,902	96.7485	3,217,036	3,325,153	3,325,153	0	0	0	0	5.846	4.904	MJSD	89,081	230,656	04/12/2018	03/30/2039
89820X-AA-6	TruPS Financials Note Se-TFINS 2020-2A A	D			1 C FE	8,961,430	95.2519	8,535,932	8,961,430	8,961,430	0	0	0	0	3.000	3.000	MS	56,756	268,843	11/24/2020	07/15/2041
89821J-AA-6	TruPS Financials Note Se-TFINS 2019-1A A	D			1 C FE	50,629,625	98.7756	50,009,716	50,629,625	50,629,625	0	0	0	0	6.871	6.870	FMAN	560,455	6,205,022	02/08/2019	02/02/2039
89822P-AA-1	TruPS Financials Note Se-2020-1A A1	D			1 C FE	10,706,394	98.3917	10,534,203	10,706,394	10,706,394	0	0	0	0	3.321	3.321	JAJ0	75,063	355,382	07/15/2020	04/15/2040
90342W-AA-5	US Capital Funding V Ltd-USCAP 2006-5A A	D			1 C FE	1,724,861	90.2608	1,875,751	2,078,146	2,020,186	0	218,706	0	0	5.218	58.062	JAJ0	24,999	124,090	03/30/2017	10/10/2040
90346W-AA-1	US AIRWAYS 2013-1A PTT-FIRST LIEN				2 A FE	1,265,872	98.7233	1,252,843	1,269,045	1,268,619	0	418	0	0	3.950	3.985	MM	6,405	50,127	01/21/2014	11/15/2025
90352W-AD-6	ITE Rail Fund Levered LP-SERIES 21-1A CL				1 F FE	15,059,789	90.5929	14,026,496	15,482,990	15,169,795	0	80,111	0	0	2.250	6.121	MON	2,903	348,371	08/09/2023	02/28/2051
90352W-AE-4	ITE Rail Fund Levered LP-STEAM 2021-2A B				2 B FE	6,884,924	88.2683	6,622,688	7,800,000	7,087,494	0	198,215	0	0	2.980	6.171	MON	1,937	232,440	07/15/2022	02/28/2051
90783X-AA-9	Union Pacific Railroad C-FIRST LIEN				1 C FE	907,311	101.2833	918,955	907,311	907,422	0	(165)	0	0	6.176	6.157	JJ	27,862	78,919	07/19/2007	01/02/2031
909319-AA-3	UNITED AIR 2013-1 A PTT-FIRST LIEN				2 B FE	3,523,731	99.2360	3,496,809	3,523,730	3,523,814	0	(361)	0	0	4.300	4.289	FA	57,241	151,520	08/01/2013	08/15/2025
909320-AA-4	UNITED AIR 2014-2 A PASS THRU TR-1ST LIE				1 F FE	1,996,446	97.9446	1,996,412	1,996,446	1,996,615	0	(300)	0	0	3.750	3.742	MS	24,540	74,867	07/28/2014	09/03/2026
91824X-AC-4	VCP RRL ABS II Ltd-VORRL 2022-1A A	C			1 F FE	6,402,966	98.6420	6,406,799	6,495,000	6,448,874	0	18,825	0	0	5.480	5.822	JAJ0	70,197	354,937	06/15/2022	01/20/2033
91824X-AE-0	VCP RRL ABS II Ltd-VORRL 2022-1A B	C			2 B FE	992,166	95.8221	963,012	1,005,000	998,513	0	2,578	0	0	6.480	6.791	JAJ0	12,844	64,943	06/15/2022	01/20/2033
91862B-AA-2	Viva Capital 3 LS 2021 L Viva Term Note				1 G PL	15,407,559	96.8700	15,732,049	16,240,373	16,024,689	0	315,436	0	0	3.500	4.943	MON	72,631	522,485	06/28/2022	10/15/2031
92212K-AB-2	Vantage Data Centers Iss-VDC 2020-1A A2				1 G FE	8,266,668	97.2024	9,137,024	9,400,000	9,103,521	0	397,862	0	0	1.645	6.223	MON	6,872	154,630	11/22/2022	09/15/2045
92867W-AD-0	Volkswagen Auto Loan Enh-VALET 2023-1 A3				1 A FE	5,998,520	100.3570	6,021,419	6,000,000	5,999,329	0	538	0	0	5.020	5.030	MON	9,203	301,200	06/06/2023	06/20/2028
92867W-AE-8	Volkswagen Auto Loan Enh-VALET 2023-1 A4				1 A FE	3,299,337	100.8628	3,328,474	3,300,000	3,299,605	0	183	0	0	5.010	5.016	MON	5,052	165,330	06/06/2023	01/22/2030
92916X-AL-1	Voya CLO 2013-3 Ltd-INGIM 2013-3A A2RR	D			1 C FE	1,967,500	100.0731	2,001,462	2,000,000	1,956,288	0	(18,091)	0	0	6.594	5.752	JAJ0	27,473	148,150	12/10/2018	10/18/2031
92917J-AG-2	Voya CLO 2018-2 Ltd-VOYA 2018-2A B2	D			1 C FE	9,747,661	100.1264	11,425,424	11,411,000	10,180,425	0	169,048	0	0	6.468	8.731	JAJ0	159,902	826,777	12/06/2022	07/15/2031
92917J-AL-1	Voya CLO 2018-2 Ltd-VOYA 2018-2A C2	D			1 F FE	6,338,428	100.0539	7,423,999	7,420,000	6,558,490	0	80,055	0	0	6.768	8.814	JAJ0	108,799	560,181	12/06/2022	07/15/2031

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
92917N-BA-5	Voya CLO 2019-1 Ltd-VOYA 2019-1A CRR	D.....			1.F FE	2,500,000	100.3602	2,509,005	2,500,000	2,500,000	0	0	0	0	6.449	6.442	JAJ0	34,931	0	09/27/2024	10/15/2037
92917N-BG-2	Voya CLO 2019-1 Ltd-VOYA 2019-1A BRR	D.....			1.C FE	9,200,000	100.1918	9,217,646	9,200,000	9,200,000	0	0	0	0	6.199	6.193	JAJ0	123,561	0	09/27/2024	10/15/2037
92918G-AE-2	Voya CLO 2020-1 Ltd-VOYA 2020-1A ER	D.....			3.C FE	923,750	100.3086	1,003,086	1,000,000	912,778	0	(7,304)	0	0	11.259	11.465	JAJ0	24,082	121,411	08/11/2022	07/16/2034
92918Y-AA-1	Voya CLO 2021-2 Ltd-VOYA 2021-2A E	D.....			3.C FE	4,700,000	100.4074	5,020,370	5,000,000	4,625,418	0	(10,831)	0	0	11.479	11.435	JAJ0	114,790	621,725	08/17/2022	10/20/2034
92919D-AC-2	Voya CLO 2021-3 Ltd-VOYA 2021-3A B	D.....			1.C FE	6,956,700	100.2494	7,318,206	7,300,000	6,869,633	0	(16,373)	0	0	6.479	6.092	JAJ0	94,594	535,621	03/28/2023	01/20/2035
936557-AE-7	WWICK 2023-2A B-WWICK 2023-2A B	D.....			1.C FE	10,000,000	101.5719	10,157,190	10,000,000	10,000,000	0	0	0	0	7.356	7.355	JAJ0	159,378	743,948	10/20/2023	01/15/2037
93655P-AC-1	Warwick Capital CLO 3 Lt-WWICK 2024-3A B	D.....			1.C FE	10,000,000	101.1300	10,113,000	10,000,000	10,000,000	0	0	0	0	6.817	6.817	JAJ0	136,348	373,015	03/21/2024	04/20/2037
936919-AA-7	Warwick Capital CLO 1 Lt-WWICK 2023-1A A	D.....			1.A FE	9,100,000	101.0181	9,192,647	9,100,000	9,100,000	0	0	0	0	6.717	6.717	JAJ0	122,257	733,334	08/16/2023	10/20/2036
936919-AC-3	Warwick Capital CLO 1 Lt-WWICK 2023-1A B	D.....			1.C FE	14,000,000	101.3357	14,186,998	14,000,000	14,000,000	0	0	0	0	7.417	7.416	JAJ0	207,687	1,234,373	08/16/2023	10/20/2036
94354K-AA-8	WAVE 2019-1 LLC-WAAV 2019-1 A	D.....			2.A FE	3,101,983	92.9068	2,882,080	3,102,119	3,101,373	0	1,275	0	0	3.597	3.606	MON	4,959	111,583	09/30/2019	09/15/2044
95058X-AE-8	Wendy's Funding LLC-WEN 2018-1A A2I1	D.....			2.B FE	7,112,519	95.4663	7,101,529	7,438,779	7,308,049	0	(18,307)	0	0	3.884	4.487	MSJD	12,841	288,922	10/11/2018	03/15/2048
95058X-AG-3	Wendy's Funding LLC-WEN 2019-1A A2I	D.....			2.B FE	22,247,973	97.3443	21,657,131	22,247,973	22,247,973	0	0	0	0	3.783	3.783	MSJD	37,406	841,636	06/13/2019	06/15/2049
96466C-BC-1	Whitebox Clo II Ltd-WBOX 2020-2A CR2	D.....			1.E FE	4,660,000	100.1539	4,667,172	4,660,000	4,660,000	0	0	0	0	6.507	6.507	JAJ0	30,322	0	11/08/2024	10/24/2037
96467F-AU-4	Whitebox Clo I Ltd-WBOX 2019-1A A1RR	D.....			1.A FE	8,511,900	100.2086	8,517,731	8,500,000	8,500,000	0	(11,900)	0	0	5.955	4.395	JAJ0	97,013	187,493	08/02/2024	07/24/2036
96467K-AA-7	Whitebox CLO Ltd-WBOX 2023-4A A1	D.....			1.A FE	8,984,400	100.3725	9,033,525	9,000,000	8,780,599	0	(1,796)	0	0	6.767	5.743	JAJ0	121,813	1,052,356	03/23/2023	04/20/2036
96467K-AE-9	Whitebox CLO Ltd-WBOX 2023-4A B	D.....			1.C FE	6,260,625	100.5844	6,286,525	6,250,000	6,250,000	0	10,625	0	0	7.217	5.668	JAJ0	90,218	775,959	08/18/2023	04/20/2036
97063Q-AA-0	WILLIS ENGINE STRUCTURED-SERIES 17-A CLA		4,5		2.B FE	5,487,616	91.1781	5,007,767	5,492,291	5,490,622	0	936	0	0	4.690	4.704	MON	11,448	257,576	07/28/2017	08/15/2042
97064E-AA-6	Willis Engine Structured-WESTF 2018-A A	D.....			1.G FE	5,647,405	98.0869	5,539,639	5,647,685	5,647,704	0	(22)	0	0	11.656	11.653	MON	11,923	268,258	08/16/2018	09/15/2043
97064F-AA-3	Willis Engine Structured-WESTF 2020-A A	D.....			1.F FE	10,496,262	92.0225	9,659,059	10,496,410	10,496,410	0	0	0	0	3.228	3.228	MON	15,059	339,123	02/18/2020	03/15/2045
97314D-AE-8	KVK CLO 2016-1 Ltd-KVK 2016-1A BR2	D.....			1.C FE	4,700,000	100.0626	4,702,942	4,700,000	4,700,000	0	0	0	0	6.718	6.717	JAJ0	68,407	352,449	09/24/2021	10/15/2034
97314F-AA-1	THL Credit Wind River 20-WINDR 2019-2A E	D.....			3.C FE	5,000,000	92.7458	4,637,290	5,000,000	5,000,000	0	0	0	0	11.656	11.653	JAJ0	126,272	625,294	02/04/2022	01/15/2035
97316G-AA-7	Wind River CLO Ltd-WINDR 2022-1A E	D.....			3.C FE	9,800,000	100.2782	10,027,820	10,000,000	9,616,605	0	(107,885)	0	0	12.737	11.899	JAJ0	254,748	1,371,735	05/13/2022	07/20/2035
974153-AB-4	Wingstop Funding LLC-WSTOP 2020-1A A2	D.....			2.B FE	10,342,500	92.8783	9,605,933	10,342,500	10,342,500	0	0	0	0	2.841	2.841	MSJD	21,221	293,830	10/09/2020	12/05/2050
97988P-BA-3	Woodmont 2017-1 Trust-WDMNT 2017-1A A1RR	D.....			1.A FE	17,500,000	100.0370	17,506,475	17,500,000	17,500,000	0	0	0	0	6.414	6.413	JAJ0	233,842	1,264,357	09/24/2021	10/18/2033
97988Q-AY-0	Woodmont 2017-2 Trust-WDMNT 2017-2A A1RR	D.....			1.A FE	10,000,000	100.0171	10,001,710	10,000,000	10,000,000	0	0	0	0	5.965	5.963	JAJ0	23,199	0	11/27/2024	10/20/2036
97988Q-BA-1	Woodmont 2017-2 Trust-WDMNT 2017-2A A2RR	D.....			1.A FE	40,000,000	100.0171	40,006,840	40,000,000	40,000,000	0	0	0	0	6.135	6.133	JAJ0	95,439	0	11/27/2024	10/20/2036
98164F-AE-2	World Omni Auto Receivab-ZCOP 2023-C A4	D.....			1.A FE	6,999,854	100.5062	7,035,437	7,000,000	6,999,891	0	(27,102)	0	0	5.030	5.031	MON	15,649	409,805	08/10/2023	11/15/2029
98164Q-AD-0	World Omni Auto Receivab-WOART 2023-B A3	D.....			1.A FE	8,302,441	99.9403	8,494,923	8,500,000	8,424,753	0	101,882	0	0	4.660	5.961	MON	17,604	396,100	10/18/2023	05/15/2028
98876N-AN-4	Zais Clo 13 Ltd-ZAIS 2019-13A A2B	D.....			1.A FE	4,000,000	95.5989	3,823,956	4,000,000	4,000,000	0	0	0	0	3.930	3.930	JAJ0	33,187	157,200	07/29/2019	07/15/2032
98878C-AA-4	Z Capital Credit Partner-ZCOP 2018-1A A1	D.....			1.A FE	6,252,360	100.1985	6,264,771	6,252,360	6,252,360	0	0	0	0	6.679	6.678	JAJ0	89,318	438,084	11/29/2018	07/16/2031
98878C-AC-0	Z Capital Credit Partner-ZCOP 2018-1A A2	D.....			1.A FE	1,640,202	100.1510	1,669,814	1,667,296	1,667,296	0	(27,094)	0	0	6.469	6.045	JAJ0	23,069	113,488	02/07/2019	01/16/2031
98887T-AQ-1	Zais Clo 6 Ltd-ZAIS6 2017-1A BR	D.....			1.A FE	6,532,674	100.0070	6,533,132	6,532,674	6,532,674	0	0	0	0	6.718	6.717	JAJ0	95,081	489,879	04/23/2021	07/15/2029
98920M-AA-0	ZAXBY'S FUNDING LLC-ZAXBY 2021-1A A2	D.....			2.B FE	15,856,367	89.6436	15,612,334	17,415,968	16,423,710	0	237,990	0	0	3.238	3.940	JAJ0	95,555	563,930	03/24/2022	07/30/2051
98944P-AB-3	Zephyrus Capital Aviatio-ZCAP 2018-1 A	C.....			2.B FE	686,894	97.3430	678,699	697,224	696,418	0	3,420	0	0	4.605	5.288	MON	2,547	30,408	09/28/2018	10/15/2038
98955R-AG-4	Owl Rock CLO II Ltd-OR 2019-2A AFR	D.....			1.A FE	10,000,000	93.3672	9,336,720	10,000,000	10,000,000	0	0	0	0	2.480	2.480	JAJ0	48,911	248,000	03/10/2021	04/20/2033
G7256K-AE-0	Prop 2017-1 Ltd-ABS SSNR 5-30 03/15/42	D.....			2.B FE	1,834,367	87.5000	1,606,030	1,835,463	1,818,654	0	(16,809)	0	0	7.300	0.275	MON	96,168	40,423	02/10/2017	03/15/2042
Q744G4-AA-7	Spectre Retail Warehouse-SPERE 2024-WH1	B.....			1.C FE	2,199,030	100.0000	2,041,050	3,300,000	2,041,050	0	0	0	(157,980)	6.861	6.861	MON	50,698	0	10/28/2024	07/31/2033
Q744G4-AB-5	Spectre Retail Warehouse-SPERE 2024-WH1	B.....			1.F FE	1,983,900	100.0000	1,855,500	3,000,000	1,855,500	0	0	0	(128,400)	7.361	7.361	MON	27,315	0	10/28/2024	07/31/2033
000000-00-0	Cairn CLO-CRNCL 2024-19A C	B.....			1.F FE	10,762,020	100.0000	10,555,980	10,200,000	10,555,980	0	0	0	0	0.000	0.000	JAJ0	0	0	12/06/2024	04/15/2039
000000-00-0	Blackrock European Clo X-BECL0 15X B1	B.....			1.D Z	11,466,280	100.0000	11,228,665	10,850,000	11,228,665	0	0	0	(237,615)	0.000	0.000	JAJ0	0	0	11/29/2024	01/28/2038
000000-00-0	Avoca CLO XVIIII DAC-AVOCA 18A CR	B.....			1.F FE	4,198,400	100.0000	4,139,600	4,000,000	4,139,600	0	0	0	(58,800)	0.000	0.000	JAJ0	0	0	12/13/2024	01/15/2038
000000-00-0	CVC Cordatus Loan Fund X-CORDA 26A B1R	B.....			1.C FE	3,202,805	100.0000	3,156,445	3,050,000	3,156,445	0	0	0	(46,360)	0.000	0.000	JAJ0	0	0	12/12/2024	01/15/2038
438123-AC-5	Honda Auto Receivables 2-HAROT 2023-4 A3	D.....			1.A FE	5,592,680	101.5761	5,599,891	5,513,000	5,555,976	0	(34,357)	0	0	5.670	4.988	MON	8,683	312,587	12/05/2023	06/21/2028
82808M-AE-3	Silver Point CLO 6 Ltd-SPCLO 2024-6A B	D.....			1.B FE	7,900,000	100.2328	7,918,391	7,900,000	7,900,000	0	0	0	0	6.317	6.314	JAJ0	49,902	0	10/15/2024	10/15/2037
82808M-AG-8	Silver Point CLO 6 Ltd-SPCLO 2024-6A C	D.....			1.E FE	4,300,000	100.4635	4,319,931	4,300,000	4,300,000	0	0	0	0	6.617	6.613	JAJ0	28,452	0	10/15/2024	10/15/2037

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
00432C-CW-9	ACCESS GROUP INC-SERIES 2005-B CLASS A3 .....	.....	.....	4	.. 1.A FE	175,908	..99.4511	189,639	190,686	189,199	0	1,333	0	0	...5.257	...6.567	JAUJ	1,894	11,038	04/13/2016	07/25/2035
165183-DB-7	Chesapeake Funding II LL-CFII 2023-2A B .....	.....	.....	.....	.. 1.C FE	1,479,907	101.6685	1,504,693	1,480,000	1,479,928	0	21	0	0	...5.970	...5.972	MON	3,927	88,356	09/12/2023	10/15/2035
165183-DC-5	Chesapeake Funding II LL-CFII 2023-2A C .....	.....	.....	.....	.. 1.F FE	4,998,613	100.3938	5,019,688	5,000,000	4,998,983	0	296	0	0	...6.150	...6.158	MON	13,667	307,500	09/12/2023	10/15/2035
20268A-AA-0	Commonbond Student Loan -CBSLT 2021-BGS .....	.....	.....	.....	.. 1.A FE	3,161,926	82.8128	3,105,682	3,750,246	3,179,456	0	17,529	0	0	...1.170	...5.705	MON	731	10,969	09/25/2024	09/25/2051
20268A-AB-8	Commonbond Student Loan -CBSLT 2021-BGS .....	.....	.....	.....	.. 2.A FE	1,915,082	86.9976	2,019,486	2,321,312	1,930,441	0	15,359	0	0	...1.640	...6.110	MON	634	38,028	01/03/2024	09/25/2051
20268B-AB-6	Commonbond Student Loan -CBSLT 2020-1 B .....	.....	.....	.....	.. 1.D FE	1,284,911	88.1210	1,332,090	1,511,660	1,291,580	0	(2,217)	0	0	...2.820	...7.325	MON	710	46,294	04/25/2023	10/25/2051
20268K-AA-8	Commonbond Student Loan -CBSLT 2017-BGS .....	.....	.....	.....	.. 1.C FE	3,930,952	91.7545	3,931,142	4,284,416	3,953,406	0	22,454	0	0	...2.680	...5.589	MON	1,914	47,843	08/09/2024	09/25/2042
20269D-AA-3	Commonbond Student Loan -CBSLT 2018-AGS .....	.....	.....	.....	.. 1.A FE	3,393,602	87.3969	3,191,288	3,651,488	3,444,298	0	50,697	0	0	...3.210	...8.412	MON	1,954	48,839	08/09/2024	02/25/2044
23802W-AA-9	DataBank Issuer-COLO 2021-1A A2 .....	.....	.....	.....	.. 1.G FE	7,998,458	95.8248	7,665,984	8,000,000	7,999,567	0	366	0	0	...2.060	...2.065	MON	2,747	164,800	02/24/2021	02/27/2051
23802W-AC-5	DataBank Issuer-COLO 2021-1A B .....	.....	.....	.....	.. 2.B FE	6,831,084	95.5268	6,772,853	7,090,000	7,011,776	0	65,417	0	0	...2.650	...3.631	MON	3,131	187,885	02/18/2022	02/27/2051
23802W-AG-6	DataBank Issuer-COLO 2021-2A A2 .....	.....	.....	.....	.. 1.G FE	1,788,750	95.0517	1,901,035	2,000,000	1,904,980	0	82,591	0	0	...2.400	...5.145	MON	800	48,000	07/06/2022	10/25/2051
32010L-AN-4	First Eagle Commercial L-NWSTR 2016-1A A .....	.....	.....	.....	.. 1.A FE	745,560	99.9682	745,332	745,569	745,561	0	27	0	0	...3.353	...3.359	JAUJ	4,583	15,278	12/17/2019	01/25/2032
47760Q-AB-9	Jimmy Johns Funding LLC-JIMMY 2017-1A A2 .....	.....	.....	.....	.. 2.B FE	4,230,000	97.5539	4,126,532	4,230,000	4,230,000	0	0	0	0	...4.846	...4.846	JAUJ	34,734	204,986	06/27/2017	07/30/2047
53950U-AA-0	Loan Asset Issuer LLC - Series 2023 NG-1 .....	.....	.....	.....	.. 1.G PL	56,060,588	99.6400	55,858,770	56,060,588	56,060,588	0	0	0	0	...7.000	...7.000	MON	397,319	3,233,674	05/31/2023	08/25/2048
53950U-AB-8	Loan Asset Issuer LLC - Series 2023 NG-1 .....	.....	.....	.....	.. 2.C PL	13,837,517	98.3500	13,609,198	13,837,517	13,837,517	0	0	0	0	...8.000	...7.999	MON	(787,170)	1,697,068	05/31/2023	09/22/2048
63942T-AA-3	Navient Student Loan Trust - NAVSL 2023- .....	.....	.....	.....	.. 1.A FE	1,628,397	101.4251	1,651,605	1,628,399	1,628,399	0	0	0	0	...6.480	...6.479	MON	4,690	103,601	10/11/2023	03/15/2072
64033N-AA-4	Neinet Student Loan Trus-NSLT 2014-5A A .....	.....	.....	.....	.. 1.B FE	7,214,418	99.2787	7,431,779	7,485,778	7,243,717	0	(1,974)	0	0	...5.233	...6.843	MON	6,529	446,115	12/06/2022	07/25/2046
65480W-AE-1	Nissan Auto Receivables -NAROT 2023-A A4 .....	.....	.....	.....	.. 1.A FE	3,184,589	98.9422	10,025,881	10,000,000	9,863,671	0	73,184	0	0	...4.850	...5.690	MON	21,556	485,000	10/03/2023	06/17/2030
78449Y-AA-8	SMB Private Education Lo-SMB 2021-B A .....	.....	.....	.....	.. 1.A FE	6,864,023	92.0194	6,926,645	7,527,373	7,136,060	0	110,013	0	0	...1.310	...5.016	MON	4,383	98,609	06/16/2022	07/17/2051
78472J-AE-3	SPS Servicer Advance Rec-SPART 2020-T2 A .....	.....	.....	.....	.. 1.A FE	11,997,702	92.2512	11,070,139	12,000,000	12,000,000	0	0	0	0	...1.830	...3.368	MON	9,760	219,600	10/23/2020	11/15/2055
826525-AB-3	Sierra Timeshare 2020-2 -SPFC 2020-2A B .....	.....	.....	.....	.. 1.F FE	3,184,589	98.9422	3,333,186	3,368,822	3,316,686	0	90,953	0	0	...2.320	...7.046	MON	2,388	78,157	08/02/2023	07/20/2037
83406E-AD-7	Sofi Professional Loan P-SQFI 2018-A B .....	.....	.....	.....	.. 1.B FE	9,205,547	92.1617	9,676,981	10,500,000	9,508,789	0	250,673	0	0	...3.610	...6.767	MON	6,318	379,050	10/18/2023	02/25/2042
86745C-AA-0	Sunnova Helios XIII Issu-SNVA 2024-A A .....	.....	.....	.....	.. 1.D FE	9,918,553	95.0286	9,625,489	10,129,047	9,928,697	0	10,144	0	0	...5.300	...5.698	MON	16,403	402,630	03/27/2024	02/20/2051
87407R-AA-4	TAL Advantage VII LLC-TAL 2020-1A A .....	.....	.....	.....	.. 1.F FE	5,701,690	92.5878	6,003,773	6,484,413	5,939,029	0	118,154	0	0	...2.050	...6.073	MON	4,062	144,155	12/08/2022	09/20/2045
87407R-AC-0	TAL Advantage VII LLC-TAL 2020-1A B .....	.....	.....	.....	.. 2.B FE	2,329,352	93.1589	2,192,436	2,353,438	2,338,676	0	3,361	0	0	...3.290	...3.580	MON	2,366	83,966	02/24/2022	09/20/2045
89657A-AC-0	Trinity Rail Leasing 201-TRL 2020-1A A .....	.....	.....	.....	.. 1.F FE	2,217,878	92.1549	2,044,375	2,218,412	2,218,117	0	57	0	0	...1.960	...1.966	MON	1,691	43,466	10/14/2020	10/17/2050
63938P-BV-0	Navistar Financial Deale-NAMVT 2023-1 B .....	.....	.....	.....	.. 1.C FE	1,947,998	100.8178	1,963,931	1,948,000	1,948,000	0	0	0	0	...6.480	...6.480	MON	2,104	126,230	09/12/2023	08/25/2028
90932P-AA-6	United Airlines 2014-1 C-SECURED NOTE .....	.....	.....	.....	.. 1.G FE	2,890,783	98.1500	2,837,303	2,890,783	2,891,002	0	(269)	0	0	...4.000	...3.990	AO	25,696	115,631	03/24/2014	04/11/2026
96328G-BH-9	Wheels Fleet Lease Fundi-WHLF 2023-2A B .....	.....	.....	.....	.. 1.C FE	2,899,653	103.2047	2,993,981	2,900,000	2,899,869	0	4,337	0	0	...6.750	...6.753	MON	6,525	208,800	10/19/2023	08/18/2038
96328G-BJ-5	Wheels Fleet Lease Fundi-WHLF 2023-2A C .....	.....	.....	.....	.. 1.F FE	2,099,652	103.4022	2,171,446	2,100,000	2,099,866	0	3,284	0	0	...6.940	...6.944	MON	4,858	145,740	10/19/2023	08/18/2038
233046-AF-8	DNKN 2017-1A A2II .....	.....	.....	.....	.. 2.B FE	19,582,500	96.8758	18,970,698	19,582,500	19,582,500	0	0	0	0	...4.030	...4.030	FIAN	89,878	789,175	09/14/2017	11/20/2047
233046-AH-4	DB Master Finance LLC-DNKN 2017-1AW A2II .....	.....	.....	.....	.. 1.C FE	11,184,755	97.1359	10,869,502	11,190,000	11,190,000	0	2,156	0	0	...3.350	...3.678	FIAN	42,693	374,865	11/22/2017	11/20/2047
233046-AM-3	DB Master Finance LLC-DNKN 2019-1AW A23W .....	.....	.....	.....	.. 1.C FE	17,237,098	97.0586	16,553,337	17,055,000	17,143,903	0	(17,916)	0	0	...4.002	...3.734	FIAN	682,541	682,541	11/07/2019	05/20/2049
25755T-AE-0	DOMINOS PIZZA MASTER ISS-SERIES 2015-1A	4 .....	.....	.....	.. 2.A FE	14,840,000	99.2694	14,731,579	14,840,000	14,840,000	0	0	0	0	...4.474	...4.478	JAUJ	121,723	663,942	10/14/2015	10/25/2045
25755T-AH-3	DOMINOS PIZZA MASTER ISS-SERIES 17-1A CL	4 .....	.....	.....	.. 2.A FE	21,611,334	97.4677	21,072,512	21,620,000	21,615,532	0	1,603	0	0	...4.118	...4.118	JAUJ	163,223	890,311	06/12/2017	07/25/2047
25755T-AG-9	Domino's Pizza Master Is-DPABS 2018-1A A .....	.....	.....	.....	.. 2.A FE	6,632,500	99.4595	6,632,500	6,632,500	6,632,617	0	(217)	0	0	...4.116	...4.112	JAUJ	50,049	272,994	08/14/2018	05/25/2048
25755T-AK-6	Domino's Pizza Master Is-DPABS 2018-1A A .....	.....	.....	.....	.. 2.A FE	3,315,214	97.1824	3,222,811	3,316,250	3,316,122	0	33	0	0	...4.328	...4.329	JAUJ	26,313	143,527	06/06/2018	07/25/2048
25755T-AL-4	Domino's Pizza Master Is-DPABS 2019-1A A .....	.....	.....	.....	.. 2.A FE	7,200,000	92.5674	6,664,854	7,200,000	7,200,000	0	0	0	0	...3.668	...3.668	JAUJ	48,418	264,096	11/06/2019	10/25/2049
25755T-AM-2	Domino's Pizza Master Is-DPABS 2019-1AW .....	.....	.....	.....	.. 1.C FE	20,650,502	92.9414	19,183,106	20,640,000	20,640,000	0	0	0	0	...3.668	...3.374	JAUJ	138,797	995,265	12/05/2019	10/25/2049
25755T-AN-0	Domino's Pizza Master Is-DPABS 2021-1A A .....	.....	.....	.....	.. 2.A FE	2,546,772	90.6641	2,645,126	2,917,500	2,598,595	0	51,822	0	0	...2.662	...5.954	JAUJ	14,238	58,248	04/18/2024	04/25/2051
58768P-AC-8	Mercedes-Benz Auto Recei-MBART 2022-1 A3 .....	.....	.....	.....	.. 1.A FE	19,711,314	100.3672	19,751,419	19,679,161	19,689,106	0	(12,943)	0	0	...5.210	...5.120	MON	45,568	1,025,284	06/07/2023	08/16/2027
69335P-EQ-4	PFS Financing Corp-PFSFC 2022-D B .....	.....	.....	.....	.. 1.F FE	3,499,062	99.6949	3,489,321	3,500,000	3,499,789	0	314	0	0	...4.900	...4.910	MON	7,622	171,500	08/02/2022	08/15/2027
69335P-EW-1	PFS Financing Corp-PFSFC 2023-B B .....	.....	.....	.....	.. 1.F FE	4,598,828	100.4544	4,620,904	4,600,000	4,599,417	0	388	0	0	...5.710	...5.719	MON	11,674	262,660	05/24/2023	05

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
90783T-AA-8	Union Pacific Railroad C-FIRST LIEN				1.C FE	37,184	100.2193	37,266	37,184	37,194	0	(18)	0	0	5.404	5.353	JJ	999	2,009	07/22/2004	07/02/2025
588926-AB-1	Merchants Fleet Funding -MFF 2023-1A B				1.C FE	7,279,731	100.9875	7,351,888	7,280,000	7,279,836	0	118	0	0	7.250	7.252	MON	16,127	573,250	10/18/2023	05/20/2036
588926-AC-9	Merchants Fleet Funding -MFF 2023-1A C				1.F FE	5,659,624	100.9636	5,714,541	5,660,000	5,659,779	0	158	0	0	7.470	7.473	MON	12,919	459,210	10/18/2023	05/20/2036
38136N-AY-2	Goldentree Loan Manageme-GLM 2020-8A ARR				1.A FE	12,000,000	100.3805	12,045,660	12,000,000	12,000,000	0	0	0	0	5.752	5.752	JAJO	118,875	0	10/18/2024	10/20/2034
38136N-BA-3	Goldentree Loan Manageme-GLM 2020-8A BRR				1.C FE	7,000,000	100.0063	7,000,441	7,000,000	7,000,000	0	0	0	0	6.152	6.152	JAJO	74,166	0	10/18/2024	10/20/2034
38136N-BC-9	Goldentree Loan Manageme-GLM 2020-8A CRR				1.F FE	6,725,000	100.1013	6,731,812	6,725,000	6,725,000	0	0	0	0	6.452	6.452	JAJO	74,727	0	10/18/2024	10/20/2034
78403D-AR-1	SBA Tower Trust-ASSET BACKED			1,2	1.F FE	10,995,066	90.9979	11,647,736	12,800,000	11,434,495	0	396,028	0	0	2.328	6.187	MON	13,244	298,812	12/11/2023	01/15/2028
78403D-BD-1	SBA Tower Trust-SECURED			2	1.F FE	30,000,000	96.4200	28,926,000	30,000,000	30,000,000	0	0	0	0	4.831	4.831	MON	64,413	261,679	09/10/2024	10/15/2029
92348K-AH-6	Verizon Master Trust-VZMT 2022-2 A				1.A FE	14,331,543	99.5862	14,913,039	14,975,000	14,943,758	0	592,633	0	0	1.530	5.496	MON	7,001	229,118	12/05/2023	07/20/2028
92348K-BS-1	Verizon Master Trust-VZMT 2023-4 A1A				1.A FE	2,374,444	100.6913	2,386,383	2,370,000	2,372,642	0	(1,692)	0	0	5.160	5.081	MON	3,737	122,292	12/05/2023	06/20/2029
92348K-CJ-0	Verizon Master Trust-VZMT 2024-2 B				1.C FE	14,598,790	100.9014	14,731,604	14,600,000	14,598,978	0	189	0	0	5.080	5.082	MON	22,662	683,994	01/09/2024	12/22/2031
46618A-AA-2	JGIPT XXXII LLC-ASSET BKD SERIES 2014-2				1.A FE	7,814,923	87.4836	6,846,360	7,825,880	7,816,189	0	216	0	0	3.610	3.629	MON	12,556	282,498	02/02/2018	01/17/2073
46618H-AA-7	J G WENTWORTH XXXIII LLC-ASSET BKD SER 2			4	1.A FE	11,587,468	86.1272	9,972,336	11,578,615	11,587,223	0	741	0	0	3.500	3.488	MON	18,011	405,213	10/25/2017	06/15/2077
46618L-AA-8	J G WENTWORTH XXXIV LLC-ASSET BKD SER 20			4	1.A FE	11,811,078	85.2265	10,160,497	11,921,762	11,890,281	0	747	0	0	3.260	3.300	MON	17,273	388,649	06/03/2015	09/15/2072
674135-EM-6	Oakwood Mortgage Investo-OAK 1999-A M2				6. FE	215,311	89.3538	217,448	243,356	55,100	0	14,340	0	0	7.690	79.905	MON	1,560	18,509	06/09/1999	04/01/2029
05377R-EA-8	Avis Budget Rental Car F-AESOP 2020-2A B				1.F FE	2,163,341	97.8145	2,283,967	2,335,000	2,261,554	0	74,446	0	0	2.960	6.464	MON	2,112	69,116	08/29/2023	02/20/2027
05377R-EK-6	Avis Budget Rental Car F-AESOP 2021-1A C				2.C FE	4,503,694	94.6743	4,530,167	4,785,000	4,685,707	0	66,567	0	0	2.130	3.624	MON	3,114	101,921	03/02/2022	08/20/2027
05377R-ET-7	Avis Budget Rental Car F-AESOP 2021-2A C				2.C FE	6,029,023	93.5438	6,548,067	7,000,000	6,532,284	0	222,146	0	0	2.350	6.031	MON	5,026	164,500	08/18/2022	02/20/2028
05377R-FB-5	Avis Budget Rental Car F-AESOP 2022-1A B				1.F FE	5,571,087	97.4621	5,467,623	5,610,000	5,582,148	0	10,299	0	0	4.300	4.512	MON	7,371	241,230	12/12/2023	08/21/2028
05377R-FL-3	Avis Budget Rental Car F-AESOP 2022-3A B				1.F FE	9,796,289	99.8254	9,982,539	10,000,000	9,905,359	0	95,988	0	0	5.310	6.364	MON	16,225	531,000	12/05/2023	02/20/2027
05377R-FR-0	Avis Budget Rental Car F-AESOP 2022-4A C				2.C FE	12,498,723	102.0132	12,751,654	12,500,000	12,499,199	0	(801)	0	0	6.680	6.682	MON	25,514	1,221,250	07/12/2022	02/20/2029
05377R-FV-1	Avis Budget Rental Car F-AESOP 2022-5A A				1.A FE	4,999,109	101.0934	5,054,671	5,000,000	4,999,654	0	284	0	0	6.120	6.126	MON	9,350	306,000	11/18/2022	04/20/2027
05377R-FW-9	Avis Budget Rental Car F-AESOP 2022-5A B				1.F FE	6,529,759	101.7152	6,609,453	6,498,000	6,513,075	0	(12,901)	0	0	7.090	6.868	MON	14,077	460,708	08/31/2023	04/20/2027
05377R-GC-2	Avis Budget Rental Car F-AESOP 2023-1A A				1.A FE	4,999,076	100.6552	5,032,758	5,000,000	4,999,397	0	172	0	0	5.250	5.254	MON	8,021	262,500	01/09/2023	04/20/2029
05377R-GZ-1	Avis Budget Rental Car F-AESOP 2023-4A B				1.F FE	3,398,666	101.3249	3,445,045	3,400,000	3,399,094	0	240	0	0	6.320	6.329	MON	6,566	214,880	03/30/2023	06/20/2029
05377R-HD-9	Avis Budget Rental Car F-AESOP 2023-5A B				1.F FE	4,998,985	101.1128	5,055,638	5,000,000	4,999,370	0	267	0	0	6.120	6.126	MON	9,350	306,000	05/24/2023	04/20/2028
05377R-HG-2	Avis Budget Rental Car F-AESOP 2023-6A A				1.A FE	6,425,507	102.6014	6,568,543	6,402,000	6,419,849	0	(4,139)	0	0	5.810	5.727	MON	11,365	371,956	08/10/2023	12/20/2029
05377R-HH-0	Avis Budget Rental Car F-AESOP 2023-6A B				1.F FE	2,500,488	101.7190	2,542,975	2,500,000	2,500,367	0	(85)	0	0	6.400	6.396	MON	4,889	160,000	07/26/2023	12/20/2029
05377R-HL-1	Avis Budget Rental Car F-AESOP 2023-7A A				1.A FE	4,248,754	101.5704	4,316,740	4,250,000	4,249,146	0	313	0	0	5.900	5.909	MON	7,662	250,750	09/12/2023	08/21/2028
05377R-HM-9	Avis Budget Rental Car F-AESOP 2023-8A A				1.A FE	4,998,038	103.4264	5,171,321	5,000,000	4,998,455	0	335	0	0	6.020	6.029	MON	9,197	301,000	09/12/2023	02/20/2030
05377R-HN-7	Avis Budget Rental Car F-AESOP 2023-8A B				1.F FE	11,749,031	104.0277	12,223,257	11,750,000	11,749,208	0	162	0	0	6.660	6.662	MON	23,911	782,550	09/12/2023	02/20/2030
05377R-HR-8	Avis Budget Rental Car F-AESOP 2023-7A B				1.F FE	5,999,036	101.6510	6,099,061	6,000,000	5,999,329	0	240	0	0	6.440	6.445	MON	11,807	386,400	09/12/2023	08/21/2028
05377R-HZ-0	Avis Budget Rental Car F-AESOP 2024-1A B				1.F FE	6,526,914	99.7776	6,485,543	6,500,000	6,522,637	0	(4,277)	0	0	5.850	5.758	MON	11,619	357,013	01/18/2024	06/20/2030
10901A-AA-4	Brigade Debt Funding II -BDF 2018-2A A				1.A FE	15,634,289	99.7482	15,594,922	15,634,289	15,634,289	0	0	0	0	4.750	4.749	AO	136,149	742,629	08/30/2018	10/25/2035
15186P-AA-6	Centerbridge Credit Fund-CBOF 2021-1A A				1.A FE	10,000,000	92.2590	9,225,900	10,000,000	10,000,000	0	0	0	0	3.164	3.164	JAJO	58,007	316,400	04/08/2021	07/25/2039
15672R-AA-3	Cerberus Loan Funding XX-CERB 2018-3A A1				1.A FE	7,313,838	100.0595	7,318,190	7,313,838	7,313,838	0	0	0	0	6.318	5.725	JAJO	100,111	511,111	06/29/2018	07/15/2030
15672R-AC-9	Cerberus Loan Funding XX-CERB 2018-3A B				1.A FE	7,000,000	100.0826	7,005,782	7,000,000	7,000,000	0	0	0	0	6.818	5.660	JAJO	103,399	532,021	06/29/2018	07/15/2030
25255J-AN-7	Diameter Capital Clo 3 L-DCLO 2022-3A A2				1.C FE	10,000,000	100.0175	10,001,750	10,000,000	10,000,000	0	0	0	0	0.000	0.000	JAJO	0	0	12/12/2024	01/15/2038
34528Q-HY-3	Ford Credit Floorplan Ma-FORFD 2023-1 C				1.E FE	6,999,688	100.6090														

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor-tization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
53946W-AA-1	Loan Asset Issuer LLC - Series 2021 NG-1 .....	.....	.....	.....	.. 1.G PL	13,796,840	96.2092	13,273,832	13,796,840	13,796,840	0	0	0	0	2.981	2.981	MON	(211,703)	479,839	08/30/2021	10/25/2046
53946W-AB-9	Loan Asset Issuer LLC - Series 2021 NG-1 .....	.....	.....	.....	.. 2.C PL	11,117,464	92.4537	10,278,510	11,117,464	11,117,464	0	0	0	0	3.967	3.967	MON	(29,402)	477,782	08/30/2021	10/25/2046
53946W-AC-7	Loan Asset Issuer LLC - Series 2021 NG-1 .....	.....	.....	.....	.. 3.C PL	7,540,511	93.6193	7,059,371	7,540,511	7,540,511	0	0	0	0	5.438	5.438	MON	(95,679)	512,568	08/30/2021	10/25/2046
53950X-AA-4	Loan Asset Issuer LLC - Series 2022 NG-1 .....	.....	.....	.....	.. 1.G PL	13,536,411	96.5034	13,063,099	13,536,411	13,536,411	0	0	0	0	2.981	2.981	MON	(179,355)	470,258	02/28/2022	02/25/2047
53950X-AB-2	Loan Asset Issuer LLC - Series 2022 NG-1 .....	.....	.....	.....	.. 2.C PL	11,808,232	92.8698	10,966,284	11,808,232	11,808,232	0	0	0	0	3.967	3.967	MON	(110,461)	573,433	02/28/2022	02/25/2047
53950X-AC-0	Loan Asset Issuer LLC - Series 2022 NG-1 .....	.....	.....	.....	.. 3.C PL	7,046,701	93.3379	6,577,243	7,046,701	7,046,701	0	0	0	0	5.438	5.438	MON	(7,488)	415,133	02/28/2022	02/25/2047
61773K-AE-2	Morgan Stanley Eaton Van-MSEV 2021-1A C .....	.....	D .....	.....	.. 1.F FE	4,000,000	100.1804	4,007,216	4,000,000	4,000,000	0	0	0	0	6.988	6.987	JAJO	54,350	312,969	09/24/2021	10/20/2034
62946A-AA-2	NP SPE II LLC-NPRL 2016-1A A1 .....	.....	.....	.....	.. 1.G FE	2,017,395	98.9618	1,996,449	2,017,395	2,017,410	0	(11)	0	0	4.164	4.162	MON	2,567	84,701	04/25/2016	04/20/2046
62946A-AB-0	NP SPE II LLC-NPRL 2016-1A A2 .....	.....	.....	.....	.. 2.A FE	17,920,416	96.5785	16,944,693	17,920,416	17,607,952	0	(45,464)	0	0	5.438	5.152	MON	29,153	954,097	11/10/2016	04/20/2046
62946A-AC-8	NP SPE II LLC-NPRL 2017-1A A1 .....	.....	.....	.....	.. 1.G FE	4,147,355	97.6053	4,048,077	4,147,393	4,147,394	0	7	0	0	3.372	3.372	MON	4,273	150,554	11/10/2017	10/21/2047
62946A-AD-6	NP SPE II LLC-NPRL 2017-1A A2 .....	.....	.....	.....	.. 2.A FE	5,986,016	95.0796	5,704,775	6,000,000	5,995,453	0	1,496	0	0	4.219	4.248	MON	7,735	253,140	06/26/2018	10/21/2047
62954J-AB-0	NP SPE II LLC-NPRL 2019-1A A2 .....	.....	.....	.....	.. 1.F FE	4,235,481	96.3419	4,080,570	4,235,510	4,235,525	0	(11)	0	0	3.241	3.241	MON	4,194	137,273	08/22/2019	09/20/2049
83546D-AL-2	Sonic Capital LLC-SONIC 2020-1AW A21W .....	.....	.....	.....	.. 1.C FE	6,813,858	96.3927	6,455,096	6,696,667	6,745,162	0	(56,757)	0	0	3.395	3.026	MON	6,947	227,352	02/03/2020	01/20/2050
83546D-AM-0	Sonic Capital LLC-SONIC 2020-1AW A21W .....	.....	.....	.....	.. 1.C FE	17,792,112	95.1405	15,928,099	16,741,667	17,168,275	0	(200,013)	0	0	2.745	1.469	MON	14,042	459,559	06/15/2020	01/20/2050
576399-CY-9	Master Credit Card Trust-MCCT 2022-4A C .....	.....	A .....	.....	.. 2.B FE	9,268,420	101.3183	9,391,191	9,269,000	9,268,615	0	108	0	0	7.220	7.221	MON	18,589	669,222	10/13/2022	04/21/2029
902538-AA-1	UA (Portland OR) CTL Pas Trust Certifica .....	.....	.....	.....	.. 3.B	11,210,305	96.5759	10,720,542	11,100,639	11,138,421	0	(13,164)	0	0	4.870	4.736	MON	24,027	585,596	03/10/2017	02/15/2032
417923-AA-7	HARUS 2023-1A A1-HARUS 2023-1A A1 .....	.....	.....	.....	.. 1.A FE	15,000,000	100.8360	15,125,400	15,000,000	15,000,000	0	0	0	0	6.546	5.400	JAJO	212,742	771,440	12/21/2023	01/15/2037
417923-AE-9	HARUS 2023-1A B-HARUS 2023-1A B .....	.....	.....	.....	.. 1.C FE	10,500,000	101.4469	10,651,925	10,500,000	10,500,000	0	0	0	0	7.256	6.100	JAJO	165,072	593,229	12/21/2023	01/15/2037
009090-AA-9	AIR CANADA 2015-1A PTT-FIRST LIEN .....	.....	A .....	.....	.. 1.F FE	7,752,389	96.8464	7,507,908	7,752,389	7,752,804	0	(554)	0	0	3.600	3.592	MS	82,175	284,816	03/11/2015	03/15/2027
126650-AN-0	CVS Pass-Through Trust-FIRST LIEN .....	.....	.....	.....	.. 2.B	258,184	100.9475	254,826	252,434	252,434	0	(5,749)	0	0	6.204	5.985	MON	1,198	15,023	09/09/2003	10/10/2025
126650-AW-0	CVS Pass-Through Trust-FIRST LIEN .....	.....	.....	.....	.. 2.B	549,169	99.0309	543,847	549,178	549,178	0	5	0	0	5.298	5.297	MON	1,697	29,060	12/09/2004	01/11/2027
126650-BQ-2	CVS HEALTH CORP PASS THRU CTF 30/360 .....	.....	.....	.....	.. 2.B FE	3,114,706	102.8782	2,728,945	2,652,597	2,833,195	0	345,859	0	0	6.943	5.393	MON	10,743	184,143	12/02/2013	01/10/2030
126650-BY-5	CVS PASS-THROUGH TRUST-SENIOR SECURED NO .....	.....	.....	.....	.. 2.C FE	674,355	98.4207	561,610	570,622	623,308	0	4,100	0	0	5.926	4.670	MON	1,973	33,814	08/31/2012	01/10/2034
86744W-AA-7	Sumnova Helios X Issuer -SNVA 2022-C A .....	.....	.....	.....	.. 1.D FE	10,953,110	97.7052	11,310,634	11,576,282	11,110,594	0	25,877	0	0	5.300	6.502	MON	18,747	613,543	11/03/2022	11/22/2049
89231F-AE-0	Toyota Auto Receivables -TAOT 2023-C A4 .....	.....	.....	.....	.. 1.A FE	4,498,898	100.6343	4,528,544	4,500,000	4,499,313	0	(687)	0	0	5.010	5.018	MON	10,020	225,450	08/08/2023	02/15/2029
89656C-AA-1	Trinity Rail Leasing 201-TRL 2010-1A A .....	.....	.....	.....	.. 1.F FE	11,076,707	97.8963	10,349,056	10,571,453	10,802,597	0	(32,445)	0	0	5.194	4.420	MON	22,878	549,081	01/17/2019	10/16/2040
89656R-AA-8	Trinity Rail Leasing 202-TRL 2022-1 A .....	.....	.....	.....	.. 1.F FE	10,018,216	94.7966	9,694,350	10,226,474	10,056,936	0	28,610	0	0	4.550	4.551	MON	12,925	465,300	04/20/2022	05/19/2052
19425M-AC-2	College Avenue Student L-CASL 2023-B B .....	.....	.....	.....	.. 1.C FE	3,239,587	104.7379	3,412,686	3,258,310	3,258,310	0	18,723	0	0	7.330	7.322	MON	3,981	243,162	10/18/2023	06/25/2054
1049999999. Subtotal - Bonds - Industrial and Miscellaneous (Unaffiliated) - Other Loan-Backed and Structured Securities						7,912,007,466	XXX	7,879,627,917	8,137,422,770	7,937,115,718	(3)	35,255,222	25,391,152	(835,195)	XXX	XXX	XXX	66,567,940	384,658,914	XXX	XXX
1109999999. Total - Industrial and Miscellaneous (Unaffiliated) Bonds						29,468,063,644	XXX	27,917,829,493	30,004,768,202	29,378,359,993	(13,343,237)	72,289,001	62,658,878	(35,851,760)	XXX	XXX	XXX	312,254,617	1,223,610,991	XXX	XXX
00773H-AA-5	AerCap Global Aviation T-AER 6 1/2 06/15 .....	.....	2 .....	.....	.. 2.C FE	12,464,219	99.8323	12,439,103	12,460,000	12,462,834	0	(1,385)	0	0	6.500	6.446	JD	35,996	404,950	09/26/2024	06/15/2045
00774M-BK-0	AerCap Ireland Capital D-AER 6.95 03/10/ .....	.....	D .....	.....	.. 2.C FE	4,007,000	102.6339	4,112,540	4,007,000	4,007,000	0	0	0	0	6.950	6.945	MS .....	.....	.....	07/08/2024	03/10/2055
018820-AA-8	Allianz SE-ALVGR 3 1/2 PERP .....	.....	D .....	.....	.. 1.G FE	8,675,000	96.1750	9,617,500	10,000,000	8,675,168	0	158	0	0	3.500	4.036	JAN	234,306	350,000	01/17/2023	01/01/9999
018820-AC-4	Allianz SE-SUBORDINATED .....	.....	D .....	.....	.. 1.E FE	10,400,000	104.0229	10,818,382	10,400,000	10,400,000	0	0	0	0	6.350	6.350	MS	210,961	660,400	08/30/2023	09/06/2053
018820-AD-2	Allianz SE-SUBORDINATED .....	.....	D .....	.....	.. 1.E FE	9,400,000	98.5650	9,285,110	9,400,000	9,400,000	0	0	0	0	5.600	5.600	MS .....	.....	.....	08/27/2024	09/03/2054
055650-DU-9	BP Capital Markets PLC-SUBORDINATED .....	.....	D .....	.....	.. 1.G FE	11,756,325	99.1951	11,929,200	12,026,000	11,713,632	0	(15,555)	0	0	4.375	3.969	JJ	144,688	526,138	02/25/2022	01/01/9999
055650-DV-7	BP Capital Markets PLC-SUBORDINATED .....	.....	D .....	.....	.. 1.G FE	15,580,620	95.7179	16,113,146	16,834,000	15,581,379	0	27	0	0	4.875	5.267	JJ	20,516	820,658	01/23/2023	01/01/9999
055650-DW-5	BP Capital Markets PLC-SUBORDINATED .....	.....	D .....	.....	.. 1.G FE	26,022,530	102.8485	25,947,648	25,229,000	25,999,973	0	(22,557)	0	0	6.450	6.450	JJ	542,424	244,939	02/26/2024	01/01/9999
055650-DX-3	BP Capital Markets PLC-BPLN 6 1/8 PERP .....	.....	D .....	.....	.. 1.G FE	29,997,300	98.4300	29,529,000	30,000,000	29,994,768	0	(2,532)	0	0	6.125	6.125	JJ	219,479	.....	11/13/2024	01/01/9999
10924B-AA-5	Brighthouse Holdings LLC-BHF 6 1/2 PERP .....	.....	R .....	.....	.. 2.C FE	18,690,000	90.0000	15,300,000	17,000,000	18,363,609	0	(73,257)	0	0	6.500	5.601	JJ	288,528	1,105,000	01/23/2018	01/01/9999
29360A-AA-8	ENSTAR FINANCE CO LLC .....	.....	1,2 .....	.....	.. 2.C FE	9,612,500	98.6650	9,866,500	10,000,000	9,618,037	0	5,537	0	0	5.750	6.132	MS	191,667	287,500	08/05/2024	09/01/2040
29360A-AB-6	Enstar Finance LLC-JR SUBORDINATED .....	.....	1,2 .....	.....	.. 2.C FE	9,675,000	95.3621	9,536,214	10,000,000	9,679,703	0	4,703	0	0	5.500	5.798	JJ	253,611	.....	07/19/2024	01/15/2042
404280-BP-3	HSBC Holdings PLC-HSBC 6 1/2 PERP .....	.....	D .....	.....	.. 2.C FE	5,000,000	99.3302	4,966,512	5,000,000	5,000,000	0	0	0	0	6.500	6.500	JJ	88,472	325,000	03/19/2018	01/01/9999
53944Y-AV-5	Lloyds Banking Group PLC-SUBORDINATED .....	.....	D .....	.....	.. 2.C FE	13,417,923	103.8110	13,937,665	13,426,000	13,417,980	0	0	0	0	8.000	8.000	JAJO	11,935	1,074,080	03/06/2023	01/01/9999

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
62582P-AA-8	Muenchener Rueckversiche-SUBORDINATED	D.....	2 .....	.....	.. 1.F FE	15,640,000	101.3841	15,856,470	15,640,000	15,640,000	0	0	0	0	...5.875	...5.875	MN	96,990	918,850	05/18/2022	05/23/2042
639057-AT-5	NatWest Group PLC-NWIG 7.3 PERP	D.....	2 .....	.....	.. 2.C FE	25,000,000	98.5926	24,648,150	25,000,000	25,000,000	0	0	0	0	...7.300	...7.300	JAJO	217,986	0	11/14/2024	01/01/9999
65558R-AK-5	Nordea Bank Abp-NDAPH 6.3 PERP	D.....	2 .....	.....	.. 2.B FE	5,059,000	96.0875	4,861,067	5,059,000	5,059,000	0	0	0	0	...6.300	...6.300	JJ	84,991	0	09/19/2024	01/01/9999
78397N-AA-4	SCF PREFERRED EQUITY LLC	D.....	2 .....	.....	.. 3.A FE	10,000,000	97.2500	9,725,000	10,000,000	10,000,000	0	0	0	0	...7.500	...7.500	JJ	156,250	750,000	08/17/2021	01/01/9999
87089N-AA-8	Swiss Re Finance Luxembo-SUBORDINATED	D.....	2 .....	.....	.. 1.F FE	4,842,500	99.3665	4,968,325	5,000,000	4,849,762	0	3,008	0	0	...5.000	...5.219	AO	61,806	250,000	06/29/2022	04/02/2049
92857W-BQ-2	Vodafone Group PLC-JR SUBORDINATED	D.....	1,2 .....	.....	.. 3.A FE	10,575,000	102.9931	10,299,312	10,000,000	10,553,530	0	(21,470)	0	0	...7.000	...5.444	AO	169,167	0	10/30/2024	04/04/2079
D07112-TU-5	Bayer AG-BAYNGR 3 1/8 11/12/2079	B.....	2 .....	.....	.. 3.A FE	1,050,552	93.9391	1,166,611	1,200,000	1,075,745	0	976	0	(74,304)	...3.125	...3.697	NOV	5,316	39,776	10/04/2022	11/12/2079
G7S40C-AG-8	Rothsay Life PLC-ROTHLF 4 7/8 PERP	D.....	2 .....	.....	.. 2.B FE	16,000,000	93.1008	18,620,150	20,000,000	15,999,258	0	35	0	0	...4.875	...6.094	JJ	211,250	975,000	01/26/2023	01/01/9999
N2563P-BU-7	Argentum Netherlands BV -SUBORDINATED	D.....	2 .....	.....	.. 2.A FE	9,990,000	99.8350	9,983,500	10,000,000	9,989,654	0	(346)	0	0	...5.750	...5.755	AUG	217,222	0	12/04/2024	08/15/2050
X10001-AA-7	Allianz SE-ALVGR 3 1/2 PERP	D.....	2 .....	.....	.. 1.F FE	4,243,000	96.1750	4,808,750	5,000,000	4,243,239	0	81	0	0	...3.500	...4.125	JAN	117,153	175,000	11/30/2022	01/01/9999
29250N-AN-5	Enbridge Inc-SUBORDINATED	A.....	2 .....	.....	.. 2.C FE	6,015,625	98.6520	6,165,750	6,250,000	6,017,124	0	590	0	0	...6.000	...6.242	JJ	172,917	375,000	08/09/2022	01/15/2077
29250N-BN-4	Enbridge Inc-ENBON 7 3/8 01/15/2083	A.....	2 .....	.....	.. 2.C FE	9,706,250	101.0375	10,103,750	10,000,000	9,706,418	0	281	0	0	...7.375	...7.601	JJ	340,069	737,500	12/05/2022	01/15/2083
29250N-BS-3	Enbridge Inc-SUBORDINATED	A.....	2 .....	.....	.. 2.C FE	7,353,000	104.9250	7,715,135	7,353,000	7,353,000	0	0	0	0	...8.250	...8.250	JJ	279,720	488,668	09/18/2023	01/15/2084
29250N-CF-0	Enbridge Inc-ENBON 7.2 06/27/54	A.....	2 .....	.....	.. 2.C FE	9,960,000	102.7708	10,235,967	9,960,000	9,960,000	0	0	0	0	...7.200	...7.200	JD	7,968	358,560	06/24/2024	06/27/2054
89366B-AG-3	Transcanada Trust-TRPN 5.6 03/07/2082	A.....	2 .....	.....	.. 2.C FE	18,036,000	94.9001	18,980,014	20,000,000	18,042,058	0	3,555	0	0	...5.600	...6.228	MS	354,667	1,120,000	02/03/2023	03/07/2082
04018V-AA-1	ARES FINANCE CO-SUBORDINATED	A.....	2 .....	.....	.. 2.C FE	18,334,359	95.7875	18,162,747	18,961,500	18,343,126	0	7,091	0	0	...4.125	...4.125	JD	2,172	876,531	06/24/2021	06/30/2051
816851-BK-4	Sempra Energy-SRE 4 7/8 PERP .....	.....	2 .....	.....	.. 2.C FE	14,828,855	98.8494	15,459,064	15,639,000	14,828,507	0	23	0	0	...4.875	...5.141	JJ	160,951	1,143,602	06/07/2023	01/01/9999
816851-BS-7	SRE 6 7/8 10/01/54 .....	.....	2 .....	.....	.. 2.C FE	10,713,357	101.1625	10,838,550	10,714,000	10,714,000	0	643	0	0	...6.875	...6.878	AO	184,147	403,077	03/11/2024	10/01/2054
816851-BT-5	Sempra-SRE 6.4 10/01/54 .....	.....	2 .....	.....	.. 2.C FE	26,667,000	98.8405	26,357,796	26,667,000	26,667,000	0	0	0	0	...6.400	...6.399	AO	530,970	0	09/04/2024	10/01/2054
949746-TD-3	Wells Fargo & Co-WFC 3.9 PERP .....	.....	2 .....	.....	.. 2.B FE	9,539,338	97.0041	9,976,870	10,285,000	9,539,521	0	55	0	0	...3.900	...4.205	JAJO	17,827	401,115	08/11/2022	01/01/9999
95002Y-AC-7	Wells Fargo & Co-WFC 6.85 PERP .....	.....	2 .....	.....	.. 2.B FE	16,514,000	102.9731	17,004,973	16,514,000	16,514,000	0	0	0	0	...6.850	...6.850	JAJO	50,276	446,202	07/16/2024	01/01/9999
190750-AE-2	CoBank ACB-COBKAC 6.45 PERP .....	.....	2 .....	.....	.. 2.B FE	15,000,000	99.9865	14,997,981	15,000,000	15,000,000	0	0	0	0	...6.450	...6.450	JAJO	241,875	967,500	08/16/2022	01/01/9999
854502-AM-3	Stanley Black & Decker I-SWK 4 03/15/60 .....	.....	1,2 .....	.....	.. 2.C FE	9,478,363	98.8000	9,880,000	10,000,000	9,491,939	0	5,963	0	0	...4.000	...4.279	MS	117,778	400,000	09/07/2022	03/15/2060
65339K-CB-4	NextEra Energy Capital H-NEE 3.8 03/15/2 .....	.....	2 .....	.....	.. 2.B FE	3,270,000	94.9188	3,796,750	4,000,000	3,272,841	0	2,467	0	0	...3.800	...4.722	MS	44,756	152,000	10/24/2023	03/15/2082
65339K-CW-8	NextEra Energy Capital H-NEE 6.7 09/01/5 .....	.....	2 .....	.....	.. 2.B FE	22,171,515	101.7080	22,558,834	22,180,000	22,171,373	0	(142)	0	0	...6.700	...6.700	MS	495,353	743,030	02/27/2024	09/01/2054
65339K-DB-3	NextEra Energy Capital H-NEE 6 3/4 06/15 .....	.....	2 .....	.....	.. 2.B FE	12,500,000	102.6384	12,829,795	12,500,000	12,500,000	0	0	0	0	...6.750	...6.750	JD	37,500	440,625	06/05/2024	06/15/2054
00440F-AA-2	ACE Capital Trust II-JR SUBORDINATED .....	.....	2 .....	.....	.. 2.A FE	9,429,351	119.3491	7,496,317	6,281,000	7,781,574	0	(248,058)	0	0	...9.700	...4.532	AO	152,314	609,257	04/20/2017	04/01/2030
842587-DF-1	Southern Co/The-SO 4 01/15/51 .....	.....	2 .....	.....	.. 2.B FE	23,771,250	97.8967	24,474,168	25,000,000	23,805,329	0	21,782	0	0	...4.000	...4.306	JJ	461,111	800,000	06/20/2024	01/15/2051
020002-BB-6	ALLSTATE CORP-SUBORDINATED BOND .....	.....	2 .....	.....	.. 2.C FE	14,962,500	99.7875	14,968,125	15,000,000	14,961,663	0	446	0	0	...7.723	...7.743	FIAN	151,243	1,293,393	01/26/2023	08/15/2053
665859-AB-9	Northern Trust Corp-NTRS 4.6 PERP .....	.....	2 .....	.....	.. 2.A FE	5,493,094	97.7150	5,183,781	5,305,000	5,348,045	0	(23,423)	0	0	...4.600	...4.111	JJ	61,008	244,030	12/21/2017	01/01/9999
65473P-AR-6	NiSource Inc-NI 6.95 11/30/54 .....	.....	2 .....	.....	.. 2.C FE	14,993,750	101.9225	15,288,375	15,000,000	14,993,731	0	(19)	0	0	...6.950	...6.950	MN	89,771	561,792	05/13/2024	11/30/2054
65473P-AT-2	NiSource Inc-NI 6 3/8 03/31/55 .....	.....	2 .....	.....	.. 2.C FE	7,500,000	99.4305	7,457,288	7,500,000	7,500,000	0	0	0	0	...6.375	...6.376	MS	148,750	0	09/03/2024	03/31/2055
883199-AR-2	TXF Float 02/15/42 .....	.....	1 .....	.....	.. 3.A FE	6,322,750	89.9125	6,326,875	7,000,000	6,326,634	0	3,884	0	0	...6.520	...7.515	FIAN	59,586	127,274	10/11/2024	02/15/2042
53079E-AN-4	Liberty Mutual Group Inc-LIBMUT 7.8 03/1 .....	.....	2 .....	.....	.. 3.A FE	10,287,500	111.7000	11,170,000	10,000,000	10,274,920	0	(12,580)	0	0	...7.800	...7.451	MS	229,667	780,000	02/22/2024	03/15/2037
902973-AZ-9	US Bancorp-US BANCORP .....	.....	2 .....	.....	.. 2.B FE	5,118,750	98.3943	4,919,713	5,000,000	5,056,317	0	(22,906)	0	0	...5.300	...4.771	JJ	54,472	265,000	02/24/2022	01/01/9999
902973-BQ-9	US Bancorp-USB 3.7 PERP .....	.....	2 .....	.....	.. 2.B FE	11,065,000	94.3750	12,268,750	13,000,000	11,065,376	0	142	0	0	...3.700	...4.348	JAJO	101,544	481,000	11/02/2022	01/01/9999
759351-AE-9	Reinsurance Group of Ame-RGA FLOAT 12/15 .....	.....	1 .....	.....	.. 2.C FE	6,442,293	98.8979	6,976,259	7,054,000	6,444,685	0	1,480	0	0	...7.285	...8.002	INJD	22,840	588,036	03/07/2023	12/15/2065
060505-FL-3	Bank of America Corp-BAC 5 7/8 PERP .....	.....	2 .....	.....	.. 2.B FE	5,168,750	100.7500	5,037,500	5,000,000	5,095,695	0	(26,890)	0	0	...5.875	...5.216	JJ	86,493	293,750	02/25/2022	01/01/9999
06055H-AB-9	Bank of America Corp-BAC 6 1/8 PERP .....	.....	2 .....	.....	.. 2.B FE	9,850,000	100.8800	10,088,000	10,000,000	9,850,052	0	108,889	0	0	...6.125	...6.218	JAJO	108,889	612,500	12/14/2022	01/01/9999
26441C-BP-9	Duke Energy Corp-DUK 3 1/4 01/15/2082 .....	.....	2 .....	.....	.. 2.C FE	13,023,275	93.3127	14,328,160	15,355,000	13,032,926	0	8,876	0	0	...3.250	...3.909	JJ	230,112	312,813	03/27/2024	01/15/2082
26441C-CG-8	Duke Energy Corp-DUK 6.45 09/01/54 .....	.....	2 .....	.....	.. 2.C FE	10,000,000	101.4607	10,146,073	10,000,000	10,000,000	0	0	0	0	...6.450	...6.450	MS	231,125	0	08/19/2024	09/01/2054
898320-AF-6	Truist Financial Corp-TFC 5.1 PERP .....	.....	2 .....	.....	.. 2.C FE	2,425,000	96.9181	2,422,953	2,500,000	2,425,026	0	2	0	0	...5.100	...5.257	JJ	42,500	127,500	06/07/2022	01/01/9999
744320-AW-2	Prudential Financial Inc-PRU 4 1/2 09/15 .....	.....	2 .....	.....	.. 2.B FE	10,000,000	96.6750	9,667,500	10,000,000	10,000,000	0	0	0	0	...4.500	...4.500	MS	132,500	450,000	09/12/2017	09/

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
025816-CH-0	American Express Co-AMERICAN EXPRESS			2	2.C FE	13,168,650	.95.6500	14,347,500	15,000,000	13,169,115	.0	.206	.0	.0	.3.550	.4.045	JAU	158,271	409,729	08/24/2022	01/01/9999
064058-AH-3	Bank of New York Mellon -BK 4.7 PERP			2	2.A FE	5,000,000	.99.0375	4,951,875	5,000,000	5,000,000	.0	.0	.0	.0	.4.700	.4.700	JJ	65,931	235,000	05/12/2020	01/01/9999
172967-PM-7	Citigroup Inc-C 7 PERP			2	3.A FE	29,630,000	105.4480	31,244,231	29,630,000	29,630,000	.0	.0	.0	.0	.7.000	.7.000	JAU	265,024	604,946	07/23/2024	01/01/9999
48128B-AN-1	JPMorgan Chase & Co-JPM 3.65 PERP			2	2.B FE	4,750,000	.96.8477	4,842,384	5,000,000	4,750,050	.0	.36	.0	.0	.3.650	.3.843	JAU	15,208	182,500	02/25/2022	01/01/9999
59156R-BS-6	MetLife Inc-MET 9 1/4 04/08/38			1,2	2.B FE	582,500	117.6071	588,036	500,000	544,994	.0	(3,772)	.0	.0	.9.250	.7.752	AO	10,663	46,250	01/24/2012	04/08/2038
59156R-BT-4	MetLife Inc-MET 5 7/8 PERP			2	2.B FE	22,200,000	.99.8242	21,961,317	22,000,000	22,113,677	.0	(32,288)	.0	.0	.5.875	.5.692	JJ	380,569	1,292,500	03/15/2022	01/01/9999
92553P-BC-5	ViaComCBS Inc-VIAC 6 1/4 02/28/57			2	3.B FE	12,350,000	.95.3750	12,398,750	13,000,000	12,350,912	.0	.912	.0	.0	.6.250	.6.250	FA	277,605	187,500	02/23/2017	02/28/2057
92556H-AE-7	Paramount Global-PARA 6 3/8 03/30/62			1,2	3.B FE	15,550,315	.96.6590	17,532,009	18,138,000	15,563,913	.0	10,378	.0	.0	.6.375	.7.506	MS	292,286	837,548	12/12/2024	03/30/2062
025537-BA-8	American Electric Power -AEP 6.95 12/15/			2	2.C FE	19,996,190	103.4234	20,684,680	20,000,000	19,995,893	.0	(297)	.0	.0	.6.950	.6.952	JD	61,778	675,694	06/18/2024	12/15/2054
638612-AJ-0	Nationwide Financial Ser-NATMUT 6 3/4 05				2.B FE	9,847,500	102.6888	10,371,564	10,100,000	9,869,279	.0	11,348	.0	.0	.6.750	.7.028	MN	87,113	681,750	01/10/2023	05/15/2037
015857-AH-8	Algonquin Power & Utiliti-AQONN 4 3/4 01/			1,2	3.A FE	7,950,000	.93.8321	9,383,214	10,000,000	7,955,404	.0	4,126	.0	.0	.4.750	.6.025	JJ	215,069	475,000	10/25/2023	01/18/2082
064159-KJ-4	Bank of Nova Scotia/The-JR SUBORDINATED			2	2.C FE	12,014,000	.98.9000	11,868,000	12,000,000	12,000,000	.0	.0	.0	.0	.7.566	.7.558	JAU	196,703	1,006,481	10/05/2017	01/01/9999
89117F-BZ-5	Toronto-Dominion Bank/TH-TD 8 1/8 10/31/			2	2.B FE	22,936,000	104.6510	24,002,753	22,936,000	22,936,000	.0	.0	.0	.0	.8.125	.8.125	JAU	315,768	1,863,550	10/06/2022	10/31/2082
654579-AE-1	Nippon Life Insurance Co-SUBORDINATED			1,2	1.G FE	5,000,000	.99.2405	4,962,023	5,000,000	5,000,000	.0	.0	.0	.0	.4.700	.4.700	JJ	105,097	235,000	01/13/2016	01/20/2046
654579-AH-4	Nippon Life Insurance Co-SUBORDINATED			2	1.G FE	23,000,000	.85.6631	19,702,508	23,000,000	23,000,000	.0	.0	.0	.0	.2.750	.2.750	JJ	281,111	632,500	01/13/2021	01/21/2051
534187-BR-9	Lincoln National Corp-SENIOR UNSECURED			2	2.C FE	3,275,000	108.7625	3,561,972	3,275,000	3,275,000	.0	.0	.0	.0	.9.250	.9.250	JJ	100,979	454,406	11/15/2022	01/01/9999
693475-AQ-8	PNC Financial Services G-PNC 5 PERP			2	2.B FE	22,404,353	.98.5250	20,758,232	21,069,000	21,386,714	.0	(164,127)	.0	.0	.5.000	.4.134	JJ	175,575	1,053,450	01/04/2018	01/01/9999
693475-BC-8	PNC Financial Services G-PNC FINANCIAL			2	2.B FE	4,550,000	.94.7500	4,737,500	5,000,000	4,550,186	.0	58	.0	.0	.3.400	.3.738	JAU	7,556	212,500	02/24/2022	01/01/9999
126650-EG-1	CVS Health Corp-CVS 6 3/4 12/10/54			2	3.A FE	19,925,000	.98.0300	19,606,000	20,000,000	19,924,661	.0	(339)	.0	.0	.6.750	.6.750	JD	78,750	.0	12/03/2024	12/10/2054
14387R-AO-1	Carolina First Mortgage -SUBORDINATED				1.F FE	17,171,000	115.7500	12,964,000	.112	14,451,345	.0	(439,133)	.0	.0	.11.125	.5.478	JAU	211,128	1,246,000	01/09/2019	01/31/2031
05567S-AJ-0	BNSF Funding Trust I-BNSF 6.613 12/15/55			1,2	2.A FE	15,308,063	101.1650	16,231,924	16,045,000	15,319,336	.0	5,296	.0	.0	.6.613	.7.003	JD	489,264	991,950	05/02/2023	12/15/2055
15189T-BJ-5	CenterPoint Energy Inc-CNP 6.85 02/15/55			2	2.C FE	10,000,000	102.1530	10,215,300	10,000,000	10,000,000	.0	.0	.0	.0	.6.850	.6.850	FA	260,681	.0	08/12/2024	02/15/2055
21871X-AP-4	Corebridge Financial Inc-CRGG 6 7/8 12/1			1,2	2.C FE	34,927,466	102.6810	35,986,610	35,047,000	34,929,450	.0	1,345	.0	.0	.6.875	.6.875	JD	107,088	2,409,481	05/31/2023	12/15/2052
21871X-AT-6	Corebridge Financial Inc-CRGG 6 3/8 09/1			1,2	2.C FE	16,667,000	.99.7805	16,630,416	16,667,000	16,667,000	.0	.0	.0	.0	.6.375	.6.375	MS	321,708	.0	09/05/2024	09/15/2054
29273V-AM-2	Energy Transfer LP-ET 7 1/8 PERP			2	3.A FE	18,463,206	100.4760	20,095,200	20,000,000	18,462,306	.0	(521)	.0	.0	.7.125	.8.307	JJ	182,084	1,068,750	12/14/2022	01/01/9999
29273V-AX-8	Energy Transfer LP-ET 8 05/15/54			1,2	3.A FE	7,000,000	105.1660	7,361,620	7,000,000	7,000,000	.0	.0	.0	.0	.8.000	.8.000	MN	71,556	451,111	01/10/2024	05/15/2054
29379V-BN-2	Enterprise Products Oper-ENTERPRISE PROD			2	2.B FE	11,102,950	.97.6300	11,920,623	12,210,000	11,108,235	.0	3,150	.0	.0	.5.250	.5.800	FA	240,384	641,025	08/02/2023	08/16/2077
29379V-BR-3	EPD 5 3/8 02/15/2078			2	2.B FE	13,131,250	.95.5326	15,285,211	16,000,000	13,141,296	.0	5,911	.0	.0	.5.375	.6.591	FA	324,889	860,000	05/04/2023	02/15/2078
726503-AE-5	Plains All American Pipe-PAA FLOAT PERP				3.A FE	27,364,288	.99.5250	28,548,746	28,685,000	27,363,926	.0	(66)	.0	.0	.8.895	10.208	JAU	333,119	2,061,647	12/12/2022	01/01/9999
808513-BJ-3	Charles Schwab Corp/The-JR SUBORDINATED			2	2.C FE	8,627,938	.86.2794	8,627,938	10,000,000	10,000,000	.0	.0	.0	.0	.4.000	.4.000	JAU	33,333	400,000	12/08/2020	01/01/9999
808513-CB-9	Charles Schwab Corp/The-CHARLES SCHWAB			2	2.C FE	7,500,000	.96.9917	7,274,375	7,500,000	7,500,000	.0	.0	.0	.0	.5.000	.5.000	JAU	31,250	375,000	03/02/2022	01/01/9999
00130H-CK-9	AES 7.6 01/15/55			2	3.B FE	18,291,000	102.5407	18,755,719	18,291,000	18,291,000	.0	.0	.0	.0	.7.600	.7.594	JJ	849,515	.0	05/16/2024	01/15/2055
00130H-CL-7	AES Corp/The-AES 6.95 07/15/55			2	3.B FE	6,175,074	.97.7500	6,175,074	6,176,000	6,174,632	.0	(441)	.0	.0	.6.950	.6.950	JJ	29,808	.0	12/04/2024	07/15/2055
25746U-DM-8	Dominion Energy Inc-D 4.35 PERP			2	2.C FE	17,494,400	.96.9107	19,420,906	20,040,000	17,494,370	.0	87	.0	.0	.4.350	.4.983	JJ	184,034	871,740	01/19/2023	01/01/9999
25746U-DU-0	Dominion Energy Inc-D 7 06/01/54			2	2.C FE	8,333,000	105.4946	8,790,867	8,333,000	8,333,000	.0	.0	.0	.0	.7.000	.7.000	JD	48,609	309,478	05/06/2024	06/01/2054
570535-AW-4	Markel Corp-MARKEL CORP			2	3.A FE	14,889,289	.99.6413	14,812,668	14,866,000	14,883,911	.0	(5,378)	.0	.0	.6.000	.5.689	JJ	74,330	445,980	11/21/2024	01/01/9999
1219999999. Subtotal - Bonds - Hybrid Securities - Issuer Obligations						1,192,671,347	XXX	1,209,386,040	1,206,830,612	1,186,616,037	0	(1,008,102)	0	(74,304)	XXX	XXX	XXX	16,589,019	49,975,861	XXX	XXX
1309999999. Total - Hybrid Securities						1,192,671,347	XXX	1,209,386,040	1,206,830,612	1,186,616,037	0	(1,008,102)	0	(74,304)	XXX	XXX	XXX	16,589,019	49,975,861	XXX	XXX
22228#-AA-4	CounterpointeSRE CPACE 706 Mission Stree				1.F	21,798,906	.97.0800	21,162,378	21,798,906	21,664,266	.0	.0	.0	.0	.6.727	.6.300	MS	1,224,701	908,370	06/20/2023	09/02/2048
22228#-AB-2	CounterpointeSRE CPACE 706 Mission Stree				2.B	2,972,578	.96.4700	2,867,646	2,972,578	2,972,578	.0	.0	.0	.0	.7.564	.7.200	MS	187,784	101,839	06/20/2023	09/02/2048
22228#-AC-0	CounterpointeSRE CPACE 706 Mission Stree				2.C	584,607	.96.3000	562,977	584,607	584,607	.0	.0	.0	.0	.7.814	.7.400	MS	38,151	20,772	06/20/2023	09/02/2048
22228#-AD-8	CounterpointeSRE CPACE 3111 Sunset Blvd				1.F	4,958,025	.95.5400	4,736,897	4,958,025	4,958,025	.0	.0	.0	.0	.6.150	.6.072	MS	535,301	.0	12/05/2024	09/01/2051
22228#-AF-3	CounterpointeSRE CPACE 2023-1 SUBI Certi				1.F	641,006	.98.0700	628,635	641,006	641,006	.0	.0	.0	.0	.7.740	.7.625	MS	25,496	.0	08/30/2024	09/01/2051
22229Q-AA-9	CounterpointeSRE CPACE Habitat 2024 Clas				1.F	5,580,184	.97.6900	5,451,282	5,580,184	5,580,184	.0	.0	.0	.0	.7.250	.7.249	MS	137,102	.0	11/01/2024	09/02/2057
22229Q-AB-7	CounterpointeSRE CPACE Habitat 2024 Clas				1.G	472,135	.97.7100	461,323	472,135	472,135	.0	.0	.0	.0	.7.284	.7.283	MS	11,655	.0	11/01/2024	09/02/2057

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
06762A-AA-3	Barings Capital Investme Senior Unsecure .....	.....	.....	.....	2.C	75,000,000	97.1917	72,893,775	75,000,000	75,000,000	0	0	0	0	4.750	4.750	FA	1,345,833	3,562,500	02/22/2022	02/22/2027
06763A-AA-8	Barings Private Credit C Senior Unsecure .....	.....	.....	.....	2.C	11,821,525	96.1618	11,539,416	12,000,000	11,933,290	0	39,937	0	0	3.500	3.865	JJ	177,333	420,000	01/31/2022	07/29/2026
06763A-AA-2	Barings Private Credit C Senior Unsecure .....	.....	.....	.....	2.C	22,662,019	96.1618	22,117,214	23,000,000	22,873,685	0	75,629	0	0	3.500	3.860	JJ	339,889	805,000	01/31/2022	07/29/2026
06763A-AA-0	Barings Private Credit C Senior Unsecure .....	.....	.....	.....	2.C	10,856,100	96.1618	10,597,030	11,020,000	10,958,738	0	36,676	0	0	3.500	3.865	JJ	162,851	385,700	01/31/2022	07/29/2026
1419999999	Subtotal - Bonds - Parent, Subsidiaries and Affiliates - Issuer																				
Obligations						157,347,085	XXX	153,018,573	158,027,441	157,638,514	0	152,242	0	0	XXX	XXX	XXX	4,186,096	6,204,181	XXX	XXX
06759F-AC-0	BABSON CLO LTD 2015-II-SERIES 15-2A CLAS	D			1.A	4,084,340	100.1345	5,472,350	5,465,000	4,694,410	0	223,201	0	0	6.469	12.333	JAJO	70,706	400,425	06/02/2022	10/20/2030
06759F-AE-6	BABSON CLO LTD 2015-II-SERIES 15-2A CLAS	D			1.A	10,276,259	100.1248	13,767,160	13,750,000	11,523,567	0	480,849	0	0	6.829	11.981	JAJO	187,798	1,057,935	06/02/2022	10/20/2030
06759U-AL-7	Barings Clo Ltd 2022-II-BABSN 2022-2A A1	D			1.A	7,055,000	100.4269	7,085,118	7,055,000	7,055,000	0	0	0	0	6.026	6.025	JAJO	92,111	120,281	07/02/2024	07/15/2039
06760D-AE-8	Barings CLO Ltd 2021-I-BABSN 2022-1A C	D			1.F	10,000,000	100.0541	10,005,410	10,000,000	10,000,000	0	0	0	0	7.017	7.017	JAJO	140,348	789,962	03/18/2022	04/15/2035
06760D-AG-3	Barings CLO Ltd 2021-I-BABSN 2022-1A D	D			2.C	7,000,000	100.1113	7,007,791	7,000,000	7,000,000	0	0	0	0	8.267	8.266	JAJO	115,744	642,418	03/18/2022	04/15/2035
06760Q-AN-9	Barings Middle Market CL-BMM 2017-1A A1R	D			1.A	4,644,256	100.0443	4,644,313	4,644,256	4,644,256	0	0	0	0	6.379	6.378	JAJO	59,252	336,027	11/12/2021	01/20/2034
06761H-AW-8	Barings CLO Ltd 2019-II-BABSN 2019-2A BR	D			1.C	30,000,000	100.0405	30,012,150	30,000,000	30,000,000	0	0	0	0	6.173	6.173	JAJO	113,172	0	11/20/2024	01/15/2038
06761H-AY-4	Barings CLO Ltd 2019-II-BABSN 2019-2A CR	D			1.F	9,250,000	100.1437	9,263,292	9,250,000	9,250,000	0	0	0	0	6.373	6.373	JAJO	36,025	0	11/20/2024	01/15/2038
06761K-BC-4	Barings CLO Ltd 2019-III-BABSN 2019-3A C	D			1.F FE	11,500,000	100.0051	11,500,587	11,500,000	11,500,000	0	0	0	0	6.200	6.200	JAJO	0	0	12/10/2024	07/15/2037
06761V-AQ-0	Barings Clo Ltd 2019-IV-BABSN 2019-4A AR	D			1.A	5,750,000	100.2824	5,766,238	5,750,000	5,750,000	0	0	0	0	6.126	6.125	JAJO	133,838	99,502	05/13/2024	07/15/2037
06761V-AS-6	Barings Clo Ltd 2019-IV-BABSN 2019-4A BR	D			1.C	10,000,000	100.8079	10,080,790	10,000,000	10,000,000	0	0	0	0	6.506	6.505	JAJO	140,961	288,386	05/13/2024	07/15/2037
06761V-AU-1	Barings Clo Ltd 2019-IV-BABSN 2019-4A CR	D			1.F	1,000,000	100.1061	1,001,061	1,000,000	1,000,000	0	0	0	0	6.856	6.855	JAJO	14,854	39,105	05/13/2024	07/15/2037
06762H-AC-1	BARINGS CLO LTD 2023-I SR SECOD NT CL B	D			1.C	2,000,000	100.3661	2,007,322	2,000,000	2,000,000	0	0	0	0	6.917	6.917	JAJO	27,670	155,684	02/01/2023	04/20/2036
06762J-AC-7	Babson CLO Ltd/Cayman Is-BABSN 2021-2A B	D			1.C	13,125,000	100.0484	13,131,353	13,125,000	13,125,000	0	0	0	0	6.568	6.567	JAJO	186,764	964,271	07/14/2021	07/15/2034
06762J-AE-3	Babson CLO Ltd/Cayman Is-BABSN 2021-2A C	D			1.F	3,500,000	100.1085	3,503,798	3,500,000	3,500,000	0	0	0	0	6.868	6.867	JAJO	52,079	267,785	07/14/2021	07/15/2034
06762J-AG-8	Babson CLO Ltd/Cayman Is-BABSN 2021-2A D	D			2.C	13,000,000	100.2763	13,035,919	13,000,000	13,000,000	0	0	0	0	8.068	8.066	JAJO	227,235	1,152,796	07/14/2021	07/15/2034
06762L-AN-8	Barings CLO Ltd 2020-I-BABSN 2020-1A BR	D			1.C	6,500,000	100.0312	6,502,028	6,500,000	6,500,000	0	0	0	0	6.568	6.567	JAJO	92,492	477,544	09/22/2021	10/15/2036
06762L-AV-0	Barings CLO Ltd 2020-I-BABSN 2020-1A BR2	D			1.D Z	9,000,000	100.0000	9,000,000	9,000,000	9,000,000	0	0	0	0	0.000	0.000	JAJO	0	0	12/20/2024	01/15/2038
06762Q-AE-7	Babson CLO Ltd/Cayman Is-BABSN LP-3A C	D			1.E	26,250,000	93.7985	24,622,106	26,250,000	26,250,000	0	0	0	0	4.500	4.499	JAJO	232,969	1,181,250	07/22/2022	07/20/2033
06762Q-AG-2	Babson CLO Ltd/Cayman Is-BABSN LP-3A D	D			2.B	25,000,000	92.9793	23,244,825	25,000,000	25,000,000	0	0	0	0	5.500	5.498	JAJO	271,181	1,375,000	07/22/2022	07/20/2033
06762Q-AL-1	Barings Loan Partners CL-BABSN LP-3A AR	D			1.A	19,000,000	100.0992	19,018,848	19,000,000	19,000,000	0	0	0	0	6.137	6.137	JAJO	233,221	983,819	12/19/2023	07/20/2033
06762Q-AM-9	Barings Loan Partners CL-BABSN LP-3A BR	D			1.B	9,500,000	100.1500	9,514,250	9,500,000	9,500,000	0	0	0	0	6.717	6.717	JAJO	127,631	533,694	12/19/2023	07/20/2033
06762R-AA-3	Babson CLO Ltd/Cayman Is-BABSN LP-3A E	D			3.A	13,250,000	94.1686	12,477,340	13,250,000	13,250,000	0	0	0	0	8.500	8.495	JAJO	222,122	1,407,813	07/22/2022	07/20/2033
06762R-AC-9	Babson CLO Ltd/Cayman Is-BABSN LP-3A F	D			4.B	500,000	88.9621	444,811	500,000	500,000	0	0	0	0	10.000	9.994	JAJO	9,861	50,000	07/22/2022	07/20/2033
06762T-AE-1	Babson CLO Ltd/Cayman Islands	D			1.F	6,800,000	100.0126	6,800,857	6,800,000	6,800,000	0	0	0	0	6.894	6.893	JAJO	97,664	524,477	11/17/2021	01/18/2035
06762T-AG-6	Babson CLO Ltd/Cayman Islands	D			2.C	10,000,000	100.2238	10,022,380	10,000,000	10,000,000	0	0	0	0	7.894	7.893	JAJO	164,458	872,957	11/17/2021	01/18/2035
06763B-AC-3	Babson CLO Ltd/Cayman Is-BABSN LP-2A B	D			1.C	10,000,000	100.1192	10,011,920	10,000,000	10,000,000	0	0	0	0	6.579	6.578	JAJO	131,580	743,921	12/02/2021	01/20/2034
06763C-AA-5	Babson CLO Ltd/Cayman Is-BABSN LP-2A E	D			3.C	20,000,000	82.6924	16,538,480	20,000,000	20,000,000	0	0	0	0	5.500	5.495	JAJO	216,944	1,100,000	12/02/2021	01/20/2034
06763C-AE-7	Babson CLO Ltd/Cayman Is-BABSN LP-2A D	D			2.C	29,807,780	89.8081	26,769,801	29,807,780	29,807,780	0	0	0	0	2.250	2.249	JAJO	132,272	671,610	12/02/2021	01/20/2034
06763F-AB-6	Barings CLO Ltd 2023-II-BABSN 2023-2A A2	D			1.A	6,000,000	100.4122	6,024,732	6,000,000	6,000,000	0	0	0	0	6.767	6.767	JAJO	81,209	580,942	05/31/2023	07/20/2036
06763F-AC-4	Barings CLO Ltd 2023-II-BABSN 2023-2A B1	D			1.C	10,000,000	100.9800	10,098,000	10,000,000	10,000,000	0	0	0	0	7.217	7.216	JAJO	144,348	1,026,487	05/31/2023	07/20/2036
06763F-AD-2	Barings CLO Ltd 2023-II-BABSN 2023-2A C	D			1.F	5,000,000	101.1911	5,059,555	5,000,000	5,000,000	0	0	0	0	7.667	7.666	JAJO	76,674	542,369	05/31/2023	07/20/2036
06763K-AC-3	Barings Middle Market CL-BMM 2023-1A A1	D			1.A	30,000,000	101.1163	30,334,890	30,000,000	30,000,000	0	0	0	0	7.067	7.067	JAJO	424,044	2,032,215	11/20/2023	01/20/2036
06763K-AE-9	Barings Middle Market CL-BMM 2023-1A A2	D			1.C	10,000,000	101.5637	10,156,370	10,000,000	10,000,000	0	0	0	0	7.867	7.866	JAJO	157,348	747,183	11/20/2023	01/20/2036
06763K-AG-4	Barings Middle Market CL-BMM 2023-1A B	D			1.F	5,000,000	102.1683	5,108,415	5,000,000	5,000,000	0	0	0	0	8.917	8.916	JAJO	89,174	419,383	11/20/2023	01/20/2036
06763M-AA-3	Barings CLO Ltd 2023-IV-BABSN 2023-4A A	D			1.A	20,000,000	100.6272	20,125,440	20,000,000	20,000,000	0	0	0	0	6.367	6.367	JAJO	254,696	1,089,775	12/06/2023	01/20/2037
06763M-AC-9	Barings CLO Ltd 2023-IV-BABSN 2023-4A B	D			1.C	9,000,000	101.3202	9,118,818	9,000,000	9,000,000	0	0	0	0	7.017	7.017	JAJO	126,313	535,574	12/06/2023	01/20/2037
06763M-AE-5	Barings CLO Ltd 2023-IV-BABSN 2023-4A C	D			1.F	5,000,000	101.4974	5,074,870	5,000,000	5,000,000	0	0	0	0	7.517	7.516	JAJO	75,174	316,847	12/06/2023	01/20/2037
06763V-AA-3	Barings CLO Ltd 2024-I-BABSN 2024-1A A	D			1.A	14,000,000	100.4377	14,061,278	14,000,000	14,000,000	0	0	0	0	6.247	6.247	JAJO	174,927	655,109	01/08/2024	01/20/2037

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
06763V-AC-9	Barings CLO Ltd 2024-I-BABSN 2024-1A B	D.....			... 1.C	6,000,000	100.9238	6,055,428	6,000,000	6,000,000	0	0	0	0	6.717	6.717	JAJ0	80,609	299,874	01/08/2024	01/20/2037
06763V-AE-5	Barings CLO Ltd 2024-I-BABSN 2024-1A C	D.....			... 1.F	3,500,000	101.1163	3,539,071	3,500,000	3,500,000	0	0	0	0	7.067	7.067	JAJ0	49,472	183,229	01/08/2024	01/20/2037
06763Y-AE-9	Barings CLO Ltd 2024-V-BABSN 2024-5A A2	D.....			... 1.A	12,500,000	100.0262	12,503,275	12,500,000	12,500,000	0	0	0	0	5.933	5.928	JAJ0	41,201		10/31/2024	07/15/2038
06764A-AA-8	Barings Loan Partners CL-BABSN LP-4A X	D.....			... 1.A	275,000	100.0007	275,002	275,000	275,000	0	0	0	0	5.877	5.883	JAJ0	5,073		08/27/2024	10/20/2034
06764A-AC-4	Barings Loan Partners CL-BABSN LP-4A A	D.....			... 1.A	34,000,000	100.0411	34,013,974	34,000,000	34,000,000	0	0	0	0	6.057	6.063	JAJ0	646,403		08/27/2024	10/20/2034
06764A-AE-0	Barings Loan Partners CL-BABSN LP-4A B	D.....			... 1.C	6,000,000	100.0687	6,004,122	6,000,000	6,000,000	0	0	0	0	6.477	6.483	JAJ0	121,981		08/27/2024	10/20/2034
06764A-AG-5	Barings Loan Partners CL-BABSN LP-4A C	D.....			... 1.F	2,750,000	100.1155	2,753,176	2,750,000	2,750,000	0	0	0	0	6.777	6.783	JAJ0	58,498		08/27/2024	10/20/2034
06764A-AJ-9	Barings Loan Partners CL-BABSN LP-4A D	D.....			... 2.B	2,000,000	100.4234	2,008,468	2,000,000	2,000,000	0	0	0	0	8.127	8.134	JAJ0	51,019		08/27/2024	10/20/2034
06764B-AA-6	Barings Loan Partners CL-BABSN LP-4A E	D.....			... 3.C	1,750,000	100.3488	1,756,104	1,750,000	1,750,000	0	0	0	0	11.277	11.285	JAJ0	61,944		08/27/2024	10/20/2034
06764C-AB-2	Barings Loan Partners CL-BABSN LP-5A B	D.....			... 1.C FE	16,500,000	99.9981	16,499,687	16,500,000	16,500,000	0	0	0	0	6.203	6.197	JAJ0	176,263		10/10/2024	01/20/2035
06764C-AC-0	Barings Loan Partners CL-BABSN LP-5A C	D.....			... 1.F FE	7,333,333	99.9957	7,333,018	7,333,333	7,333,333	0	0	0	0	6.553	6.546	JAJ0	82,759		10/10/2024	01/20/2035
06764C-AD-8	Barings Loan Partners CL-BABSN LP-5A D	D.....			... 2.A FE	4,666,667	100.2008	4,676,038	4,666,667	4,666,667	0	0	0	0	7.403	7.395	JAJ0	59,497		10/10/2024	01/20/2035
06764E-AC-6	Barings Middle Market Lo-BMMLP 2024-1A A	D.....			... 1.A	20,000,000	99.9819	19,996,380	20,000,000	20,000,000	0	0	0	0	1.696	1.697	JAJ0	111,183		08/16/2024	10/15/2034
06764E-AE-2	Barings Middle Market Lo-BMMLP 2024-1A B	D.....			... 1.C	9,250,000	99.9869	9,248,788	9,250,000	9,250,000	0	0	0	0	2.046	2.047	JAJ0	62,034		08/16/2024	10/15/2034
06764E-AG-7	Barings Middle Market Lo-BMMLP 2024-1A C	D.....			... 1.F	9,500,000	99.9812	9,498,214	9,500,000	9,500,000	0	0	0	0	2.496	2.497	JAJ0	77,723		08/16/2024	10/15/2034
06764E-AJ-1	Barings Middle Market Lo-BMMLP 2024-1A D	D.....			... 2.C	2,500,000	100.0180	2,500,450	2,500,000	2,500,000	0	0	0	0	4.296	4.297	JAJ0	35,203		08/16/2024	10/15/2034
06764F-AB-5	Barings Middle Market Lo-BMMLP 2024-1I E	D.....			... 3.C	5,000,000	99.8986	4,994,930	5,000,000	5,000,000	0	0	0	0	8.046	8.038	JAJ0	131,865		08/16/2024	10/15/2034
067925-AC-1	Barings Middle Market Lo-BMMLP 2024-1I A	D.....			... 1.A	20,000,000	99.9822	19,996,440	20,000,000	20,000,000	0	0	0	0	6.255	6.251	JAJ0	410,038		08/16/2024	10/20/2034
067925-AE-7	Barings Middle Market Lo-BMMLP 2024-1I A	D.....			... 1.C	3,000,000	99.9877	2,999,631	3,000,000	3,000,000	0	0	0	0	6.635	6.630	JAJ0	65,242		08/16/2024	10/20/2034
067925-AG-2	Barings Middle Market Lo-BMMLP 2024-1I A	D.....			... 1.F	4,000,000	99.9816	3,999,264	4,000,000	4,000,000	0	0	0	0	7.085	7.079	JAJ0	92,890		08/16/2024	10/20/2034
067925-AJ-6	Barings Middle Market Lo-BMMLP 2024-1I A	D.....			... 2.C	5,250,000	100.2805	5,264,726	5,250,000	5,250,000	0	0	0	0	8.835	8.823	JAJ0	152,032		08/16/2024	10/20/2034
067926-AA-3	Barings Middle Market Lo-BMMLP 2024-1I A	D.....			... 3.C	1,400,000	99.8962	1,398,547	1,400,000	1,400,000	0	0	0	0	12.585	12.552	JAJ0	57,750		08/16/2024	10/20/2034
067930-AL-1	Barings Private Credit C-BPCC 2023-1A A1	D.....			... 1.A	25,000,000	100.0547	25,013,675	25,000,000	25,000,000	0	0	0	0	6.286	6.285	JAJ0	340,486	130,525	08/27/2024	10/15/2036
067930-AQ-0	Barings Private Credit C-BPCC 2023-1A A2	D.....			... 1.C	10,500,000	100.0733	10,507,697	10,500,000	10,500,000	0	0	0	0	6.656	6.655	JAJ0	151,422	57,842	08/27/2024	10/15/2036
067930-AS-6	Barings Private Credit C-BPCC 2023-1A BR	D.....			... 1.F	15,000,000	100.0915	15,013,725	15,000,000	15,000,000	0	0	0	0	7.156	7.155	JAJ0	232,567	88,465	08/27/2024	10/15/2036
067932-AA-1	Barings CLO Ltd 2023-III-BABSN 2023-3A A	D.....			... 1.A	25,000,000	100.6696	25,167,400	25,000,000	25,000,000	0	0	0	0	6.356	6.355	JAJ0	344,278	1,877,650	08/28/2023	10/15/2036
067932-AE-3	Barings CLO Ltd 2023-III-BABSN 2023-3A B	D.....			... 1.C	7,000,000	100.7261	7,050,827	7,000,000	7,000,000	0	0	0	0	6.956	6.955	JAJ0	105,498	570,542	08/28/2023	10/15/2036
067932-AG-8	Barings CLO Ltd 2023-III-BABSN 2023-3A C	D.....			... 1.F	3,000,000	101.2463	3,037,389	3,000,000	3,000,000	0	0	0	0	7.456	7.455	JAJ0	48,463	260,518	08/28/2023	10/15/2036
067936-AA-2	BABSN 2024-2A A1-BABSN 2024-2A A1	D.....			... 1.A	15,000,000	100.5817	15,087,255	15,000,000	15,000,000	0	0	0	0	6.730	6.739	JAJ0	487,923		05/31/2024	07/15/2039
067936-AE-4	BABSN 2024-2A B-BABSN 2024-2A B	D.....			... 1.C	10,000,000	100.4936	10,049,360	10,000,000	10,000,000	0	0	0	0	7.000	7.009	JAJ0	338,332		05/31/2024	07/15/2039
067936-AG-9	BABSN 2024-2A C-BABSN 2024-2A C	D.....			... 1.F	5,000,000	100.0990	5,004,950	5,000,000	5,000,000	0	0	0	0	7.300	7.309	JAJ0	176,416		05/31/2024	07/15/2039
000000-00-0	Barings Euro CLO-BABSE 2023-1A A2	B.....			... 1.A	9,959,000	100.1379	9,534,210	9,200,000	9,521,080	0	0	0	(657,800)	5.000	4.996	JAJ0	80,665	496,777	02/03/2023	04/30/2036
000000-00-0	Barings Euro CLO-BABSE 2023-2A A	B.....			... 1.A	21,256,000	100.3231	20,764,875	20,000,000	20,698,000	0	0	0	(1,430,000)	4.949	4.949	JAJ0	204,869	1,019,837	11/03/2023	01/20/2038
000000-00-0	Barings Euro CLO-BABSE 2023-2A B1	B.....			... 1.C	10,628,000	100.3935	10,389,723	10,000,000	10,349,000	0	0	0	(715,000)	5.669	5.668	JAJ0	117,337	580,538	11/03/2023	01/20/2038
000000-00-0	Barings Euro Middle Mark-BEIMC 2024-1A A	B.....			... 1.A FE	19,665,000	100.0000	19,404,375	18,750,000	19,404,375	0	0	0	(260,625)	4.269	4.267	JAJ0	36,817		11/21/2024	04/20/2037
000000-00-0	BEIMC 2024-1X B-BEIMC 2024-1X B	B.....			... 1.C	4,090,320	100.0000	4,036,110	3,900,000	4,036,110	0	0	0	(54,210)	4.999	4.996	JAJ0	8,967		11/21/2024	04/20/2037
000000-00-0	Barings Euro Middle Mark-BEIMC 2024-1A B	B.....			... 1.C FE	4,090,320	100.0000	4,036,110	3,900,000	4,036,110	0	0	0	(54,210)	4.999	4.996	JAJ0	8,967		11/21/2024	04/20/2037
000000-00-0	BEIMC 2024-1X C-BEIMC 2024-1X C	B.....			... 1.F	3,775,680	100.0000	3,725,640	3,600,000	3,725,640	0	0	0	(50,040)	5.499	5.495	JAJ0	9,105		11/21/2024	04/20/2037
000000-00-0	Barings Euro Middle Mark-BEIMC 2024-1A C	B.....			... 1.F FE	3,775,680	100.0000	3,725,640	3,600,000	3,725,640	0	0	0	(50,040)	5.499	5.495	JAJ0	9,105		11/21/2024	04/20/2037
000000-00-0	Barings Euro CLO 2022-1 DAC	B.....			... 1.D	0	0.0000	0	0	134,640	0	0	0	0	5.499	5.495	JAJ0	9,105		11/21/2024	04/20/2037
1449999999. Subtotal - Bonds - Parent, Subsidiaries and Affiliates - Other Loan-Backed and Structured Securities						811,707,634	XXX	806,280,360	812,272,035	811,955,608	0	704,050	0	(3,271,925)	XXX	XXX	XXX	10,475,860	29,748,343	XXX	XXX
1509999999. Total - Parent, Subsidiaries and Affiliates Bonds						969,054,719	XXX	959,298,933	970,299,476	969,594,122	0	856,292	0	(3,271,925)	XXX	XXX	XXX	14,661,956	35,952,524	XXX	XXX
02124T-AA-1	Qatar Airways Senior Term Loa				.. 1.D PL	17,009,236	92.0849	15,725,652	17,077,341	17,009,236	0	0	0	0	6.560	6.560	MAT	276,279	642,324	01/31/2022	05/06/2031
04019Q-AE-3	ARES PBN FINANCE CO. II LLC - Class A Te				.. 1.G PL	24,000,000	100.0000	24,000,000	24,000,000	24,000,000	0	0	0	0	5.890	5.890	MAT	651,827	1,694,031	10/12/2023	10/15/2037

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
049650-AA-1	Atreides Funding Trust - Pass-Through In				1.G PL	23,753,211	100.2100	23,803,092	23,753,211	23,753,211	0	0	0	0	0.250	0.250	MAT	7,266	139,813	05/27/2022	11/18/2083
056340-AB-7	BSI3 Hold Teal Inc. - First Lien Term Lo				2.C PL	17,875,000	105.7523	18,903,224	17,875,000	17,875,000	0	0	0	0	7.560	7.560	MAT	124,137	2,309,774	08/22/2023	08/21/2028
056370-AA-6	BTC Holdings Fund III LLC Class A-T Ln				1.C PL	87,500,000	100.5145	87,950,172	87,500,000	87,500,000	0	0	0	0	8.722	8.577	JAJO	1,400,815	8,983,974	10/23/2023	07/19/2032
09582*-AB-3	Blue Owl Capital Call Facility - Fixed T				1.B PL	11,750,000	101.3139	11,904,383	11,750,000	11,750,000	0	0	0	0	6.300	6.300	MAT	187,119	0	06/11/2024	06/10/2027
09582*-AC-1	Blue Owl Capital Call Facility - Fixed T				1.B PL	6,500,000	101.9674	6,627,881	6,500,000	6,500,000	0	0	0	0	6.320	6.320	MAT	103,841	0	06/12/2024	06/10/2029
127810-AF-5	CRE II LENDER SUB I, LLC - Term Loan Ser				1.F PL	1,177,017	100.0000	1,177,017	1,177,017	1,177,017	0	0	0	0	7.020	7.020	MON	0	20,414	07/24/2024	10/25/2029
127810-AG-3	CRE II LENDER SUB I, LLC - Term Loan Ser				1.F PL	584,290	100.0000	584,290	584,290	584,290	0	0	0	0	4.370	4.370	MON	0	7,196	08/16/2024	11/19/2029
19459K-A*-2	COLLER CREDIT BACKED LOANS & NOTES II LT	C			1.G PL	13,173,794	100.0000	13,173,794	13,173,794	13,173,794	0	0	0	0	4.593	4.593	JAJO	86,032	0	10/09/2024	10/30/2036
19459K-A0-0	COLLER CREDIT BACKED LOANS & NOTES II LT	C			2.C PL	5,269,518	100.0000	5,269,518	5,269,518	5,269,518	0	0	0	0	4.593	4.593	JAJO	13,423	0	10/09/2024	10/30/2036
292510-AB-9	Encina Business Credit SPV LLC Revolving				2.B PL	17,760,000	100.0000	17,760,000	17,760,000	17,760,000	0	0	0	0	11.110	11.110	MAT	266,769	376,585	12/11/2024	07/07/2028
311680-AA-9	Fasanara Apex 3 12/22/25				2.C PL	5,290,507	100.0000	5,285,967	5,290,507	5,290,507	0	0	0	0	8.250	8.215	MON	308,558	489,393	01/25/2023	12/22/2025
31575*-AA-8	First Eagle DCF-A Funding LLC - Revolvin				3.A PL	8,977,631	100.0000	9,220,046	8,977,631	8,977,631	0	0	0	0	9.256	9.256	JAJO	171,095	259,899	07/19/2024	07/31/2031
350420-AA-2	Foundation Finance Trust - Fixed Class A				1.A PL	49,111,423	100.1000	49,308,950	49,259,690	49,111,423	0	0	0	0	5.650	2.568	MAT	650,563	3,529,547	08/23/2022	10/15/2042
350420-AB-0	Foundation Finance Trust - Fixed Class B				1.C PL	6,322,628	100.1000	6,377,371	6,371,000	6,322,628	0	0	0	0	6.740	5.603	MAT	95,032	643,025	08/23/2022	10/15/2042
350420-AC-8	Foundation Finance Trust - Fixed Class C				2.B PL	8,478,064	100.1000	8,549,541	8,541,000	8,478,064	0	0	0	0	8.000	5.286	MAT	248,756	993,933	08/23/2022	10/15/2042
350420-AD-6	Foundation Finance Trust - Fixed Class D				3.C PL	8,594,315	100.1000	8,664,656	8,656,000	8,594,315	0	0	0	0	9.350	6.690	MAT	166,364	1,079,115	08/23/2022	10/15/2042
40487*-AC-2	HV Voyage L.P. - 1st Lien Term Loan (Par				1.F PL	738,885	100.0000	738,885	738,885	738,885	0	0	0	0	7.904	7.904	MJSD	37,471	83,371	03/30/2022	03/15/2028
456860-AB-0	InfraStripe LLC				3.A PL	1,773,623	99.8628	1,801,209	1,803,684	1,785,729	0	42	0	0	10.590	10.590	MAT	79,155	902,188	09/30/2019	01/15/2025
456860-AC-8	InfraStripe LLC Delayed Draw				3.A PL	1,930,982	100.0204	1,931,376	1,930,982	1,930,982	0	0	0	0	10.850	10.850	MAT	49,590	606,632	06/30/2021	01/07/2025
486330-AB-6	KAHE VENTURES LLC SR SECD TERM LN				1.D Z	9,225,079	100.0555	9,230,199	9,225,079	9,225,079	0	0	0	0	6.860	6.860	MAT	71,504	281,482	12/20/2024	01/25/2027
515130-AA-9	Landmark Equity Partners XVI-D, LLC				1.F PL	64,506,637	100.0000	64,506,637	64,506,637	64,506,637	0	0	0	0	7.460	7.460	MAT	1,862,721	5,912,356	12/15/2024	12/15/2029
544050-AA-4	LORDCAP GREEN TR 2022-A SUBI CTF 1295 LA				1.F PL	1,508,196	85.8600	1,294,937	1,508,196	1,508,196	0	0	0	0	6.650	6.650	MAT	31,491	123,297	07/27/2022	08/30/2042
544050-AB-2	LORDCAP GREEN TR 2022-A SUBI CTF 121 W M				1.E PL	1,258,081	77.0500	969,352	1,258,081	1,258,081	0	0	0	0	5.190	4.940	MAT	49,920	57,183	05/24/2022	09/29/2045
544050-AC-0	LORDCAP GREEN TR 2022-A SUBI CTF 225 MAI				1.F PL	1,289,288	88.3200	1,138,699	1,289,288	1,289,288	0	0	0	0	6.600	5.465	MAT	12,762	106,788	06/22/2022	08/30/2039
55314V-AR-7	MI OPO HOLDINGS INC Term Loan TL-B				4.B FE	6,555,917	100.5000	7,285,889	7,249,641	6,555,917	0	0	0	0	11.710	11.710	MAT	213,871	329,014	11/04/2024	03/31/2028
60510M-A#-5	Mission Lane Credit Card Master Trust -				2.B PL	6,400,000	100.0000	6,400,000	6,400,000	6,400,000	0	0	0	0	7.950	7.950	MAT	62,927	108,788	11/27/2024	10/15/2027
60510M-A0-7	Mission Lane Credit Card Master Trust -				1.F PL	30,400,000	100.0000	30,400,000	30,400,000	30,400,000	0	0	0	0	6.950	6.950	MAT	264,047	1,566,482	11/27/2024	10/15/2027
60510M-B*-8	Mission Lane Credit Card Master Trust -				3.A PL	3,200,000	100.0000	3,200,000	3,200,000	3,200,000	0	0	0	0	12.950	12.950	MAT	51,765	83,853	11/27/2024	10/15/2027
62879K-AB-9	NB SOF V ISPV 2022 LLC - Class A Term Lo				1.G PL	14,752,211	100.0000	14,752,211	14,752,211	14,752,211	0	0	0	0	7.510	7.510	MAT	270,699	1,001,690	09/25/2024	08/15/2037
62879X-AB-1	NB Select Opportunities ISPV 2022 LLC -				1.G PL	28,449,188	89.2400	25,388,056	28,449,188	28,449,188	0	0	0	0	4.150	4.150	MAT	292,625	1,235,165	11/07/2024	04/15/2037
62879X-AC-9	NB Select Opportunities ISPV 2022 LLC -				2.C PL	6,593,895	84.9400	5,600,855	6,593,895	6,593,895	0	0	0	0	6.400	6.400	MAT	104,596	427,501	11/07/2024	04/15/2037
63155Y-AB-2	NASSAU CFO 2022 LLC - Class A Term Loan				1.G FE	30,000,000	100.0000	30,000,000	30,000,000	30,000,000	0	0	0	0	7.150	7.501	MAT	1,304,875	1,608,750	09/30/2022	11/15/2037
65012C-AB-8	JFK Airport Terminal 6 - Term Loan				2.C FE	9,135,508	101.7013	9,337,618	9,181,415	9,135,508	0	0	0	0	6.560	6.560	MAT	163,860	885,525	12/23/2024	11/17/2029
656580-AB-0	NORTH HAVEN FALCON BUYER LLC - DELAYED				3.C PL	51,807	65.0000	33,674	51,807	51,807	0	0	0	0	12.490	12.490	MAT	10,401	3,107	12/31/2024	05/19/2027
67008*-AA-9	NOVIPA K BUYER LLC INITIAL TERM LN				3.A PL	515,698	92.0000	474,442	515,698	515,698	0	0	0	0	12.710	12.710	MAT	23,008	135,150	12/31/2024	12/01/2026
67080B-AA-9	NXT Capital Structured Note I, LLC - Cla				1.A PL	31,440,443	100.0000	31,440,443	31,440,443	31,440,443	0	0	0	0	7.160	7.160	MAT	506,315	2,080,286	08/28/2024	01/26/2031
681440-AB-6	Olympia Acquisition, Inc-2022 2nd Amendm				4.C PL	28,210	44.0000	12,412	28,210	17,448	0	0	10,762	0	12.160	12.160	MAT	1,178	0	11/29/2024	02/26/2027
873040-AA-6	TOP HAWKER INTER LLC 2ND INCREMENTAL TER				3.B PL	144,500	100.0000	144,500	144,500	144,500	0	0	0	0	10.250	10.250	MAT	1,646	27,962	12/01/2020	08/30/2026
901390-AA-1	Twin Brook Capital Funding XIII WSPV, LL				1.E PL	11,403,960	100.0000	11,403,960	11,403,960	11,403,960	0	0	0	0	7.780	7.780	MAT	48,043	788,070	03/28/2024	10/18/2028
90140*-AA-0	Twin Brook Capital Funding XIV WSPV, LLC				1.E PL	8,057,648	100.0000	8,057,648	8,057,648	8,057,648	0	0	0	0	7.760	7.760	MAT	128,294	594,760	03/28/2024	10/18/2028
96222*-AA-4	WHL P IV (RP), LP Senior Secured				1.G PL	10,966,549	101.7438	11,157,784	10,966,549	10,966,549	0	0	0	0	7.270	7.270	MAT	215,521	735,102	10/19/2023	03/31/2026
000000-00-0	NP Inc. - NP Line of Credit First Lien R				6. *	5,205,595	96.2000	5,007,783	5,205,595	5,007,783	(197,813)	0	0	0	12.000	12.000	MAT	53,618	277,621	06/27/2024	05/18/2026
E5000*-AJ-3	ESPAI BARCA FONDO DE TITULIZACION EUR FA	B			2.B PL	9,966,500	102.9623	9,234,826	8,666,667	8,969,133	0	0	0	(397,367)	5.820	5.820	MAT	318,319	0	07/01/2024	06/30/2028
E83700-AC-2	REAL BETIS BALOMPIE SAD Senior Secured	B			2.C PL	21,364,000	106.7914	22,103,684	20,000,000	20,698,000	0	0	0	(666,000)	5.820	5.820	MAT	629,081	0	06/26/2024	07/15/2034
F98630-AB-3	XPFIBRE SAS Senior Term Loa	B			2.B PL	12,155,000	100.2215	11,409,115	11,000,000	11,383,900	0	0	0	0	5.460	5.460	MAT	115,359	0	08/30/2024	05/14/2031

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost			Rate Used to Obtain Fair Value	Fair Value												Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
G0567@-AA-4	Arqiva Broadcast Parent Limited - GBP Su	B.....			.. 3.C YE	.. 5,664,794	.. 100.5000	.. 6,290,798	.. 5,000,000	.. 6,181,256	.. 0	.. 0	.. 0	.. 516,463	.. 9.230	.. 9.230	MAT	.. 145,592	.. 888,464	.. 11/02/2022	.. 09/30/2029
G1339#-AA-7	Blueco 22 Limited - GBP Term Loan	B.....			.. 3.A YE	.. 24,597,540	.. 101.8593	.. 25,503,532	.. 20,000,000	.. 24,787,620	.. 0	.. 0	.. 0	.. (483,120)	.. 8.070	.. 8.070	MAT	.. 255,045	.. 2,181,152	.. 11/15/2023	.. 07/13/2027
G3166*-AA-5	CIP VIII Holdings SPV L.P - Term Loan	C.....			.. 1.F PL	.. 139,540,000	.. 101.3482	.. 141,887,480	.. 140,000,000	.. 139,540,000	.. 0	.. 0	.. 0	.. 0	.. 7.120	.. 7.120	MAT	.. 864,768	.. 14,726,518	.. 06/06/2022	.. 11/24/2026
G8656@-AA-9	TPG TIGER HOLDCO, LLC, - Class A Term Lo	C.....			.. 1.G PL	.. 35,060,617	.. 98.7400	.. 34,618,853	.. 35,060,617	.. 35,060,617	.. 0	.. 0	.. 0	.. 0	.. 3.950	.. 3.950	JAJO	.. 307,796	.. 1,340,262	.. 11/04/2024	.. 07/14/2042
G8656@-AB-7	TPG TIGER HOLDCO, LLC, - Class B Term Lo	C.....			.. 2.B PL	.. 11,686,872	.. 98.0600	.. 11,460,147	.. 11,686,872	.. 11,686,872	.. 0	.. 0	.. 0	.. 0	.. 7.900	.. 7.900	JAJO	.. 205,197	.. 565,812	.. 11/04/2024	.. 07/14/2042
G8359#-AB-3	VIDA Finance PLC EUR Pass-Through Loan S	B.....			.. 2.B PL	.. 18,287,113	.. 109.5600	.. 22,878,552	.. 20,178,000	.. 20,882,212	.. 0	.. 0	.. 0	.. (1,442,727)	.. 0.000	.. 0.000	MAT	.. 0	.. 562,078	.. 04/24/2023	.. 03/27/2026
N3000@-AA-5	Cooperatie Koninklijke Cosun U.A - EUR S	C.....			.. 2.B	.. 21,730,000	.. 106.4071	.. 22,024,142	.. 20,000,000	.. 20,698,000	.. 0	.. 0	.. 0	.. (1,430,000)	.. 5.010	.. 5.010	MAT	.. 265,003	.. 1,014,836	.. 01/31/2023	.. 01/31/2030
W8000#-AE-4	Samh-nllsbyggnadsbolaget i Norden AB - T	D.....			.. 4.A PL	.. 5,000,000	.. 96.7311	.. 4,836,555	.. 5,000,000	.. 5,000,000	.. 0	.. 0	.. 0	.. 0	.. 9.000	.. 6.420	MAT	.. 247,083	.. 166,250	.. 03/11/2024	.. 07/21/2027
W9001#-AK-7	Solor Bioenergi AB - SEK Term Loan	B.....			.. 2.B	.. 30,409,368	.. 100.0000	.. 29,804,375	.. 330,000,000	.. 29,506,331	.. 0	.. 0	.. 0	.. (903,036)	.. 5.010	.. 5.010	MAT	.. 377,146	.. 461,004	.. 05/23/2024	.. 02/14/2029
18502@-AA-1	Clearinghouse CDFI - INITIAL LN 1ST TRAN	C.....			.. 1.G	.. 10,000,000	.. 87.9080	.. 8,790,800	.. 10,000,000	.. 10,000,000	.. 0	.. 0	.. 0	.. 0	.. 8.590	.. 8.590	MAT	.. 198,250	.. 390,000	.. 05/25/2022	.. 07/01/2032
36457W-AC-5	Galway Borrower LLC-1L SR SECD	C.....			.. 3.B PL	.. 45,305	.. 99.0000	.. 44,892	.. 45,346	.. 45,305	.. 0	.. 0	.. 0	.. 0	.. 6.000	.. 6.000	MON	.. 0	.. 605	.. 09/29/2023	.. 09/30/2028
55076*-AA-1	LUXURY MTG CORP REVOLVING LOAN	C.....			.. 6. *	.. 2,500,000	.. 100.0000	.. 2,500,000	.. 2,500,000	.. 2,500,000	.. 0	.. 0	.. 0	.. 0	.. 0.000	.. 0.000	MAT	.. 57,334	.. 131,743	.. 05/28/2024	.. 06/21/2026
00218F-AB-0	ASPF II 2022-1, LP Class A-1 Loan	C.....			.. 1.G PL	.. 7,445,877	.. 100.6600	.. 7,445,019	.. 7,445,877	.. 7,445,877	.. 0	.. 0	.. 0	.. 0	.. 4.750	.. 4.750	MAT	.. 89,375	.. 1,629,749	.. 09/30/2024	.. 10/01/2034
00218F-AE-4	ASPF II 2022-1, LP Class A-2 Loan	C.....			.. 1.G PL	.. 4,856,006	.. 100.8000	.. 4,894,855	.. 4,856,006	.. 4,856,006	.. 5,865	.. 0	.. 0	.. 0	.. 7.600	.. 7.600	MAT	.. 93,289	.. 654,429	.. 09/30/2024	.. 10/01/2034
51222H-AN-7	LAKEVIEW LOAN SERVICING Lakeview MSR Tr	C.....			.. 1.E PL	.. 45,000,000	.. 101.0700	.. 45,481,500	.. 45,000,000	.. 45,000,000	.. 0	.. 0	.. 0	.. 0	.. 6.940	.. 6.940	MAT	.. 130,078	.. 647,734	.. 10/31/2024	.. 06/21/2029
73112@-AB-6	Policy Services Company, 1L PIK Toggle T	C.....			.. 5.B GI	.. 8,042,520	.. 99.0200	.. 8,182,590	.. 8,263,573	.. 8,042,520	.. 0	.. 0	.. 0	.. 0	.. 14.900	.. 14.900	MAT	.. 232,517	.. 2,056,550	.. 10/24/2024	.. 06/21/2026
73112@-AC-4	Policy Services Company, 1L PIK Toggle D	C.....			.. 5.B GI	.. 2,835,307	.. 99.0200	.. 2,898,723	.. 2,927,412	.. 2,835,307	.. 0	.. 0	.. 0	.. 0	.. 14.900	.. 14.900	MAT	.. 518,635	.. 361,486	.. 10/24/2024	.. 06/21/2026
67576A-A*-1	OCULAR THERAPEUTIX INC First Lien Term	C.....			.. 6. *	.. 7,943,000	.. 123.4000	.. 8,021,000	.. 6,500,000	.. 7,943,000	.. 0	.. 0	.. 0	.. 0	.. 11.230	.. 11.230	MAT	.. 200,263	.. 120,908	.. 09/11/2024	.. 08/02/2029
92569#-AA-4	VICINITY ENERGY INC Term Loan	C.....			.. 2.B Z	.. 6,917,400	.. 100.0000	.. 7,000,000	.. 7,000,000	.. 6,917,400	.. 0	.. 0	.. 0	.. 0	.. 6.990	.. 6.990	MAT	.. 44,695	.. 112,115	.. 09/12/2024	.. 09/12/2029
85214@-AA-9	SPRUCE POWER HOLDING COR Spruce SET Borr	C.....			.. 1.E PL	.. 19,166,667	.. 100.8600	.. 19,331,500	.. 19,166,667	.. 19,166,667	.. 0	.. 0	.. 0	.. 0	.. 6.890	.. 6.890	MAT	.. 157,713	.. 520,821	.. 06/26/2024	.. 04/17/2042
83428#-AA-4	Solar Ln Borrower 2024-1 LLC Class A Loa	C.....			.. 1.F PL	.. 32,047,862	.. 90.0600	.. 30,219,144	.. 33,554,457	.. 32,047,862	.. 0	.. 0	.. 0	.. 0	.. 5.300	.. 5.300	MAT	.. 504,307	.. 0	.. 09/25/2024	.. 09/01/2050
83428#-AB-2	Solar Ln Borrower 2024-1 LLC Class B Loa	C.....			.. 1.G PL	.. 3,592,064	.. 62.7900	.. 3,490,339	.. 5,558,750	.. 3,592,064	.. 0	.. 0	.. 0	.. 0	.. 0.000	.. 0.000	MAT	.. 0	.. 0	.. 09/25/2024	.. 09/01/2050
83428#-AC-0	Solar Ln Borrower 2024-1 LLC Class C Loa	C.....			.. 2.B PL	.. 3,587,155	.. 77.2800	.. 3,676,596	.. 4,757,500	.. 3,587,155	.. 0	.. 0	.. 0	.. 0	.. 0.000	.. 0.000	MAT	.. 0	.. 0	.. 09/25/2024	.. 09/01/2050
83428#-AD-8	Solar Ln Borrower 2024-1 LLC Class D Loa	C.....			.. 3.A PL	.. 2,187,801	.. 87.3000	.. 2,407,298	.. 2,757,500	.. 2,187,801	.. 0	.. 0	.. 0	.. 0	.. 0.000	.. 0.000	MAT	.. 0	.. 0	.. 09/25/2024	.. 09/01/2050
83428#-AE-6	SUNLIGHT FINANCIAL LLC Solar Loan Borr	C.....			.. 6. *	.. 25,699	.. 0.0400	.. 20,559	.. 51,397,512	.. 20,559	.. (5,140)	.. 0	.. 0	.. 0	.. 0.000	.. 0.000	MAT	.. 0	.. 0	.. 09/25/2024	.. 11/30/2037
71384P-A#-8	Perimeter Master Note Business Trust - S	C.....			.. 2.C PL	.. 21,225,485	.. 98.8500	.. 21,187,294	.. 21,433,782	.. 21,225,485	.. 0	.. 0	.. 0	.. 0	.. 5.890	.. 5.890	MAT	.. 204,088	.. 1,720,642	.. 03/06/2024	.. 11/15/2028
71384P-A*-2	Perimeter Master Note Business Trust - S	C.....			.. 1.D PL	.. 80,640,190	.. 97.6500	.. 79,632,429	.. 81,548,826	.. 80,640,190	.. 0	.. 0	.. 0	.. 0	.. 4.710	.. 4.710	MAT	.. 592,101	.. 6,089,313	.. 03/06/2024	.. 11/15/2028
71384P-A@-0	Perimeter Master Note Business Trust - S	C.....			.. 1.G PL	.. 15,532,990	.. 98.2000	.. 15,446,931	.. 15,730,072	.. 15,532,990	.. 0	.. 0	.. 0	.. 0	.. 5.350	.. 5.350	MAT	.. 125,757	.. 1,096,347	.. 03/06/2024	.. 11/15/2028
71384P-B*-1	Perimeter Master Note Business Trust - S	C.....			.. 3.C PL	.. 24,536,889	.. 97.8100	.. 24,236,056	.. 24,778,710	.. 24,536,889	.. 0	.. 0	.. 0	.. 0	.. 8.510	.. 8.510	MAT	.. 341,589	.. 2,834,193	.. 03/06/2024	.. 11/15/2028
71384P-B@-9	Perimeter Master Note Business Trust - S	C.....			.. 4.C PL	.. 10,695,378	.. 96.0100	.. 10,498,992	.. 10,935,311	.. 10,695,378	.. 0	.. 0	.. 0	.. 0	.. 11.380	.. 11.380	MAT	.. 218,785	.. 1,880,379	.. 03/06/2024	.. 11/15/2028
50246*-AG-4	LYNV Funding LLC - 1st Lien	C.....			.. 1.F PL	.. 1,250,000	.. 100.4297	.. 1,255,372	.. 1,250,000	.. 1,250,000	.. 0	.. 0	.. 0	.. 0	.. 6.840	.. 6.840	MON	.. 47,263	.. 0	.. 06/12/2024	.. 06/12/2029
000000-00-0	JETBLUE AIRWAYS CORPORAT Term Loan Class	C.....			.. 2.A Z	.. 1,020,989	.. 103.0000	.. 1,051,619	.. 1,020,989	.. 1,020,989	.. 0	.. 0	.. 0	.. 0	.. 6.990	.. 6.990	MAT	.. 28,337	.. 0	.. 08/16/2024	.. 7

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
18685P-AA-9	CLIFFWATER ENHANCED LENDING FUND-Senior				1.D PL	10,714,286	100.0000	10,714,286	10,714,286	10,714,286	0	0	0	0	7.867	7.867	JAJO	0	304,309	07/19/2024	07/19/2029
1819999999	Subtotal - Bonds - Unaffiliated Bank Loans - Issued					1,359,152,277	XXX	1,359,805,119	1,709,337,118	1,358,482,805	(197,088)	42	10,762	(5,576,887)	XXX	XXX	XXX	21,055,134	88,614,270	XXX	XXX
00135B-AC-7	AI Convoy (Luxembourg) S.A.R.L - 2021 Te		D		4.C Z	2,685,958	100.0000	2,754,829	2,754,829	2,687,574	0	0	0	0	10.920	10.920	MAT	160,085	494,165	10/28/2021	01/17/2027
00177F-AA-1	AMF Levered II, LLC - Revolver				1.C PL	15,710,769	100.0000	15,710,769	15,710,769	15,710,769	0	0	0	0	0.000	0.000	MAT	101,878	1,197,027	07/24/2024	08/21/2028
00233F-AA-3	ATL II MRO Holdings Inc. - Senior Term L				4.B	1,216,383	98.5000	1,228,859	1,247,572	1,216,383	0	0	0	0	9.820	9.820	MAT	20,629	240,183	11/01/2022	11/01/2028
00241E-AA-5	AMF ENDEAVOUR, LLC, - Senior Secured Loa				1.F PL	33,333,333	100.0000	33,333,333	33,333,333	33,333,333	0	0	0	0	7.060	7.060	MAT	92,556	1,377,129	12/18/2024	10/02/2033
00268*-AA-5	ASF VIII SUNTORI, L.P and ASF VIII B SUN				1.G PL	42,820,000	100.0000	41,396,000	40,000,000	41,396,000	0	0	0	(1,424,000)	6.600	2.669	MAT	697,684	815,800	06/25/2024	03/28/2029
00452F-AA-7	Accommodations Plus Technologies LLC/Ter				4.B PL	2,639,629	100.0000	2,639,629	2,639,629	2,639,629	0	0	0	0	11.230	11.230	MAT	537,502	45,321	12/29/2023	05/11/2025
00640F-AA-0	Adams Street Global Secondary Fund 6 LP				1.F PL	9,714,095	100.0000	9,812,217	9,812,217	9,714,095	0	0	0	0	8.100	8.100	MAT	423,994	0	03/15/2024	03/14/2030
03979F-AA-9	RTI Surgical		C		3.B PL	2,990,177	100.0000	2,990,177	2,990,177	2,990,177	0	0	0	0	12.090	12.090	MAT	61,085	476,532	07/16/2020	07/20/2026
04019Q-AC-7	ARES PBN FINANCE CO. II LLC - Class B Te				2.C PL	5,000,000	100.0000	5,000,000	5,000,000	5,000,000	0	0	0	0	8.290	8.290	MAT	87,506	499,629	10/12/2023	09/24/2026
04940F-AA-9	Atlas Securitized Products Funding 3 LP				1.D PL	67,540,541	99.4000	67,135,297	67,540,541	67,540,541	0	0	0	0	6.290	6.290	MON	1,238,146	2,779,737	06/27/2024	03/28/2069
04940F-AB-7	Atlas Securitized Products Funding 3 LP				2.B PL	5,959,459	100.0000	5,959,459	5,959,459	5,959,459	0	0	0	0	7.840	7.840	MON	134,807	257,565	06/27/2024	03/28/2069
05629F-AA-8	BR DSCO I INVESTCO, LLC - Senior Secured				2.B PL	16,000,000	100.0000	16,000,000	16,000,000	16,000,000	0	0	0	0	7.610	7.230	MAT	314,435	1,101,787	05/01/2024	04/22/2032
05630F-AA-1	BCRED MERIDIAN PEAK FUNDING LLC - Secure				1.F PL	24,600,000	100.0000	24,600,000	24,600,000	24,600,000	0	0	0	0	7.130	7.130	MAT	355,462	1,956,997	09/09/2024	08/16/2030
05651E-AA-7	BR DSCO II Investco, LLC & BR SCO II-A I				1.G PL	10,885,714	100.0000	10,885,714	10,885,714	10,885,714	0	0	0	0	7.540	7.540	MAT	126,436	384,721	10/01/2024	07/01/2033
06683E-AA-7	BANYAN SOFTWARE HOLDINGS LLC - TERM LOA				3.B PL	405,228	100.0000	405,228	405,228	405,228	0	0	0	0	11.460	11.460	MAT	8,245	84,111	10/29/2020	10/30/2026
06683E-AB-5	BANYAN SOFTWARE HOLDINGS LLC - DELAYED				3.B PL	232,385	100.0000	232,385	232,385	232,385	0	0	0	0	11.460	11.460	MAT	4,741	49,866	04/19/2022	10/30/2026
09262X-AD-3	Blackstone Credit Rated Fund Trust SPV L				1.G PL	30,211,070	100.0000	30,211,070	30,211,070	30,211,070	0	0	0	0	7.260	7.260	MAT	473,652	857,016	12/18/2024	12/22/2035
09263R-AA-1	Blackstone Cooper Asset Holdco LLC-Delay				1.G PL	10,714,286	100.0000	10,714,286	10,714,286	10,714,286	0	0	0	0	7.810	7.810	MAT	60,483	0	10/01/2024	09/27/2036
09580*-AA-7	BLUE OCEAN INCOME FUND III LP - Class A				1.G PL	3,291,806	100.0000	3,291,806	3,291,806	3,291,806	0	0	0	0	7.000	7.000	MN	343,863	0	09/09/2024	11/07/2027
10970F-AA-9	Brinley PD SPV I LLC/Revolving Facility				1.F PL	9,421,652	100.0000	9,600,000	9,600,000	9,421,652	0	0	0	0	7.450	7.837	MON	781,158	138,414	12/09/2024	10/14/2032
12721F-AC-3	CVP HOLDCO INC. - DELAYED DRAW TERM LOA				3.B PL	11,047	100.0000	11,047	11,047	11,047	0	0	0	0	0.000	0.000	MAT	0	1,820	12/29/2023	10/31/2025
12756E-AB-5	CGI PARENT LLC 1st AMEND TERM LOAN				4.B	466,104	100.0000	480,519	480,519	466,104	0	0	0	0	9.090	9.090	MAT	7,397	77,709	12/30/2022	02/14/2028
12758F-AA-3	CMFT RE Lending Sub MM, LLC - Term Loan				1.G PL	6,277,500	100.0000	6,277,500	6,277,500	6,277,500	0	0	0	0	6.960	6.960	MAT	107,993	449,099	03/16/2022	07/16/2027
12758F-AB-1	CMFT RE Lending Sub MM, LLC - Term Loan				1.G PL	13,644,400	100.0000	13,644,400	13,644,400	13,644,400	0	0	0	0	6.730	6.730	MAT	196,121	963,787	06/13/2022	10/10/2027
12758F-AC-9	CMFT RE Lending Sub MM, LLC - Term Loan				1.G PL	6,075,000	100.0000	6,075,000	6,075,000	6,075,000	0	0	0	0	6.530	6.530	MAT	102,380	417,909	07/11/2022	11/01/2027
12758F-AD-7	CMFT RE Lending Sub MM, LLC - Term Loan				1.F PL	11,335,988	100.0000	11,335,988	11,335,988	11,335,988	0	0	0	0	6.280	6.280	MAT	184,035	769,488	12/01/2022	09/06/2027
12758F-AE-5	CMFT RE Lending Sub MM, LLC - Term Loan				2.A PL	4,584,000	100.0000	4,584,000	4,584,000	4,584,000	0	0	0	0	6.940	6.940	MAT	65,773	330,137	09/14/2022	01/13/2028
12765F-AA-8	CCOF II & CARLYLE CREDIT OPPORTUNITIES C				1.E PL	25,000,000	100.0000	25,000,000	25,000,000	25,000,000	0	0	0	0	8.880	8.880	MAT	658,882	2,432,986	01/10/2023	11/03/2032
12781E-AA-6	CRE II LENDER SUB I, LLC - Term Loan Ser				1.F PL	3,960,887	100.0000	3,960,887	3,960,887	3,960,887	0	0	0	0	6.690	6.690	MAT	66,482	257,678	10/25/2024	11/24/2027
12781E-AD-0	CRE II LENDER SUB I, LLC - Term Loan Ser				1.F PL	3,793,898	100.0000	3,793,898	3,793,898	3,793,898	0	0	0	0	7.140	7.140	MAT	83,682	267,840	10/25/2024	04/26/2028
12781E-AB-8	CRE II LENDER SUB I, LLC - Term Loan Ser				1.F PL	670,765	100.0000	670,765	670,765	670,765	0	0	0	0	7.240	7.240	MAT	14,403	26,397	10/25/2024	06/14/2029
14979F-AA-6	CAZ GP OWNERSHIP EF AGGREGATOR, L.P. - S				1.G PL	23,800,000	100.0000	23,800,000	23,800,000	23,800,000	0	0	0	0	9.560	9.560	MAT	313,077	1,142,438	06/30/2023	12/07/2040
14979E-AA-4	CAZ GP OWNERSHIP CD AGGREGATOR - Secured				1.G PL	26,200,000	100.0000	26,200,000	26,200,000	26,200,000	0	0	0	0	9.560	9.560	MAT	344,648	2,602,715	06/30/2023	12/07/2040
15644F-AA-4	Centric Brands Inc. - 2024 Term Loan				5.C PL	1,807,916	100.0000	1,807,916	1,807,916	1,807,916	0	0	0	0	10.030	10.030	MAT	75,395	99,629	02/06/2024	08/06/2029
15645F-AA-3	Centric Brands Inc. - 2024 Term Loan A1				6. PL	1,865,796	100.0000	1,865,796	1,865,796	1,865,796	0	0	0	0	11.030	11.030	MAT	92,062	112,355	02/06/2024	02/06/2031
15645F-AB-1	Centric Brands Inc. - 2024 Term Loan A2				6. PL	1,697,404	100.0000	1,697,404	1,697,404	1,697,404	0	0	0	0	12.530	12.530	MAT	137,926	0	11/06/2024	02/06/2031
000000-00-0	DF Fund IV Herman Loan - Delayed Draw Te				2.B Z	20,937,000	99.4337	20,881,079	21,000,000	20,937,000	0	0	0	0	18.040	18.040	MAT	0	236,373	07/25/2024	11/15/2025
171435-AA-8	CHURCHILL CFO 2022-1 LTD. - Class A Revo				1.F PL	40,000,000	100.0000	40,000,000	40,000,000	40,000,000	0	0	0	0	7.360	7.360	MAT	3,469,078	1,250,000	06/30/2022	06/15/2037
171435-AC-4	CHURCHILL CFO 2022-1 LTD. - Class B Revo				2.B PL	10,000,000	98.0700	9,807,000	10,000,000	10,000,000	0	0	0	0	7.360	7.360	MAT	867,269	375,000	06/30/2022	06/15/2037
18914D-AC-2	CLOVER HOLDINGS 2 LLC 7.750% Fixed Ra				4.B Z	2,874,000	100.0000	2,874,000	2,874,000	2,874,000	0	0	0	0	7.750	7.750	MAT	11,137	0	12/13/2024	11/01/2031
19076F-AA-7	COBALT BUYER SUB INC. - CLOSING DATE TE				3.B PL	273,516	100.0000	273,516	273,516	273,516	0	0	0	0	9.860	9.860	MAT	2,449	38,085	09/30/2021	10/02/2028
19076F-AB-5	COBALT BUYER SUB INC. - DELAYED DRAW TE				3.B PL	91,713	100.0000	91,713	91,713	91,713	0	0	0	0	9.860	9.860	MAT	1,574	14,787	06/21/2023	10/02/2028
21079F-AA-6	CONTINENTAL ACQUISITION HOLDINGS INC. -				3.C PL	627,931	77.0000	483,507	627,931	627,931	0	0	0	0	11.480	11.480	MAT	57,603	77,009	12/31/2024	01/20/2027

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
21079#-AB-4	CONTINENTAL ACQUISITION HOLDINGS INC. - .....	.....	.....	.....	...3.C PL	231,548 ..	77.0000 ..	178,292 ..	231,548 ..	231,548 ..	0	0	0	0	11.480	11.480	MAT	18,907	27,043	12/31/2024	01/20/2027
25471V-AE-8	DISH DBS IssuerIncrmntlTL .....	.....	.....	.....	...4.C Z	1,125,833 ..	104.9380 ..	1,224,277 ..	1,166,667 ..	1,125,833 ..	0	0	0	0	6.120	6.120	MON	26,120	0	09/27/2024	09/30/2025
26789#-AA-6	DYNAMIC NC AEROSPACE HOLDINGS LLC - TER .....	.....	.....	.....	...2.C PL	390,401 ..	100.0000 ..	390,401 ..	390,401 ..	390,401 ..	0	0	0	0	11.240	11.240	MAT	25,737	44,728	12/29/2020	12/30/2026
26888*-AA-0	EPS Nass Parent Inc. - Term Loan .....	.....	.....	.....	...3.A PL	444,386 ..	96.5000 ..	428,833 ..	444,386 ..	444,386 ..	0	0	0	0	11.180	11.180	MAT	0	61,907	04/16/2021	04/19/2028
28622#-AA-5	ELEVATION SERVICES PARENT HOLDINGS LLC .....	.....	.....	.....	...3.B PL	173,382 ..	96.0000 ..	166,447 ..	173,382 ..	173,382 ..	0	0	0	0	10.740	10.740	MAT	4,656	26,027	12/17/2020	12/18/2026
28622#-AB-3	ELEVATION SERVICES PARENT HOLDINGS LLC .....	.....	.....	.....	...3.B PL	231,772 ..	96.0000 ..	222,501 ..	231,772 ..	231,772 ..	0	0	0	0	10.720	10.720	MAT	4,141	37,380	04/30/2021	12/18/2026
30034#-AA-3	EVERLAKE PRIVATE FUND BORROWER, LLC - Se .....	.....	.....	.....	...2.A PL	27,666,667 ..	100.0000 ..	27,666,667 ..	27,666,667 ..	27,666,667 ..	0	0	0	0	7.500	7.323	MAT	344,752	1,709,810	12/20/2024	09/28/2037
30301*-AA-1	FS CREIT FINANCE MM-1 LLC - Secured Term .....	.....	.....	.....	...1.F PL	127,500,000 ..	100.0000 ..	127,500,000 ..	127,500,000 ..	127,500,000 ..	0	0	0	0	7.170	7.185	MAT	1,598,859	10,075,408	11/13/2024	09/20/2029
30319*-AA-1	FSS Buyer LLC Initial Term Loan .....	.....	.....	.....	...3.B PL	7,066,572 ..	100.0000 ..	7,210,788 ..	7,210,788 ..	7,073,509 ..	0	18	0	0	9.360	9.360	MAT	293,742	1,052,713	08/31/2021	08/31/2028
32013#-AA-2	FIRST EAGLE DIRECT LENDING V-B, LLC - Se .....	.....	.....	.....	...1.D PL	19,613,490 ..	100.0000 ..	19,613,490 ..	19,613,490 ..	19,613,490 ..	0	0	0	0	8.030	8.030	MAT	343,952	2,062,330	01/31/2024	06/16/2029
34559*-AA-2	Forest Buyer LLC - Term Loan .....	.....	.....	.....	...5.B GI	531,969 ..	99.3000 ..	541,790 ..	545,609 ..	531,969 ..	0	0	0	0	9.330	9.330	MAT	13,424	33,443	03/15/2024	03/15/2030
35042#-AC-6	FOUNDATION CONSUMER BRANDS LLC - TERM L .....	.....	.....	.....	...2.C PL	349,635 ..	100.0000 ..	349,635 ..	349,635 ..	349,635 ..	0	0	0	0	10.890	10.890	MAT	15,061	49,489	02/11/2021	10/01/2026
35956#-AB-2	Fugue Finance B.V. - 2023 EUR Term Loan	B .....	.....	.....	...5.B GI	1,058,862 ..	100.2020 ..	1,036,991 ..	1,000,000 ..	1,037,901 ..	0	0	0	(71,707)	7.160	7.160	MAT	6,588	111,577	09/28/2023	01/31/2028
40481#-AA-8	HH - STELLA INC. - INITIAL TERM LOAN .....	.....	.....	.....	...3.B PL	465,797 ..	100.0000 ..	465,797 ..	465,797 ..	465,797 ..	0	0	0	0	9.980	9.980	MAT	12,206	112,888	04/20/2021	04/24/2028
40481#-AB-6	HH - STELLA INC. - DELAYED DRAW TERM LO .....	.....	.....	.....	...3.B PL	83,317 ..	100.0000 ..	83,317 ..	83,317 ..	83,317 ..	0	0	0	0	9.980	9.980	MAT	4,500	13,953	03/24/2023	04/24/2028
40494#-AB-1	HXSG INTERMEDIARY 2 LLC INITIAL DDTL .....	.....	.....	.....	...4.C	183,184 ..	99.0000 ..	181,353 ..	183,184 ..	183,184 ..	0	0	0	0	8.830	8.830	MAT	4,678	14,167	07/10/2024	11/28/2029
40506#-AA-1	Hanley Wood LLC - 2021 Delayed Draw Term .....	.....	.....	.....	...4.C IF	649,617 ..	100.0000 ..	649,617 ..	649,617 ..	649,617 ..	0	0	0	0	10.400	10.400	MAT	11,837	173,899	01/19/2023	05/10/2026
40506#-AC-7	Hanley Wood LLC - 2021 Incremental Term .....	.....	.....	.....	...4.C IF	3,768,581 ..	100.0000 ..	3,845,491 ..	3,845,491 ..	3,769,429 ..	0	0	0	0	10.190	10.190	MAT	5,442	695,580	12/17/2021	05/10/2026
42328D-AG-3	Helios Software Holdings EUR TLB (Mar'21 .....	.....	.....	.....	...4.B FE	649,988 ..	99.8130 ..	750,313 ..	726,368 ..	699,098 ..	0	0	0	(48,300)	6.430	6.430	MAT	13,630	112,675	09/26/2022	03/11/2028
45054#-AA-6	ITI Intermodal - Term Loan .....	.....	.....	.....	...3.A PL	1,229,042 ..	99.9000 ..	1,254,699 ..	1,255,955 ..	1,229,189 ..	0	0	0	0	10.630	10.630	MAT	34,095	151,841	12/20/2021	12/20/2027
45054#-AB-4	ITI Intermodal INC - Delayed Draw Term L .....	.....	.....	.....	...3.A PL	181,734 ..	99.9000 ..	181,553 ..	181,734 ..	181,734 ..	0	0	0	0	10.600	10.600	MAT	4,933	23,672	03/31/2023	12/21/2027
45249#-AA-0	Image Intl Holdco Initial Term Ln .....	.....	.....	.....	...5.A YE	1,148,728 ..	96.2000 ..	1,110,741 ..	1,154,616 ..	1,148,728 ..	0	0	0	0	10.240	10.240	MAT	20,025	92,991	02/26/2024	07/10/2025
45661*-AA-3	INDUSTRY VENTURES MM HOLDCO, LLC, - Seni .....	.....	.....	.....	...1.F PL	20,000,000 ..	100.0000 ..	20,000,000 ..	20,000,000 ..	20,000,000 ..	0	0	0	0	8.390	8.390	MAT	701,063	1,017,299	07/26/2024	07/12/2037
46126#-AB-4	INTRAPAC PARENT INC. - FIRST AMENDMENT T .....	.....	.....	.....	...3.B PL	144,419 ..	100.0000 ..	144,419 ..	144,419 ..	144,419 ..	0	0	0	0	9.930	9.930	MAT	12,571	24,579	08/03/2021	01/11/2026
47235#-AA-2	JEFFERIES DIRECT LENDING FUND II SPE LLC .....	.....	.....	.....	...2.C PL	19,669,423 ..	100.0000 ..	19,669,423 ..	19,669,423 ..	19,669,423 ..	0	0	0	0	7.230	7.230	MAT	362,225	1,175,860	12/19/2024	06/17/2031
47236#-AA-1	JEFFERIES DIRECT LENDING OFFSHORE FD II .....	.....	.....	.....	...2.C PL	8,098,456 ..	100.0000 ..	8,098,456 ..	8,098,456 ..	8,098,456 ..	0	0	0	0	7.130	7.130	MAT	115,613	507,687	12/19/2024	06/17/2031
47236#-AA-5	JEFFERIES DIRECT LENDING OFFSHORE FUND I .....	.....	.....	.....	...2.C PL	3,075,488 ..	100.0000 ..	3,075,488 ..	3,075,488 ..	3,075,488 ..	0	0	0	0	7.210	7.210	MAT	48,494	154,908	12/19/2024	06/17/2031
47236#-AA-3	JEFFERIES DIRECT LENDING FD II C SPE LLC .....	.....	.....	.....	...2.C PL	3,453,578 ..	100.0000 ..	3,453,578 ..	3,453,578 ..	3,453,578 ..	0	0	0	0	7.230	7.230	MAT	62,655	202,133	12/19/2024	06/17/2031
47237#-AA-0	JEFFERIES DIRECT LENDING OFFSHORE FUND I .....	.....	.....	.....	...2.B PL	5,936,170 ..	100.0000 ..	5,936,170 ..	5,936,170 ..	5,936,170 ..	0	0	0	0	7.040	7.040	MAT	80,177	294,274	12/19/2024	06/17/2031
48285#-AA-9	KKR LION FINANCING L.P. - Senior Secured .....	.....	.....	.....	...1.G PL	40,000,000 ..	100.0000 ..	40,000,000 ..	40,000,000 ..	40,000,000 ..	0	0	0	0	9.500	9.499	MAT	633,333	2,427,778	02/29/2023	08/15/2043
50207M-AA-5	LMF 2023-1, LLC - Class A Term Loans .....	.....	.....	.....	...1.G PL	40,000,000 ..	99.9165 ..	39,966,604 ..	40,000,000 ..	40,000,000 ..	0	0	0	0	7.250	7.250	MAT	708,475	2,764,374	07/12/2023	07/19/2032
50541#-AA-5	Laboratories Bidco LLC/Term Loan 9/19 .....	.....	.....	.....	...3.B Z	457,954 ..	80.0000 ..	366,363 ..	457,954 ..	457,954 ..	0	0	0	0	10.230	10.230	MAT	26,317	35,380	12/31/2024	07/23/2027
50541#-AB-3	Laboratories Bidco LLC/Second Amendment .....	.....	.....	.....	...3.B Z	72,556 ..	80.0000 ..	58,045 ..	72,556 ..	72,556 ..	0	0	0	0	6.230	6.230	MAT	1,951	10,123	12/31/2024	07/23/2027
50541#-AC-1	LABORATORIES BIDCO LLC - THIRD AMENDMENT .....	.....	.....	.....	...3.B Z	465,004 ..	80.0000 ..	372,003 ..	465,004 ..	465,004 ..	0	0	0	0	10.230	10.230	MAT	40,995	48,295	12/31/2024	07/23/2027
50541#-AD-9	LABORATORIES BIDCO LLC - TL .....	.....	.....	.....	...4.A PL	2,200,847 ..	80.0000 ..	1,760,677 ..	2,200,847 ..	2,200,847 ..	0	0	0	0	10.230	10.230	MAT	126,475	250,028	12/31/2024	07/23/2027
50541#-AE-7	LABORATORIES BIDCO LLC - DELAYED DRAW TE .....	.....	.....	.....	...5.B GI	159,802 ..	80.0000 ..	127,841 ..	159,802 ..	159,802 ..	0	0	0	0	10.230	10.230	MAT	14,140	22,400	12/31/2024	07/23/2027
51206#-AA-9	LAKERS BUYER INC. - TERM LOAN .....	.....	.....	.....	...3.C PL	454,281 ..	100.0000 ..	454,281 ..	454,281 ..	454,281 ..	0	0	0	0	10.000	10.000	MAT	24,215	80,274	03/18/2021	03/22/2027
51206#-AB-7	LAKERS BUYER INC. - INITIAL DELAYED DRA .....	.....	.....	.....	...3.C PL	191,526 ..	100.0000 ..	191,526 ..	191,526 ..	191,526 ..	0	0	0	0	10.480	10.480	MAT	4,521	40,562	03/10/2023	03/22/2027
51513#-AA-7	LANDMARK EQUITY PARTNERS XV-D, LLC - Cla .....	.....	.....	.....	...1.G PL	36,773,930 ..	95.9600 ..	35,288,264 ..	36,773,930 ..	36,773,930 ..	0	0	0	0	5.400	5.400	MAT	790,553	1,490,109	07/14/2022	07/14/2030
51514#-AA-8	LANDMARK EQUITY PARTNERS XVII-D LLC REVO .....	.....	.....	.....	...1.F PL	31,936,000 ..	100.0000 ..	31,936,000 ..	31,936,000 ..	31,936,000 ..	0	0	0	0	7.410	7.410	MAT	1,270,346	1,299,033	10/23/2024	06/23/2032
57780#-AA-2	MAVERICK ACQUISITION INC. - TERM LOAN .....	.....	.....	.....	...5.B PL	302,772 ..	99.8750 ..	302,393 ..	302,772 ..	302,772 ..	0	0	0	0	10.580	10.580	MAT	17,385	62,791	06/01/2021	06/01/2027
57780#-AB-0	MAVERICK ACQUISITION INC. - DELAYED DRA .....	.....	.....	.....	...3.B PL	67,931 ..	65.0000 ..	44,862 ..	69,018 ..	67,931 ..	0	0	0	0	10.580	10.580	MAT	2,717	7,371	11/05/2021	06/01/2027
60937#-AA-8	MONICA HOLDCO (US) INC. - TERM LOAN .....	.....	.....	.....	...2.C PL	1,523,779 ..	100.0000 ..	1,523,779 ..	1,523,779 ..	1,523,779 ..	0	0	0	0	10.230	10.230	MAT	88,894	346,359	01/07/2021	01/07/2028
62902#-AA-3	NCL III-PE-D LLC / NCL III-PE-E LLC SECD .....	.....	.....	.....	...1.F PL	8,793,600 ..	100.0000 ..	8,793,600 ..	8,793,600 ..	8,793,600 ..	0	0	0	0	7.410	7.410	MAT	351,557	357,729	10/23/2024	06/23/2032
62903#-AA-4	NAW Buyer LLC - Term Loan .....	.....	.....	.....	...5.B GI	825,131 ..	100.0000 ..	846,288 ..	846,288 ..	825,131 ..	0	0	0	0	10.080	10.080	MAT	22,449	106,352	09/13/2023	09/13/2029

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
62931*-AA-2	NMC Skincare Intermediate Holdings II L				3.B PL	548,824	90.2500	507,050	561,828	555,582	0	0	0	0	10.750	10.750	MAT	51,009	18,746	10/04/2024	11/02/2026
62931*-AC-8	NMC Skincare Intermediate Holdings II L				3.B PL	189,352	90.2500	170,890	189,352	189,352	0	0	0	0	10.750	10.750	MAT	18,961	6,422	10/04/2024	11/02/2026
63942#-AA-3	NAW BUYER LLC DELAYED DRAW TERM LN				5.B GI	10,686	100.0000	10,686	10,686	10,686	0	0	0	0	10.080	10.080	MAT	198	1,369	07/26/2024	09/13/2029
65658#-AA-2	NORTH HAVEN FALCON BUYER LLC - TERM LOA				3.C PL	306,388	65.0000	199,152	306,388	306,388	0	0	0	0	12.510	12.510	MAT	32,432	53,829	11/22/2024	05/19/2027
67115E-AC-4	Omega Holdings - Senior Term Loan				4.C	387,916	100.0000	395,833	395,833	387,916	0	0	0	0	9.460	9.460	MAT	3,412	56,785	03/31/2022	03/31/2029
67117#-AA-5	OR Opportunistic DL (C) Funding LLC - Te				1.E PL	30,453,333	100.0000	30,453,333	30,453,333	30,453,333	0	0	0	0	7.400	4.776	MAT	830,277	1,912,661	06/26/2023	12/31/2031
67119*-AA-5	OT-MM REDF3 Seller, LLC - Series 2022-2				1.F PL	18,953,236	100.0000	18,953,236	18,953,236	18,953,236	0	0	0	0	6.750	6.750	MAT	179,858	1,329,822	08/16/2022	11/17/2027
67119*-AB-3	OT-MM REDF3 Seller, LLC - Series 2022-1				1.F PL	15,848,018	100.0000	15,848,018	15,848,018	15,848,018	0	0	0	0	6.500	6.500	MAT	208,542	1,050,252	02/23/2024	11/02/2027
68144#-AC-4	Olympia Acquisition, Inc - 2022 2nd Amen				4.C PL	104,326	44.0000	45,903	104,326	64,538	0	0	39,788	0	12.160	12.160	MAT	3,880	0	12/20/2024	02/26/2027
68144#-AD-2	Olympia Acquisition, Inc-2022 Rolled Ter				4.C PL	651,334	44.0000	286,587	651,334	402,965	0	0	248,369	0	12.160	12.160	MAT	27,313	0	11/29/2024	02/26/2027
68144#-AE-0	Olympia Acquisition, Inc - 2023 First Ou				4.C PL	36,033	100.0000	36,739	36,739	36,033	0	0	0	0	14.070	14.070	MAT	885	1,004	12/20/2024	02/26/2027
69429#-AB-2	PDQ (PDQ TOPCO LP) DDTL				5.A	2,940,917	98.8100	2,905,920	2,940,917	2,940,917	0	0	0	0	9.340	9.340	MAT	46,640	478,440	12/30/2021	08/27/2027
71685*-AA-1	PEV Holdings 1066 AB LLC	C			1.G PL	11,880,000	100.0000	12,000,000	12,000,000	11,880,000	0	0	0	0	7.230	7.230	MAT	244,697	0	09/25/2024	09/25/2031
72305#-AA-7	PINEBRIDGE PRIVATE CREDIT III HOLDINGS L				1.G PL	17,409,317	100.0000	17,409,317	17,409,317	17,409,317	0	0	0	0	7.140	7.140	MAT	281,669	1,300,451	11/15/2024	12/21/2031
73103#-AA-9	Polara - Term Loan				4.C	1,100,370	100.0000	1,122,827	1,100,370	1,100,488	0	0	0	0	9.230	9.230	MAT	27,270	193,080	11/23/2021	12/03/2027
73103#-AB-7	Polara - 2022 Incremental Term Loan				4.C	1,113,490	100.0000	1,136,215	1,136,215	1,113,490	0	0	0	0	9.230	9.230	MAT	27,595	171,306	04/28/2022	12/03/2027
74140#-AA-0	Project Potter Buyer LLC - Term Loan				3.C PL	1,309,458	100.0000	1,309,458	1,309,458	1,309,458	0	0	0	0	10.330	10.330	MAT	76,509	103,400	04/22/2020	04/23/2027
74140#-AB-8	PROJECT POTTER BUYER LLC - 2020 INCREME				3.C PL	289,264	100.0000	289,264	289,264	289,264	0	0	0	0	10.330	10.330	MAT	16,901	33,596	10/28/2020	04/23/2027
74140#-AC-6	PROJECT POTTER BUYER LLC - TERM LOAN				3.C PL	328,789	100.0000	328,789	328,789	328,789	0	0	0	0	10.330	10.330	MAT	19,210	23,657	11/17/2020	04/23/2027
74140#-AD-4	PROJECT POTTER BUYER LLC - DELAYED DRAW				3.C PL	111,515	100.0000	111,515	111,515	111,515	0	0	0	0	10.330	10.330	MAT	5,274	11,056	12/22/2020	04/23/2027
74309#-AB-5	PRG 9/20 Last Out				4.B PL	1,661,217	99.7500	1,657,064	1,661,217	1,661,217	0	0	0	0	17.580	17.580	MAT	351,058	220,547	09/30/2024	08/21/2029
74923#-AB-3	RoadOne IntermodalLogistics - Term Loan				4.B PL	1,154,541	100.4000	1,204,948	1,200,147	1,154,541	0	0	0	0	10.840	12.198	MAT	22,091	223,208	12/30/2022	12/30/2028
74923#-AC-1	R1 HLDGS LLC DELAYED DRAW TERM LN				4.B PL	109,977	100.4000	110,417	109,977	109,977	0	0	0	0	10.830	10.830	MAT	1,964	18,648	11/08/2023	12/30/2028
74934#-AB-8	RCC REAL ESTATE SPE 9 LLC -Series 2022-1				1.F PL	1,674,402	100.0000	1,674,402	1,674,402	1,674,402	0	0	0	0	7.940	7.940	MAT	32,231	137,629	12/22/2022	12/22/2027
74934#-AC-6	RCC REAL ESTATE SPE 9 LLC -Series 2022-2				1.F PL	875,362	100.0000	875,362	875,362	875,362	0	0	0	0	8.590	8.590	MAT	18,193	77,262	12/22/2022	12/22/2027
74934#-AD-4	RCC REAL ESTATE SPE 9 LLC -Series 2023-3				1.F PL	605,172	100.0000	605,172	605,172	605,172	0	0	0	0	8.440	8.440	MAT	10,148	53,290	09/22/2023	06/30/2028
75338#-AA-1	RAPID BUYER LLC INITIAL TERM LN				4.C Z	281,950	98.5000	281,950	281,950	281,950	0	0	5,753	0	9.400	9.400	MAT	5,753	0	10/15/2024	10/15/2030
77260#-AA-7	Rock Labor LLC - Term Loan				5.B GI	251,798	98.3000	255,172	259,585	251,798	0	0	0	0	10.660	10.660	MAT	5,844	34,874	09/14/2023	09/14/2029
78029#-AF-6	ROYAL HOLDCO CORP DDTL A		1		2.C PL	580,905	100.0000	580,905	580,905	580,905	0	0	0	0	10.440	10.440	MAT	56,885	(2,546)	03/13/2024	12/30/2027
78029#-AG-4	ROYAL HOLDCO CORP DELAYED DRAW TERM LN B				2.C PL	396,224	100.0000	396,224	396,224	396,224	0	0	0	0	10.310	10.310	MAT	8,368	0	12/16/2024	12/30/2027
78432#-AB-8	SFE Intermediate HoldCo LLC/Incremental				2.B PL	334,911	100.0000	341,746	341,746	338,685	0	0	0	0	10.480	10.480	MAT	19,448	56,704	09/05/2018	07/31/2026
78459#-AC-4	SEI HLDG I CORP/SINGER EQUITIES INC CLOS	C			4.C IF	287,312	99.5900	286,135	287,312	287,312	0	0	0	0	9.410	9.410	MAT	3,774	43,362	01/02/2024	03/27/2028
78486#-AA-5	SSE BUYER INC.				6. *	278,825	0.0000	0	278,825	0	0	0	278,825	0	13.950	0.000	MAT	0	7,205	12/05/2022	06/30/2026
78503#-AA-4	SPV FACILITY I LLC - Senior Secured Revo				1.G PL	20,450,000	100.0000	20,450,000	20,450,000	20,450,000	0	0	0	0	7.680	7.680	MAT	284,217	103,258	12/20/2024	03/31/2033
78524#-AA-9	SOLIFI GROUP (UK) LTD First Lien TL	C			4.C Z	1,764,096	99.0000	1,764,096	1,781,915	1,764,096	0	0	0	0	9.520	9.520	MAT	23,094	0	11/12/2024	11/12/2031
816307-AB-1	SelectQuote Inc./Term Loan 10/19				3.C PL	691,880	92.0000	636,529	691,880	691,880	0	0	0	0	13.960	13.960	MAT	116,725	86,902	12/31/2024	09/30/2027
84724#-AB-1	Sparus Holdings LLC - Delayed Draw Term				4.C	326,680	99.3500	324,459	326,680	326,680	0	0	0	0	9.250	9.250	MAT	4,748	29,731	02/03/2023	05/15/2025
84729#-AA-8	SPATCO ENERGY SOLUTIONS INC CLOSING DT T				4.C	1,441,289	98.4500	1,447,907	1,470,703	1,441,289	0	0	0	0	9.630	9.630	MAT	27,203	45,372	07/23/2024	07/23/2030
84729#-AB-6	SPATCO ENERGY SOLUTIONS Tranche A DDTL				4.C	235,312	98.4500	235,312	235,312	235,312	0	0	3,575	0	9.540	9.540	MAT	8,297	8,297	08/16/2024	07/23/2030
84729#-AC-4	SPATCO ENERGY SOLUTIONS DDTL B				4.C IF	74,744	98.4500	73,585	74,744	74,743	0	0	0	0	9.440	9.440	MAT	463	2,586	08/30/2024	07/23/2030
85789#-AA-2	STEALTH HOLDING LLC - U.S. INITIAL TERM				4.A PL	558	100.0000	558	558	558	0	0	0	0	11.500	11.500	MAT	0	271	02/26/2021	03/02/2026
85789#-AB-0	STEALTH HOLDING LLC - DELAYED DRAW TERM				4.A PL	6,827	100.0000	6,827	6,827	6,827	0	0	0	0	11.880	11.880	MAT	0	1,265	03/09/2022	03/02/2026
86662#-AA-2	SUN ACQUIRER CORP				3.C PL	963,792	100.0000	963,792	963,792	963,792	0	0	0	0	9.360	9.360	MAT	25,069	137,002	09/03/2021	09/08/2028
86662#-AB-0	SUN ACQUIRER CORP				3.C PL	681,239	100.0000	681,239	681,239	681,239	0	0	0	0	9.360	9.360	MAT	17,718	58,121	02/08/2023	09/08/2028
86822#-AA-1	SUPERJET BUYER LLC INITIAL TERM LN				5.A	4,417,331	98.4200	4,436,262	4,507,480	4,417,331	0	0	0	0	10.090	10.090	MAT	119,399	706,251	12/30/2021	12/30/2027

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
87300*-AJ-3	HILB GROUP LLC Term Loan TL				... 4.C Z	537,366	99.0000	537,366	542,794	537,366	0	0	0	0	9.110	9.110	MAT	8,624	0	10/31/2024	10/31/2029
87304*-AB-4	TOP HAWKER INTERMEDIATE LLC - DELAYED DR				... 3.B PL	162,646	100.0000	162,646	162,646	162,646	0	0	0	0	10.250	10.250	MAT	8,839	29,418	10/19/2021	08/28/2026
87338*-AA-8	TSYL Corp Buyer Inc Initial Term Ln A				... 5.B GI	241,327	99.0000	243,790	246,252	241,327	0	0	0	0	9.260	9.260	MAT	2,028	63,506	12/19/2022	12/19/2028
87338*-AB-6	TSYL Corp Buyer Inc Initial Term Ln B				... 5.B GI	15,951	99.0000	16,114	16,277	15,951	0	0	0	0	9.260	9.260	MAT	134	2,601	12/19/2022	12/19/2028
88675#-AA-3	TIKEHAU GREEN DIAMOND CFO LLC - Class A				... 1.F PL	27,800,788	100.0000	27,800,788	27,800,788	27,800,788	0	0	0	0	7.550	7.550	MAT	538,827	2,398,241	10/02/2023	12/21/2030
88675#-AB-1	TIKEHAU GREEN DIAMOND CFO LLC - Class B				... 2.C PL	13,666,864	100.0000	13,666,864	13,666,864	13,666,864	0	0	0	0	9.380	9.380	MAT	147,752	650,904	12/18/2024	12/21/2030
89617*-AB-4	Trident Maritime Systems Inc. - 2021 Ter				... 3.B PL	2,414,684	94.2000	2,309,271	2,451,455	2,414,684	0	0	0	0	12.200	12.200	MAT	64,238	360,215	09/30/2022	02/26/2027
89617*-AD-0	Trident Maritime Systems Inc. - 2023 Inc				... 4.C	81,761	94.2000	78,791	83,643	81,761	0	0	0	0	11.930	11.930	MAT	2,384	9,270	10/19/2023	02/26/2027
91860*-AA-6	VPC ASSET BACKED OPPORTUNISTIC CREDIT Ho				... 1.F PL	21,943,778	100.0000	21,943,778	21,943,778	21,943,778	0	0	0	0	8.700	8.700	MAT	381,839	1,590,007	06/13/2024	06/14/2029
92213L-AE-3	VARAGON STRUCTURED NOTES ISSUER I, LLC -				... 1.A PL	39,157,025	100.0000	39,157,025	39,157,025	39,157,025	0	0	0	0	7.520	7.520	MAT	654,960	2,772,586	10/28/2024	11/20/2032
92846*-AB-1	VITAL BUYER LLC 2023 INCREMENTAL TERM LO				... 4.C	2,352,250	98.7900	2,395,657	2,425,000	2,352,250	0	0	0	0	9.970	9.970	MAT	18,797	334,553	03/17/2023	06/01/2028
92943H-AB-5	W.R. Grace & Co. TL B				... 4.A FE	338,396	100.8000	341,958	339,244	338,396	0	0	0	0	7.580	7.580	MAT	6,809	33,467	08/11/2021	09/22/2028
93000#-AA-9	WIEEC Holdings II Corp - Term Loan				... 4.C	1,721,087	98.6000	1,740,504	1,765,217	1,721,087	0	0	0	0	10.080	10.080	MAT	46,707	298,117	10/03/2022	10/03/2028
93000#-AB-7	WIEEC Holdings II Corp - Delayed Draw Ter				... 4.C	385,287	98.6000	379,893	385,287	385,287	0	0	0	0	10.080	10.080	MAT	10,194	35,006	12/29/2023	10/03/2028
93279#-AA-3	WALNUT PARENT INC. - INITIAL TERM LOAN				... 3.C PL	470,221	97.0000	456,114	470,221	470,221	0	0	0	0	9.960	9.960	MAT	27,304	53,936	11/06/2020	11/09/2027
94979#-AA-6	WELLNESS ACQUISITIONCO INC. - TERM LOAN				... 2.C PL	414,693	100.0000	414,693	414,693	414,693	0	0	0	0	9.960	9.960	MAT	3,688	91,821	01/01/2022	01/20/2027
95483#-AA-0	WEST NR ACQUISITIONCO LLC 2ND AMEND TERM				... 4.C	304,354	98.8500	304,793	308,339	304,354	0	0	0	0	9.420	9.420	MAT	3,525	13,638	12/13/2024	12/27/2027
96524K-AD-2	Dawson Rated Fund 5-R1 LP-Term Loan Clas				... 1.G PL	12,095,768	100.0000	12,095,768	12,095,768	12,095,768	0	0	0	0	7.750	7.750	MAT	730,940	577,472	10/21/2024	12/15/2032
97959#-AA-3	Woodland Foods Inc - Term Loan				... 5.A	1,659,364	99.0000	1,676,296	1,693,229	1,659,797	0	0	0	0	9.870	9.870	MAT	12,993	375,506	12/01/2021	12/02/2027
97959#-AC-9	Woodland Foods Inc - 2024 Incremental Te				... 5.A	143,386	99.0000	144,849	146,312	143,386	0	0	0	0	9.870	9.870	MAT	9,252	2,505	04/09/2024	12/01/2027
98876*-AE-5	ZB Holdco LLC - 2023 Incremental Delayed				... 3.B PL	516,418	98.5300	508,826	516,418	516,418	0	0	0	0	10.020	10.020	MAT	13,180	45,133	08/05/2024	02/09/2028
98876*-AF-2	ZIYAD INC 2024-1 DDTL				... 3.B PL	354,688	98.5300	349,474	354,688	354,688	0	0	0	0	10.030	10.030	MAT	4,317	4,507	12/13/2024	02/09/2028
A4000#-AB-3	INFONIQ HLDG GMBH EUR FACILITY B2	B			... 5.B GI	620,376	100.0000	574,572	555,196	574,572	0	0	0	(45,804)	8.130	8.130	MAT	16,429	16,822	08/23/2024	06/13/2031
B6000#-AB-7	Innovad NV - 2024 EUR Delayed Draw Term	B			... 5.B GI	2,624,301	100.0000	2,532,061	2,446,672	2,532,061	0	0	0	(92,248)	7.680	7.680	MAT	35,852	136,971	04/29/2024	04/18/2028
000000-00-0	Tech 8 SASU New Money DD A2	B			... 6. *	125,166	10.0000	12,114	117,054	0	19,426	0	125,166	(4,343)	3.180	0.000	MAT	22,135	367	06/07/2023	07/31/2026
000000-00-0	Tech 8 SASU New Money A1 Fa	B			... 6. *	137,102	10.0000	14,722	142,256	0	2,538	0	137,102	(1,312)	3.180	0.000	MAT	13,732	0	03/14/2024	07/31/2026
000000-00-0	Technicolor Creative Stu EUR ORAs (Jun'2	B			... 6. *	25	0.0000	0	273,817	0	30	0	25	(5)	7.680	0.000	MAT	26,311	0	06/08/2023	06/07/2033
000000-00-0	Tech 8 SASU Reinstated EUR	B			... 6. *	211,306	0.2500	708	273,831	0	97,707	0	211,306	(5,466)	3.080	0.000	MAT	31,863	0	06/08/2023	09/15/2026
000000-00-0	Technicolor Creative Studios - 2023 EUR	B			... 6. *	61,666	0.0000	0	63,807	0	0	0	61,666	(2,760)	2.680	0.000	MAT	3,352	0	10/20/2023	07/31/2026
000000-00-0	IVC Acquisition Ltd - 2023 GBP Term Loan	B			... 4.C FE	1,118,621	100.0710	1,141,291	911,000	1,116,303	0	0	0	(21,757)	10.320	10.320	MAT	77,447	57,386	12/12/2023	11/17/2028
000000-00-0	TECH 7 Super Senior EU	B			... 5.B Z	41,112	39.3400	15,059	36,988	38,279	0	0	0	(2,833)	18.120	18.120	MAT	2,408	0	08/28/2024	03/31/2026
000000-00-0	Acclime Holdings HK Limi-2024 TERM LOAN	D			... 4.C Z	1,211,875	97.5000	1,181,578	1,211,875	1,211,875	0	0	0	0	0.000	0.000	MAT	11,879	0	12/24/2024	08/06/2027
000000-00-0	PRODUCTLIFE GROUP SA Incremental DDT	B			... 5.B GI	2,166,607	98.3600	2,009,445	1,974,055	2,042,950	0	0	0	(123,658)	8.380	8.380	MAT	55,971	26,683	10/24/2024	10/06/2029
000000-00-0	Tech 7 SAS Super Senior EU	B			... 5.B Z	79,553	39.3400	30,117	73,975	76,557	0	0	0	(2,996)	18.680	18.680	MAT	8,106	0	06/10/2024	03/31/2026
000000-00-0	AIRX CLIMATE SOLUTIONS Incremental DDT				... 4.C Z	98,355	100.0000	98,355	98,355	98,355	0	0	0	0	9.520	9.520	MAT	0	0	11/26/2024	11/07/2029
000000-00-0	SERENI CAPITAL DDTL 4	B			... 4.C Z	2,179,870	98.8000	2,127,805	2,081,021	2,153,649	0	0	0	(26,221)	9.360	9.360	MAT	7,282	0	12/18/2024	05/31/2029
000000-00-0	PINARD EMBALLAGES SAS Unitranche				... 4.B Z	4,544,496	97.9500	4,219,466	4,162,504	4,210,850	0	0	0	(333,646)	7.930	7.930	MAT	99,228	0	09/26/2024	09/25/2030
000000-00-0	NAFINCO BV RCF	B			... 4.C Z	75,974	98.0000	74,167	73,129	75,681	0	0	0	(293)	7.870	7.870	MAT	116	0	12/24/2024	05/30/2031
000000-00-0	PROJECT EOS Unitranche	B			... 4.C Z	217,943	97.5000	213,427	211,517	213,427	0	0	0	(4,516)	8.330	8.330	MAT	0	0	11/29/2024	11/04/2027
B6S2MT-RM-5	Origin Bidco Ltd USD FAC B3	D			... 4.C Z	2,974,225	98.0000	2,974,225	3,034,923	2,974,225	0	0	0	0	12.500	12.500	MAT	18,459	0	10/24/2024	08/31/2029
B6S2RO-PF-0	Auris Luxembourg III S.a.r.l.	B			... 4.C Z	1,086,200	100.0420	1,035,335	1,000,000	1,034,900	0	0	0	(51,300)	6.690	6.690	MAT	6,158	6,061	10/31/2024	02/28/2029
000000-00-0	PowerGem Buyer Inc. - Term Loan				... 4.C Z	5,566,139	99.0000	5,510,477	5,566,139	5,566,139	0	0	0	0	9.510	9.510	MAT	0	26,909	11/08/2024	10/21/2029
000000-00-0	TRAFFIC AND PARKING CONT DDTL				... 4.C Z	55,894	100.0000	55,894	55,894	55,894	0	0	0	0	9.340	9.340	MAT	0	0	12/23/2024	11/15/2029
000000-00-0	TECH 7 SAS Super Senior EU	B			... 5.B Z	46,386	126.2300	56,077	42,926	44,424	0	0	0	(1,962)	17.570	17.570	MAT	1,366	0	10/29/2024	03/31/2026
000000-00-0	VILLAGE VET LTD Barings DDTL Tr	B			... 4.C Z	152,680	97.0000	147,914	147,346	152,489	0	0	0	(192)	8.010	8.010	MAT	7,162	0	12/20/2024	11/21/2031

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
000000-00-0	Nordlo Holding AB - SEK 1st Lien Term Lo	B.....	.....	.....	...4.C Z	4,118,308	..97.7500	4,077,356	46,184,454	4,077,356	0	0	0	(40,952)	...7.830	...0.454	MAT	11,791	0	12/18/2024	12/16/2029
000000-00-0	ROYAL HOLDCO CORP Senior Term Loa .....	.....	.....	.....	...4.C Z	1,930,774	..98.5000	1,930,774	1,960,177	1,930,774	0	0	0	0	...9.230	...9.230	MAT	7,037	0	12/17/2024	12/16/2029
000000-00-0	Blackstone Credit Rated Fund Trust SPV L .....	.....	.....	.....	...1.F Z	4,000,000	..100.0000	4,000,000	4,000,000	4,000,000	0	0	0	0	...7.470	...7.470	MAT	0	0	12/18/2024	12/22/2035
C6784#-AA-0	NSPC-L HLDGS II LP SECURED LOAN FACILITY .....	.....	.....	.....	...1.G PL	46,900,000	..100.0000	46,900,000	46,900,000	46,900,000	0	0	0	0	...7.370	...7.370	MAT	407,950	1,767,546	05/21/2024	05/21/2033
C9300#-AA-9	UCIT Online Security Inc.-CAD Term Loan .....	.....	.....	.....	...4.A PL	689	..100.0000	703	703	691	0	0	0	0	...11.500	...11.500	MAT	14,996	36	03/05/2021	03/02/2026
D0007#-AA-3	A&W HLDG GMBH EUR FAC B1 .....	.....	.....	.....	...4.C Z	4,826,421	..98.7000	4,704,957	4,606,172	4,671,589	0	0	0	(154,832)	...8.220	...8.220	MAT	1,088	131,495	06/21/2024	02/28/2029
D5106#-AA-2	MEHLER LAW ENFORCEMENT G Senior Term Loa	B.....	.....	.....	...4.B Z	2,541,931	..97.5000	2,430,156	2,408,414	2,430,156	0	0	0	(111,775)	...8.590	...8.590	MAT	44,605	0	10/17/2024	10/21/2029
F4927#-AC-6	IM SQUARE EURO SR BDS C	B.....	.....	.....	...3.C	2,419,492	..97.8300	2,328,618	2,300,000	2,314,813	0	0	0	(104,680)	...8.180	...8.180	MAT	52,283	89,709	05/14/2024	05/31/2028
F9218#-AA-9	Tech 7 SAS Super Senior EU .....	.....	.....	.....	...5.B Z	133,538	..39.3400	50,196	123,292	127,595	0	0	0	(5,943)	...18.680	...18.680	MAT	18,540	0	03/26/2024	03/31/2026
G3165#-AB-0	CCO I CREDIT BACKED LOANS LTD. - Senior .....	.....	.....	.....	...1.G PL	30,560,354	..100.0000	30,560,354	30,560,354	30,560,354	0	0	0	0	...7.250	...6.471	MAT	564,366	2,462,934	12/09/2022	12/17/2031
G4217#-AA-8	HL Private Assets Holdings LP - Term Loa .....	.....	.....	.....	...1.F PL	18,000,000	..100.0000	18,000,000	18,000,000	18,000,000	0	0	0	0	...7.340	...7.340	MAT	466,478	1,612,048	06/05/2023	03/12/2030
G4301U-AF-1	Harbour Aircraft Investm Series 2017-1 C	C.....	.....	.....	...3.B FE	5,709,441	..91.5000	5,257,725	5,746,148	5,709,441	0	0	0	0	...4.000	...4.000	MON	0	0	09/26/2022	11/15/2037
G4604#-AA-3	HORIZON BIDCO CAYMAN LTD USD TERM LOAN	D.....	.....	.....	...5.B GI	4,041,667	..99.6800	4,153,333	4,166,667	4,041,667	0	0	0	0	...10.340	...10.340	MAT	210,568	469,968	05/03/2022	10/11/2028
G4701#-AA-1	IFM USIDF (INTERMEDIATE) B, L.P. - Secur	C.....	.....	.....	...1.G PL	43,570,000	..100.0000	43,570,000	43,570,000	43,570,000	0	0	0	0	...7.630	...7.630	MAT	1,079,719	3,239,787	10/01/2024	11/01/2035
G6492#-AD-5	XEINADIN GROUP CAF 2	B.....	.....	.....	...5.B GI	1,897,828	..97.5600	1,788,518	1,464,374	1,833,249	0	0	0	(64,579)	...5.250	...5.250	MAT	33,589	0	10/24/2024	05/19/2029
G6577#-AA-7	NORDIC CAPITAL GROUP, L.P - Senior Secur .....	.....	.....	.....	...1.F PL	10,704,500	..100.0000	10,349,000	10,000,000	10,349,000	0	0	0	(592,500)	...6.410	...6.410	MAT	158,422	316,720	10/21/2024	10/20/2037
G6577#-AB-5	NORDIC CAPITAL GROUP, L.P - Senior Secur .....	.....	.....	.....	...1.F Z	14,425,333	..100.0000	13,798,667	13,333,333	13,798,667	0	0	0	(626,667)	...5.630	...5.630	MAT	170,833	0	10/21/2024	10/20/2037
G6766#-AB-6	GBP FIRST ADDITIONAL FAC	B.....	.....	.....	...4.B Z	3,968,172	..97.7500	3,842,334	3,139,849	3,842,334	0	0	0	(125,837)	...5.250	...5.250	MAT	37,903	0	10/23/2024	08/16/2027
G6774#-AD-4	Origin Bidco Ltd EURO FAC B4	B.....	.....	.....	...4.C IF	1,885,633	..98.0000	1,805,052	1,779,776	1,805,052	0	0	0	(80,581)	...8.640	...8.640	MAT	7,955	22,970	10/24/2024	10/23/2031
G7234#-AC-0	Pregin Ltd - 2024 GBP Incremental Delaye	B.....	.....	.....	...4.C	1,215,256	..100.0000	1,232,185	984,252	1,232,185	0	0	0	16,929	...10.450	...10.450	MAT	24,722	85,108	04/22/2024	08/03/2028
G7349#-AA-6	Radius Aerospace Europe Limited/U.K. Ter	C.....	.....	.....	...5.B GI	385,343	..100.0000	385,343	385,343	385,343	0	0	0	0	...10.470	...10.470	MAT	32,632	53,578	11/13/2019	03/29/2025
G7567#-AB-5	Lernen Bidco Limited EUR TLB1 (Nov'1	B.....	.....	.....	...5.B GI	1,014,000	..100.3980	1,039,019	1,000,000	970,219	0	0	0	(67,031)	...6.780	...6.780	MAT	49,279	140,697	01/19/2023	10/25/2025
G7740#-AA-7	SCL XL I FUND L.P. - Senior Secured Revo .....	.....	.....	.....	...1.G PL	8,382,704	..100.0000	8,382,704	8,382,704	8,382,704	0	0	0	0	...7.950	...7.950	MAT	209,955	903,109	03/20/2023	10/05/2029
G7741#-AA-6	SSG CREDIT STRATEGIES VII ICAV - Senior	D.....	.....	.....	...1.E PL	22,515,651	..100.0000	22,515,651	22,515,651	22,515,651	0	0	0	0	...7.540	...6.133	MAT	379,905	1,896,986	06/05/2024	02/28/2034
G9349#-AA-8	VMED 02 UK Holdco 4 Ltd. EUR TL Z (Sep'2	B.....	.....	.....	...3.C	752,598	..100.1530	725,538	700,000	717,186	0	0	0	(49,550)	...6.330	...6.330	AO	5,717	55,309	11/16/2023	10/15/2031
G9512#-AA-1	WEAVER BIDCO LTD	B.....	.....	.....	...4.C Z	1,590,909	..98.0000	1,534,997	1,251,157	1,534,997	0	0	0	(55,912)	...10.080	...10.080	MAT	29,824	0	10/22/2024	10/11/2031
L4467#-AB-7	GREEN LEAF FINCO SARL EUR ADDITIONAL DEL	B.....	.....	.....	...4.B Z	1,884,758	..98.1900	1,793,392	1,764,857	1,826,450	0	0	0	(58,308)	...9.130	...9.130	MAT	32,679	3,731	12/27/2024	09/18/2029
L4807#-AA-2	HL SCOPE MASTER SICAV-RAIF SCSp - Senior	C.....	.....	.....	...1.F PL	44,027,778	..100.0000	44,027,778	44,027,778	44,027,778	0	0	0	0	...7.220	...7.220	MAT	945,240	972,079	12/18/2024	03/03/2031
L5581#-AA-9	ION Trading Technologies EUR TLB (Mar'21	B.....	.....	.....	...5.B GI	981,305	..99.1110	989,155	964,370	933,155	0	0	0	(64,471)	...6.930	...6.930	MAT	19,371	136,896	01/24/2023	04/01/2028
L7583#-AA-1	PEMBERTON PD SMA HOLDINGS (LEVERED) S.A. .....	.....	.....	.....	...1.G PL	12,588,468	..100.0000	11,963,444	11,560,000	11,963,444	0	0	0	(806,052)	...5.460	...5.460	MAT	144,175	846,050	11/14/2023	02/08/2032
L9714#-AA-3	WEST STREET EUROPEAN PRIVATE CREDIT MM S .....	.....	.....	.....	...1.G PL	22,414,387	..100.0000	21,517,123	20,791,500	21,517,123	0	0	0	(897,264)	...5.760	...5.760	MAT	307,610	621,091	09/25/2024	10/10/2033
L9714#-AB-1	WEST STREET EUROPEAN PRIVATE CREDIT MM S	C.....	.....	.....	...1.G PL	750,000	..100.0000	750,000	750,000	750,000	0	0	0	0	...7.550	...7.550	MAT	11,164	46,726	01/25/2024	10/13/2033
L9714#-AC-9	WEST STREET EUROPEAN PRIVATE CREDIT MM S .....	.....	.....	.....	...1.G PL	27,888,732	..100.0000	26,623,648	25,725,817	26,623,648	0	0	0	(1,390,659)	...6.030	...6.103	MAT	320,347	494,309	11/14/2024	10/13/2033
L9714#-AD-7	WEST STREET EUROPEAN PRIVATE CREDIT MM S	C.....	.....	.....	...1.G PL	750,000	..100.0000	750,000	750,000	750,000	0	0	0	0	...7.550	...7.550	MAT	11,164	40,183	04/09/2024	10/13/2033
N4857#-AA-5	KEYSTONE BIDCO BV EUR FAC B TRANCHE B2	B.....	.....	.....	...5.B GI	2,970,676	..98.0000	2,781,281	2,742,334	2,774,186	0	0	0	(196,490)	...7.970	...7.970	MAT	50,708	0	08/29/2024	09/16/2031
N8233#-AA-5	STARLINEER B V USD SR TERM FAC	D.....	.....	.....	...4.B	4,925,000	..100.0000	5,000,000	5,000,000	4,927,500	0	0	0	0	...9.610	...9.610	MAT	42,728	686,747	10/25/2021	04/15/2027
N8000D-AJ-6	UPC Broadband Holding BV EUR TLAY (Apr'2	B.....	.....	.....	...3.C FE	437,590	..100.1440	445,072	429,444	416,655	0	0	0	(28,786)	...5.830	...5.830	MAT	3,236	50,362	03/31/2023	01/31/2029
Y0019#-AD-0	Acclime Holdings HK Limited USD Fac D L	D.....	.....	.....	...5.B GI	2,427,545	..97.5000	2,437,500	2,500,000	2,427,545	0	0	0	0	...10.970	...10.970	MAT	154,024	391,794	04/29/2024	08/04/2027
14741#-AA-1	Cascade Services - Term Loan .....	.....	.....	.....	...5.B	419,749	..94.2000	405,542	430,511	419,749	0	0	0	0	...10.590	...10.590	MAT	10,513	46,723	10/04/2023	09/30/2029
14741#-AB-9	Cascade Services - Delayed Draw Term Loa .....	.....	.....	.....	...5.B	218,826	..94.2000	206,134	218,826	218,826	0	0	0	0	...10.510	...10.510	MAT	2,777	15,126	08/15/2024	09/30/2029
12125B-AE-0	BBB Industries LLC - 2022 2nd Lien Term .....	.....	.....	.....	...5.A	2,181,818	..89.0000	2,022,727	2,272,727	2,181,818	0	0	0	0	...14.190	...14.190	MAT	54,637	431,920	07/28/2022	07/25/2030
75046T-AB-0	Radius Aerospace Inc-RADAER TL 1L USD .....	.....	.....	.....	...3.C PL	547,181	..98.0000	545,789	556,927	551,672	0	20	0	0	...5.974	...5.974	MJSD	47,557	46,928	03/29/2019	03/29/2025
00228#-AB-2	ATI RESTORATION LLC - INITIAL DDTL .....	.....	.....	.....	...2.A PL	747,835	..98.0000	732,879	747,835	747,835	0	0	0	0	...9.960	...9.960	MAT	94,434	129,112	12/29/2021	07/31/2026
02325#-AA-8	AMBER CS LLC - Senior Secured Loan .....	.....	.....	.....	...2.C PL	7,515,266	..100.0000	7,515,266	7,515,266	7,515,266	0	0	0	0	...7.430	...7.430	MAT	89,148	559,053	11/26/2024	06/19/2032
0554M#-AA-8	BKF ENGINEERS Senior Term Loa .....	.....	.....	.....	...5.B GI	277,778	..98.2400	278,458	283,447	277,778	0	0	0	0	...9.340	...9.340	MAT	368	9,731	08/23/2024	08/23/2030

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
10483*-AC-9	BRAGG LIVE FOOD PRODUCTS LLC - TERM LOAN .....	.....	.....	.....	3.A PL	3,275,676	100.0000	3,275,676	3,275,676	3,275,676	0	0	0	0	10.854	10.854	MJSD	186,110	392,089	12/31/2020	12/29/2025
10947U-AC-2	BrightSign - Term Loan .....	.....	.....	.....	3.A PL	2,143,402	100.0000	2,165,052	2,165,052	2,144,182	0	2	0	0	9.960	9.960	MAT	19,627	449,720	10/14/2021	10/14/2027
12787*-AA-2	COFF BUYER, LLC INITIAL TERM LN .....	.....	.....	.....	3.B PL	148,659	98.5600	149,508	151,692	148,659	0	0	0	0	9.770	9.770	MAT	1,441	16,017	02/26/2024	02/26/2030
12787*-AB-0	CALIFORNIA CUSTOM FRUITS DDTL .....	.....	.....	.....	3.B PL	82,949	98.5600	81,754	82,949	82,949	0	0	0	0	9.770	9.770	MAT	1,216	1,663	11/07/2024	02/26/2030
19249H-A*-4	Coherus Biosciences Inc - Term Loan .....	.....	.....	.....	5.A	3,871,256	97.8000	3,903,184	3,990,985	3,871,256	0	0	0	0	12.330	12.330	MAT	0	214,136	05/08/2024	05/09/2029
26888*-AB-7	EP WEALTH ADVISORS LLC - DELAYED DRAW T .....	.....	.....	.....	2.A PL	517,170	100.0000	517,170	517,170	517,170	0	0	0	0	11.090	11.090	MAT	0	92,606	11/17/2021	09/04/2026
36152*-AA-4	GB EAGLE BUYER INC INITIAL TERM LN .....	.....	.....	.....	4.C	1,749,981	99.0000	1,786,064	1,804,105	1,749,981	0	0	0	0	9.080	9.080	MAT	50,186	288,745	12/01/2022	12/01/2028
36457W-AD-3	GALWAY BORROWER LLC - CLOSING DATE TERM .....	.....	.....	.....	3.B PL	319,833	99.0000	322,672	325,931	320,017	0	0	0	0	8.830	8.830	MAT	16,128	80,157	12/29/2023	09/29/2028
40494*-AA-3	HXSG Intermediary 2 LLC - Term Loan .....	.....	.....	.....	4.C	1,208,200	99.0000	1,220,529	1,232,857	1,208,200	0	0	0	0	8.860	8.860	MAT	31,536	125,379	11/28/2023	11/28/2029
48773*-AA-8	Kellermeyer Bergensons Services LLC/Ter .....	.....	.....	.....	4.B PL	154,321	98.2500	153,152	155,880	154,796	0	0	0	0	11.320	11.320	MAT	0	40,186	11/07/2019	11/07/2026
48773*-AB-6	Kellermeyer Bergensons Services LLC/2 .....	.....	.....	.....	4.B PL	34,295	100.0000	34,295	34,295	34,295	0	0	0	0	11.320	11.320	MAT	0	39,366	01/09/2020	11/07/2026
48773*-AF-7	Kellermeyer Bergensons Services, LLC - 2 .....	.....	.....	.....	4.B PL	935,237	100.0000	935,237	935,237	656,183	0	0	279,054	0	5.740	5.740	MAT	20,182	0	10/31/2024	11/07/2026
48773*-AH-3	Kellermeyer Bergensons Services, LLC - 2 .....	.....	.....	.....	4.B PL	2,171,516	100.0000	2,171,516	2,171,516	2,171,516	0	0	0	0	10.730	10.730	FINAN	34,786	0	10/31/2024	11/06/2028
55268*-AA-3	MB PURCHASER LLC INITIAL TERM LOAN .....	.....	.....	.....	5.B GI	1,031,215	99.5000	1,046,999	1,052,260	1,031,215	0	0	0	0	9.340	9.340	MAT	31,925	99,415	01/03/2024	01/03/2030
55268*-AB-1	MB PURCHASER LLC DDTL .....	.....	.....	.....	5.B GI	420,816	99.5000	418,712	420,816	420,816	0	0	0	0	9.270	9.270	MAT	7,629	13,398	11/08/2024	01/03/2030
62907*-AH-5	NEFCO HLDG CO LLC AMEND NO. 3 TERM LN .....	.....	.....	.....	4.C	293,882	99.0000	293,882	296,851	293,882	0	0	0	0	10.270	10.270	MAT	12,256	0	08/13/2024	08/05/2028
67100*-AA-2	OC III LVS XXVI LP - Secured Loan Facili .....	.....	.....	.....	1.F PL	31,937,417	100.0000	31,937,417	31,937,417	31,937,417	0	0	0	0	8.380	8.380	MAT	648,544	2,484,010	08/15/2023	11/20/2030
67117*-AD-1	OA BUYER INC 2024 INCREMENTAL TERM LN .....	.....	.....	.....	5.A	861,273	99.6000	862,139	865,601	861,273	0	0	0	0	9.110	9.110	MAT	28,523	20,614	06/10/2024	12/20/2028
74972G-A#-0	RPX CORP Term Loan .....	.....	.....	.....	4.A	1,554,695	98.7100	1,558,009	1,578,370	1,554,695	0	0	0	0	10.020	10.020	MAT	39,429	14,557	08/02/2024	08/02/2030
92974*-AA-7	WSHP FC ACQUISITION 2A TL L+625 03/30/20 .....	.....	.....	.....	3.B PL	1,292,938	93.0000	1,202,432	1,292,938	1,292,938	0	0	0	0	11.980	11.980	MAT	78,948	183,088	12/31/2024	03/30/2027
92974*-AD-1	WSHP FC ACQUISITION 1A TL L+650 03/30/20 .....	.....	.....	.....	3.B PL	155,447	93.0000	149,323	160,562	158,319	0	0	0	0	11.980	11.980	MAT	7,959	27,880	12/31/2024	03/30/2027
92974*-AE-9	WSHP FC ACQUISITION 1A DDTL L+625 03/30/ .....	.....	.....	.....	3.B PL	201,910	93.0000	187,776	201,910	201,910	0	0	0	0	11.980	11.980	MAT	12,352	42,859	12/31/2024	03/30/2028
95483*-AB-8	Warner Pacific Insurance Services - Dela .....	.....	.....	.....	4.C	1,216,524	98.8500	1,217,804	1,231,972	1,216,524	0	0	0	0	9.600	10.850	MAT	16,422	28,065	12/02/2024	12/27/2027
98415D-AA-3	XIFIN Inc./Term Loan 02/20 .....	.....	.....	.....	3.B PL	315,505	94.0000	296,575	315,505	315,505	0	0	0	0	11.220	11.220	MAT	48,497	11,318	06/28/2024	02/06/2026
000000-00-0	ENERGYCO DDTL .....	.....	.....	.....	4.C Z	74,125	99.0000	73,384	74,125	74,125	0	0	0	0	9.460	9.460	MAT	897	0	12/04/2024	11/08/2029
000000-00-0	VERITAS US INC / VERITAS S+1250 Arctera .....	.....	.....	.....	5.B Z	419,462	100.0000	419,462	419,462	419,462	0	0	0	0	19.000	19.000	MAT	4,791	0	12/09/2024	12/06/2029
000000-00-0	VERITAS US INC / VERITAS 15.00% PIK Pref .....	.....	.....	.....	5.B Z	178,602	99.5000	177,709	178,602	178,602	0	0	0	0	4.430	4.430	MAT	483	0	12/09/2024	12/06/2027
000000-00-0	WARNER PACIFIC INSURANCE Senior Term Loa .....	.....	.....	.....	4.C Z	425,616	98.8500	424,971	429,915	425,616	0	0	0	0	9.400	9.400	MAT	2,020	0	12/13/2024	12/13/2029
25471V-AC-2	DISH DBS Issuer ClosingTL .....	.....	.....	.....	4.C Z	4,053,000	104.9000	4,405,800	4,200,000	4,053,000	0	0	0	0	15.120	15.120	MON	92,808	0	09/27/2024	06/30/2029
75988*-AA-6	RENOVATION ACQUISITION INC TERM LOAN .....	.....	.....	.....	4.C	4,591,019	91.5000	4,308,495	4,708,738	4,593,384	0	0	0	0	10.110	10.110	MAT	56,982	860,665	11/15/2021	11/15/2027
80586*-AA-8	Scaled Agile Inc. - 2021 Delayed Draw Te .....	.....	.....	.....	2.C PL	167,258	90.0000	150,532	167,258	167,258	0	0	0	0	10.250	10.250	MAT	3,628	30,802	04/14/2023	12/15/2028
80586*-AB-6	Scaled Agile Inc. - 2021 Unitranche Term .....	.....	.....	.....	2.C PL	3,331,845	90.0000	3,059,858	3,399,842	3,332,191	0	1	0	0	9.930	9.930	MAT	88,882	606,859	12/16/2021	12/16/2028
84724*-AA-5	Spatial Business Systems - Senior Term L .....	.....	.....	.....	5.A	972,905	98.5000	997,852	972,905	972,905	0	0	0	0	10.010	10.010	MAT	8,905	145,394	10/03/2022	09/30/2028
84724*-AB-3	Spatial Business Systems - Delayed Draw .....	.....	.....	.....	5.A	1,240,625	98.5000	1,222,016	1,240,625	1,240,625	0	0	0	0	10.010	10.010	MAT	12,348	151,187	11/14/2024	10/03/2028
84724*-AC-1	SPATIAL BUSINESS SYS LLC 2ND AMEND INCRE .....	.....	.....	.....	4.C Z	246,067	98.5000	246,067	249,814	246,067	0	0	0	0	10.020	10.020	MAT	3,267	0	11/14/2024	10/03/2028
86614D-AK-4	Summit Materials Cos I L New Incremental .....	.....	.....	.....	2.C FE	4,726,250	100.0180	4,738,948	4,738,948	4,726,250	0	0	0	0	6.150	6.150	MAT	36,408	289,299	01/26/2024	11/30/2028
62907*-AA-0	NEFCO Holding Company, LLC - Term Loan .....	.....	.....	.....	4.C	892,787	99.0000	895,971	905,021	892,787	0	0	0	0	10.270	10.270	MAT	39,355	157,028	08/13/2024	08/05/2028
62907*-AB-8	NEFCO Holding Company, LLC - Delayed Dra .....	.....	.....	.....	4.C	137,474	99.0000	136,397	137,775	137,474	0	0	0	0	10.980	10.980	MAT	3,725	15,730	08/13/2024	08/05/2028
62907*-AC-6	NEFCO Holding Company, LLC - Delayed Dra .....	.....	.....	.....	4.C	138,776	99.0000	137,689	139,079	138,776	0	0	0	0	10.900	10.900	MAT	3,182	11,573	08/13/2024	08/05/2028
62907*-AD-4	NEFCO Holding Company, LLC - Delayed Dra .....	.....	.....	.....	4.C	164,610	99.0000	163,320	164,970	164,610	0	0	0	0	10.590	10.590	MAT	1,941	22,335	08/13/2024	08/05/2028
62907*-AF-9	NEFCO Holding Company LLC - 2023 Amendme .....	.....	.....	.....	4.C	32,548	99.0000	32,880	33,212	32,548	0	0	0	0	10.450	10.450	MAT	270	4,143	12/01/2023	08/05/2028
62907*-AG-7	NEFCO Holding Company LLC - 2023 Delayed .....	.....	.....	.....	4.C	179,525	99.0000	177,729	179,525	179,525	0	0	0	0	10.200	10.200	MAT	3,926	20,785	03/28/2024	12/01/2025
62907*-AJ-1	NEFCO ACQUISITIONS INC DDTL E .....	.....	.....	.....	4.C Z	2,928,175	99.0000	2,898,894	2,928,175	2,928,175	0	0	0	0	10.300	10.300	MAT	46,935	0	11/05/2024	03/29/2026
69451*-AC-3	PPW AERO BUYER INC Funded DDTL-1 .....	.....	.....	.....	4.C IF	1,993,010	98.7500	1,968,098	1,993,010	1,993,010	0	0	0	0	9.830	9.830	MAT	35,439	26,810	12/27/2024	02/15/2029
70476X-AJ-4	PetVet Care Centers, LLC - 2020 Incremen .....	.....	.....	.....	5.B GI	370,313	100.0000	370,313	370,313	370,313	0	0	0	0	0.000	0.000	MAT	0	0	10/09/2020	02/14/2025

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
002100-AA-3	ASF Crabapple, L.P. - Term Loan				1.G PL	8,610,463	100.0000	8,653,732	8,653,732	8,610,463	.0	.0	.0	.0	4.321	4.321	MJSD	761,074	42,737	12/08/2023	12/07/2029
404898-AA-2	HPS Mezzanine Partners 2019, L.P., MP 20				1.F PL	40,000,000	100.0000	40,000,000	40,000,000	40,000,000	.0	.0	.0	.0	8.050	8.050	MON	60,004	421,012	06/14/2023	07/15/2030
51514*-AA-0	Landmark Equity Partners XVII-B, L.P. -				1.F PL	15,436,800	100.0000	15,436,800	15,436,800	15,436,800	.0	.0	.0	.0	7.410	7.410	MAT	684,624	727,951	08/01/2024	06/23/2032
74354#-AA-1	PROJECT ESSENTIAL BIDCO LLC - TERM LOAN				4.A PL	386,989	94.0000	363,770	386,989	386,989	.0	.0	.0	.0	10.910	10.910	MAT	3,754	95,029	11/29/2024	04/20/2028
000000-00-0	Checkout Holding Corp. - 2023 Exit Term				5.B GI	83,148	92.5000	129,313	139,797	83,148	.0	.0	.0	.0	13.900	13.900	MAT	2,438	7,016	10/15/2024	04/24/2027
212578-AC-8	Convey Health Solutions Inc./Term Loan				3.A PL	946,806	86.0000	814,253	946,806	946,806	.0	.0	.0	.0	9.680	9.680	MAT	24,094	120,780	12/31/2024	09/04/2026
74363#-AA-0	PROSPECT INTER HLDGS LLC/PROSPECT PHYSIC				4.A PL	15,150,938	100.9787	15,667,751	15,515,890	15,150,938	.0	.0	.0	.0	20.850	20.850	MAT	808,910	1,443,259	10/02/2024	05/23/2026
74363#-AB-8	PROSPECT INTER HLDGS LLC/PROSPECT PHYSIC				4.A PL	1,956,837	100.9787	2,019,612	2,000,037	1,956,837	.0	.0	.0	.0	20.850	20.850	MAT	199,267	93,830	10/02/2024	05/23/2026
762528-AA-1	Rialto Management Group LLC/Term Loan 1				2.B PL	1,611	100.0000	1,628	1,620	1,620	.8	.0	.0	.0	10.170	10.170	MAT	6,733	(229,264)	11/28/2018	01/15/2025
87583F-AN-8	Tank Holding Corp. - 2022 Term Loan				4.B PL	4,515,807	98.0210	4,528,326	4,619,751	4,515,807	.0	.0	.0	.0	10.250	10.250	MAT	121,273	728,176	03/31/2022	03/31/2028
000000-00-0	AERO ACCESSORIES INC Senior Term Loa				4.C Z	374,211	98.5000	374,211	379,909	374,211	.0	.0	.0	.0	9.580	9.580	MAT	5,495	.0	11/08/2024	11/06/2029
45116#-AA-0	ICE HOUSE AMERICA LLC INITIAL DOTL				5.A	386,100	98.2500	379,344	386,100	386,100	.0	.0	.0	.0	9.820	9.820	MAT	4,712	32,647	03/27/2024	01/12/2030
45116#-AB-8	Ice House America Closing Dt Term Loan				5.A	1,418,919	98.2500	1,422,539	1,447,876	1,418,919	.0	.0	.0	.0	10.160	10.160	MAT	31,451	120,427	01/12/2024	01/12/2030
46127*-AA-9	Invesco Private Credit Opportunities Hol				1.G PL	23,080,000	100.0000	23,080,000	23,080,000	23,080,000	.0	.0	.0	.0	7.200	7.200	MAT	351,940	1,525,727	12/20/2024	09/23/2032
59509#-AA-6	Micromeritics Instrument Corp./Term Loan				2.B Z	181,917	100.0000	181,917	181,917	181,917	.0	.0	.0	.0	10.010	10.010	MAT	.0	31,493	12/18/2019	12/18/2025
000000-00-0	ICE HOUSE AMERICA DOTL - 2				4.C Z	127,391	98.2500	125,162	127,391	127,391	.0	.0	.0	.0	9.970	9.970	MAT	1,100	.0	12/06/2024	12/01/2030
34559*-AC-8	FOREST BUYER LLC 1ST AMEND TERM LN				5.B GI	1,560,352	99.3000	1,563,361	1,574,382	1,560,352	.0	.0	.0	.0	9.330	9.330	MAT	38,640	18,916	08/19/2024	03/15/2030
36831F-AA-3	GOM GROSVENOR DIVERSIFIED ALTERNATIVES I				1.G FE	20,000,000	90.8900	18,178,000	20,000,000	20,000,000	.0	.0	.0	.0	4.250	4.250	MAT	125,139	425,000	04/05/2022	09/08/2027
450548-AD-0	ITI Intermodal Inc. - 2023 Incremental T				3.A PL	360,104	100.0000	371,241	371,241	360,104	.0	.0	.0	.0	10.880	10.880	MAT	10,315	67,794	03/31/2023	12/20/2027
450548-AE-8	ITI Intermodal Inc. - 2023 Columbia Dela				3.A PL	196,067	100.0000	196,067	196,067	196,067	.0	.0	.0	.0	10.880	10.880	MAT	5,448	33,962	05/03/2023	12/21/2027
542888-AC-2	LONG TERM CARE GROUP INC AMENDMENT NO 1				5.B YE	357,359	89.4000	325,402	363,984	357,359	.0	.0	.0	.0	11.880	11.880	MAT	8,528	55,558	04/05/2022	09/08/2027
89989#-AF-1	Portfolio Group - Agency 1st Lien Term L				4.C PL	1,335,269	95.0000	1,362,394	1,362,520	1,336,081	.0	.2	.0	.0	10.330	10.330	MAT	37,444	317,621	11/15/2021	12/02/2025
89989#-AG-9	TURBO BUYER INC AMEND NO 4 DOTL				4.C PL	1,003,343	95.0000	973,091	1,024,307	1,003,343	.0	.0	.0	.0	10.480	10.480	MAT	28,150	171,169	04/12/2022	12/02/2025
89989#-AH-7	TURBO BUYER INC AMEND NO 5 - Delayed Dra				4.C PL	206,339	95.0000	196,022	206,339	206,339	.0	.0	.0	.0	10.330	10.330	MAT	5,671	32,511	11/30/2022	12/02/2025
90286#-AA-0	UHY Advisors Inc. - Term Loan				4.C Z	330,226	99.0000	330,226	333,562	330,226	.0	.0	.0	.0	9.260	9.260	MAT	.0	.0	11/22/2024	11/21/2031
62994*-AA-6	NF Holdco LLC - Term Loan	C			4.C IF	557,156	100.0000	574,388	574,388	557,156	.0	.0	.0	.0	10.830	10.830	MAT	16,382	86,498	03/31/2023	04/02/2029
71571E-AD-1	PES Holdings LLC-PHIENE PIK-TERM C-EXIT				6. *	1,659,301	0.5000	10,067	2,013,319	.0	93,003	.0	.0	.0	3.350	0.000	MAT	138,086	.0	11/30/2023	03/29/2025
03272*-AA-3	ANAQUA PARENT HOLDINGS INC. - TERM LOAN				3.B PL	143,873	100.0000	143,873	143,873	143,873	.0	.0	.0	.0	9.200	9.200	MAT	10,664	22,974	06/23/2021	04/10/2026
03272*-AB-1	ANAQUA PARENT HOLDINGS INC. - DELAYED D				3.B PL	7,779	100.0000	7,779	7,779	7,779	.0	.0	.0	.0	10.050	10.050	MAT	1,322	2,263	07/06/2022	04/10/2026
07363*-AD-8	BEACON MOBILITY CORP AMEND NO 4 DOTL				4.C	4,537,404	98.6700	4,477,056	4,537,404	4,537,404	.0	.0	.0	.0	10.860	10.860	MAT	34,211	924,765	10/07/2022	03/31/2025
23363#-AB-5	DRS Holdings III Inc./Term Loan 11/19				3.A PL	595,691	99.0000	589,734	595,691	595,691	.0	.0	.0	.0	10.710	10.710	MAT	5,767	131,902	11/01/2019	11/01/2025
23363#-AC-3	DRS HOLDINGS III INC. - 2021 TERM LOAN				3.A PL	418,849	99.0000	414,660	418,849	418,849	.0	.0	.0	.0	10.710	10.710	MAT	4,067	83,589	05/28/2021	11/01/2025
000000-00-0	NORTHSTAR RECYCLING COMP Senior Term Loa				4.B Z	950,122	98.7500	962,149	950,122	950,122	.0	.0	.0	.0	8.980	8.980	MAT	.0	.0	12/23/2024	12/16/2029
642888-AC-0	HARBOURVEST DOVER STR X INVT LP 2ND AME	C			1.G PL	11,567,003	100.0000	11,567,003	11,567,003	11,567,003	.0	.0	.0	.0	8.499	8.499	JAJO	993,907	395,563	08/09/2023	01/05/2028
448798-AA-2	Hydratech Hldgs 1st Amendment DOTL				4.C Z	112,111	98.6600	110,609	112,111	112,111	.0	.0	.0	.0	9.330	9.330	MAT	2,719	841	10/01/2024	09/30/2030
448798-AA-0	Hydratech Hldgs 1st Amendment Increm Ter				4.C Z	147,239	98.6600	149,481	147,239	147,239	.0	.0	.0	.0	9.330	9.330	MAT	3,669	2,433	09/03/2024	09/30/2030
34960#-AD-5	FORTIS PAYMENT SYSTEMS LLC 10TH AMEND DD				4.C	416,204	98.6100	418,795	424,698	416,204	.0	.0	.0	.0	9.680	9.680	MAT	10,830	32,446	01/31/2024	02/13/2026
34960#-AE-3	Fortis Payment Systems LLC 10TH AMEND TE				4.C	32,002	98.6100	31,557	32,002	32,002	.0	.0	.0	.0	9.680	9.680	MAT	734	4,506	12/17/2024	02/13/2026
34962B-AB-6	Fortis Payment Systems LLC - 2022 Delaye				4.C	725,691	98.6100	715,604	725,691	725,691	.0	.0	.0	.0	10.180	10.180	MAT	19,436	116,970	12/15/2023	02/13/2026
42981#-AA-9	HIGH STREET BUYER INC. - DELAYED DRAW T				3.B PL	363,897	100.0000	363,897	363,897	363,897	.0	.0	.0	.0	9.850	9.850	MAT	19,081	74,729	03/01/2022	04/14/2028
42983#-AA-7	HIGH STREET BUYER INC. - TERM LOAN B				3.B PL	270,786	100.0000	270,786	270,786	270,786	.0	.0	.0	.0	9.580	9.580	MAT	14,162	46,699	04/15/2021	04/14/2028
42983#-AB-5	HIGH STREET BUYER INC. - DELAYED DRAW T				3.B PL	156,774	100.0000	156,774	156,774	156,774	.0	.0	.0	.0	9.580	9.580	MAT	8,199	26,920	07/01/2021	04/14/2028
42983#-AC-3	HIGH STREET BUYER INC. - DELAYED DRAW T				3.B PL	357,452	100.0000	357,452	357,452	357,452	.0	.0	.0	.0	9.580	9.580	MAT	18,695	71,074	10/01/2021	04/14/2028
243608-AC-6	DECOFAC INC. - TERM B LOAN				3.B PL	624	100.0000	624	624	624	.0	.0	.0	.0	10.420	10.420	MAT	.0	107	12/30/2022	05/15/2028
16117L-BW-8	Charter Communications 0-CHTR TL B1 1L U				2.C FE	3,225,782	100.0000	3,818,087	3,818,087	3,421,585	.0	.0	.0	.0	6.590	6.590	MAT	63,634	500,672	03/19/2020	04/30/2025

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
16117L-CB-3	Charter Communications I TL B-4 due Dece .....	.....	.....	.....	.. 2.C FE	5,331,741	..99.6360	5,339,029	5,358,534	5,331,741	0	0	0	0	...6.310	...6.310	MAT	89,534	418,790	12/13/2023	11/30/2030
29643*-AC-6	EShipping LLC DDTL ... ..	.....	.....	.....	.. 4.B	290,926	100.0000	290,926	290,926	290,926	0	0	0	0	...9.470	...9.470	MAT	2,511	30,392	09/06/2023	11/05/2027
74142K-AJ-8	Pretium Packaging LLC New 1st Out Ter .....	.....	.....	.....	.. 4.C FE	157,146	102.9380	167,771	162,982	157,146	0	0	0	0	...9.570	...9.575	MAT	6,882	14,046	08/01/2024	10/01/2028
74142K-AK-5	Pretium Packaging LLC New 2nd Out Ter .....	.....	.....	.....	.. 5.C FE	422,821	..79.0830	435,525	550,719	422,821	0	0	0	0	...9.170	...9.174	MAT	22,303	45,895	08/01/2024	10/01/2028
75445*-AA-1	RAWLINGS SPORTING GOODS COMPANY INC - T .....	.....	.....	.....	.. 3.B PL	819,448	100.0000	819,448	819,448	819,448	0	0	0	0	...9.500	...9.500	MAT	44,588	145,341	12/30/2020	12/31/2026
84967*-AA-9	SPRING INSURANCE SOLUTIONS LLC - INITIA .....	.....	.....	.....	.. 3.A PL	438,560	..92.0000	403,475	438,560	438,560	0	0	0	0	...10.980	...10.980	MAT	26,106	75,720	03/31/2024	11/24/2025
84967*-AB-7	SPRING INSURANCE SOLUTIONS LLC - DELAYE .....	.....	.....	.....	.. 3.A PL	74,706	..92.0000	68,729	74,706	74,706	0	0	0	0	...10.980	...10.980	MAT	6,704	7,529	03/31/2024	11/24/2025
00233*-AB-1	ATL II MRO HLDGS INC 1ST AMEND TERM LN .....	.....	.....	.....	.. 4.B	953,260	..98.5000	963,037	977,702	953,260	0	0	0	0	...9.820	...9.820	MAT	16,166	76,928	02/15/2024	11/01/2028
00233*-AC-9	ATL II MRO HLDGS INC 2ND AMEND INCREM TE .....	.....	.....	.....	.. 4.C Z	1,838,602	..98.5000	1,838,602	1,866,601	1,838,602	0	0	0	0	...9.820	...9.820	MAT	30,787	0	11/01/2024	11/01/2028
04250*-AC-9	ARMSTRONG TRANS GROUP LLC / MAXFRB LLC T .....	.....	.....	.....	.. 5.B Z	1,599,575	..94.7000	1,549,597	1,636,323	1,599,575	0	0	0	0	...10.090	...10.090	MAT	80,936	197,610	10/31/2024	12/31/2026
44961*-AB-1	Implus Footcare LLC/Initial Term Loan 0 .....	.....	.....	.....	.. 3.C PL	873,042	80.0000	700,153	875,192	875,192	0	(2,150)	0	0	...13.730	...13.730	MAT	163,252	109,415	12/31/2024	07/31/2025
45321*-AA-5	Implus Footcare LLC/Spenco Incremental .....	.....	.....	.....	.. 3.C PL	135,683	80.0000	108,804	136,006	136,006	0	(323)	0	0	...14.010	...14.010	MAT	21,076	25,090	09/30/2024	07/31/2025
46126*-AA-6	IntraPac International LLC/U.S. Term Loa .....	.....	.....	.....	.. 3.B PL	1,091,074	100.0000	1,116,188	1,116,188	1,101,723	0	0	0	0	...9.930	...9.930	MAT	96,980	134,041	01/07/2019	01/11/2026
69429*-AA-4	PDQ (PDQ TOPCO LP) First Lien Term .....	.....	.....	.....	.. 5.A	4,293,087	..98.8100	4,241,999	4,293,087	4,293,087	0	0	0	0	...9.340	...9.340	MAT	104,053	762,208	08/27/2021	08/27/2027
74276*-AC-0	Process Insights - Term Loan .....	.....	.....	.....	.. 5.B GI	439,872	..97.9000	441,677	439,872	439,872	0	0	0	0	...10.770	...10.770	MAT	4,837	71,750	07/18/2023	06/30/2029
88033*-AA-0	Tencarva Machinery Company - Senior Term .....	.....	.....	.....	.. 4.C	2,374,491	..98.8000	2,391,222	2,420,266	2,374,742	0	0	0	0	...9.480	...9.480	MAT	60,483	419,247	12/20/2021	12/20/2027
88033*-AB-8	Tencarva Machinery Company .....	.....	.....	.....	.. 4.C	392,836	..98.8000	388,122	392,836	392,836	0	0	0	0	...9.800	...9.800	MAT	8,146	72,310	08/15/2022	12/20/2027
88033*-AD-4	Tencarva Machinery Company LLC - 2024 In .....	.....	.....	.....	.. 4.C	1,594,896	..98.8000	1,607,915	1,627,445	1,594,896	0	0	0	0	...9.480	...9.480	MAT	40,668	44,557	05/08/2024	12/20/2027
74066*-AA-4	PREMIER SPECIALTIES INC. - TERM LOAN .....	.....	.....	.....	.. 3.B PL	299,825	..94.0000	281,835	299,825	299,825	0	0	0	0	...11.460	...11.460	MAT	11,956	58,152	12/31/2024	08/20/2027
08947*-AA-5	TECHNOLOGY SVC STREAM BIDCO PTY LTD AUD .....	.....	.....	.....	.. 5.B GI	1,892,006	..97.7100	1,767,234	2,924,256	1,758,914	0	0	0	(133,092)	...10.290	...10.290	MAT	93,310	0	07/01/2024	01/07/2030
00228*-AA-4	AMERICAN TECHNOLOGIES LLC - TERM LOAN .....	.....	.....	.....	.. 2.A PL	2,138,614	..98.0000	2,095,842	2,138,614	2,138,614	0	0	0	0	...10.170	...10.170	MAT	32,028	381,931	07/30/2020	07/31/2026
00797*-AA-5	Aero Operating LLC/Term Loan 1/20 .....	.....	.....	.....	.. 3.B PL	437,846	..85.0000	372,169	437,846	437,846	0	0	0	0	...13.740	...13.740	MAT	15,019	99,429	04/01/2024	02/07/2026
00797*-AB-3	Aero Operating LLC/Delayed Draw Term Loa .....	.....	.....	.....	.. 3.B PL	124,038	..85.0000	105,433	124,038	124,038	0	0	0	0	...13.740	...13.740	MAT	4,309	31,576	07/01/2024	02/07/2026
03770*-AA-0	Apollo Asset-Backed Finance Lending Comp .....	.....	.....	.....	.. 2.A PL	9,560,185	100.0000	9,560,185	9,560,185	9,560,185	0	0	0	0	...6.000	...6.000	MJSD	271,442	0	12/02/2024	06/30/2044
03770*-AB-8	Apollo Asset-Backed Finance Lending Comp .....	.....	.....	.....	.. 2.C PL	3,824,074	100.0000	3,824,074	3,824,074	3,824,074	0	0	0	0	...6.000	...6.000	MJSD	74,745	54,790	12/02/2024	06/30/2044
03770*-AC-6	Apollo Asset-Backed Finance Lending Comp .....	.....	.....	.....	.. 2.B PL	15,296,296	100.0000	15,296,296	15,296,296	15,296,296	0	0	0	0	...6.000	...6.000	MJSD	273,961	202,222	12/02/2024	06/30/2044
04941*-AA-2	Atlas Securitized Products Funding 1 LP .....	.....	.....	.....	.. 1.D PL	12,090,467	..99.9500	12,263,751	12,269,886	12,090,467	0	0	0	0	...6.050	...7.456	MON	81,345	591,189	12/31/2024	05/25/2063
04941*-AB-0	Atlas Securitized Products Funding 1 LP .....	.....	.....	.....	.. 1.D PL	5,969,401	100.0000	6,004,412	6,004,412	5,969,401	0	0	0	0	...6.550	...6.550	MON	55,327	317,149	12/31/2024	05/25/2063
04941*-AC-8	Atlas Securitized Products Funding 1 LP .....	.....	.....	.....	.. 1.G PL	12,090,467	..99.7500	12,239,212	12,269,886	12,090,467	0	0	0	0	...1.500	...5.735	MON	122,029	573,783	12/31/2024	05/25/2063
04941*-AD-6	Atlas Securitized Products Funding 1 LP .....	.....	.....	.....	.. 1.G PL	5,969,401	..99.9100	5,999,008	6,004,412	5,969,401	0	0	0	0	...6.550	...6.869	MON	59,318	303,915	12/31/2024	05/25/2063
05465*-AA-1	AXONIC CAPITAL LLC - Senior Secured Term .....	.....	.....	.....	.. 1.F PL	15,000,000	100.0000	15,000,000	15,000,000	15,000,000	0	0	0	0	...10.590	...10.590	MAT	269,163	1,727,067	05/18/2023	05/18/2035
14318*-AA-6	CARLYLE SECURED LENDING III SPV, - Senio .....	.....	.....	.....	.. 2.A PL	20,280,000	100.0000	20,280,000	20,280,000	20,280,000	0	0	0	0	...7.530	...7.530	MAT	379,734	1,161,935	10/29/2024	09/30/2030
49375*-AA-0	DistroKid Senior Term Loan .....	.....	.....	.....	.. 5.A	6,621,334	100.0000	6,756,463	6,756,463	6,627,010	0	0	0	0	...9.490	...9.490	MAT	108,593	1,125,803	10/01/2021	10/01/2027
50246*-AF-6	LYNV Funding LLC/ Term Loan 10/2023 .....	.....	.....	.....	.. 1.F PL	3,750,000	102.6225	3,848,343	3,750,000	3,750,000	0	0	0	0	...7.800	...7.800	MON	220,188	29,250	10/26/2023	10/18/2028
55343*-AA-6	MUX VENTURE MANAGEMENT III LLC .....	.....	.....	.....	.. 3.B PL	2,297,656	..87.0790	2,016,967	2,316,250	2,300,493	0	0	0	0	...9.490	...9.490	MAT	47,015	199,666	10/25/2018	10/15/2031
55343*-AC-2	MUX VENTURE SENIOR TL L+1.682 04/30/2031 .....	.....	.....	.....	.. 1.D PL	18,264,613	100.0400	18,271,918	18,264,613	18,266,529	0	0	0	0	...6.540	...6.540	MAT	238,790	1,564,225	04/04/2018	04/30/2031
55343*-AD-0	MUX VENTURE JUNIOR L+4.418 4/30/2031 .....	.....	.....	.....	.. 3.B PL	2,611,000	..84.1860	2,239,348	2,660,000	2,621,670	0	0	0	0	...9.270	...9.270	MAT	49,332	270,607	04/04/2018	04/30/2031
55343*-AE-8	MUX VENTURE JUNIOR L+607 07/30/2032 .....	.....	.....	.....	.. 4.B PL	3,264,000	..90.5630	3,042,917	3,360,000	3,274,123	0	0	0	0	...10.930	...10.930	MAT	161,665	423,494	08/28/2019	07/30/2032
55343*-AJ-7	MUX Venture Mgmt III LLC Senior TL .....	.....	.....	.....	.. 1.F PL	24,240,000	..99.4850	24,115,164	24,240,000	24,240,000	0	0	0	0	...6.920	...6.920	MAT	753,187	3,036,607	02/11/2021	07/30/2032
55343*-AG-3	MUX Venture Mgmt III LLC Senior TL .....	.....	.....	.....	.. 1.C PL	16,510,490	..99.6624	16,454,751	16,510,490	16,509,000	0	0	0	0	...6.240	...6.240	MAT	220,429	1,928,532	10/25/2018	10/15/2031
55343*-AH-1	MUX VENTURE 41 SENIOR L+3.19 1/11/2034 .....	.....	.....	.....	.. 5.B GI	10,252,325	..99.3450	10,185,172	10,252,325	10,252,325	0	0	0	0	...8.050	...8.050	MAT	160,377	1,355,228	02/11/2021	01/11/2034
55343*-AJ-7	MUX VENTURE 41 JUNIOR L+7.34 1/11/2034 .....	.....	.....	.....	.. 5.B GI	1,182,085	..99.5440	1,182,085	1,182,085	1,182,085	0	0	0	0	...12.200	...12.200	MAT	67,257	530,466	02/11/2021	01/11/2034
71685*-AA-9	PEV Holdings 1067 AB LLC .....	.....	.....	.....	.. 1.F PL	13,860,000	100.0000	14,000,000	14,000,000	13,860,000	0	0	0	0	...7.230	...7.230	MAT	285,480	0	09/25/2024	09/25/2031
74309*-AA-7	Production Resource Group, LLC - 2020 De .....	.....	.....	.....	.. 4.B PL	575,023	100.0000	575,023	575,023	575,023	0	0	0	0	...12.250	...12.250	MAT	65,349	162,327	12/31/2024	08/21/2029
74309*-AC-3	PRODUCTION RESOURCE GROUP L.L.C. - DELA .....	.....	.....	.....	.. 4.B PL	31,477	100.0000	31,477	31,477	31,477	0	0	0	0	...9.750	...9.750	MAT	3,790	40,928	06/28/2024	08/21/2029

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
74309#-AD-1	PRODUCTION RESOURCE GROUP L.L.C. - SECO				. 4.B PL	340,239	100.0000	340,239	340,239	340,239	0	0	0	0	12.250	12.250	MAT	31,892	32,538	09/30/2024	08/21/2029
75645#-AA-9	Red Cedar Holdings BL.P - Revolver				. 1.D PL	17,200,677	100.0000	17,200,677	17,200,677	17,200,677	0	0	0	0	0.000	0.000	MAT	873,946	844,465	07/26/2024	08/10/2030
83176*-AB-0	Smartling Inc. - Delayed Draw Term Loan				. 4.B	425,903	100.0000	425,903	425,903	425,903	0	0	0	0	9.000	9.000	MAT	9,815	58,663	04/28/2023	11/08/2027
88167#-AA-8	Tetragon Financial Group (Delaware) LLC				. 1.F PL	30,000,000	100.0000	30,000,000	30,000,000	30,000,000	0	0	0	0	7.740	7.740	MAT	193,410	2,008,943	07/12/2024	07/15/2032
90380#-AA-7	US SALT INVESTORS LLC - INITIAL TERM LO				. 3.B PL	3,209,450	100.0000	3,209,450	3,209,450	3,209,450	0	0	0	0	9.730	9.730	MAT	170,325	264,244	07/16/2021	07/19/2028
55371*-AV-7	MRI Software LLC/Delayed Draw Term Loan				. 4.A PL	1,432	99.7500	1,428	1,432	1,432	0	0	0	0	0.000	0.000	MAT	0	0	12/28/2021	02/10/2026
55371*-AY-1	MRI SOFTWARE LLC - SECOND AMENMENT TERM				. 4.A PL	0	99.7500	0	0	0	0	0	0	0	10.950	10.950	MAT	0	19,993	09/30/2022	02/10/2026
55371*-AZ-8	MRI SOFTWARE LLC - TRANCHE 3 DELAYED DRA				. 5.B GI	0	99.7500	0	0	0	0	0	0	0	7.620	7.620	MAT	0	(4,234)	06/21/2022	02/10/2026
65716*-AB-4	NORTH AMERICAN SCIENCE ASSOCIATES INC.				. 2.C PL	168,644	96.0000	161,898	168,644	168,644	0	0	0	0	10.500	10.500	MAT	3,775	20,842	02/24/2023	09/15/2027
65716#-AA-4	NORTH AMERICAN SCIENCE ASSOCIATES INC.				. 2.C PL	370,717	96.0000	355,888	370,717	370,717	0	0	0	0	10.500	10.500	MAT	1,514	52,768	12/29/2020	09/15/2027
65716#-AB-2	NORTH AMERICAN SCIENCE ASSOCIATES INC.				. 2.C PL	53,709	96.0000	51,560	53,709	53,709	0	0	0	0	10.500	10.500	MAT	219	14,547	12/29/2020	09/15/2027
00453#-AB-6	Accurus Aerospace Corporation - 2022 A-1				. 5.A	3,840,297	96.7000	3,770,119	3,898,779	3,840,297	0	0	0	0	10.300	10.300	MAT	22,359	688,703	04/05/2022	04/05/2028
239426-AD-1	DAWSON RATED FUND 6-R1 LP - Secured Clas				. 1.G PL	23,685,247	100.0000	23,685,247	23,685,247	23,685,247	0	0	0	0	7.820	7.820	MAT	793,109	353,368	09/19/2024	06/15/2034
239426-AF-6	DAWSON RATED FUND 6-R1 LP - Secured Clas				. 2.C PL	5,921,312	100.0000	5,921,312	5,921,312	5,921,312	0	0	0	0	10.610	10.610	MAT	264,906	111,583	09/19/2024	06/15/2034
C4800#-AA-5	IntraPac Canada Corporation/Canadian Ter				. 3.B PL	555,963	100.0000	568,760	568,760	560,721	0	0	0	0	9.930	9.930	MAT	49,417	119,891	01/07/2019	01/11/2026
26869#-AA-1	Standard Elevator Systems - Term Loan				. 5.B GI	2,357,176	94.3000	2,268,181	2,405,282	2,357,769	0	0	0	0	10.410	10.410	MAT	34,959	287,285	12/02/2021	12/02/2027
26869#-AB-9	Standard Elevator Systems - Delayed Draw				. 5.B GI	711,552	94.3000	713,931	757,085	711,552	0	0	0	0	10.230	10.230	MAT	20,322	163,108	12/19/2022	12/02/2027
37963#-AC-7	GLOBAL CRITICAL LOGISTICS LLC USD 7TH AM				. 4.C	815,638	98.9600	807,155	815,638	815,638	0	0	0	0	9.500	9.500	MAT	42,747	0	10/29/2024	07/31/2026
74588B-AB-6	Puma Buyer TL 2029				. 4.B PL	18,274,500	100.0000	19,650,000	19,650,000	18,274,500	0	0	0	0	9.930	1.066	MAT	512,394	6,152,761	07/29/2022	07/14/2029
G3930#-AA-8	GLOBAL CRITICAL LOGISTICS LTD GBP 7TH AM				. 4.C IF	178,883	98.9600	179,718	181,607	178,883	0	0	0	0	9.500	9.500	MAT	2,144	16,739	01/31/2024	07/31/2026
25822C-C#-3	Dorel Industries Inc. - Asset Backed Fir		A		. 4.A PL	1,943,750	98.3750	1,912,164	1,943,750	1,943,750	0	0	0	0	12.629	12.629	MON	121,137	166,139	12/08/2023	12/08/2026
12464#-AA-0	CAI Software - Term Loan				. 5.A	3,763,955	99.4000	3,817,725	3,840,770	3,763,955	0	0	0	0	9.840	9.840	MAT	99,540	514,808	12/13/2021	12/13/2028
98876*-AB-1	ZB Holdco LLC - Delayed Draw Term Loan				. 5.A	235,538	98.5300	232,076	235,538	235,538	0	0	0	0	9.980	9.980	MAT	6,188	26,948	01/30/2023	02/09/2028
40490#-AA-9	HTI Technology & Industries - 2022 Term				. 5.A	519,337	94.9000	500,356	527,245	519,336	0	0	0	0	13.540	0.512	MAT	28,943	96,905	07/27/2022	07/07/2025
40490#-AB-7	HTI Technology & Industries - 2022 Delay				. 5.A	113,269	94.9000	107,492	113,269	113,269	0	0	0	0	13.990	13.990	MAT	3,697	0	07/27/2022	07/07/2025
40490#-AE-1	HTI Technology & Industries - 2023 Incre				. 5.A	212,594	94.9000	207,991	219,169	212,594	0	0	0	0	13.540	13.540	MAT	12,031	39,280	02/15/2023	07/27/2025
40490#-AF-8	HTI Technology & Industries - 2023 Delay				. 5.A	350,523	94.9000	332,646	350,523	350,523	0	0	0	0	13.990	13.990	MAT	11,440	71,452	02/22/2023	07/27/2025
23345U-AF-6	DISA HOLDINGS CORP Incremental DDT				. 3.B PL	24,339	100.0000	24,339	24,339	24,339	0	0	0	0	9.330	9.330	MAT	737	881	08/13/2024	09/09/2028
52172*-AB-9	LeadsOnline LLC - Amendment No 6 Term Ln				. 4.C	743,734	99.6000	744,482	747,472	743,734	0	0	0	0	9.080	9.080	MAT	17,899	28,748	05/17/2024	02/07/2028
56629#-AA-9	MARCONI YELLOWSTONE BUYER INC. - TERM LO				. 3.C PL	309,624	92.0000	290,667	315,943	310,079	0	1	0	0	10.980	10.980	MAT	8,780	72,875	06/23/2021	06/23/2028
56629#-AB-7	MARCONI YELLOWSTONE BUYER INC. - DELAYED				. 3.C PL	104,984	92.0000	96,585	104,984	104,984	0	0	0	0	11.400	11.400	MAT	2,917	19,455	12/31/2021	06/23/2028
75734#-AC-7	Reddy Ice Holdings Inc./Delayed Draw Te				. 5.B GI	2,293	100.0000	2,293	2,293	2,293	0	0	0	0	10.420	10.420	MAT	0	215	03/31/2021	07/01/2025
76028#-AA-4	REPAIRIFY INC. - INITIAL TERM LOAN				. 2.A PL	362,813	100.0000	362,813	362,813	362,813	0	0	0	0	9.530	9.530	MAT	19,522	47,655	06/11/2021	06/14/2027
78013#-AA-5	ROYAL BUYER LLC INITIAL TERM LN				. 5.B GI	1,748,066	99.9000	1,781,957	1,783,740	1,748,066	0	0	0	0	10.010	0.344	MAT	15,918	336,812	08/31/2022	08/31/2028
79400#-AA-6	Saldon Holdings Inc./First Amendment Te				. 3.B PL	326,119	100.0000	329,413	329,413	327,508	0	4	0	0	10.460	10.460	MAT	9,298	38,522	08/29/2019	03/13/2025
79400#-AB-4	Saldon Holdings Inc./Term Loan 3/19				. 3.B PL	1,986,059	100.0000	2,036,984	2,036,984	2,009,802	0	63	0	0	10.460	10.460	MAT	57,499	248,296	03/11/2019	03/13/2025
79400#-AC-2	SALDON HOLDINGS INC. - SECOND AMENMENT				. 3.B PL	180,061	100.0000	180,061	180,061	180,061	0	0	0	0	10.460	10.460	MAT	6,647	17,881	06/24/2021	03/13/2025
82419*-AB-9	Shermco Intermediate Holdings Inc. - 201				. 3.B PL	586,177	99.0000	595,196	601,208	586,177	0	0	0	0	9.590	9.590	MAT	27,069	53,951	09/06/2023	06/05/2026
82419*-AC-7	Shermco Intermediate Holdings Inc. - 202				. 3.B PL	150,871	99.0000	157,672	159,265	150,871	0	0	0	0	9.600	9.600	MAT	8,836	8,473	06/10/2024	06/05/2026
87607*-AA-2	TAPCO Buyer LLC - Unitranche Term Loan				. 4.C Z	990,992	98.5000	990,992	1,006,084	990,992	0	0	0	0	9.520	9.520	MAT	12,243	0	11/15/2024	11/15/2030
88233F-AK-6	Vistra Operations Co LLC-VST TL B3 TL US				. 2.C FE	7,395,843	100.0800	8,042,251	8,035,822	7,581,983	0	0	0	0	6.110	6.110	MAT	29,712	735,354	03/19/2020	12/20/2030
88732#-AA-4	TIMECLOCK PLUS LLC - DELAYED DRAW TERM				. 4.B PL	160,141	100.0000	160,141	160,141	160,141	0	0	0	0	9.980	9.980	MAT	6,364	25,208	12/01/2020	08/28/2026
89668#-AA-2	Trintech Inc - 2023 Term Loan				. 4.B PL	1,202,883	98.4400	1,220,741	1,240,086	1,202,883	0	0	0	0	9.860	9.860	MAT	11,103	191,894	07/25/2023	07/25/2029
91839*-AE-6	VPROP OPERATING LLC - TRANCHE A				. 4.B PL	122,894	100.0000	123,929	123,929	122,894	0	0	0	0	14.290	14.290	MAT	8,804	27,547	12/06/2024	11/06/2026
91839*-AF-3	VPROP OPERATING LLC - TRANCHE B LOAN				. 4.B PL	149,816	100.0000	149,816	149,816	149,816	0	0	0	0	14.290	14.290	MAT	10,643	20,091	12/06/2024	11/06/2026

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 1

Showing All Long-Term BONDS Owned December 31 of Current Year

1	2	Codes			6	7	Fair Value		10	11	Change in Book/Adjusted Carrying Value				Interest					Dates	
		3	4	5			8	9			12	13	14	15	16	17	18	19	20	21	22
CUSIP Identification	Description	C o d e	F o r e i g n	Bond Char	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol	Actual Cost	Rate Used to Obtain Fair Value	Fair Value	Par Value	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Rate of	Effective Rate of	When Paid	Admitted Amount Due and Accrued	Amount Received During Year	Acquired	Stated Contractual Maturity Date
91839*-AG-1	VPROP OPERATING LLC - TRANCHE C LOAN				.. 4.B PL	680,983	100.0000	680,983	680,983	680,983	0	0	0	0	14.290	14.290	MAT	48,379	99,956	12/06/2024	11/06/2026
92974*-AB-5	WSHP FC ACQUISITION LLC - SECOND AMENDME				.. 3.B PL	829,366	93.0000	771,310	829,366	829,366	0	0	0	0	11.980	11.980	MAT	65,549	128,887	12/31/2024	03/30/2027
92974*-AC-3	WSHP FC Acquisition LLC/Third Amendment				.. 3.B PL	387,140	93.0000	360,040	387,140	387,140	0	0	0	0	11.980	11.980	MAT	23,624	78,656	12/31/2024	03/30/2027
000000-00-0	Kings III - Delayed Draw Term Loan				.. 5.B GI	362,347	99.9000	361,985	362,347	362,347	0	0	0	0	10.210	10.210	MAT	3,288	44,162	05/30/2024	08/31/2028
G6684@-AA-9	OHA Credit Solutions Master Fund I SPV, ...	C			.. 1.F PL	28,542,937	100.0000	28,542,937	28,542,937	28,542,937	0	0	0	0	7.710	7.710	MAT	1,013,867	2,151,125	09/25/2023	12/16/2032
N2104K-AB-7	Clear Channel Worldwide CCIBV Fixed Rat		2		.. 4.B FE	7,920,000	98.2500	7,860,000	8,000,000	7,920,000	0	0	0	0	7.500	7.500	MON	151,667	565,000	03/26/2024	03/31/2027
20824@-AC-4	CONNEXUS RESOURCE GROUP INC / ROI SOLUTI				.. 4.C Z	648,142	98.2500	648,142	659,686	648,142	0	0	0	0	9.330	9.330	MAT	15,672		10/03/2024	10/03/2029
000000-00-0	BECKLAR LLC Senior Term Loa				.. 4.C Z	735,805	98.5000	735,805	747,010	735,805	0	0	0	0	9.510	9.510	MAT	4,932		12/06/2024	12/06/2029
12881#-AC-9	CALDWELL & GREGORY LLC 1L Term Loan				.. 4.C IF	1,104,553	98.6300	1,106,010	1,121.373	1,104,553	0	0	0	0	9.330	9.330	MAT	27,591	1,682	09/30/2024	09/30/2030
55183*-AC-7	Lynx Franchising LLC - 2021-09 Increment				.. 4.C	2,805,581	98.6000	2,822,758	2,862,838	2,805,581	0	0	0	0	10.750	10.750	MAT	78,613	493,378	09/09/2021	12/23/2026
55183*-AF-0	EMPOWER BRANDS FRANCHISI Term Loan TL US				.. 4.C	1,163,132	98.4000	1,179,919	1,199,105	1,163,132	0	0	0	0	11.250	11.250	MAT	34,989		06/25/2024	12/18/2026
87300*-AE-4	THG Acquisition LLC - 2020 Delayed Draw			4	.. 3.A PL	4	99.8700	4	4	4	0	0	0	0	10.540	10.540	MAT	5,925		12/31/2021	12/02/2026
000000-00-0	CALDWELL & GREGORY LLC 1L DDTL				.. 4.C Z	26,231	98.6300	25,872	26,231	26,231	0	0	0	0	9.340	9.340	MAT	183	60	12/30/2024	09/30/2027
L4830@-AA-1	WEBCENTRAL DEH Incremental CAF	B			.. 5.B GI	2,878,624	98.0400	2,789,402	395,614	2,772,095	0	0	0	(106,529)	9.430	9.430	MAT	67,148	90,948	10/30/2024	12/18/2030
67117*-AA-7	OA BUYER INC INITIAL TERM LN				.. 5.A	3,568,753	99.6000	3,627,018	3,641,585	3,568,753	0	0	0	0	9.110	9.110	MAT	30,330	545,774	12/31/2021	12/20/2026
75279*-AB-2	RANDYS HLDGS INC DELAYED DRAW TERM LOAN				.. 3.B PL	163,149	98.9100	161,371	163,149	163,149	0	0	0	0	9.960	9.960	MAT	3,740	13,900	07/15/2024	11/01/2028
87338*-AC-4	Technosylva - Delayed Draw Term Loan				.. 5.B GI	699,638	99.0000	692,641	699,638	699,638	0	0	0	0	9.280	9.280	MAT	5,761	58,665	10/01/2024	12/19/2028
87338*-AE-0	TECHNOSYLVLA TSYL TA Term Loan TL US				.. 4.C Z	1,043,757	99.0000	1,043,757	1,054,300	1,043,757	0	0	0	0	9.570	9.570	MAT	8,447	6,593	11/07/2024	09/17/2027
000000-00-0	TECHNOSYLVLA TSYL TA Senior Term Loa				.. 4.C Z	1,219,280	99.0000	1,219,280	1,231,596	1,219,280	0	0	0	0	9.470	9.470	MAT	9,216		12/06/2024	12/04/2029
20470*-AB-5	Comply365 - 2023 Incremental Term Loan				.. 4.C	178,204	100.0000	181,841	181,841	178,204	0	0	0	0	9.460	9.460	MAT	1,563	21,094	12/21/2023	12/21/2029
20475@-AA-0	COMPLY365 LLC DDTL				.. 4.C IF	62,053	100.0000	62,053	62,053	62,053	0	0	0	0	9.460	9.460	MAT	534	14,516	08/27/2024	12/21/2025
B6S2BL-MZ-0	WEBCENTRAL DEH Incremental TLB	B			.. 4.C Z	0	97.7800	0	2,353,606	0	0	0	0	0	9.570	9.570	MAT	0	0	06/17/2024	12/17/2030
000000-00-0	CLIFFWATER ENHANCED LEND Revolving Facil				.. 1.D Z	6,832,298	100.0000	6,832,298	6,832,298	6,832,298	0	0	0	0	0.000	0.000	MAT	0	0	12/26/2024	07/19/2029
000000-00-0	CLIFFWATER CORPORATE LEN Cliff- TL 12/18				.. 1.D Z	22,500,000	100.0000	22,500,000	22,500,000	22,500,000	0	0	0	0	0.000	0.000	MAT	0	0	12/18/2024	04/08/2030
B6S28Y-LY-0	Tikehau Green Diamond CFO LLC				.. 1.F Z	20,000,000	100.0000	20,000,000	20,000,000	20,000,000	0	0	0	0	0.000	0.000	MAT	0	0	12/18/2024	12/21/2030
1829999999. Subtotal - Bonds - Unaffiliated Bank Loans - Acquired						2,302,955,747	XXX	2,289,895,402	2,341,071,319	2,293,183,010	212,704	(2,354)	1,494,437	(8,010,872)	XXX	XXX	XXX	50,477,041	144,692,172	XXX	XXX
1909999999. Subtotal - Bonds - Unaffiliated Bank Loans						3,662,108,024	XXX	3,649,700,521	4,050,408,437	3,651,665,815	15,616	(2,312)	1,505,199	(13,587,759)	XXX	XXX	XXX	71,532,176	233,306,442	XXX	XXX
2419999999. Total - Issuer Obligations						20,954,968,617	XXX	19,544,839,199	20,831,550,251	20,784,229,731	(11,418,317)	16,369,728	30,357,980	(30,188,321)	XXX	XXX	XXX	266,493,641	822,881,985	XXX	XXX
2429999999. Total - Residential Mortgage-Backed Securities						3,183,533,475	XXX	2,926,601,263	3,784,211,982	3,161,148,011	204,636	4,918,245	6,909,746	(4,092,548)	XXX	XXX	XXX	23,621,716	117,887,069	XXX	XXX
2439999999. Total - Commercial Mortgage-Backed Securities						1,142,525,578	XXX	1,068,163,894	1,224,882,826	1,162,091,811	(2,129,553)	8,553,903	0	(810,000)	XXX	XXX	XXX	4,530,867	55,163,999	XXX	XXX
2449999999. Total - Other Loan-Backed and Structured Securities						8,723,715,101	XXX	8,685,908,277	8,949,694,806	8,749,071,326	(3)	35,959,272	25,391,152	(4,107,120)	XXX	XXX	XXX	77,043,800	414,407,257	XXX	XXX
2459999999. Total - SVO Identified Funds						0	XXX	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0	XXX	XXX
2469999999. Total - Affiliated Bank Loans						0	XXX	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0	XXX	XXX
2479999999. Total - Unaffiliated Bank Loans						3,662,108,024	XXX	3,649,700,521	4,050,408,437	3,651,665,815	15,616	(2,312)	1,505,199	(13,587,759)	XXX	XXX	XXX	71,532,176	233,306,442	XXX	XXX
2489999999. Total - Unaffiliated Certificates of Deposit						0	XXX	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0	XXX	XXX
2509999999 - Total Bonds						37,666,850,796	XXX	35,875,213,154	38,840,748,302	37,508,206,693	(13,327,621)	65,798,837	64,164,077	(52,785,748)	XXX	XXX	XXX	443,222,199	1,643,646,752	XXX	XXX

1. Line Book/Adjusted Carrying Value by NAIC Designation Category Footnote:
Number
1A 1A ..\$ 6,873,008,959 1B ..\$ 1,082,204,439 1C ..\$ 2,894,589,786 1D ..\$ 1,477,820,357 1E ..\$ 1,550,988,929 1F ..\$ 4,404,114,185 1G ..\$ 3,732,369,625
1B 2A ..\$ 3,515,345,798 2B ..\$ 6,621,543,835 2C ..\$ 3,366,016,837
1C 3A ..\$ 414,624,183 3B ..\$ 255,708,035 3C ..\$ 442,463,100
1D 4A ..\$ 134,181,658 4B ..\$ 196,387,924 4C ..\$ 195,599,033
1E 5A ..\$ 85,600,279 5B ..\$ 140,209,991 5C ..\$ 13,997,048

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

Line Number	Book/Adjusted Carrying Value by NAIC Designation Category Footnote:													
1A	1A ..\$	6,873,008,959	1B ..\$	1,082,204,439	1C ..\$	2,894,589,786	1D ..\$	1,477,820,357	1E ..\$	1,550,988,929	1F ..\$	4,404,114,185	1G ..\$	3,732,369,625
1B	2A ..\$	3,515,345,798	2B ..\$	6,621,543,835	2C ..\$	3,366,016,837								
1C	3A ..\$	414,624,183	3B ..\$	255,708,035	3C ..\$	442,463,100								
1D	4A ..\$	134,181,658	4B ..\$	196,387,924	4C ..\$	195,599,033								
1E	5A ..\$	85,600,279	5B ..\$	140,209,991	5C ..\$	13,997,048								
1F	6	\$	111,432,692											

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 2 - SECTION 1

Showing All PREFERRED STOCKS Owned December 31 of Current Year

1	2	Codes		5	6	7	8	Fair Value		11	Dividends			Change in Book/Adjusted Carrying Value					20	21
		3	4					9	10		12	13	14	15	16	17	18	19		
CUSIP Identi- fication	Description	Code	For- eign	Number of Shares	Par Value Per Share	Rate Per Share	Book/ Adjusted Carrying Value	Rate Per Share Used to Obtain Fair Value	Fair Value	Actual Cost	Declared but Unpaid	Amount Received During Year	Nonadmitted Declared But Unpaid	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other-Than- Temporary Impairment Recognized	Total Change in Book/Adjusted Carrying Value (15 + 16 - 17)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	NAIC Design- ation, NAIC Design- ation Modifier and SVO Admini- strative Symbol	Date Acquired
04686J-30-9 ...	Athene Holding Ltd-ATHENE HOLDING LTD ...			80,000,000	25.00	0.000	2,007,200	25.090	2,007,200	1,984,000	31,875	127,500	0	63,200	0	0	63,200	0	2.C FE	06/12/2020
088555-ZC-4 ...	BIDTELLECT SERIES B-1 PERP CONVETIBLE PF	R		161,308,000	0.00	0.000	2,050,961	15.885	2,562,378	635,625	0	0	0	0	0	0	0	0	5.B GI	08/25/2017
088577-ZA-2 ...	BEXION PHARMACEUTICALS B-1 MAND REDEEM P	R		8,948,000	0.00	0.000	19,426	2.171	19,426	139,994	0	0	0	(78,462)	0	0	(78,462)	0	6.*	12/28/2017
088577-ZB-0 ...	BEXION PHARMACEUTICALS B PERP PFD	R		10,092,000	0.00	0.000	17,224	1.707	17,224	199,997	0	0	0	(69,568)	0	0	(69,568)	0	6.*	09/10/2018
088577-ZZ-7 ...	BEXION PHARMACEUTICALS A-1 PERP CONV PFD	R		23,433,000	0.00	0.000	45,106	1.925	45,106	319,134	0	0	0	(182,185)	0	0	(182,185)	0	6.*	03/06/2017
08888#-12-2 ...	Bidtellect Inc. Perpetual Preferred	R		294,985,000	0.00	0.000	1,007,377	9.515	2,806,782	1,799,409	0	0	0	0	0	0	0	0	5.B GI	06/30/2015
28852N-20-8 ...	Ellington Financial Inc-ELLINGTON FIN			215,546,000	25.00	0.000	5,479,180	25.420	5,479,179	5,089,914	138,354	363,734	0	564,731	0	0	564,731	0	2.A PL	03/25/2020
37427*-10-7 ...	GET ME MEARS GROUP SERIES E PERP PFD	R		11,770	0.00	0.000	1,476,184	125,419.212	1,476,184	664,113	0	0	0	(9,968)	0	0	(9,968)	0	5.B GI	09/02/2020
499188-ZZ-6 ...	KNOPP BIOSCIENCES LLC C PERP CONV PFD	R		8,615,377,000	0.00	0.000	15,049,172	1.747	15,049,172	8,378,078	0	0	0	(466,409)	0	0	(466,409)	0	6.*	02/14/2019
534187-88-5 ...	Lincoln National Corp-PREFERRED STOCK			600,000,000	25.00	0.000	16,578,000	27.630	16,578,000	15,000,000	0	1,350,000	0	222,000	0	0	222,000	0	2.C FE	11/15/2022
61686Z-ZZ-1 ...	MORGAN JOSEPH TRI-ARTISAN GRP D 5.00% PE			5,120,930	0.00	0.000	0	0.000	0	0	0	0	0	0	0	0	0	0	5.B GI	01/03/2020
61762V-83-8 ...	Morgan Stanley-MORGAN STANLEY			1,000,000,000	25.00	0.000	26,720,000	26.720	26,720,000	25,000,000	414,063	345,052	0	1,720,000	0	0	1,720,000	0	2.C FE	07/23/2024
65341T-20-6 ...	NexBank Capital Inc Noncumulative Perpet			49,993,500	1,000.00	0.000	47,290,351	945.930	47,290,351	49,993,500	0	3,749,513	0	8,295,421	0	0	8,295,421	0	2.B PL	09/01/2021
69425*-10-2 ...	PRG III LLC Perpetual Preferred	R		4,219,000	0.00	0.000	210,699	49.940	210,699	180,784	0	0	0	(1,498,015)	0	0	(1,498,015)	0	6.*	10/06/2020
714239-ZB-9 ...	PERMIAN HOLDCO 2 A PERP PFD			28,050,000	0.00	0.000	0	0.000	0	0	0	0	0	0	0	0	0	0	5.B GI	11/01/2016
857477-85-5 ...	State Street Corp-STATE STREET CORP			2,665,000	25.00	0.000	62,441	23.430	62,441	45,334	0	4,456	0	(1,365)	0	0	(1,365)	0	2.A FE	03/19/2020
88429#-12-2 ...	THIRD POLE SERIES A 8.00% PERP CONV PFD	R		139,300,000	0.00	0.000	0	0.000	0	3,438,097	0	0	0	628,317	0	3,438,097	(2,809,780)	0	6.*	05/14/2020
88429Z-ZZ-6 ...	THIRD POLE SERIES B TRANCHE 1 PERP CONV	R		44,466,000	0.00	0.000	0	0.000	0	1,471,806	0	0	0	76,340	0	1,471,806	(1,395,466)	0	6.*	12/01/2021
950810-70-5 ...	WesBanco Inc-WESBANCO INC			320,000,000	25.00	0.000	8,075,072	25.235	8,075,072	8,000,000	0	540,000	0	419,808	0	0	419,808	0	2.C FE	08/04/2020
09069Z-ZA-2 ...	BIOWISH TECHNOLOGIES SERIES B PERP PFD	C		1,525,571,000	0.00	0.000	0	0.000	0	488,183	0	0	0	0	0	488,183	(488,183)	0	6.*	04/05/2017
09069Z-ZB-0 ...	BIOWISH TECHNOLOGIES SERIES C PERP PFD	C		5,400,615,000	0.00	0.000	0	0.000	0	1,458,166	0	0	0	0	0	1,458,166	(1,458,166)	0	6.*	04/05/2017
09069Z-ZC-8 ...	BIOWISH TECHNOLOGIES SERIES E PERP PFD	R	C	4,838,941,000	0.00	0.000	0	0.000	0	2,634,000	0	0	0	2,634,000	0	2,634,000	0	0	6.*	11/15/2018
09069Z-ZG-9 ...	BIOWISH TECHNOLOGIES SERIES F PERP PFD	C		6,301,402,000	0.00	0.000	0	0.000	0	602,936	160,485	0	0	381,402	0	602,936	(221,534)	0	6.*	11/21/2023
29359U-10-9 ...	Enstar Group Ltd-PREFERRED STOCK	D		689,890,000	25.00	0.000	13,777,103	19.970	13,777,103	14,209,445	0	428,750	0	(432,342)	0	0	(432,342)	0	2.C FE	12/16/2024
G1625Z-26-7 ...	Brookfield Infrastructur-PREFERRED STOCK	D		200,000,000	25.00	0.000	3,524,000	17.620	3,524,000	5,000,000	0	256,250	0	232,000	0	0	232,000	0	2.C FE	09/14/2020
G9078F-13-1 ...	Triton International Ltd-TRITON INTERNAT	D		24,149,000	25.00	0.000	611,694	25.330	611,694	605,829	0	36,224	0	5,865	0	0	5,865	0	3.A FE	04/15/2024
G9078F-15-6 ...	Triton International Ltd-TRITON INTERNAT	D		55,723,000	25.00	0.000	1,079,355	19.370	1,079,355	1,105,606	0	60,076	0	(26,251)	0	0	(26,251)	0	3.A FE	04/15/2024
4019999999. Subtotal - Preferred Stock - Industrial and Miscellaneous (Unaffiliated) Perpetual Preferred							145,080,545	XXX	147,391,366	148,443,950	744,777	7,261,554	0	12,478,519	0	10,093,188	2,385,331	0	XXX	XXX
03769M-20-5 ...	Apollo Global Management-APOLLO GLOBAL M			800,000,000	25.00	0.000	20,000,000	27.046	21,636,560	20,000,000	0	1,525,002	0	0	0	0	0	0	2.A FE	08/16/2023
03770#-10-0 ...	APOLLO ASSET-BACKED FINANCE LENDING COMP			5,736,110	0.00	0.000	5,588,865	1,000.000	5,736,110	5,736,110	0	0	0	0	0	0	0	0	3.A PL	12/02/2024
04651L-30-5 ...	AT&T Mobility II LLC Preferred Equity			23,269,000	1,000.00	0.000	23,269,000	1,021.785	23,775,915	23,269,000	791,146	1,257,043	0	0	0	0	0	0	2.A PL	06/15/2023
04686J-83-8 ...	Athene Holding Ltd-ATHENE HOLDING LTD			1,000,000,000	25.00	0.000	25,000,000	24.893	24,893,200	25,000,000	0	1,475,174	0	0	0	0	0	0	2.B FE	02/29/2024
12766#-12-3 ...	Cogency Global - Preferred			137,753	0.00	0.000	137,753	2,602.500	358,503	137,753	0	0	0	0	0	0	0	0	5.A	02/14/2022
14314C-10-5 ...	Carlyle Finance LLC-CARLYLE FINANCE LLC			100,000,000	25.00	0.000	1,990,556	17.860	1,786,000	1,990,556	0	86,719	0	0	0	0	0	0	2.B FE	04/08/2024
30290Y-A*-2 ...	FS Credit Opportunities Series 2029 Term			15,000,000	1,000.00	0.000	15,000,000	1,012.314	15,184,710	15,000,000	0	0	0	0	0	0	0	0	1.D FE	05/16/2024
48253M-10-4 ...	KKR Group Finance Co IX -KKR GRP FIN IX			420,000,000	25.00	0.000	6,867,000	18.360	7,711,200	6,867,000	121,406	485,626	0	0	0	0	0	0	2.A FE	10/25/2023

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 2 - SECTION 1

Showing All PREFERRED STOCKS Owned December 31 of Current Year

1	2	Codes		5	6	7	8	Fair Value		11	Dividends			Change in Book/Adjusted Carrying Value					20	21
		3	4					9	10		12	13	14	15	16	17	18	19		
CUSIP Identi- fication	Description	Code	For- eign	Number of Shares	Par Value Per Share	Rate Per Share	Book/ Adjusted Carrying Value	Rate Per Share Used to Obtain Fair Value	Fair Value	Actual Cost	Declared but Unpaid	Amount Received During Year	Nonadmitted Declared But Unpaid	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other-Than- Temporary Impairment Recognized	Total Change in Book/Adjusted Carrying Value (15 + 16 - 17)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	NAIC Design- ation, NAIC Design- ation Modifier and SVO Admini- strative Symbol	Date Acquired
55076*-11-1 ..	Luxury Mortgage Corp Series I Preferred ..	.....	.....	3,500,000.000	1.00	0.000	3,500,000	1.120	3,920,000	3,500,000	0	0	0	0	0	0	0	0	5.B	05/28/2024 ..
606336-ZZ-8 ..	MOD PIZZA PERP CONV PFD	R.....	.....	25,012.000	0.00	0.000	0	0.000	0	3,499,929	0	0	0	0	0	3,499,929	(3,499,929)	0	5.B GI	05/01/2019 ..
68144#-AF-7 ..	Olympia Acquisition, Inc./Preferred Unit ..	.....	.....	80.306	0.00	0.000	0	0.000	0	30,920	0	0	0	0	0	0	0	0	6. *	02/28/2023 ..
759351-80-2 ...	Reinsurance Group of Ame-REINSURANCE GRO	.....	.....	500,000.000	25.00	0.000	12,500,000	24.590	12,295,000	12,500,000	0	0	0	0	0	0	0	0	2.B FE	12/05/2024 ..
759351-88-5 ...	Reinsurance Group of Ame-REINSURANCE GRO	.....	.....	200,000.000	25.00	0.000	5,000,000	26.067	5,213,340	5,000,000	89,063	356,250	0	0	0	0	0	0	2.B FE	09/15/2022 ..
78500B-40-3 ..	SVB Financial Trust-SVB FINANCIAL TRUST	.....	.....	5,000,000.000	0.01	0.000	6,070	0.010	50,000	6,070	0	0	0	0	0	0	0	0	5.B Z	11/08/2024 ..
872652-10-2 ...	TPG Operating Group II L-TPG OPERATING G	.....	.....	1,333,600.000	25.00	0.000	33,340,000	25.470	33,966,792	33,340,000	0	1,808,649	0	0	0	0	0	0	2.C FE	02/28/2024 ..
000000-00-0 ..	DISH DBS Issuer Pfd 6/29 .....	.....	.....	466,667.000	0.00	0.000	450,334	105.000	49,000,035	450,334	0	0	0	0	0	0	0	0	6. *	09/27/2024 ..
B6S2XZ-LM-5 ..	Cohesity Inc Series G .....	.....	.....	5,488.000	0.00	0.000	86,136	22.500	123,480	86,136	0	0	0	0	0	0	0	0	5.B Z	12/09/2024 ..
B6S2XZ-W5-0 ..	Cohesity Inc Series G1 .....	.....	.....	3,791.000	0.00	0.000	59,501	22.500	85,298	59,501	0	0	0	0	0	0	0	0	5.B Z	12/09/2024 ..
4029999999. Subtotal - Preferred Stock - Industrial and Miscellaneous (Unaffiliated) Redeemable Preferred							152,795,215	XXX	205,736,143	156,473,309	1,001,615	6,994,463	0	0	0	3,499,929	(3,499,929)	0	XXX	XXX
4109999999. Total - Preferred Stock - Industrial and Miscellaneous (Unaffiliated)							297,875,760	XXX	353,127,509	304,917,259	1,746,392	14,256,017	0	12,478,519	0	13,593,117	(1,114,598)	0	XXX	XXX
4409999999. Total - Preferred Stock - Parent, Subsidiaries and Affiliates							0	XXX	0	0	0	0	0	0	0	0	0	0	XXX	XXX
4509999999 - Total Preferred Stocks							297,875,760	XXX	353,127,509	304,917,259	1,746,392	14,256,017	0	12,478,519	0	13,593,117	(1,114,598)	0	XXX	XXX

1. Line Book/Adjusted Carrying Value by NAIC Designation Category Footnote:

Number	1A	1A ...\$	1B	1B ...\$	1C	1C ...\$	1D	1D ...\$	1E	1E ...\$	1F	1F ...\$	1G	1G ...\$
	1A	1A ...\$ 0	1B	1B ...\$ 0	1C	1C ...\$ 0	1D	1D ...\$ 15,000,000	1E	1E ...\$ 0	1F	1F ...\$ 0	1G	1G ...\$ 0
	1B	2A ...\$ 55,677,621	2B	2B ...\$ 91,780,907	2C	2C ...\$ 104,021,375								
	1C	3A ...\$ 7,279,914	3B	3B ...\$ 0	3C	3C ...\$ 0								
	1D	4A ...\$ 0	4B	4B ...\$ 0	4C	4C ...\$ 0								
	1E	5A ...\$ 137,753	5B	5B ...\$ 8,186,228	5C	5C ...\$ 0								
	1F	6\$ 15,791,961												

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 2 - SECTION 2

Showing All COMMON STOCKS Owned December 31 of Current Year

1	2	Codes		5	6	Fair Value		9	Dividends			Change in Book/Adjusted Carrying Value				17	18
		3	4			7	8		10	11	12	13	14	15	16		
CUSIP Identi- fication	Description	Code	For- eign	Number of Shares	Book/ Adjusted Carrying Value	Rate Per Share Used to Obtain Fair Value	Fair Value	Actual Cost	Declared but Unpaid	Amount Received During Year	Nonadmitted Declared But Unpaid	Unrealized Valuation Increase/ (Decrease)	Current Year's Other-Than- Temporary Impairment Recognized	Total Change in Book/Adjusted Carrying Value (13 - 14)	Total Foreign Exchange Change in Book/Adjusted Carrying Value	Date Acquired	NAIC Design- ation, NAIC Design- ation Modifier and SVO Admini- strative Symbol
001084-10-2 ...	AGCO CORP-COMMON STOCK ...			1,000,000	93,480	93.480	93,480	100,726	0	3,660	0	(27,930)	0	(27,930)	0	07/26/2022	
02215L-20-9 ...	Kinetik Holdings Inc-COMMON STOCK ...			4,615,000	261,717	56.710	261,717	166,768	0	13,983	0	107,576	0	107,576	0	10/18/2023	
05105P-10-7 ...	Augmedix Inc-COMMON STOCK ...			500,000,000	1,175,000	2.350	1,175,000	1,500,000	0	0	0	(1,750,000)	0	(1,750,000)	0	09/28/2020	
05591L-10-7 ...	BM Technologies Inc-COMMON STOCK ...			31,790,000	155,453	4.890	155,453	411,363	0	0	0	90,284	0	90,284	0	01/05/2021	
05722G-10-0 ...	Baker Hughes Co-COMMON STOCK ...			3,900,000	159,978	41.020	159,978	96,253	0	3,276	0	26,676	0	26,676	0	07/28/2022	
08579W-10-3 ...	Berry Global Group Inc-COMMON STOCK ...			1,300,000	84,071	64.670	84,071	88,161	0	1,476	0	(3,536)	0	(3,536)	0	12/21/2023	
09062W-20-4 ...	BIOLIFE SOLUTIONS INC-COMMON STOCK ...			91,316,000	2,370,563	25.960	2,370,563	3,202,452	0	0	0	886,678	0	886,678	0	05/03/2021	
09628D-10-4 ...	Bluestem Group Inc-COMMON STOCK ...			2,071,000	21	0.010	21	476	0	145	0	(456)	0	(456)	0	12/31/2014	
09739D-10-0 ...	BOISE CASCADE CO-COMMON STOCK ...			470,000	55,864	118.860	55,864	33,264	0	2,735	0	(4,935)	0	(4,935)	0	12/23/2022	
125269-10-0 ...	CF INDUSTRIES HOLDINGS I-COMMON STOCK ...			5,100,000	435,132	85.320	435,132	485,585	0	10,200	0	29,682	0	29,682	0	09/16/2022	
126408-10-3 ...	CSX CORP-COMMON STOCK ...			6,000,000	193,620	32.270	193,620	228,117	0	2,160	0	(34,497)	0	(34,497)	0	02/29/2024	
127097-10-3 ...	CABOT OIL & GAS CORP-COMMON STOCK ...			6,409,000	163,686	25.540	163,686	167,979	0	5,384	0	128	0	128	0	07/21/2022	
149123-10-1 ...	Caterpillar Inc-COMMON STOCK ...			1,500,000	544,140	362.760	544,140	547,792	0	4,012	0	(3,652)	0	(3,652)	0	10/17/2024	
150870-10-3 ...	Celanese Corp-COMMON STOCK ...			1,100,000	76,131	69.210	76,131	123,254	0	3,080	0	(94,776)	0	(94,776)	0	09/08/2022	
156440-ZZ-5 ...	CENTURY BANK OF GEORGIA-COMMON STOCK ...	R		17,811,000	1,377	0.077	1,377	182,940	0	0	0	181,563	181,563	0	0	06/21/2021	
16411Q-10-1 ...	CHENIERE ENERGY PARTNERS-COMMON STOCK ...			33,347,000	1,771,393	53.120	1,771,393	1,676,187	0	114,677	0	111,676	0	111,676	0	03/27/2024	
16411R-20-8 ...	CHENIERE ENERGY INC-COMMON STOCK ...			10,539,000	2,264,515	214.870	2,264,515	1,571,912	0	13,194	0	453,626	0	453,626	0	10/11/2024	
166764-10-0 ...	CHEVRON CORP-COMMON STOCK ...			4,200,000	608,328	144.840	608,328	648,069	0	27,384	0	(18,144)	0	(18,144)	0	07/24/2023	
201723-10-3 ...	COMMERCIAL METALS CO-COMMON STOCK ...			3,200,000	158,720	49.600	158,720	113,057	0	2,240	0	(1,408)	0	(1,408)	0	07/22/2022	
20825C-10-4 ...	ConocoPhillips-COMMON STOCK ...			4,492,000	445,472	99.170	445,472	404,261	0	11,232	0	(59,307)	0	(59,307)	0	11/22/2024	
23130Q-10-7 ...	CuriosityStream Inc-COMMON STOCK ...	R		27,930,000	42,733	1.530	42,733	312,476	1,803	291	0	27,648	0	27,648	0	10/18/2021	
23345M-10-7 ...	DT Midstream Inc-COMMON STOCK ...			15,771,000	1,568,111	99.430	1,568,111	1,367,135	11,592	12,605	0	183,699	0	183,699	0	11/22/2024	
244199-10-5 ...	Deere & Co-COMMON STOCK ...			600,000	254,220	423.700	254,220	187,262	972	3,528	0	14,298	0	14,298	0	07/27/2022	
24664T-10-3 ...	Delek Logistics Partners-COMMON STOCK ...			383,000	16,186	42.260	16,186	19,020	0	1,653	0	(349)	0	(349)	0	06/29/2022	
26875P-10-1 ...	EOG Resources Inc-COMMON STOCK ...			1,360,000	166,709	122.580	166,709	149,428	0	6,990	0	2,217	0	2,217	0	07/28/2022	
29273V-10-0 ...	ENERGY TRANSFER EQUITY L P LTD PARTNERSH ...			847,125,000	16,595,179	19.590	16,595,179	9,340,833	316,045	796,893	0	4,933,315	0	4,933,315	0	11/03/2023	
29336T-10-0 ...	ENLINK MIDSTREAM LLC COMMON UNIT ...			388,927,000	5,503,317	14.150	5,503,317	3,522,224	0	103,066	0	773,965	0	773,965	0	09/16/2022	
293792-10-7 ...	ENTERPRISE PRODS PARTNERS L P COMMON UNI ...			372,712,000	11,688,248	31.360	11,688,248	9,372,387	0	775,241	0	1,867,287	0	1,867,287	0	06/23/2023	
29415C-10-1 ...	Eos Energy Enterprises I-COMMON STOCK ...			1,204,430,000	5,853,530	4.860	5,853,530	13,028,574	0	0	0	4,540,701	0	4,540,701	0	12/29/2021	
30231G-10-2 ...	Exxon Mobil Corp-COMMON STOCK ...			7,200,000	774,504	107.570	774,504	838,758	0	29,083	0	(9,024)	0	(9,024)	0	05/03/2024	
35671D-85-7 ...	FREEMPORT-MCMORAN INC-COMMON STOCK ...			15,068,000	573,789	38.080	573,789	519,069	0	7,991	0	(100,978)	0	(100,978)	0	04/29/2024	
36828A-10-1 ...	GE Vernova Inc-COMMON STOCK ...			400,000	131,572	328.930	131,572	37,374	100	0	0	94,198	0	94,198	0	04/02/2024	
369604-30-1 ...	General Electric Co-COMMON STOCK ...			1,600,000	266,864	166.790	266,864	186,870	448	1,472	0	100,030	0	100,030	0	07/26/2023	
37045V-10-0 ...	General Motors Co-COMMON STOCK ...			5,600,000	298,312	53.270	298,312	229,608	0	2,016	0	68,704	0	68,704	0	02/29/2024	
371927-10-4 ...	GENESIS ENERGY L P LTD PARTNERSHIP UNIT ...			34,574,000	349,543	10.110	349,543	372,383	0	20,416	0	(51,584)	0	(51,584)	0	02/27/2024	
37946R-10-9 ...	Global Partners LP/MA-COMMON STOCK LTD P ...			36,416,000	1,695,165	46.550	1,695,165	1,298,783	0	104,150	0	154,404	0	154,404	0	12/08/2023	
388689-10-1 ...	GRAPHIC PACKAGING HOLDIN-COMMON STOCK ...			4,000,000	108,640	27.160	108,640	115,705	400	400	0	(7,065)	0	(7,065)	0	09/11/2024	
403949-10-0 ...	HF Sinclair Corp-COMMON STOCK ...			2,879,000	100,909	35.050	100,909	123,690	0	5,758	0	(59,077)	0	(59,077)	0	07/21/2022	
406216-10-1 ...	HALLIBURTON CO-COMMON STOCK ...			7,200,000	195,768	27.190	195,768	207,065	1,224	3,672	0	(64,512)	0	(64,512)	0	07/21/2022	
428103-10-5 ...	Hess Midstream LP-COMMON STOCK ...			34,579,000	1,280,460	37.030	1,280,460	1,047,975	0	91,226	0	186,727	0	186,727	0	12/07/2023	
452308-10-9 ...	Illinois Tool Works Inc-COMMON STOCK ...			800,000	202,848	253.560	202,848	209,966	1,200	3,440	0	(7,118)	0	(7,118)	0	02/29/2024	
45687V-10-6 ...	Ingersoll Rand Inc-COMMON STOCK ...			2,500,000	226,150	90.460	226,150	225,129	0	200	0	1,021	0	1,021	0	02/29/2024	
457187-10-2 ...	INGREDION INC-COMMON STOCK ...			2,500,000	343,900	137.560	343,900	337,570	0	0	0	6,330	0	6,330	0	10/17/2024	
460146-10-3 ...	International Paper Co-COMMON STOCK ...			8,500,000	457,470	53.820	457,470	318,418	0	15,725	0	150,195	0	150,195	0	12/21/2023	
49456B-10-1 ...	Kinder Morgan Inc/DE-KINDER MORGAN INC ...			206,088,000	5,646,811	27.400	5,646,811	4,583,962	0	115,269	0	997,263	0	997,263	0	11/22/2024	
55336V-10-0 ...	MPLX LP COMMON UNIT ...			326,814,000	15,641,318	47.860	15,641,318	10,812,542	0	1,070,288	0	3,383,214	0	3,383,214	0	05/01/2024	

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 2 - SECTION 2

Showing All COMMON STOCKS Owned December 31 of Current Year

1	2	Codes		5	6	Fair Value		9	Dividends			Change in Book/Adjusted Carrying Value				17	18
		3	4			7	8		10	11	12	13	14	15	16		
CUSIP Identi- fication	Description	Code	For- eign	Number of Shares	Book/ Adjusted Carrying Value	Rate Per Share Used to Obtain Fair Value	Fair Value	Actual Cost	Declared but Unpaid	Amount Received During Year	Nonadmitted Declared But Unpaid	Unrealized Valuation Increase/ (Decrease)	Current Year's Other-Than- Temporary Impairment Recognized	Total Change in Book/Adjusted Carrying Value (13 - 14)	Total Foreign Exchange Change in Book/Adjusted Carrying Value	Date Acquired	NAIC Design- ation, NAIC Design- ation Modifier and SVO Admini- strative Symbol
56585A-10-2 ...	MARATHON PETROLEUM CORP-COMMON STOCK			2,291,000	319,595	139,500	319,595	194,510	0	7,755	0	(20,298)	0	(20,298)	0	07/21/2022	
60938K-30-4 ...	Moneylion Inc-COMMON STOCK			36,982,797	3,180,890	86,010	3,180,890	11,094,950	0	0	0	862,439	0	862,439	0	09/22/2021	
624756-10-2 ...	MUELLER INDUSTRIES INC-COMMON STOCK			4,926,000	390,927	79,360	390,927	178,678	0	4,369	0	230,004	0	230,004	0	12/21/2023	
62913M-10-7 ...	NGL ENERGY PARTNERS LP-COMMON STOCK LTD			146,170,000	729,388	4,990	729,388	576,707	0	0	0	(84,779)	0	(84,779)	0	12/05/2023	
670346-10-5 ...	NUCOR CORP-COMMON STOCK			1,868,000	218,014	116,710	218,014	201,499	1,027	4,035	0	(107,092)	0	(107,092)	0	09/29/2022	
682680-10-3 ...	ONECK INC COMMON STK			40,064,125	4,022,438	100,400	4,022,438	1,319,730	0	158,654	0	1,209,135	0	1,209,135	0	09/25/2023	
695156-10-9 ...	PACKAGING CORP OF AMERIC-COMMON STOCK			1,800,000	405,234	225,130	405,234	325,478	2,250	4,750	0	79,551	0	79,551	0	09/11/2024	
701094-10-4 ...	Parker-Hannifin Corp-COMMON STOCK			730,000	464,302	636,030	464,302	401,764	0	2,592	0	62,538	0	62,538	0	09/11/2024	
718546-10-4 ...	PHILLIPS 66-COMMON STOCK			1,823,000	207,694	113,930	207,694	247,677	0	8,204	0	(35,020)	0	(35,020)	0	12/20/2023	
719405-10-2 ...	PHOTRONICS INC-COMMON STOCK			4,500,000	106,020	23,560	106,020	115,923	0	0	0	(35,145)	0	(35,145)	0	07/25/2023	
726503-10-5 ...	PLAINS ALL AMERICAN PIPELINE L.P. LTD PA			705,251,000	12,045,687	17,080	12,045,687	8,369,074	0	868,218	0	1,216,917	0	1,216,917	0	03/27/2024	
75281A-10-9 ...	RANGE RESOURCES CORP-COMMON STOCK			2,900,000	104,342	35,980	104,342	88,421	232	696	0	16,066	0	16,066	0	12/19/2023	
759509-10-2 ...	Reliance Steel & Aluminu-COMMON STOCK			1,000,000	269,260	269,260	269,260	181,102	0	4,400	0	(10,420)	0	(10,420)	0	08/08/2022	
76155G-20-6 ...	REVOLUTION LIGHTING TECH-COMMON STOCK			730,815,000	0	0,000	0	36,541	0	0	0	(36,541)	0	(36,541)	0	05/03/2016	
780287-10-8 ...	ROYAL GOLD INC-COMMON STOCK			620,000	81,747	131,850	81,747	61,362	0	992	0	6,752	0	6,752	0	08/04/2022	
78454L-10-0 ...	SM ENERGY CO-COMMON STOCK			2,200,000	85,272	38,760	85,272	85,206	0	1,628	0	88	0	88	0	12/19/2023	
84265V-10-5 ...	SOUTHERN COPPER CORP-COMMON STOCK			4,142,640	377,519	91,130	377,519	344,610	0	8,681	0	24,632	0	24,632	0	12/20/2023	
858119-10-0 ...	STEEL DYNAMICS INC-COMMON STOCK			5,437,000	620,199	114,070	620,199	396,878	2,501	9,814	0	(21,911)	0	(21,911)	0	09/29/2022	
864482-10-4 ...	SUBURBAN PROPANE PARTNER-COMMON STOCK			36,359,000	625,375	17,200	625,375	623,604	0	46,610	0	(26,619)	0	(26,619)	0	03/22/2024	
86614G-10-1 ...	Summit Midstream Partner-COMMON STOCK			9,000,000	340,020	37,780	340,020	324,990	0	0	0	15,030	0	15,030	0	06/24/2024	
86722A-10-3 ...	SunCoke Energy Inc-COMMON STOCK			19,200,000	205,440	10,700	205,440	126,156	0	8,448	0	(768)	0	(768)	0	09/08/2022	
86765K-10-9 ...	SUNOCO LP COMMON STK			101,264,000	5,209,020	51,440	5,209,020	4,690,387	0	51,440	0	312,563	0	312,563	0	05/02/2024	
87612G-10-1 ...	TARGA RES CORP COMMON STK			27,846,000	4,970,511	178,500	4,970,511	1,723,275	0	76,577	0	2,551,529	0	2,551,529	0	07/21/2022	
887389-10-4 ...	Tinkin Co/The-COMMON STOCK			1,000,000	71,370	71,370	71,370	79,751	0	1,350	0	(8,780)	0	(8,780)	0	12/21/2023	
887399-10-3 ...	Metallus Inc			900,000	12,717	14,130	12,717	15,230	0	0	0	(8,388)	0	(8,388)	0	09/13/2022	
893641-10-0 ...	TransDigm Group Inc-COMMON STOCK			195,000	247,120	1,267,280	247,120	228,356	0	14,625	0	18,763	0	18,763	0	02/29/2024	
918390-ZZ-1 ...	V-TEK CAPITAL INC.-COMMON STOCK			8,467,000	781,541	92,304	781,541	798,958	0	0	0	(706,880)	0	(706,880)	0	11/06/2020	
91913Y-10-0 ...	VALERO ENERGY CORP-COMMON STOCK			1,335,000	163,658	122,590	163,658	139,126	0	5,714	0	(9,892)	0	(9,892)	0	07/21/2022	
958669-10-3 ...	Western Midstream Partne-COMMON STOCK			254,682,000	9,787,429	38,430	9,787,429	6,773,081	0	700,884	0	2,217,062	0	2,217,062	0	11/06/2024	
960413-10-2 ...	WESTLAKE CHEMICAL CORP-COMMON STOCK			1,600,000	183,440	114,650	183,440	155,893	0	3,280	0	(40,496)	0	(40,496)	0	09/13/2022	
969457-10-0 ...	WILLIAMS COS INC COMMON STK			97,689,000	5,286,929	54,120	5,286,929	3,937,515	46,402	103,070	0	1,320,780	0	1,320,780	0	11/21/2024	
000000-00-0 ...	Polymer Solutions Group -COMMON STOCK			155,000	0	0,000	0	0	0	0	0	0	0	0	0	09/18/2023	
000000-00-0 ...	FitLab Inc. - Common Stock Purchase Warr			59,771,000	1	0,000	0	0	0	0	0	0	0	0	0	02/07/2024	
008474-10-8 ...	Agnico Eagle Mines Ltd-COMMON STOCK			2,400,000	187,704	78,210	187,704	108,801	0	3,971	0	56,064	0	56,064	0	07/29/2022	
067901-10-8 ...	Barrick Gold Corp-COMMON STOCK			16,400,000	254,200	15,500	254,200	282,981	0	930	0	(48,737)	0	(48,737)	0	09/11/2024	
351858-10-5 ...	Franco-Nevada Corp-COMMON STOCK			400,000	47,036	117,590	47,036	49,942	0	432	0	2,712	0	2,712	0	07/19/2022	
867224-10-3 ...	SUNCOR ENERGY INC-COMMON STOCK			6,400,000	228,352	35,680	228,352	207,570	17,814	1,967	0	23,296	0	23,296	0	07/21/2022	
87807B-10-7 ...	TC Energy Corp-COMMON STOCK			52,300,000	2,433,519	46,530	2,433,519	2,135,298	82,574	0	0	298,221	0	298,221	0	10/11/2024	
878742-20-4 ...	TECK RESOURCES LTD-COMMON STOCK			16,218,000	657,316	40,530	657,316	489,947	22,431	1,149	0	(28,219)	0	(28,219)	0	09/16/2022	
03938L-20-3 ...	ArcelorMittal-ADR	C...		4,800,000	111,024	23,130	111,024	113,127	0	2,040	0	(25,248)	0	(25,248)	0	07/22/2022	
088606-10-8 ...	BHP Billiton Ltd-ADR	C...		9,000,000	439,470	48,830	439,470	473,379	26,640	12,825	0	(175,320)	0	(175,320)	0	09/14/2022	
34959A-20-6 ...	Fortescue Ltd-ADR	C...		2,000,000	45,080	22,540	45,080	67,582	0	2,426	0	(22,502)	0	(22,502)	0	04/29/2024	
373737-10-5 ...	Gerdau SA-ADR	C...		33,264,000	95,800	2,880	95,800	116,170	0	6,997	0	(38,642)	0	(38,642)	0	07/29/2022	
37827X-10-0 ...	Glencore PLC-ADR	C...		15,000,000	130,950	8,730	130,950	177,805	0	0	0	(46,855)	0	(46,855)	0	04/29/2024	
71654V-40-8 ...	Petroleo Brasileiro SA-ADR	C...		5,600,000	72,016	12,860	72,016	87,411	9,480	8,878	0	(17,416)	0	(17,416)	0	12/19/2023	
767204-10-0 ...	RIO TINTO PLC-ADR	C...		8,200,000	482,242	58,810	482,242	473,693	0	35,588	0	(128,330)	0	(128,330)	0	09/14/2022	

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 2 - SECTION 2

Showing All COMMON STOCKS Owned December 31 of Current Year

1	2	Codes		5	6	Fair Value		9	Dividends			Change in Book/Adjusted Carrying Value				17	18
		3	4			7	8		10	11	12	13	14	15	16		
CUSIP Identi- fication	Description	Code	For- eign	Number of Shares	Book/ Adjusted Carrying Value	Rate Per Share Used to Obtain Fair Value	Fair Value	Actual Cost	Declared but Unpaid	Amount Received During Year	Nonadmitted Declared But Unpaid	Unrealized Valuation Increase/ (Decrease)	Current Year's Other-Than- Temporary Impairment Recognized	Total Change in Book/Adjusted Carrying Value (13 - 14)	Total Foreign Exchange Change in Book/Adjusted Carrying Value	Date Acquired	NAIC Design- ation, NAIC Design- ation Modifier and SVO Admini- strative Symbol
84473L-10-5 ...	SOUTH32 LTD-ADR	C.....		21,000.000	220,290	10.490	220,290	222,204	0	2,995	0	(1,914)	0	(1,914)	0	04/18/2024	
91912E-10-5 ...	VALE SA-ADR	C.....		7,800.000	69,186	8.870	69,186	106,701	0	10,099	0	(54,522)	0	(54,522)	0	07/29/2022	
F9062M-10-1 ...	Technicolor Creative Stu-COMMON STOCK	B.....		33,329.260	0	0.000	0	577	0	0	0	(5,823,900)	577	(5,824,477)	(11)	12/20/2023	
F9062M-12-7 ...	Technicolor Animation Pr-TECHNICOLOR ANI	B.....		1,025,805.000	0	0.000	0	111	0	0	0	113	111	2	(3)	06/08/2023	
G29183-10-3 ...	EATON CORP PLC-COMMON STOCK	C.....		1,750.000	580,773	331.870	580,773	559,547	0	3,901	0	21,225	0	21,225	0	10/17/2024	
G79441-10-4 ...	SeaCo Ltd-COMMON STOCK	C.....		1,043,750.000	1	0.000	0	0	0	0	0	1	0	1	0	02/12/2009	
68994E-10-3 ...	TRANE TECHNOLOGIES PLC-COMMON STOCK	C.....		800.000	295,480	369.350	295,480	226,144	673	1,344	0	69,336	0	69,336	0	02/29/2024	
H11356-10-4 ...	Bunge Ltd-COMMON STOCK	C.....		2,400.000	186,624	77.760	186,624	217,996	0	8,076	0	(55,656)	0	(55,656)	0	11/01/2023	
5019999999. Subtotal - Common Stock - Industrial and Miscellaneous (Unaffiliated) Publicly Traded					139,051,079	XXX	139,051,077	120,466,239	545,809	5,851,738	0	19,816,145	182,251	19,633,894	(14)	XXX	XXX
088555-ZB-6 ...	BIDTELLECT \$6.78 6/29/2025	R.....		294,985.000	662,241	2.925	662,241	200,590	0	0	0	0	0	0	0	06/30/2015	
08888Z-13-6 ...	BIDTELLECT \$.01 6/26/2027	R.....		116,726.000	338,054	6.130	338,054	458,017	0	0	0	0	0	0	0	08/25/2017	
130540-ZZ-3 ...	CALIFORNIA POLLUTION CONTROL FINANCING A	R.....		15,316.000	50,709	3.311	50,709	168,476	0	0	0	(226,575)	0	(226,575)	0	11/23/2020	
133999-ZA-3 ...	CGL HOLDINGS - VI CLASS A Common Stock	R.....		5,515.580	27,504,000	4,986.593	27,504,000	5,515,225	0	0	0	5,098,000	0	5,098,000	0	06/27/2019	
133999-ZB-1 ...	CGL HOLDINGS - VI CLASS B Common Stock	R.....		983.000	2,419,000	2,460.834	2,419,000	983,401	0	0	0	(732,000)	0	(732,000)	0	06/27/2019	
133999-ZZ-8 ...	CGL HOLDINGS - II CORPORATION Common Sto	R.....		8,050.000	47,342,130	5,890.559	47,342,130	8,050,000	0	175,163	0	9,064,000	0	9,064,000	0	04/21/2015	
23359*-10-9 ...	DTV AMERICA CORPORATION			1,333,333.000	840,000	0.630	840,000	1,333,333	0	0	0	(493,333)	0	(493,333)	0	06/30/2015	
237200-ZZ-6 ...	DataLink Project Connect			1,875,000.000	1,816,752	0.969	1,816,752	1,875,000	0	77,633	0	(907,051)	0	(907,051)	0	11/23/2020	
313360-ZZ-5 ...	FEDERAL HOME LOAN BANK CINCINNATI-R	RF.....		415,252.000	41,525,200	100.000	41,525,200	41,525,200	0	3,775,016	0	0	0	0	0	02/27/2020	
37519H-MM-7 ...	Gigsky, Inc.-Common Stock Purchase Warra			499,145.000	1	0.000	0	0	0	0	0	0	0	0	0	02/23/2024	
404129-ZB-7 ...	HC2 BROADCASTING \$130 08/07/2024	R.....		12,495.000	0	0.000	0	754,073	0	0	0	754,073	0	754,073	0	10/21/2021	
404129-ZC-5 ...	HC2 BROADCASTING HOLDINGS INC			12,245.000	0	0.000	0	1,836,750	0	0	0	1,836,750	0	1,836,750	0	08/07/2018	
404129-ZD-3 ...	HC2 BROADCASTING \$130 10/24/2025	R.....		30,000.000	0	0.000	0	2,092,500	0	0	0	2,092,500	0	2,092,500	0	10/21/2021	
404129-ZO-9 ...	HC2 Broadcasting \$130 08/31/2026	R.....		45,000.000	0	0.000	0	3,384,449	0	0	0	3,384,450	0	3,384,450	0	10/21/2021	
462651-ZZ-6 ...	IRACORE INTERNATIONAL	R.....		1,176.000	39,267	246.390	39,267	488,040	0	20,562	0	17,472	0	17,472	0	04/11/2017	
477700-ZA-9 ...	JOBSON MEDICAL LLC - LP Shares	R.....		133,349.910	0	0.000	0	0	0	0	0	0	0	0	0	03/20/2012	
63733Z-ZZ-0 ...	NATIONAL REALTY	R.....		6,000.000	5,372,656	895.443	5,372,656	6,000,000	0	506,667	0	(1,830,447)	0	(1,830,447)	0	12/09/2020	
704881-SS-1 ...	Policy Services Company LLC Warrants Cla			517.000	31,242	60.430	31,242	0	0	0	0	5,030	0	5,030	0	03/23/2022	
704881-TT-8 ...	Policy Services Company LLC Warrants Cla			186.000	0	0.000	0	0	0	0	0	0	0	0	0	01/31/2022	
704881-UU-3 ...	Policy Services Company LLC Warrants Cla			1,807.000	109,197	60.430	109,197	2	0	0	0	17,582	0	17,582	0	01/31/2022	
704881-WW-7 ...	Policy Services Company LLC Warrants Cla			5,355.000	323,603	60.430	323,603	5	0	0	0	52,104	0	52,104	0	01/31/2022	
714239-ZA-1 ...	PERMIAN HOLDINGS INC.			28,050.000	0	0.000	0	0	0	0	0	0	0	0	0	11/01/2016	
745999-ZZ-8 ...	Quick Med Holdings LLC			3,500,000.000	2,310,467	0.660	2,310,468	3,502,392	0	0	0	119,130	0	119,130	0	01/01/2019	
828166-ZZ-4 ...	Silac Inc Common Stock	R.....		14,224,829.000	14,486,092	1.018	14,486,092	7,800,000	0	0	0	1,762,863	0	1,762,863	0	11/01/2019	
000000-00-0 ...	Pacificco Inc			3,971.000	99,275	25.000	99,275	6,354	0	0	0	97,290	0	97,290	0	05/10/2023	
NIVITA-00-1 ...	VITA INCLINATA TECHNOLOGIES, INC. Warran			2,611.000	0	0.000	0	0	0	0	0	0	0	0	0	05/02/2023	
13499Z-ZA-4 ...	CRANEMERE UK HOLDINGS IV LIMITED - Votin	R.....	D.....	3,677,808.000	5,882,500	1.599	5,882,500	4,515,980	0	0	0	(1,697,500)	0	(1,697,500)	0	12/29/2020	
13499Z-ZB-2 ...	CRANEMERE UK HOLDINGS IV LIMITED - Non V	R.....	D.....	3,677,808.000	5,882,500	1.599	5,882,500	4,515,980	0	0	0	(1,697,500)	0	(1,697,500)	0	12/29/2020	
652935-MM-6 ...	NEXT.E.GO NV Warrants			138,640.000	0	0.000	0	0	0	0	0	0	0	0	0	10/20/2023	
000000-00-0 ...	RAPIDAIR COMPRESSED AIR Common Equity	C.....		28.000	28.000	1,000.000	28.000	28.000	0	0	0	0	0	0	0	10/15/2024	
5029999999. Subtotal - Common Stock - Industrial and Miscellaneous (Unaffiliated) Other					157,062,886	XXX	157,062,886	95,033,769	0	4,555,041	0	16,716,838	8,067,773	8,649,065	0	XXX	XXX
5109999999. Total - Common Stock - Industrial and Miscellaneous (Unaffiliated)					296,113,965	XXX	296,113,963	215,500,008	545,809	10,406,779	0	36,532,983	8,250,024	28,282,959	(14)	XXX	XXX
5409999999. Total - Common Stocks - Mutual Funds					0	XXX	0	0	0	0	0	0	0	0	0	XXX	XXX
5609999999. Total - Common Stocks - Unit Investment Trusts					0	XXX	0	0	0	0	0	0	0	0	0	XXX	XXX

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 2 - SECTION 2

Showing All COMMON STOCKS Owned December 31 of Current Year

1	2	Codes		5	6	Fair Value		9	Dividends			Change in Book/Adjusted Carrying Value				17	18
		3	4			7	8		10	11	12	13	14	15	16		
CUSIP Identi- fication	Description	Code	For- eign	Number of Shares	Book/ Adjusted Carrying Value	Rate Per Share Used to Obtain Fair Value	Fair Value	Actual Cost	Declared but Unpaid	Amount Received During Year	Nonadmitted Declared But Unpaid	Unrealized Valuation Increase/ (Decrease)	Current Year's Other-Than- Temporary Impairment Recognized	Total Change in Book/Adjusted Carrying Value (13 - 14)	Total Foreign Exchange Change in Book/Adjusted Carrying Value	Date Acquired	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
5809999999. Total - Common Stocks - Closed-End Funds					0	XXX	0	0	0	0	0	0	0	0	0	XXX	XXX
78463V-10-7 ...	SPDR Gold Shares-ETF .....	.....	.....	2,500,000	605,326	242.130	605,325	568,009	0	0	0	37,316	0	37,316	0	07/18/2024 ..	.....
5819999999. Subtotal - Common Stocks - Exchange Traded Funds					605,326	XXX	605,325	568,009	0	0	0	37,316	0	37,316	0	XXX	XXX
03612*-10-4 ...	Annuity Investors Life (AILIC) Common St .....	.....	.....	20,000,000	464,499,730	22,781.946	464,499,730	175,055,121	0	0	0	36,992,231	0	36,992,231	0	11/13/1996 ..	.....
55410*-10-8 ...	MM ASCEND LIFE INV SVCS LLC Common Stock .....	.....	.....	100,000	1,010,867	8,613.340	1,010,867	3,721,839	0	0	0	117,820	0	117,820	0	05/28/2021 ..	.....
56313*-10-2 ...	Manhattan National Life (MNLIC) Common S .....	.....	.....	100,000	16,546,125	168,359.657	16,546,125	65,021,217	0	0	0	(263,866)	0	(263,866)	0	09/30/2008 ..	.....
5929999999. Subtotal - Common Stock - Parent, Subsidiaries and Affiliates Other					482,056,721	XXX	482,056,721	243,798,177	0	0	0	36,846,185	0	36,846,185	0	XXX	XXX
5979999999. Total - Common Stocks - Parent, Subsidiaries and Affiliates					482,056,721	XXX	482,056,721	243,798,177	0	0	0	36,846,185	0	36,846,185	0	XXX	XXX
5989999999 - Total Common Stocks					778,776,012	XXX	778,776,009	459,866,194	545,809	10,406,779	0	73,416,484	8,250,024	65,166,459	(14)	XXX	XXX
5999999999 - Total Preferred and Common Stocks					1,076,651,773	XXX	1,131,903,518	764,783,453	2,292,201	24,662,796	0	85,895,003	21,843,141	64,051,862	(14)	XXX	XXX

1. Line Book/Adjusted Carrying Value by NAIC Designation Category Footnote:
Number

1A	1A ..\$	0	1B ..\$	0	1C ..\$	0	1D ..\$	0	1E ..\$	0	1F ..\$	0	1G ..\$	0
1B	2A ..\$	0	2B ..\$	0	2C ..\$	0								
1C	3A ..\$	0	3B ..\$	0	3C ..\$	0								
1D	4A ..\$	0	4B ..\$	0	4C ..\$	0								
1E	5A ..\$	0	5B ..\$	0	5C ..\$	0								
1F	6 ..\$	0												

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 3

Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
91282C-MA-6	United States Treasury N-UNSECURED		..12/10/2024 ..	BANK OF MONTREAL		600,867	600,000	748
0109999999	Subtotal - Bonds - U.S. Governments					600,867	600,000	748
04317N-AA-6	ARUBA GOVERNMENT Senior Unsecured Notes	D.....	..08/15/2024 ..	DIRECT		4,643,000	4,643,000	0
0309999999	Subtotal - Bonds - All Other Governments					4,643,000	4,643,000	0
835574-CB-8	County of Sonoma CA-REVENUE BONDS		..08/15/2024 ..	KEY CAPITAL MARKETS		21,821,939	20,925,000	241,973
74529J-PX-7	Puerto Rico Sales Tax Fi-REVENUE BONDS		..01/12/2024 ..	JP MORGAN SECURITIES		995,080	1,000,000	2,222
575898-CS-8	Massachusetts Port Autho-REVENUE BONDS		..05/08/2024 ..	STIFEL NICOLAUS		2,083,510	2,015,000	44,781
30767E-AE-9	Farm Credit Bank of Texa-FARMCB 7 3/4 PE		..11/13/2024 ..	VARIOUS		33,663,855	32,872,000	282,645
79467B-JJ-5	Sales Tax Securitization-REVENUE BONDS		..12/06/2024 ..	RBC CAPITAL MARKETS		5,000,000	5,000,000	0
0909999999	Subtotal - Bonds - U.S. Special Revenues					63,564,384	61,812,000	571,621
869507-AA-1	SUTTONPARK STRUCTURED SE-SERIES 17-1A CL		..01/30/2024 ..	BAIRD		7,505,601	8,362,787	15,573
29717P-AR-8	ESSEX PORTFOLIO LP-SENIOR UNSECURED		..10/15/2024 ..	GOLDMAN		6,812,573	6,957,000	115,588
171340-AN-2	CHURCH & DWIGHT CO INC-SENIOR UNSECURED		..11/18/2024 ..	VARIOUS		12,242,856	12,800,000	176,960
579780-AN-7	MCCORMICK & CO INC/MD-SENIOR UNSECURED		..11/18/2024 ..	JP MORGAN SECURITIES		8,328,068	8,600,000	76,349
92343V-DY-7	VERIZON COMMUNICATIONS I-SENIOR UNSECURE		..10/15/2024 ..	MORGAN		697,865	700,000	2,406
379352-AL-1	GLOBAL MARINE INC-NOTE		..08/23/2024 ..	WELLS FARGO		4,877,205	5,169,000	70,849
760759-AS-9	Republic Services Inc-SENIOR UNSECURED		..07/22/2024 ..	GOLDMAN		3,561,659	3,725,000	23,747
927804-FZ-2	Virginia Electric & Powe-SENIOR UNSECURE		..04/23/2024 ..	VARIOUS		6,661,607	7,033,000	17,817
75625Q-AE-9	Reckitt Benckiser Treasu-SENIOR UNSECURE	D.....	..11/18/2024 ..	VARIOUS		33,345,000	35,000,000	231,250
98978V-AL-7	Zoetis Inc-SENIOR UNSECURED		..07/26/2024 ..	BOFAMLSEC		28,377,000	30,000,000	138,177
82340*-AA-5	Shepherds Flat Funding T Trust A-1-A Cer		..05/02/2024 ..	DIRECT		1,941,097	1,900,000	0
278062-AD-6	EATON CORP-SR UNSECURED		..04/09/2024 ..	VARIOUS		18,092,686	18,829,000	170,712
373298-BR-8	GEORGIA-PACIFIC LLC-SENIOR UNSECURED		..04/09/2024 ..	VARIOUS		21,628,707	18,997,000	332,957
64034D-AB-3	Nelnet Student Loan Trus-NSLT 2018-4 B		..03/28/2024 ..	BOFAMLSEC		8,038,313	8,600,000	13,062
63890B-AC-0	Navient Student Loan Tru-NAVSL 2018-EA B		..10/15/2024 ..	CANTOR		5,353,262	5,500,000	678
10334#-AG-7	Boyd Watterson GSA Fund, Senior Note Ser		..12/10/2024 ..	DIRECT		4,875,300	5,000,000	67,022
89657B-AA-2	Trinity Rail Leasing 201-TRL 2019-1A A		..02/17/2024 ..	PAYUP		160,931	160,931	0
806851-AK-7	Schlumberger Holdings Co-SENIOR UNSECURE		..04/23/2024 ..	SUNTRUST CAPITAL MAR		8,262,996	8,685,000	148,658
053332-AW-2	AutoZone Inc-SENIOR UNSECURED		..04/23/2024 ..	U. S. BANCORP		10,236,050	11,000,000	8,021
101137-AX-5	Boston Scientific Corp-SENIOR UNSECURED		..08/02/2024 ..	BARCLAYS CAPITAL INC		19,720,000	20,000,000	137,899
90265E-AQ-3	UDR Inc-SENIOR UNSECURED		..11/22/2024 ..	BBVASECINC		7,881,331	8,580,000	99,147
37960J-AA-6	Global Aircraft Leasing -SR UNSECURED	D.....	..08/28/2024 ..	PIK NOTE BUY UP		97,500	97,500	0
87612E-BH-8	Target Corp-SENIOR UNSECURED		..02/29/2024 ..	GOLDMAN		5,013,559	5,327,000	69,417
902494-BJ-1	Tyson Foods Inc-SENIOR UNSECURED		..06/25/2024 ..	JP MORGAN SECURITIES		2,581,656	2,643,000	33,772
92343V-DD-3	Verizon Communications I-SENIOR UNSECURE		..06/25/2024 ..	MORGAN		6,142,833	6,469,000	61,792
713448-DN-5	PepsiCo Inc-SENIOR UNSECURED		..11/18/2024 ..	BOFAMLSEC		18,178,671	18,855,000	53,488
91324P-DE-9	UnitedHealth Group Inc-SENIOR UNSECURED		..11/18/2024 ..	VARIOUS		13,634,561	14,237,000	96,793
824348-AW-6	Sherwin-Williams Co/The-SENIOR UNSECURED		..11/20/2024 ..	VARIOUS		18,255,085	18,936,000	149,399
48305Q-AC-7	Kaiser Foundation Hospit-SENIOR UNSECURE		..10/15/2024 ..	U. S. BANCORP		1,569,315	1,610,000	23,244
855244-AK-5	Starbucks Corp-SENIOR UNSECURED		..06/25/2024 ..	BARCLAYS CAPITAL INC		4,751,850	5,000,000	3,743
461070-AQ-7	Interstate Power & Light-SENIOR UNSECURE		..04/09/2024 ..	DEUTSCHE BANK SECURI		4,668,950	5,000,000	5,000
25278X-AM-1	Diamondback Energy Inc-SENIOR UNSECURED		..10/15/2024 ..	CITIGROUP GLOBAL MAR		7,042,208	7,225,000	88,055
12510H-AC-4	Capital Automotive Reit-CAUTO 2020-1A A3		..01/30/2024 ..	BARCLAYS CAPITAL INC		1,528,270	1,520,263	2,196
125523-CL-2	Cigna Corp-SENIOR UNSECURED		..01/12/2024 ..	BOFAMLSEC		2,652,526	3,020,000	24,563
64110L-AX-4	Netflix Inc-SENIOR UNSECURED		..08/02/2024 ..	GOLDMAN		21,741,600	20,000,000	283,333
26444H-AH-4	Duke Energy Florida LLC-SECURED		..01/31/2024 ..	BARCLAYS CAPITAL INC		11,617,601	13,100,000	53,410
872540-AT-6	TJX Cos Inc/The-SENIOR UNSECURED		..10/29/2024 ..	BOFAMLSEC		6,354,216	6,600,000	10,656
631005-BJ-3	Narragansett Electric Co-SENIOR UNSECURE		..03/21/2024 ..	BOFAMLSEC		13,581,916	14,875,000	232,864
26875P-AU-5	EOG Resources Inc-SENIOR UNSECURED		..12/06/2024 ..	U. S. BANCORP		8,301,097	8,393,000	55,079
512807-AV-0	Lam Research Corp-SENIOR UNSECURED		..02/13/2024 ..	JP MORGAN SECURITIES		5,780,337	6,900,000	21,850
25243Y-BE-8	Diageo Capital PLC-SENIOR UNSECURED	D.....	..04/09/2024 ..	CITIGROUP GLOBAL MAR		8,117,500	10,000,000	95,625
55336V-BQ-2	MPLX LP-SENIOR UNSECURED		..03/27/2024 ..	VARIOUS		17,229,325	20,000,000	155,319
008513-AA-1	Agree LP-SENIOR UNSECURED		..04/23/2024 ..	SEAPORT GROUP		4,241,750	5,000,000	9,667
872480-AA-6	Tif Funding II LLC-SERIES 20-1A CLASS A		..07/25/2024 ..	BOFAMLSEC		1,363,751	1,383,333	482
89680H-AA-0	Triton Container Finance-TCF 2020-1A A		..01/25/2024 ..	WELLS FARGO		644,749	723,833	382

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SCHEDULE D - PART 3

Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
824348-BL-9	Sherwin-Williams Co-The-SENIOR UNSECURED		11/22/2024	GOLDMAN		2,970,420	3,390,000	2,166
874060-AX-4	Takeda Pharmaceutical Co-SENIOR UNSECURE	D.	02/13/2024	VARIOUS		6,011,871	7,150,000	54,966
55336V-AR-1	MPLX LP-SENIOR UNSECURED		04/23/2024	JP MORGAN SECURITIES		7,840,142	8,262,000	36,720
05541T-AP-6	BGC Partners Inc-SENIOR UNSECURED		01/30/2024	EXCHANGE OFFER		4,397,162	4,400,000	24,063
55336V-BN-9	MPLX LP-SENIOR UNSECURED		11/19/2024	BARCLAYS CAPITAL INC		4,924,600	5,000,000	99,757
91324P-DX-7	UnitedHealth Group Inc-SENIOR UNSECURED		08/02/2024	JP MORGAN SECURITIES		17,579,200	20,000,000	88,889
872540-AW-9	TJX Cos Inc/The-SENIOR UNSECURED		04/09/2024	GOLDMAN		6,600,918	8,200,000	53,209
30231G-BN-1	Exxon Mobil Corp-SENIOR UNSECURED		01/12/2024	JEFFERIESLLC		12,964,568	14,428,000	96,235
00287Y-BV-0	AbbVie Inc-SENIOR UNSECURED		11/19/2024	VARIOUS		12,320,020	12,704,000	185,524
776743-AL-0	Roper Technologies Inc-SENIOR UNSECURED		04/23/2024	VARIOUS		11,035,460	14,000,000	47,639
038222-AN-5	Applied Materials Inc-SENIOR UNSECURED		01/30/2024	U. S. BANCORP		10,255,596	12,110,000	35,321
101137-BA-4	Boston Scientific Corp-SENIOR UNSECURED		12/19/2024	VARIOUS		15,977,310	18,000,000	66,029
63942J-AB-3	Navient Private Educatio-SERIES 21-CA CL		01/11/2024	BOFAMLSEC		4,211,875	5,750,000	367
052769-AE-6	Autodesk Inc-SENIOR UNSECURED		11/18/2024	JP MORGAN SECURITIES		3,297,148	3,390,000	50,756
00176B-AM-5	AMMC CLO XIII Ltd-AMMC 2013-13A B3LR	D.	07/24/2024	PAYUP		22,220	22,220	0
26875P-AP-6	EOG Resources Inc-SENIOR UNSECURED		11/19/2024	SUNTRUST CAPITAL MAR		2,984,160	3,000,000	43,229
29379V-BL-6	Enterprise Products Oper-SENIOR UNSECURE		03/21/2024	WELLS FARGO		13,607,944	13,934,000	61,155
14576A-AC-6	Cars Net Lease Mortgage -CARM 2020-1A A3		05/07/2024	BARCLAYS CAPITAL INC		570,456	639,167	1,321
40637L-AC-4	Halsey Point CLO Ltd-SERIES 2021-4A CLAS	D.	01/05/2024	BOFAMLSEC		2,991,000	3,000,000	50,135
45254N-NT-0	Impac CMB Trust Series 2-IMM 2005-3 M1		03/25/2024	VARIOUS		(1,770)	122	0
34417R-AA-4	FOCUS Brands Funding LLC-FOCUS 2017-1A A		05/30/2024	IN-KIND TRANSFER		3,820,000	3,820,000	24,556
58942H-AC-5	Mercy Health/OH-SECURED		09/05/2024	VARIOUS		7,387,233	7,415,000	46,196
487836-BP-2	Kellogg Co-SENIOR UNSECURED		11/18/2024	CITADELQ		8,511,831	8,669,000	37,566
58013M-FQ-2	McDonald's Corp-SENIOR UNSECURED		01/26/2024	U. S. BANCORP		4,700,850	5,000,000	14,500
58278L-AA*-7	MOREIF SubREIT LLC-SENIOR SECURED NOTES		05/06/2024	PIK NOTE BUY UP		21,773	24,667	0
67181D-AA-9	Oak Street Investment Gr-OAKIG 2020-1A A		10/02/2024	CANTOR		4,700,417	4,911,465	3,442
67103H-AH-0	O'Reilly Automotive Inc-SENIOR UNSECURED		08/02/2024	MORGAN		12,454,116	12,743,000	88,351
67190A-AB-2	Oak Street Investment Gr-OAKIG 2021-1A A		09/25/2024	DEUTSCHE BANK SECURI		5,294,216	5,876,341	1,890
74052B-AA-5	Premier Health Partners-UNSECURED		12/13/2024	JP MORGAN SECURITIES		3,011,022	3,134,000	7,856
693436-AA-#	PLP Trust 2020-1-PLP 2020-1A A		12/31/2024	VARIOUS		(8,484,526)	(18,857,969)	(75,890)
70338C-10-9	Patrons' Legacy-PATRL 6.673 12/04/23		05/30/2024	DIRECT		1,103,347	1,103,347	5,317
785592-AX-4	Sabine Pass Liquefaction-FIRST LIEN		04/09/2024	BOFAMLSEC		9,053,310	9,420,000	157,550
805564-EM-9	Saxon Asset Securities T-SAST 1999-3 BF1		12/01/2024	VARIOUS		210	2,003	0
74980Q-AE-1	ALM Ltd/KY-PRAM 2021-17A A2	D.	08/06/2024	BOFAMLSEC		5,002,500	5,000,000	24,043
24703T-AD-8	Dell International LLC -FIRST LIEN		10/15/2024	BARCLAYS CAPITAL INC		5,946,773	5,826,000	117,883
72303H-AA-7	Pinebridge Private Credi Term Loan FAC		05/30/2024	DIRECT		1,031,553	1,031,553	0
00119V-AN-9	AGL CLO 6 LTD-AGL 2020-6A AR	D.	08/05/2024	BOFAMLSEC		19,995,000	20,000,000	56,197
50196@-AA-5	LQN North American Fund Corp Bond		03/06/2024	VARIOUS		(424,284)	(424,284)	0
63946T-AA-9	NB Direct Access Insuran Senior Secured		01/30/2024	VARIOUS		1,073,171	1,073,171	0
036752-AR-4	Anthem Inc-SENIOR UNSECURED		06/25/2024	WELLS FARGO		3,027,985	3,225,000	13,572
67066G-AF-1	NVIDIA Corp-SENIOR UNSECURED		01/26/2024	DAIWA SECURITIES AME		6,840,300	7,500,000	70,656
579780-AS-6	McCormick & Co Inc/MD-SENIOR UNSECURED		02/13/2024	VARIOUS		5,161,054	6,408,000	21,334
68902V-AK-3	Otis Worldwide Corp-SENIOR UNSECURED		08/02/2024	GOLDMAN		13,540,131	14,958,000	181,179
855244-AZ-2	Starbucks Corp-SENIOR UNSECURED		01/26/2024	SG COWEN SECURITIES		8,732,000	10,000,000	53,125
23338V-AN-6	DTE Electric Co-SECURED		03/21/2024	CITIGROUP GLOBAL MAR		8,390,845	9,372,000	86,066
437076-CJ-9	Home Depot Inc/The-SENIOR UNSECURED		03/27/2024	BNP PARIBAS		5,733,560	7,000,000	5,833
63942G-AA-1	Navient Private Educatio-NAVSL 2021-FA A		03/27/2024	BOFAMLSEC		4,076,238	4,767,530	2,352
92676X-AF-4	Viking Cruises Ltd-SENIOR UNSECURED	D.	08/09/2024	WELLS FARGO		2,515,625	2,500,000	86,042
08661U-AA-4	Beth Israel Lahey Health-SENIOR UNSECURE		05/08/2024	SUNTRUST CAPITAL MAR		1,376,117	1,564,000	12,442
25461L-AA-0	DTV 5 7/8 08/15/27-SECURED		05/15/2024	VARIOUS		5,400,935	5,808,000	70,833
07386X-AH-9	Bear Stearns ALT-A Trust-BALTA 2007-1 21		06/01/2024	PAYUP		(28,321)	453	0
11135F-AQ-4	Broadcom Inc-SENIOR UNSECURED		04/24/2024	BOFAMLSEC		4,935,370	5,325,000	98,831
69357V-AA-3	PMHC II Inc-SENIOR UNSECURED		07/12/2024	WELLS FARGO		1,810,000	2,000,000	75,000
91913Y-BC-3	Valero Energy Corp-SENIOR UNSECURED		03/21/2024	DAIWA SECURITIES AME		3,345,906	3,925,000	34,802
49271V-AN-0	Keurig Dr Pepper Inc-SENIOR UNSECURED		01/30/2024	CITIGROUP GLOBAL MAR		3,669,225	4,350,000	36,975
46188B-AD-4	Invitation Homes Operati-SENIOR UNSECURE		04/23/2024	WELLS FARGO		2,234,300	2,500,000	2,882

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98138H-A6-6	Workday Inc-SENIOR UNSECURED		11/19/2024	BANK OF AMERICA SECU		4,878,700	5,000,000	23,819
12661P-AC-3	CSL Finance Plc-SENIOR UNSECURED	D.	04/09/2024	DEUTSCHE BANK SECURI		8,072,332	8,522,000	160,837
12661P-AB-5	CSL Finance Plc-SENIOR UNSECURED	D.	03/13/2024	U. S. BANCORP		1,280,172	1,332,000	20,679
808513-AQ-8	Charles Schwab Corp/The-SENIOR UNSECURED		10/15/2024	WELLS FARGO		11,187,142	11,482,000	44,907
49271V-AQ-3	Keurig Dr Pepper Inc-SENIOR UNSECURED		01/12/2024	BARCLAYS CAPITAL INC		5,244,470	5,500,000	56,925
12510H-AM-2	CARS-DB5 LP-CAUTO 2021-1A A3		05/01/2024	CANTOR		654,468	733,234	704
902494-BC-6	Tyson Foods Inc-SENIOR UNSECURED		08/01/2024	JP MORGAN SECURITIES		9,674,500	10,000,000	59,167
65339K-BY-5	NextEra Energy Capital H-SENIOR UNSECURE		11/18/2024	BARCLAYS CAPITAL INC		3,876,924	4,109,000	26,537
92257B-AA-0	Velocity Commercial Capi-VCC 2022-3 A		12/17/2024	CITIGROUP GLOBAL MAR		5,236,233	5,477,589	13,502
423452-AG-6	Helmerich & Payne Inc-SENIOR UNSECURED		10/21/2024	VARIOUS		15,029,204	17,830,000	129,540
052769-AH-9	Autodesk Inc-SENIOR UNSECURED		11/22/2024	VARIOUS		13,261,436	15,592,000	155,611
87267C-AA-6	TRP 2021 LLC-TRP 2021-1 A		03/27/2024	MIZUHO SECURITIES		5,990,795	6,835,702	5,342
00121G-AA-6	AGL Core CLO 15 Ltd-AGL 2021-15A A1	D.	08/06/2024	BOFAMLSEC		13,988,800	14,000,000	41,649
12662P-AD-0	CVR Energy Inc-SENIOR UNSECURED		09/27/2024	JEFFERIESLLC		37,600	40,000	288
67117D-AC-4	Onslow Bay Mortgage Loan-OBX 2022-NQM7 A		01/31/2024	MIZUHO SECURITIES		961,380	959,282	152
89683L-AA-8	TRP - TRIP Rail Master F-TRP 2021-2 A		07/24/2024	MIZUHO SECURITIES		7,070,579	7,765,218	6,833
16308N-AA-2	Cheever Escrow Issuer LL-SECURED		06/06/2024	VARIOUS		2,030,000	2,000,000	26,125
465685-AR-6	ITC Holdings Corp-SENIOR UNSECURED		11/19/2024	TORONTO DOMINION SEC		21,763,183	21,653,000	172,683
98138H-AH-4	Workday Inc-SENIOR UNSECURED		12/19/2024	VARIOUS		18,192,409	19,256,000	90,708
68251P-AA-5	1375209 BC Ltd-FIRST LIEN	A.	07/02/2024	VARIOUS		4,029,665	4,378,000	114,750
071734-AQ-0	Bausch Health Cos Inc-FIRST LIEN	A.	01/31/2024	VARIOUS		1,964,829	2,451,000	0
071734-AR-8	Bausch Health Cos Inc-BHCCN 14 10/15/30	A.	01/31/2024	DIRECT		392,806	490,000	0
05724B-AD-1	Baker Hughes Holdings LL-SENIOR UNSECURE		11/19/2024	GOLDMAN		5,422,274	5,698,000	50,563
25746U-DL-0	Dominion Energy Inc-SENIOR UNSECURED		03/13/2024	U. S. BANCORP		8,541,261	10,463,000	19,618
637417-AK-2	National Retail Properti-SENIOR UNSECURE		11/19/2024	GOLDMAN		5,471,807	5,651,000	19,229
14855J-AB-1	Castlelake Aircraft Secu-CLAST 2016-1 A		12/16/2024	VARIOUS		1,606,573	1,602,405	(3,141)
78573N-AH-5	Sabre GBLB Inc-SECURED		08/01/2024	VARIOUS		5,355,250	5,400,000	85,688
278865-AV-2	Ecolab Inc-SENIOR UNSECURED		10/15/2024	TORONTO DOMINION SEC		9,929,748	10,216,000	126,423
02666T-AB-3	American Homes 4 Rent LP-SENIOR UNSECURE		04/23/2024	GOLDMAN		6,375,233	6,593,000	62,817
023135-BC-9	Amazon.com Inc-SENIOR UNSECURED		11/19/2024	VARIOUS		19,365,471	20,000,000	154,000
03027X-AW-0	American Tower Corp-SENIOR UNSECURED		08/02/2024	JP MORGAN SECURITIES		12,575,351	13,047,000	234,121
11135F-AN-1	Broadcom Inc-SENIOR UNSECURED		10/15/2024	TORONTO DOMINION SEC		4,918,900	5,000,000	14,893
11135F-BT-7	Broadcom Inc-SENIOR UNSECURED		04/23/2024	BOFAMLSEC		5,699,117	6,270,000	7,228
713448-ES-3	PepsiCo Inc-SENIOR UNSECURED		02/13/2024	MITSUBISHI UFJ SEC I		2,924,704	3,279,000	36,570
38237G-AA-7	GoodLeap Sustainable Hom-GOOD 2021-4GS A		01/16/2024	MORGAN		7,960,258	10,422,596	15,645
437076-BY-7	Home Depot Inc/The-SENIOR UNSECURED		03/27/2024	BOFAMLSEC		5,671,715	6,150,000	53,420
785592-AS-5	Sabine Pass Liquefaction-FIRST LIEN		10/15/2024	JP MORGAN SECURITIES		5,037,150	5,000,000	21,528
96949L-AD-7	Williams Cos Inc/The-SENIOR UNSECURED		07/22/2024	BOFAMLSEC		5,225,904	5,400,000	21,375
36264F-AK-7	GSK Consumer Healthcare -SENIOR UNSECURE		11/18/2024	BARCLAYS CAPITAL INC		22,575,631	23,170,000	261,970
20903X-AF-0	Consolidated Communicati-FIRST LIEN		09/12/2024	JP MORGAN SECURITIES		3,298,750	3,500,000	102,375
G1746#-AG-1	Cadent Finance PLC - Senior Unsecured No	B.	04/02/2024	DIRECT		(88,800)	(88,799)	0
31740J-AA-6	FINANCE OF AMERICA STRUC-FASST 2023-RMF1		05/25/2024	PAYUP		16,764	16,764	0
78450Q-AC-7	SMB 2023-A B-SMB 2023-A B		03/27/2024	GOLDMAN		7,081,102	7,053,000	18,432
05606F-AN-3	BX Trust 2019-OC11-BX 2019-OC11 E		01/02/2024	PERFORM		(6,426,875)	(8,000,000)	(6,135)
L6256K-AA-8	Maslow Kensington Investments S.A.R.L -	B.	12/04/2024	DIRECT		1,935,903	1,935,903	0
78355H-KV-0	Ryder System Inc-SENIOR UNSECURED		07/26/2024	CITIGROUP GLOBAL MAR		18,076,174	17,662,000	205,926
874054-AK-5	Take-Two Interactive Sof-SENIOR UNSECURE		11/05/2024	VARIOUS		19,614,101	19,578,000	152,030
55819M-AU-0	Madison Park Funding XXX-MDPK 2019-35A B	D.	08/07/2024	BNP PARIBAS		4,494,600	4,500,000	19,095
L3009#-AA-6	Ergea Group S.A r.L. Guaranteed Secured	B.	06/13/2024	DIRECT		12,009	12,009	0
63941U-AB-9	Navient Private Educatio-NAVSL 2020-GA B		01/19/2024	JP MORGAN SECURITIES		1,091,125	1,405,000	781
14115D-AA-2	Carbon Revolution Ltd-SECURED	D.	05/23/2024	VARIOUS		19,500	20,000	61
67077M-BA-5	Nutrien Ltd-SENIOR UNSECURED	A.	09/21/2024	VARIOUS		10,215,708	10,289,000	222,057
716973-AD-4	Pfizer Investment Enterp-SENIOR UNSECURE	D.	12/19/2024	BAIRD		9,890,400	10,000,000	40,042
87251F-AD-1	TCW DIRECT LENDING STRUCTURED SOLUTIONS		10/10/2024	DIRECT		1,040,288	1,040,288	0
46656T-AD-8	JCP Direct Lending CLO 2-JCPDL 2023-11 A	D.	06/11/2024	VARIOUS		15,437,756	15,437,756	0
46656T-AM-8	JCP Direct Lending CLO 2-JCPDL 2023-11 C	D.	06/11/2024	VARIOUS		1,543,776	1,543,776	0
46656T-AK-2	JCP Direct Lending CLO 2-JCPDL 2023-11 B	D.	06/11/2024	VARIOUS		2,396,557	2,396,557	0

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N42810-CM-5	Koninklijke Vopak NV Senior Notes Series	B	10/17/2024	DIRECT		180,400	180,398	0
17136M-AA-0	Church & Dwight Co Inc-SENIOR UNSECURED		12/13/2024	VARIOUS		53,604,389	64,177,000	100,112
571676-AU-9	Mars Inc-SENIOR UNSECURED		04/09/2024	VARIOUS		8,828,301	8,957,000	162,060
L3551F-AN-0	Ferrero International SA Gtd Senior Note	B	10/17/2024	BOFAMLSEC		(31,350)	(31,349)	0
877409-AF-9	Taylor Wimpey PLC Senior Unsecured Notes	B	10/17/2024	SANTANDER INVESTMENT		87,500	87,494	0
G3301*-AK-9	FIL Ltd/Bermuda Senior Note Series A	B	11/20/2024	BOFAMLSEC		(48,000)	(47,996)	0
709599-BU-7	Penske Truck Leasing Co -SENIOR UNSECURE		06/25/2024	U. S. BANCORP		2,508,975	2,500,000	12,778
432917-AB-8	Hilton Grand Vacations T-HGVT 2023-1A B		12/02/2024	WELLS FARGO		7,416,859	7,316,260	9,934
34535C-AB-2	Ford Credit Auto Owner T-FORDR 2023-2 B		08/06/2024	MIZUHO SECURITIES		596,494	580,000	2,098
G9020*-AE-0	Travis Perkins PLC Senior Note Series C	B	06/14/2024	RBS SECURITIES INC		(12,600)	(12,597)	0
G9020*-AC-4	Travis Perkins PLC Senior Note Series A	B	06/14/2024	RBS SECURITIES INC		(19,600)	(19,596)	0
709599-BW-3	Penske Truck Leasing Co -SENIOR UNSECURE		02/13/2024	JP MORGAN SECURITIES		3,076,440	3,000,000	7,058
78573N-AJ-1	Sabre GLBL Inc-FIRST LIEN		06/04/2024	U B S SECURITIES		553,500	600,000	13,513
548661-EP-8	Lowe's Cos Inc-SENIOR UNSECURED		06/25/2024	BOFAMLSEC		4,962,250	5,000,000	56,667
874054-AJ-8	Take-Two Interactive Sof-SENIOR UNSECURE		01/04/2024	JP MORGAN SECURITIES		2,219,934	2,222,000	30,861
94106L-BT-5	Waste Management Inc-SENIOR UNSECURED		02/29/2024	WELLS FARGO		9,861,300	10,000,000	24,410
86746B-AA-1	Helios Issuer LLC-SNVA 2023-GRID1 1A		01/24/2024	DEUTSCHE BANK SECURI		4,035,414	3,947,068	3,783
31684E-AA-#	Figure Lending LLC FIGRE Trust 2023-HE1a		10/09/2024	DIRECT		(34,408,722)	(34,756,847)	0
25243Y-BG-3	Diageo Capital PLC-SENIOR UNSECURED	D	07/22/2024	MORGAN		10,108,603	9,950,000	130,373
29273V-AT-7	Energy Transfer LP-SENIOR UNSECURED		04/23/2024	BOFAMLSEC		9,945,078	9,611,000	246,042
47216Q-AB-9	JDE Peet's NV-SENIOR UNSECURED	D	08/01/2024	VARIOUS		8,255,771	9,016,000	4,479
36267V-AF-0	GE HealthCare Technolog-i-SENIOR UNSECURE		11/19/2024	VARIOUS		33,910,210	33,068,000	242,533
47587*-AA-6	JEN HoldCo 23 LLC Senior Secured Note		05/14/2024	DIRECT		2,694,444	2,694,444	(11,488)
89680H-AE-2	Triton Container Finance-TCF 2021-1A A		05/10/2024	mitsubishi UFJ SEC I		11,776,484	13,459,600	16,007
26844Q-AA-5	EFMT 2023-1-EFMT 2023-1 A1		01/22/2024	VARIOUS		(24,483)	(24,778)	(24)
88315L-AL-2	Textainer Marine Contain-TMCL 2021-1A A	D	08/12/2024	VARIOUS		3,928,171	4,384,333	4,385
G84810-AA-0	STENN MEZZ CLASS B	D	10/07/2024	DIRECT		4,250,000	4,250,000	0
G84810-AB-8	STENN MEZZ CLASS C	D	10/07/2024	DIRECT		4,750,000	4,750,000	0
64116*-AK-9	Netrality Properties LP Senior Notes Ser		02/20/2024	DIRECT		25,000,000	25,000,000	0
18055*-CG-5	Clarion Lion Properties Senior Note Seri		02/01/2024	DIRECT		7,000,000	7,000,000	0
18055*-CF-7	Clarion Lion Properties Senior Note Seri		02/01/2024	DIRECT		13,000,000	13,000,000	0
881943-AF-1	TEVT 2023-1 B		09/18/2024	U. S. BANCORP		2,567,969	2,500,000	11,721
20268A-AB-8	Commonbond Student Loan -CBSLT 2021-BGS		01/03/2024	BARCLAYS CAPITAL INC		2,237,598	2,712,240	1,236
20268W-AB-0	Commonbond Student Loan -CBSLT 2021-AGS		01/04/2024	BARCLAYS CAPITAL INC		685,919	902,525	456
14913U-AE-0	Caterpillar Financial Se-SENIOR UNSECURE		11/20/2024	BARCLAYS CAPITAL INC		10,012,200	10,000,000	166,250
76209P-AD-5	RGA Global Funding-SECURED		04/23/2024	VARIOUS		21,772,291	21,910,000	144,222
74256L-EX-3	Principal Life Global Fu-SECURED		01/08/2024	WELLS FARGO		6,664,400	6,667,000	0
02665W-EY-3	American Honda Finance C-SENIOR UNSECURE		01/08/2024	SMBC NIKKO SECURITIE		3,846,423	3,847,000	0
756109-CF-9	Realty Income Corp-SENIOR UNSECURED		01/08/2024	WELLS FARGO		9,922,500	10,000,000	0
05377R-HZ-0	Avis Budget Rental Car F-AESOP 2024-1A B		01/18/2024	CANTOR		6,526,914	6,500,000	10,583
58769J-AR-8	Mercedes-Benz Finance No-SENIOR UNSECURE		01/08/2024	BOFAMLSEC		3,329,034	3,333,000	0
92348K-CJ-0	Verizon Master Trust-VZMT 2024-2 B		01/09/2024	BOFAMLSEC		14,598,790	14,600,000	0
00138C-AX-6	Corebridge Global Fundin-CRBG 5.2 01/12/		01/09/2024	BOFAMLSEC		8,328,667	8,333,000	0
709599-BY-9	Penske Truck Leasing Co -SENIOR UNSECURE		01/09/2024	JP MORGAN SECURITIES		942,971	944,000	0
74368C-BX-1	Protective Life Global F-SECURED		01/09/2024	WELLS FARGO		11,667,000	11,667,000	0
86745Q-AA-9	Sunnova Sol III Issuer L-SNVA 2021-1 A		01/12/2024	BOFAMLSEC		10,814,294	12,851,449	69,384
58989V-2G-8	Met Tower Global Funding-SECURED		01/10/2024	BOFAMLSEC		9,991,400	10,000,000	0
233853-AV-2	Daimler Truck Finance No-SENIOR UNSECURE		08/02/2024	VARIOUS		16,512,779	16,420,000	27,778
75973V-AA-4	Renew 2024-1-RENEW 2024-1A A		01/29/2024	VARIOUS		11,850,108	11,833,000	4,656
30225V-AR-8	Extra Space Storage LP-SENIOR UNSECURED		01/12/2024	U. S. BANCORP		10,455,400	10,000,000	75,389
79466L-AJ-3	Salesforce Inc-SENIOR UNSECURED		01/12/2024	SUNTRUST CAPITAL MAR		5,428,309	6,410,000	694
04010L-BF-9	Ares Capital Corp-SENIOR UNSECURED		01/16/2024	BOFAMLSEC		24,161,552	24,365,000	0
67570A-AE-6	OCP CLO 2024-31 Ltd-OCP 2024-31A B1	D	01/16/2024	CIBC OPPENHEIMER		7,000,000	7,000,000	0
67570A-AA-4	OCP CLO 2024-31 Ltd-OCP 2024-31A A1	D	01/16/2024	CIBC OPPENHEIMER		15,000,000	15,000,000	0
224044-CS-4	Cox Communications Inc-SENIOR UNSECURED	D	01/16/2024	JP MORGAN SECURITIES		40,950,800	40,000,000	215,333
69145D-AA-0	Oxford Finance Credit Fu-OPFINF 2024-A A		01/18/2024	KEY CAPITAL MARKETS		5,500,000	5,500,000	0
12510H-AL-4	CARS-DB5 LP-CAUTO 2021-1A A2		01/18/2024	BARCLAYS CAPITAL INC		740,894	949,864	421

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 3

Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
22822V-BD-2	Crown Castle Inc-SENIOR UNSECURED		.03/21/2024	JP MORGAN SECURITIES		5,071,350	5,000,000	84,778
66901F-AB-2	Pantheon International p Senior Secured		.02/01/2024	RBC CAPITAL MARKETS		12,500,000	12,500,000	0
66901F-AA-4	Pantheon International p Senior Secured		.02/01/2024	RBC CAPITAL MARKETS		6,250,000	6,250,000	0
449298-BE-3	ICRE REIT Holdings Senior Note Series I		.02/15/2024	WELLS FARGO		5,000,000	5,000,000	0
449298-BD-5	ICRE REIT Holdings Senior Note Series I		.02/15/2024	WELLS FARGO		16,000,000	16,000,000	0
92847C-AA-5	Vitality Re XV Ltd-UNSECURED	D.....	.01/22/2024	MMSECINC		16,000,000	16,000,000	0
39154T-CM-8	GreatAmerica Leasing Rec-GALC 2024-1 C		.01/23/2024	BOFAMLSEC		1,949,715	1,950,000	0
75884R-AV-5	Regency Centers LP-SENIOR UNSECURED		.11/19/2024	GOLDMAN		6,625,920	6,797,000	74,087
756109-BY-9	Realty Income Corp-SENIOR UNSECURED		.01/23/2024	EXCHANGE OFFER		1,226,650	1,265,000	20,015
756109-CB-8	Realty Income Corp-SENIOR UNSECURED		.01/23/2024	EXCHANGE OFFER		12,053,204	11,921,000	10,596
756109-CE-2	Realty Income Corp-SENIOR UNSECURED		.01/23/2024	EXCHANGE OFFER		4,867,867	5,830,000	69,086
756109-CA-0	Realty Income Corp-SENIOR UNSECURED		.01/23/2024	EXCHANGE OFFER		4,426,530	5,000,000	37,333
36831B-CF-9	GCAT 2024-INV1 Trust-GCAT 2024-INV1 B2		.01/24/2024	BOFAMLSEC		5,237,185	5,020,000	29,280
36831B-CC-6	GCAT 2024-INV1 Trust-GCAT 2024-INV1 B1		.01/24/2024	BOFAMLSEC		7,221,780	6,813,000	39,738
875127-BM-3	Tampa Electric Co-SENIOR UNSECURED		.01/26/2024	VARIOUS		26,646,016	26,594,000	0
056920-AA-9	Bain Capital CLO 2024-1 -BCC 2024-1A A1	D.....	.01/25/2024	MIZUHO SECURITIES US		8,400,000	8,400,000	0
67118H-AC-4	OBX 2024-NQM2 Trust-OBX 2024-NQM2 A2		.01/25/2024	BARCLAYS CAPITAL INC		4,999,928	5,000,000	25,125
832696-AW-8	J M Smucker Co/The-SENIOR UNSECURED		.01/31/2024	VARIOUS		9,927,405	9,500,000	149,876
30225V-AK-3	Extra Space Storage LP-SENIOR UNSECURED		.01/26/2024	U. S. BANCORP		4,767,408	4,697,000	20,810
88240J-AA-1	TCIFC 2024-1A A1-TCIFC 2024-1A A1	D.....	.01/29/2024	BARCLAYS CAPITAL INC		10,000,000	10,000,000	0
38173M-AE-2	Golub Capital BDC Inc-SENIOR UNSECURED		.01/29/2024	WELLS FARGO		8,014,564	8,106,000	0
494553-AD-2	Kinder Morgan Inc-SENIOR UNSECURED		.01/29/2024	MIZUHO SECURITIES		7,986,720	8,000,000	0
449276-AD-6	IBM International Capita-SENIOR UNSECURE	D.....	.01/29/2024	BOFAMLSEC		4,988,500	5,000,000	0
449276-AC-8	IBM International Capita-SENIOR UNSECURE	D.....	.01/29/2024	BOFAMLSEC		4,992,700	5,000,000	0
65339K-CT-5	NextEra Energy Capital H-SENIOR UNSECURE		.01/29/2024	WELLS FARGO		9,978,900	10,000,000	0
N7334F-AY-9	Wereldhave NV Senior Note Series C	D.....	.01/31/2024	RABO BANK		25,000,000	25,000,000	0
863667-AY-7	Stryker Corp-SENIOR UNSECURED		.01/30/2024	CITIGROUP GLOBAL MAR		3,611,689	4,254,000	10,600
25179M-BF-9	DVN 4 1/2 01/15/30		.04/09/2024	VARIOUS		6,693,979	6,966,000	44,881
11271L-AA-0	BROOKFIELD FINANCE INC-SENIOR UNSECURED	A.....	.10/15/2024	BAIRD		1,994,520	2,000,000	31,639
055328-AL-2	BCC Middle Market CLO 20-BCMM 2018-1A A1		.01/31/2024	CITIGROUP GLOBAL MAR		16,500,000	16,500,000	0
630028-AA-2	NRM Cabin Intermediate # Senior Secured		.02/12/2024	RBC CAPITAL MARKETS		15,302,468	15,302,468	0
040168-AA-0	Arglass V-F2 LLC Senior Secured Notes		.02/06/2024	JEFFGROUPLLC		22,321,450	22,321,450	0
075887-CR-8	Becton Dickinson & Co-SENIOR UNSECURED		.02/13/2024	CITIGROUP GLOBAL MAR		9,910,200	10,000,000	9,477
38179N-AB-0	Golub Capital Partners C-GOCAP 2024-71A		.02/05/2024	BNP PARIBAS		16,000,000	16,000,000	0
009158-BH-8	Air Products and Chemica-SENIOR UNSECURE		.02/29/2024	VARIOUS		15,190,724	15,300,000	26,552
009158-BJ-4	Air Products and Chemica-SENIOR UNSECURE		.05/07/2024	VARIOUS		19,861,000	20,000,000	190,000
86744Y-AA-3	Sumnova SOL VI Issuer LL-SNVA 2024-1A A		.03/27/2024	VARIOUS		10,120,469	10,500,000	68,114
29244R-AA-3	Empower CLO 2024-1 Ltd-EMPIWR 2024-1A A1	D.....	.02/07/2024	GOLDMAN		15,000,000	15,000,000	0
69120Y-AA-3	Owl Rock CLO Ltd-OR 2024-16A A		.02/07/2024	DEUTSCHE BANK SECURI		5,300,000	5,300,000	0
41755W-AE-0	Harvest US Clo 2024-1 Lt-HARUS 2024-1A B	D.....	.02/07/2024	CITIGROUP GLOBAL MAR		9,600,000	9,600,000	0
29280M-AA-9	Energy Asset Issuer Trus Senior Secured		.02/09/2024	DIRECT		32,000,000	32,000,000	0
233331-BK-2	DTE Energy Co-SENIOR UNSECURED		.02/13/2024	MTSUBISHI UFJ SEC I		9,930,500	10,000,000	0
09077T-AA-3	Birch Grove CLO 8 Ltd-BGCLO 2024-8A A1	D.....	.02/12/2024	BOFAMLSEC		15,000,000	15,000,000	0
053484-AC-5	AvalonBay Communities In-SENIOR UNSECURE		.02/13/2024	U. S. BANCORP		9,183,745	10,570,000	41,282
855244-BH-1	Starbucks Corp-SENIOR UNSECURED		.02/13/2024	BOFAMLSEC		9,883,000	10,000,000	9,528
191216-CT-5	Coca-Cola Co/The-SENIOR UNSECURED		.02/13/2024	GOLDMAN		9,310,600	10,000,000	134,167
278062-AK-0	Eaton Corp-SENIOR UNSECURED		.02/13/2024	SUSQUEHANNA BANCOSHA		3,124,168	3,176,000	33,388
025816-DN-6	American Express Co-SENIOR UNSECURED		.02/13/2024	JP MORGAN SECURITIES		5,335,250	5,000,000	0
40443Q-AA-1	HPS Private Credit CLO 2-HPSPR 2024-2A A		.02/14/2024	NATIXIS CAP MKT		7,700,000	7,700,000	0
47587F-AA-0	JEN HoldCo 24 LLC Senior Secured Notes		.06/06/2024	DIRECT		18,000,000	18,000,000	0
59803F-AA-9	MidOcean Credit CLO XIV -MIDO 2024-14A A	D.....	.02/15/2024	BNP PARIBAS		15,000,000	15,000,000	0
59803F-AE-1	MidOcean Credit CLO XIV -MIDO 2024-14A B	D.....	.02/15/2024	BNP PARIBAS		8,300,000	8,300,000	0
86745C-AA-0	Sumnova Helios XIII Issu-SNVA 2024-A A		.03/27/2024	BARCLAYS CAPITAL INC		10,545,567	10,769,368	17,440
04636N-AM-5	Astrazeneca Finance LLC-SENIOR UNSECURED		.03/21/2024	DAIWA SECURITIES AME		5,905,546	5,900,000	23,289
37519H-AA-6	GigSky Inc-UNSECURED		.02/22/2024	GUGGENHEIM		3,960,000	4,000,000	0
78355H-KZ-1	Ryder System Inc-SENIOR UNSECURED		.03/13/2024	VARIOUS		2,675,533	2,660,000	6,354
75041V-AB-0	Radiology Partners Inc-RADPAR 8 1/2 01/3		.02/22/2024	EXCHANGE OFFER		4,439,855	4,531,317	48,854

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 3

Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
63902H-AM-1	Nature Conservancy/The-SENIOR UNSECURED		.02/27/2024	SOUTHWEST SEC.		1,085,916	1,300,000	3,165
03740M-AC-4	AON North America Inc-SENIOR UNSECURED		.02/28/2024	CITIGROUP GLOBAL MAR		6,649,666	6,667,000	0
902494-BL-6	Tyson Foods Inc-SENIOR UNSECURED		.03/13/2024	VARIOUS		20,612,795	20,528,000	15,750
17275R-BS-0	Cisco Systems Inc-SENIOR UNSECURED		.03/27/2024	VARIOUS		20,117,400	20,000,000	59,125
58013M-FM-1	McDonald's Corp-SENIOR UNSECURED		.02/29/2024	WELLS FARGO		3,598,854	4,200,000	744
863667-BC-4	Stryker Corp-SENIOR UNSECURED		.05/07/2024	U. S. BANCORP		5,755,804	5,800,000	117,990
110122-DQ-8	Bristol-Myers Squibb Co-SENIOR UNSECURED		.08/02/2024	VARIOUS		16,849,400	20,000,000	66,056
12592B-AR-5	CNH Industrial Capital L-SENIOR UNSECURE		.03/27/2024	BARCLAYS CAPITAL INC		20,327,400	20,000,000	241,389
64105M-AA-9	Nestle Capital Corp-SENIOR UNSECURED		.03/13/2024	JP MORGAN SECURITIES		9,577,152	9,600,000	3,720
440452-AK-6	Hormel Foods Corp-SENIOR UNSECURED		.10/15/2024	WELLS FARGO		13,524,403	13,329,000	28,435
29717P-BA-4	ESS 5 1/2 04/01/34		.08/19/2024	WELLS FARGO		2,057,420	2,000,000	47,972
831943-AC-9	SMB Private Education Lo-SMB 2024-A B		.03/12/2024	VARIOUS		9,013,307	9,000,000	490
714264-AM-0	PERNOD RICARD SA-SENIOR UNSECURED	D.....	.06/25/2024	BARCLAYS CAPITAL INC		2,405,450	2,500,000	4,063
171512-AQ-9	Churchill Middle Market -CHMIL 2019-1A A	D.....	.03/08/2024	NATIXIS CAP MKT		10,000,000	10,000,000	0
39573A-AE-2	GreenState Auto Receivab-GRNST 2024-1A B		.03/11/2024	BOFAMLSEC		2,399,222	2,400,000	0
39573A-AF-9	GreenState Auto Receivab-GRNST 2024-1A C		.03/11/2024	BOFAMLSEC		2,999,979	3,000,000	0
20268J-AK-9	CommonSpirit Health-SECURED		.04/23/2024	SOUTHWEST SEC.		18,798,371	18,466,000	337,706
209111-FM-0	ED 3 1/8 11/15/27		.04/24/2024	BOFAMLSEC		9,115,628	9,765,000	136,473
871987-AA-1	Symphony CLO 42 Ltd-SYMP 2024-42A A1	D.....	.03/12/2024	JP MORGAN SECURITIES		15,000,000	15,000,000	0
78200J-AA-0	Rush Obligated Group-UNSECURED		.11/07/2024	VARIOUS		12,759,747	13,361,000	180,178
744573-AV-8	Public Service Enterpris-SENIOR UNSECURE		.04/24/2024	CITIGROUP GLOBAL MAR		10,242,612	10,100,000	264,241
03073E-AP-0	Cencora Inc-SENIOR UNSECURED		.11/19/2024	JP MORGAN SECURITIES		15,721,888	16,283,000	241,870
874054-AG-4	Take-Two Interactive Sof-SENIOR UNSECURE		.04/23/2024	TORONTO DOMINION SEC		5,020,318	5,273,000	5,961
22160K-AP-0	Costco Wholesale Corp-SENIOR UNSECURED		.04/09/2024	TORONTO DOMINION SEC		4,182,300	5,000,000	38,000
04636N-AK-9	Astrazeneca Finance LLC-SENIOR UNSECURED		.11/19/2024	VARIOUS		31,950,896	31,784,000	335,658
361886-DC-5	GMF Floorplan Owner Revo-GFORT 2024-1 B		.03/19/2024	CITIGROUP GLOBAL MAR		4,749,953	4,750,000	0
361886-DA-9	GMF Floorplan Owner Revo-GFORT 2024-1 A1	D.....	.03/19/2024	CITIGROUP GLOBAL MAR		19,247,526	19,250,000	0
29977F-AA-2	EverBright Solar Trust 2-EVBRT 2024-A A		.03/20/2024	RBC CAPITAL MARKETS		7,929,603	8,000,000	0
682680-BV-4	ONEOK Inc-SENIOR UNSECURED		.02/27/2024	EXCHANGE OFFER		8,738,278	6,932,000	130,899
03073E-AR-6	Cencora Inc-SENIOR UNSECURED		.03/21/2024	BOFAMLSEC		3,788,339	4,294,000	43,417
438516-CJ-3	Honeywell International Inc-HON 4.95 02/		.03/21/2024	CITIGROUP GLOBAL MAR		4,556,340	4,500,000	24,750
88339W-AB-2	Williams Cos Inc/The-WMB 4.9 03/15/29		.03/21/2024	GOLDMAN		14,304,960	14,400,000	156,800
93655P-AC-1	Warwick Capital CLO 3 LT-WWICK 2024-3A B	D.....	.03/21/2024	RBC CAPITAL MARKETS		10,000,000	10,000,000	0
33817F-AA-8	FITLAB INC TERM LN		.02/07/2024	DIRECT		10,142,857	10,142,857	0
87249Q-AL-4	TICP CLO XI Ltd-TICP 2018-11A AR	D.....	.03/26/2024	BOFAMLSEC		15,000,000	15,000,000	0
444859-CA-8	Humana Inc-SENIOR UNSECURED		.03/27/2024	GOLDMAN		10,228,224	10,240,000	27,520
03740M-AB-6	AON 5.15 03/01/29		.03/27/2024	JP MORGAN SECURITIES		10,060,800	10,000,000	42,917
65364U-AL-0	Niagara Mohawk Power Cor-SENIOR UNSECURE		.03/27/2024	DEUTSCHE BANK SECURI		5,258,880	5,500,000	69,280
05565E-CJ-2	BMW US Capital LLC-SENIOR UNSECURED		.03/27/2024	SCOTIA CAPITAL MARKE		10,014,400	10,000,000	0
481952-AC-3	KKR CLO 50 Ltd-KKR 2024-50A B	D.....	.03/27/2024	BARCLAYS CAPITAL INC		10,000,000	10,000,000	0
55817B-AB-8	Madison Park Funding Ltd-MDPK 2024-58A B	D.....	.03/27/2024	CITIGROUP GLOBAL MAR		5,080,000	5,080,000	0
29365B-AG-1	Entergy New Orleans LLC First Mortgage B		.05/23/2024	BARCLAYS CAPITAL INC		25,000,000	25,000,000	0
44961B-AA-1	iGPS Logistics LLC Senior Secured Note S		.04/18/2024	JEFFGROUPLLC		6,551,700	6,551,700	0
44961B-AB-9	iGPS Logistics LLC Senior Secured Note S		.04/18/2024	JEFFGROUPLLC		12,718,750	12,718,750	0
13887A-AE-8	Canyon CLO 2023-2 Ltd-CANYC 2023-2A B	D.....	.04/03/2024	DEUTSCHE BANK SECURI		5,000,000	5,000,000	0
29250N-BX-2	Enbridge Inc-SENIOR UNSECURED	A.....	.07/26/2024	CITIGROUP GLOBAL MAR		9,960,169	9,570,000	118,030
532457-CK-2	LLY 4 1/2 02/09/29		.11/22/2024	SG COWEN SECURITIES		5,638,079	5,650,000	74,863
86212X-AM-2	Store Master Funding I-V-STR 2024-1A A2		.04/05/2024	CITIGROUP GLOBAL MAR		9,999,503	10,000,000	0
79582M-AA-9	Saluda Grade Alternative-GRADE 2024-FIGS		.04/05/2024	NOMURA SECURITIES IN		9,999,986	10,000,000	19,113
14987V-AQ-2	CBAM 2019-9 Ltd-CBAM 2019-9A B1R	D.....	.04/08/2024	MORGAN		10,000,000	10,000,000	0
12592B-AS-3	CNH Industrial Capital L-SENIOR UNSECURE		.10/29/2024	VARIOUS		20,063,844	20,206,000	64,887
14913U-AJ-9	Caterpillar Financial Se-SENIOR UNSECURE		.04/09/2024	TORONTO DOMINION SEC		5,001,150	5,000,000	29,639
49271V-AT-7	Keurig Dr Pepper Inc-SENIOR UNSECURED		.04/09/2024	TORONTO DOMINION SEC		4,986,050	5,000,000	23,847
372460-AA-3	Genuine Parts Co-SENIOR UNSECURED		.04/09/2024	U. S. BANCORP		6,467,360	8,000,000	66,667
87612E-BP-0	Target Corp-SENIOR UNSECURED		.04/23/2024	VARIOUS		12,134,130	12,575,000	50,625
67080L-AC-9	Nuveen LLC-SENIOR UNSECURED		.11/05/2024	VARIOUS		30,613,205	30,325,000	196,112
03027X-BW-9	American Tower Corp-SENIOR UNSECURED		.04/09/2024	GOLDMAN		19,029,032	20,900,000	61,133

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 3

Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
03332Q-AA-3	Anchorage Capital CLO Lt-ANCH 2024-29A	D	04/09/2024	CIBC OPPENHEIMER		15,000,000	15,000,000	0
B9550E-AP-6	UMICORE SA Senior Sustainability-linked	B	04/04/2024	DIRECT		21,718,000	21,718,003	0
000000-00-0	United Power, Inc. First Mortgage Bond S		04/25/2024	DIRECT		7,894,750	7,894,750	0
G6369H-AB-7	NSG UK Enterprises Limit Senior Note Ser		04/17/2024	BOFAMLSEC		26,625,000	26,625,004	0
43283Y-AB-9	Hilton Grand Vacations T-HGVT 2024-1B B		04/15/2024	BOFAMLSEC		1,899,648	1,900,000	0
83206N-AC-1	SMB Private Education Lo-SMB 2022-B B		04/17/2024	GOLDMAN		1,418,555	1,500,000	758
16144C-AG-1	Chase Auto Owner Trust-CHAOT 2024-2A D		04/18/2024	JP MORGAN SECURITIES		7,259,499	7,260,000	0
25755T-AN-0	Domino's Pizza Master Is-CPABS 2021-1A A		04/18/2024	JP MORGAN SECURITIES		2,546,772	2,917,500	18,769
91135E-AB-1	United Power, Inc. First Mortgage Bonds		04/25/2024	DIRECT		4,500,000	4,500,000	0
09582E-AA-3	Blue Owl RE Net Lease Pr Senior Secured		04/24/2024	DIRECT		30,000,000	30,000,000	0
110122-ED-6	Bristol-Myers Squibb Co		11/20/2024	VARIOUS		20,744,158	20,625,000	256,059
07336P-AA-2	Bayview Opportunity Mast-BVQLN 2024-EDU1		04/23/2024	BOFAMLSEC		13,500,000	13,500,000	0
07336P-AC-8	Bayview Opportunity Mast-BVQLN 2024-EDU1		04/23/2024	BOFAMLSEC		2,500,000	2,500,000	0
57763R-AD-9	Mauser Packaging Solutio-SECURED		04/16/2024	EXCHANGE OFFER		4,882,962	4,949,000	66,038
928668-CF-7	Volkswagen Group of Amer-SENIOR UNSECURE		08/02/2024	MORGAN		10,187,100	10,000,000	195,806
855244-BG-3	Starbucks Corp-SBUX 4.85 02/08/27		08/02/2024	CITIGROUP GLOBAL MAR		5,056,050	5,000,000	119,229
289913-AC-9	Logan CLO I Ltd-LOGN1 2021-1A AR1	D	04/24/2024	RBC CAPITAL MARKETS		10,000,000	10,000,000	0
08182Y-AA-6	Benefit Street Partners -BSP 2024-35A A	D	04/25/2024	JP MORGAN SECURITIES		16,000,000	16,000,000	0
08182Y-AC-2	Benefit Street Partners -BSP 2024-35A B	D	04/25/2024	JP MORGAN SECURITIES		10,000,000	10,000,000	0
14074E-AE-1	Captree Park CLO Ltd-CPTPK 2024-1A B1	D	04/26/2024	CITIGROUP GLOBAL MAR		7,300,000	7,300,000	0
04020R-AA-6	Ares Direct Lending CLO -ARESOL 2024-1A		04/26/2024	BNP PARIBAS		15,000,000	15,000,000	0
05876N-AA-7	Ballyrock CLO 26 Ltd-BALLY 2024-26A A1A	D	04/29/2024	MORGAN		12,950,000	12,950,000	0
04362V-AA-3	Ascent Education Funding-ASONT 2024-A A		12/06/2024	BARCLAYS CAPITAL INC		13,578,743	13,361,617	31,905
000000-00-0	THEIA BIDCO PTY LTD FAC A1	B	04/30/2024	BANK LOANS BARINGS		4,322,813	4,456,507	0
784710-AA-3	SSM Health Care Corp-SENIOR UNSECURED		11/18/2024	VARIOUS		6,589,478	6,775,000	122,145
34535Q-AC-9	Ford Credit Auto Owner T-FORDR 2023-1 C		05/02/2024	BOFAMLSEC		2,967,773	3,000,000	9,765
46148H-AC-2	Invesco US CLO 2024-3 LT-INVCO 2024-3A B	D	05/02/2024	BOFAMLSEC		3,800,000	3,800,000	0
68626B-AA-4	Antares Capital Advisers-ANTOR 2024-3A A	D	05/03/2024	JP MORGAN SECURITIES		20,000,000	20,000,000	0
68626B-AC-0	Antares Capital Advisers-ANTOR 2024-3A B	D	05/03/2024	JP MORGAN SECURITIES		10,000,000	10,000,000	0
75009L-AL-0	Rad CLO 16 Ltd-RAD 2022-16A A1R	D	05/03/2024	GOLDMAN		25,500,000	25,500,000	0
T3420H-AE-1	CRIF SpA Senior Unsecured Notes	B	05/07/2024	DIRECT		26,925,000	26,925,003	0
E1000H-AE-9	Acciona Financiacion Fil Green Gtd Senio	B	05/08/2024	DIRECT		37,611,000	37,610,993	0
67119F-AB-9	OBX 2024-NQM7 Trust-OBX 2024-NQM7 A2		05/06/2024	BARCLAYS CAPITAL INC		5,000,000	5,000,000	38,497
67119F-AA-1	OBX 2024-NQM7 Trust-OBX 2024-NQM7 A1		05/06/2024	BARCLAYS CAPITAL INC		4,999,980	5,000,000	37,285
29002G-AL-5	Elmwood CLO IV Ltd-ELMW4 2020-1A AR	D	05/06/2024	BNP PARIBAS		15,000,000	15,000,000	0
23110A-AB-2	Cumulus Media New Holdin-FIRST LIEN		05/02/2024	EXCHANGE OFFER		2,500,412	2,490,000	56,482
55400W-AA-7	MVII 2023-2 LLC-MVIIOT 2023-2A A		05/07/2024	BOFAMLSEC		7,066,035	6,941,309	22,640
571676-AB-1	MARS 3.2 04/01/30		05/07/2024	U. S. BANCORP		1,878,028	2,070,000	6,992
049560-AT-2	Atmos Energy Corp-SENIOR UNSECURED		12/19/2024	VARIOUS		10,484,034	12,803,000	78,783
45866F-AJ-3	Intercontinental Exchang-SENIOR UNSECURE		05/07/2024	JP MORGAN SECURITIES		4,781,200	5,000,000	25,000
78403D-AT-7	SBA Tower Trust-SBATOW 1.631 11/15/26		05/07/2024	BAIRD		6,323,800	7,000,000	7,611
83206E-AA-5	SMB Private Education Lo-SMB 2024-C A1A		05/07/2024	BOFAMLSEC		9,998,200	10,000,000	0
81743C-AE-5	Sequoia Mortgage Trust 2-SEMT 2024-5 A5		05/07/2024	BOFAMLSEC		4,971,873	5,000,000	10,833
45687V-AE-6	Ingersoll Rand Inc-SENIOR UNSECURED		05/08/2024	VARIOUS		21,871,678	21,880,000	0
126650-EB-2	CVS 5.4 06/01/29		05/07/2024	BOFAMLSEC		14,985,450	15,000,000	0
718547-AK-8	Phillips 66 Co-SENIOR UNSECURED		05/08/2024	JP MORGAN SECURITIES		10,064,314	11,198,000	142,075
59801F-AE-3	MidOcean Credit CLO XV L-MIDO 2024-15A B	D	05/10/2024	GOLDMAN		7,000,000	7,000,000	0
12478C-AQ-4	CBAM 2018-B Ltd/KY-CBAM 2018-8A A1R	D	05/10/2024	MORGAN		18,000,000	18,000,000	0
12478C-AU-5	CBAM 2018-B Ltd/KY-CBAM 2018-8A B1R	D	05/10/2024	MORGAN		7,750,000	7,750,000	0
92839H-AA-4	Vista Point Securitizati-VSTA 2024-CES1		05/10/2024	PIPERJAFFRAY		7,899,919	7,900,000	62,995
82667C-AC-9	Signal Rail I LLC-SRL 2024-1A A		05/13/2024	WELLS FARGO		8,995,275	9,000,000	0
758750-AM-5	Regal Rexnord Corp-SENIOR UNSECURED		05/02/2024	EXCHANGE OFFER		25,253,556	25,000,000	71,424
83011V-AC-8	Sixth Street CLO XXV Ltd-SIXST 2024-25A	D	05/15/2024	CITIGROUP GLOBAL MAR		8,300,000	8,300,000	0
10373Q-BY-5	BP Capital Markets Ameri-SENIOR UNSECURE		11/20/2024	BOFAMLSEC		10,103,400	10,000,000	11,149
39843P-ZZ-8	GRIFOLS SA 1st Lien Secured	B	05/15/2024	DIRECT		10,708,920	10,872,000	38,505
88632Q-AE-3	Cloud Software Group Inc-SECURED		05/29/2024	VARIOUS		7,437,258	7,830,000	72,638
37149Y-AG-4	Generate Clo 16 Ltd-GWRT 2024-16A B	D	05/17/2024	BOFAMLSEC		10,000,000	10,000,000	0
85253H-AN-1	STAG Industrial Operatin Gtd Senior Note		05/28/2024	BANK OF AMERICA CORP		8,000,000	8,000,000	0

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Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
38190B-AA-3	Golub Capital Partners C-GCBSL 2024-74A	D	.05/20/2024	MITSUBISHI UFJ SEC I		11,250,000	11,250,000	0
38190B-AC-9	Golub Capital Partners C-GCBSL 2024-74A	D	.05/20/2024	MITSUBISHI UFJ SEC I		6,500,000	6,500,000	0
64640#-AA-5	Holman Leasing Ltd Senior Guaranteed Not	B	.05/23/2024	BANK OF AMERICA		38,136,000	38,136,013	0
25255W-AA-6	Diameter Capital CLO 7 L-DCLQ 2024-7A A1	D	.05/21/2024	MORGAN		15,000,000	15,000,000	0
25255W-AE-8	Diameter Capital CLO 7 L-DCLQ 2024-7A A2	D	.05/21/2024	MORGAN		10,000,000	10,000,000	0
G1969#-AJ-5	Balfour Beatty PLC Senior Note Series A	D	.05/28/2024	HSBC SECURITIES INC		8,035,700	8,035,700	0
37147X-AC-7	Generate CLO 15 Ltd-GNRT 2024-15A B	D	.04/03/2024	DEUTSCHE BANK		9,500,000	9,500,000	0
12555X-AN-1	CIFC Funding 2019-VI Ltd-CIFC 2019-6A A1	D	.05/22/2024	JP MORGAN SECURITIES		10,000,000	10,000,000	0
86746F-AA-2	Sunnova Hestia II Issuer-SNVA 2024-GRID1		.05/22/2024	SMBC NIKKO SECURITIE		9,999,644	10,000,000	0
86944B-AG-8	Sutter Health-UNSECURED		.12/19/2024	VARIOUS		11,759,835	13,417,000	69,086
255123-A*-2	Diversified ABS Phase VIII Senior Secure		.05/29/2024	BARCLAYS CAPITAL INC		22,338,000	22,338,000	0
000000-00-0	Diversified ABS Phase VIII Senior Secure		.05/29/2024	BARCLAYS CAPITAL INC		5,172,000	5,172,000	0
29244P-AE-9	Empower CLO 2024-2 Ltd-EMPIR 2024-2A B	D	.05/24/2024	MIZUHO SECURITIES		10,000,000	10,000,000	0
04020T-AE-4	Ares Loan Funding VI Ltd-ARES 2024-ALF6A	D	.05/24/2024	MORGAN		10,000,000	10,000,000	0
74745*-AA-3	QTS IRVING DC3 LLC Senior Secured Notes		.05/28/2024	DIRECT		6,944,450	6,944,450	0
14310Q-AN-8	Carlyle Direct Lending C-CGFM 2015-1A A1		.05/30/2024	CITIGROUP GLOBAL MAR		50,000,000	50,000,000	0
14310Q-AS-7	Carlyle Direct Lending C-CGFM 2015-1A A2		.05/30/2024	CITIGROUP GLOBAL MAR		15,000,000	15,000,000	0
12563E-AN-3	CIFC Funding 2021-I Ltd-CIFC 2021-1A AR	D	.05/31/2024	BOFAMLSEC		12,000,000	12,000,000	0
417558-AB-9	Harvest Midstream I LP-SENIOR UNSECURED		.06/05/2024	WELLS FARGO		3,045,000	3,000,000	18,750
K7802#-BH-1	Royal Greenland A/S Senior Note		.06/11/2024	CITIGROUP GLOBAL MAR		24,111,821	24,111,821	0
96467F-AU-4	Whitebox Clo I Ltd-WBOX 2019-1A A1RR	D	.08/02/2024	GOLDMAN		8,511,900	8,500,000	0
38172U-AE-5	Golub Capital Partners C-GOCAP 2018-38A	D	.06/07/2024	BNP PARIBAS		20,000,000	20,000,000	0
G2964#-AA-7	AP Grange Holdings LLC Senior Secured No	C	.06/11/2024	DIRECT		50,000,000	50,000,000	0
10334#-AT-9	BOYD WATTERSON GSA FUND Senior Notes		.05/23/2024	DIRECT		22,500,000	22,500,000	0
00423B-AB-3	ACADIA REALTY TRUST Senior Note		.05/28/2024	DIRECT		20,000,000	20,000,000	0
000000-00-0	MOLKEREI ALOIS MUELLER G Senior Unsecure	B	.06/03/2024	DIRECT		21,770,000	21,770,011	0
40495*-AB-4	HGIT PROPERTIES LP Guaranteed Senior Not		.06/03/2024	DIRECT		19,593,000	19,593,010	0
F2000B-AC-2	C2 DEVELOPPMENT Senior Unsecured Notes	B	.04/26/2024	DIRECT		21,390,000	21,390,008	0
D2736#-AY-5	FRITZ DRAXLMAIER GMBH AN Senior Unsecure	D	.05/28/2024	DIRECT		6,000,000	6,000,000	0
12542R-MF-4	CHS INC SER DD SR NT		.04/03/2024	DIRECT		22,500,000	22,500,000	0
05642*-AA-1	BWC TERMINALS INC Senior Secured Notes A		.06/17/2024	DIRECT		21,875,000	21,875,000	0
65345X-AA-2	GENESIS AIRCRAFT SERVICE Class A Certifi	C	.06/07/2024	DIRECT		29,900,014	29,900,765	0
65345X-AB-0	GENESIS AIRCRAFT SERVICE Class B Certifi	C	.06/07/2024	DIRECT		9,954,145	9,963,665	0
302704-AB-7	FLYWHEEL ENERGY ASSET IS Class B Note		.06/24/2024	DIRECT		10,000,000	10,000,000	0
302704-AA-9	FLYWHEEL ENERGY ASSET IS Class A Note		.06/24/2024	DIRECT		40,000,000	40,000,000	0
43324B-AH-0	HINES GLOBAL REAL ESTATE Senior Note		.06/20/2024	DIRECT		15,750,000	15,750,000	0
233853-AY-6	Daimler Truck Finance No-SENIOR UNSECURE		.10/15/2024	RBC CAPITAL MARKETS		10,155,000	10,000,000	29,896
79575B-AN-7	SALTOCHUK RESOURCES INC Sr Unsecured Bond		.06/24/2024	DIRECT		8,636,000	8,636,000	0
437076-CZ-3	Home Depot Inc/The-SENIOR UNSECURED		.06/25/2024	MORGAN		10,013,200	10,000,000	1,431
89236T-MD-4	Toyota Motor Credit Corp-SENIOR UNSECURE		.06/25/2024	VARIOUS		7,012,600	7,000,000	40,444
50220P-AB-9	LSEGA Financing PLC-SENIOR UNSECURED	D	.06/25/2024	BOFAMLSEC		6,327,977	6,780,000	20,717
000000-00-0	BG BETA I LTD Class A-2 Senior Secured N	C	.07/01/2024	DIRECT		10,000,000	10,000,000	0
N3149*-AE-1	EVOS FINANCE BV Senior Secured Notes Tra		.07/01/2024	DIRECT		24,681,300	24,681,289	0
000000-00-0	Merrion Square Residenti-MERRI 2024-1A C	B	.07/03/2024	MORGAN STANLEY & CO		1,670,443	1,700,370	0
000000-00-0	Merrion Square Residenti-MERRI 2024-1A A	B	.07/03/2024	MORGAN STANLEY & CO		12,878,764	12,955,200	0
000000-00-0	Merrion Square Residenti-MERRI 2024-1A B	B	.07/03/2024	MORGAN STANLEY & CO		2,090,694	2,105,220	0
N7334#-AZ-6	WERELDHAVE NV Senior Unsecured Notes	B	.07/16/2024	DIRECT		10,910,000	10,910,003	0
871829-BF-3	SVY 3 1/4 07/15/27		.07/22/2024	CITIGROUP GLOBAL MAR		5,924,300	6,211,000	4,486
94106L-BX-6	Waste Management Inc-SENIOR UNSECURED		.07/22/2024	JP MORGAN SECURITIES		10,059,200	10,000,000	27,500
00774M-BG-9	AerCap Ireland Capital D-SENIOR UNSECURE	D	.07/26/2024	GOLDMAN		18,434,347	17,873,000	121,806
11135F-BZ-3	Broadcom Inc-AVGO 5.05 07/12/27		.08/02/2024	MORGAN		7,109,480	7,000,000	22,585
423012-AF-0	Heineken NV-HEIANA 3 1/2 01/29/28	D	.08/02/2024	VARIOUS		62,128,309	64,405,000	14,467
872480-AE-8	TIF Funding II LLC-TIF 2021-1A A		.07/25/2024	VARIOUS		4,412,191	5,048,750	1,388
97246J-AA-6	Wilsonart LLC-SENIOR UNSECURED		.07/25/2024	GOLDMAN		2,250,000	2,250,000	0
18977W-2D-1	CNO 5 7/8 06/04/27		.07/26/2024	JP MORGAN SECURITIES		5,953,490	5,875,000	52,732
000000-00-0	EDENS LIMITED PARTNERSHI Senior Note 3yr		.07/23/2024	DIRECT		10,000,000	10,000,000	0
78355H-LC-1	R 4.95 09/01/29		.11/22/2024	BARCLAYS CAPITAL INC		4,988,650	5,000,000	78,375
61776Q-AC-0	Morgan Stanley Residenti-MSRM 2024-3 A2		.07/30/2024	MORGAN		4,998,124	5,000,000	30,833
567928-AB-2	Mariner Finance Issuance-MFIT 2024-AA B		.07/30/2024	WELLS FARGO		999,981	1,000,000	0

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CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
567928-AA-4	Mariner Finance Issuance-MFIT 2024-AA A		..07/30/2024	WELLS FARGO		2,999,632	3,000,000	0
39571M-AD-0	GreenSky Home Improvemen-GSKY 2024-1 A4		..07/30/2024	GOLDMAN		9,999,571	10,000,000	0
02352B-AA-3	Amentum Escrow Corp-SENIOR UNSECURED		..07/30/2024	JP MORGAN SECURITIES		421,000	421,000	0
21925D-AB-5	Cornerstone Building Bra-SECURED		..07/31/2024	DEUTSCHE BANK SECURI		2,187,000	2,187,000	0
22757H-AB-7	Cross 2024-H5 Mortgage T-CROSS 2024-H5 A		..07/31/2024	GOLDMAN		7,499,927	7,500,000	45,045
22757H-AA-9	Cross 2024-H5 Mortgage T-CROSS 2024-H5 A		..07/31/2024	GOLDMAN		4,999,955	5,000,000	29,270
105925-AB-7	BRAVO Residential Fundin-BRAVO 2024-NQMS		..07/31/2024	BOFAMLSEC		3,999,928	4,000,000	23,551
469815-AL-8	Jacobs Entertainment Inc-SENIOR UNSECURE		..12/05/2024	VARIOUS		7,263,336	7,707,000	86,948
233331-BM-8	DTE Energy Co-SENIOR UNSECURED		..11/18/2024	VARIOUS		31,229,901	31,039,000	199,193
000000-00-0	SCF FUNDING LLC Senior Unsecured Notes		..07/31/2024	DIRECT		20,000,000	20,000,000	0
43283Q-AC-4	Hilton Grand Vacations B-SECURED		..08/01/2024	BOFAMLSEC		3,759,375	3,750,000	11,732
45687V-AD-8	Ingersoll Rand Inc-SENIOR UNSECURED		..08/02/2024	CITADELEQ		22,747,879	22,100,000	270,087
03768R-AQ-9	Apidos CLO XXXII-APID 2019-32A A1R	D.....	..08/02/2024	MORGAN		4,002,000	4,000,000	9,928
36830F-AF-3	GCAT 2024-INV3 Trust-GCAT 2024-INV3 A6		..08/02/2024	BOFAMLSEC		7,770,871	7,750,000	43,809
69381J-AA-0	PRPM 2024-RCF5 LLC-PRPM 2024-RCF5 A1		..08/02/2024	GOLDMAN		9,752,289	10,000,000	0
36830F-AN-6	GCAT 2024-INV3 Trust- 36830FAN6		..08/02/2024	BOFAMLSEC		3,004,688	3,000,000	18,500
795924-AA-7	Saluda Grade Alternative-GRADE 2024-INV1		..08/05/2024	NOMURA SECURITIES IN		9,999,811	10,000,000	57,371
12564D-AA-2	CIFC Funding 2021-III LT-CIFC 2021-3A A	D.....	..08/06/2024	DEUTSCHE BANK SECURI		19,995,000	20,000,000	85,649
92259W-AA-2	Velocity Commercial Capi-VCC 2024-4 A		..08/06/2024	CITIGROUP GLOBAL MAR		9,999,653	10,000,000	70,320
69544Q-AB-6	Pagaya AI Debt Grantor T-PAID 2024-8 B		..12/03/2024	AMHERST SECURITIES		9,829,167	9,824,562	28,290
78450X-AA-6	SMB Private Education Lo-SMB 2024-E A1A		..08/07/2024	JP MORGAN SECURITIES		12,994,903	13,000,000	0
31425B-AA-5	FCI Funding 2024-1 LLC-FCITL 2024-1A A		..08/07/2024	CAPONE		22,999,179	23,000,000	0
0738AB-AC-5	Pepper Residential Secur-PEPAU 40 A2	B.....	..08/08/2024	NATIONAL AUSTRALIA B		3,946,800	3,946,800	0
0738AB-AH-4	Pepper Residential Secur-PEPAU 40 B	B.....	..08/08/2024	NATIONAL AUSTRALIA B		1,447,160	1,447,160	0
20268K-AA-8	Commonbond Student Loan -CBSLT 2017-BGS		..08/09/2024	RBC CAPITAL MARKETS		4,212,909	4,591,726	5,811
20269D-AA-3	Commonbond Student Loan -CBSLT 2018-AGS		..08/09/2024	RBC CAPITAL MARKETS		3,665,822	3,944,395	5,979
81749N-AB-1	Sequoia Mortgage Trust 2-SEMT 2024-8 A2		..08/09/2024	WELLS FARGO		15,364,375	15,500,000	66,306
81749N-AV-7	Sequoia Mortgage Trust 2-SEMT 2024-8 A20		..08/09/2024	WELLS FARGO		13,958,435	14,171,000	60,620
27889*-AQ-2	ECOM ATLANTIC INC Senior Unsecured Notes		..08/08/2024	DIRECT		25,000,000	25,000,000	0
196919-AB-0	COLT 2024-INV3 Mortgage -COLT 2024-INV3		..08/12/2024	MORGAN		7,499,885	7,500,000	22,543
196919-AA-2	COLT 2024-INV3 Mortgage -COLT 2024-INV3		..08/12/2024	MORGAN		13,525,985	13,526,000	38,856
62847R-AA-5	MVW 2024-1 LLC-MVWOT 2024-1A A		..08/12/2024	BARCLAYS CAPITAL INC		5,194,555	5,121,730	17,408
60041@-AB-9	MILLENNIUM PIPELINE INTE Senior Unsecure		..08/09/2024	DIRECT		7,500,000	7,500,000	0
00262@-AA-9	AIP ITALY LP Senior Secured Notes Class		..08/08/2024	DIRECT		20,000,000	20,000,000	0
60041@-AA-1	MILLENNIUM PIPELINE INTE Senior Unsecure		..08/09/2024	DIRECT		6,000,000	6,000,000	0
70687F-AE-9	PenFed Auto Receivables -PMFED 2024-A B		..08/13/2024	JP MORGAN SECURITIES		4,199,968	4,200,000	0
48660G-R@-7	KAYNE ANDERSON ENERGY IN KYN 7Y Senior		..08/13/2024	DIRECT		10,000,000	10,000,000	0
88749*-AE-1	TING ISSUER LLC TING FUNDING LLC (TRANCH		..08/13/2024	DIRECT		1,999,877	2,000,000	0
88749*-AD-3	TING ISSUER LLC TING FUNDING LLC (TRANCH		..08/13/2024	DIRECT		24,391,321	24,395,000	0
92540N-AB-9	Verus Securitization Tru-VERUS 2024-INV2		..08/14/2024	WELLS FARGO		5,797,944	5,798,000	18,720
92538N-AC-1	Verus Securitization Tru-VERUS 2022-4 A3		..08/15/2024	BOFAMLSEC		1,788,837	1,830,598	3,615
03768C-AS-8	Apidos CLO XXX-APID XXXA A2R	D.....	..08/15/2024	RBC CAPITAL MARKETS		15,000,000	15,000,000	124,965
931427-AW-8	WBA 8 1/8 08/15/29		..08/16/2024	JP MORGAN SECURITIES		2,540,625	2,500,000	3,950
48252Y-AQ-2	KKR CLO 23 Ltd-KKR 23 BR	D.....	..08/16/2024	CITIGROUP GLOBAL MAR		10,000,000	10,000,000	0
023945-AA-6	AMERICAN AIRLS PASS THRU TR 2024-1B(R) T		..08/15/2024	DIRECT		29,000,000	29,000,000	0
00138C-BB-3	Corebridge Global Fundin-SECURED		..08/19/2024	JP MORGAN SECURITIES		11,248,200	11,250,000	0
77669G-AG-1	Roper Technologies Inc-SENIOR UNSECURED		..08/19/2024	JP MORGAN SECURITIES		9,955,000	10,000,000	0
74153W-CU-1	Pricoa Global Funding I-SECURED		..08/20/2024	DEUTSCHE BANK SECURI		14,996,700	15,000,000	0
0744G4-AB-5	Spectre Retail Warehouse-SPERE 2024-WH1	B.....	..10/26/2024	ANGLE		1,983,900	1,983,900	4,398
0744G4-AA-7	Spectre Retail Warehouse-SPERE 2024-WH1	B.....	..10/28/2024	ANGLE		4,344,950	4,344,950	2,050
0754C@-AB-1	Resimac Bastille Trust S-RESI 2024-2NC A	B.....	..08/14/2024	DBAUS		5,285,600	5,285,601	0
46658G-AT-9	JP Morgan Mortgage Trust-JPMIT 2024-8 A9		..08/21/2024	JP MORGAN SECURITIES		2,869,344	2,868,000	13,862
24422E-TW-9	John Deere Capital Corp		..11/19/2024	WELLS FARGO		13,604,000	14,227,000	79,671
62979*-AT-4	NSA OP LP Senior Notes		..08/23/2024	DIRECT		15,000,000	15,000,000	0
002939-AE-6	A&D Mortgage Trust 2024-ADMT 2024-NQM4		..08/27/2024	NOMURA SECURITIES IN		9,999,874	10,000,000	45,267
002939-AD-8	A&D Mortgage Trust 2024-ADMT 2024-NQM4		..08/27/2024	NOMURA SECURITIES IN		4,999,956	5,000,000	21,844

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 3

Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
53229K-AA-7	Lightning Power LLC-SECURED		.09/06/2024	VARIOUS		4,378,800	4,230,000	15,541
48251T-AG-6	KKR CLO 20 Ltd-KKR 20 BR	D.	.08/29/2024	DEUTSCHE BANK SECURI		10,000,000	10,000,000	.0
771196-CP-5	Roche Holdings Inc-SENIOR UNSECURED		.09/03/2024	JP MORGAN SECURITIES		15,000,000	15,000,000	.0
57636Q-BA-1	Mastercard Inc-SENIOR UNSECURED		.09/03/2024	BOFAMLSEC		9,225,923	9,231,000	.0
127387-AM-0	Cadence Design Systems I-SENIOR UNSECURE		.09/04/2024	HSBC SECURITIES INC		4,999,150	5,000,000	.0
127387-AN-8	Cadence Design Systems I-SENIOR UNSECURE		.10/29/2024	VARIOUS		14,890,700	15,000,000	29,861
90353T-AN-0	Uber Technologies Inc-SENIOR UNSECURED		.09/04/2024	MORGAN		18,993,730	19,000,000	.0
00846U-AQ-4	Agilent Technologies Inc-SENIOR UNSECURE		.09/04/2024	WELLS FARGO		19,973,200	20,000,000	.0
863667-BE-0	Stryker Corp-SENIOR UNSECURED		.10/28/2024	VARIOUS		29,754,400	30,000,000	76,736
18977W-2F-6	CNO Global Funding-SECURED		.09/04/2024	GOLDMAN		6,057,788	6,061,000	.0
053015-AH-6	Automatic Data Processin-SENIOR UNSECURE		.09/04/2024	BOFAMLSEC		9,964,100	10,000,000	.0
Q55469-AB-3	Liberty Series 2024-1 SM-LBRTY 2024-1SME	B.	.09/04/2024	NATIONAL AUSTRALIA B		10,087,500	10,087,499	.0
36198*-AB-2	GI PARTNERS HOLDINGS LP GI PARTNERS HOLD		.09/05/2024	DIRECT		10,000,000	10,000,000	.0
00835A-AB-4	Affirm Asset Securitizat-AFFRM 2024-B B		.09/06/2024	BARCLAYS CAPITAL INC		9,999,593	10,000,000	.0
00835A-AC-2	Affirm Asset Securitizat-AFFRM 2024-B C		.09/06/2024	BARCLAYS CAPITAL INC		8,498,178	8,500,000	.0
423452-AH-4	Helmerich & Payne Inc-SENIOR UNSECURED		.09/10/2024	WELLS FARGO		7,349,912	7,353,000	.0
78403D-BD-1	SBA Tower Trust-SECURED		.09/10/2024	BARCLAYS BANK PLC		30,000,000	30,000,000	.0
924925-AD-2	Verus Securitization Tru-VERUS 2024-7 A2		.09/11/2024	MORGAN		14,999,813	15,000,000	37,528
761925-AA-4	REVL 2024-1, Ltd Class A Notes	C.	.05/28/2024	DIRECT		7,583,333	7,583,333	.0
749529-AA-1	REVL 2024 2 LTD REVL 2024-2 LTD	C.	.08/22/2024	DIRECT		6,469,311	6,469,311	.0
20752T-AB-0	Connect Finco SARL / Con-SECURED	C.	.09/13/2024	VARIOUS		2,574,438	2,575,000	.0
89182Q-AB-1	Towd Point Mortgage Trus-TPMT 2024-CES4		.09/12/2024	JP MORGAN SECURITIES		6,109,876	6,110,000	22,827
45866F-BB-9	Intercontinental Exchang-SENIOR UNSECURE		.09/10/2024	EXCHANGE OFFER		13,647,684	14,299,000	14,398
16144Q-AF-2	Chase Auto Owner Trust 2-CHAOT 2024-5A C		.09/13/2024	JP MORGAN SECURITIES		6,498,044	6,500,000	.0
16144Q-AG-0	Chase Auto Owner Trust 2-CHAOT 2024-5A D		.09/13/2024	JP MORGAN SECURITIES		2,849,343	2,850,000	.0
87167G-QM-0	Symphony CLO XXII Ltd-SVMP 2020-22A BR	D.	.09/13/2024	MORGAN		15,000,000	15,000,000	.0
88517Q-AB-9	Thor 2024-A LLC-THOR 2024-A B		.09/16/2024	WELLS FARGO		6,498,973	6,500,000	.0
36320T-BF-9	Galaxy XXII CLO Ltd-GALXY 2016-22A BRRR	D.	.09/16/2024	JP MORGAN SECURITIES		15,000,000	15,000,000	.0
16159X-AV-4	Chase Home Lending Mortg-CHASE 2024-8 A9		.09/17/2024	JP MORGAN SECURITIES		9,956,250	10,000,000	38,194
7417Q*-CK-3	Prime Property Fund LLC Sr Note Series E		.09/17/2024	DIRECT		4,000,000	4,000,000	.0
43283Y-AA-1	Hilton Grand Vacations T-HGVT 2024-1B A		.09/18/2024	U. S. BANCORP		3,877,297	3,804,769	2,431
02073L-AA-9	Alpha Generation LLC-SENIOR UNSECURED		.09/19/2024	CITIGROUP GLOBAL MAR		461,000	461,000	.0
361528-AD-4	GBX Leasing 2023-1 LLC-GBXL 2023-1A B		.09/23/2024	WELLS FARGO		5,097,449	4,948,980	4,003
55389Q-AB-3	MVII 2024-2 LLC-MVIIOT 2024-2A B		.09/24/2024	WELLS FARGO		5,999,749	6,000,000	.0
30165B-AF-0	Exeter Automobile Receiv-EART 2024-5A C		.09/24/2024	BARCLAYS CAPITAL INC		1,999,860	2,000,000	.0
55389Q-AC-1	MVII 2024-2 LLC-MVIIOT 2024-2A C		.09/24/2024	WELLS FARGO		3,999,430	4,000,000	.0
69392B-AD-8	PEAC Solutions Receivabl-PEAC 2024-2A B		.09/24/2024	WELLS FARGO		3,749,807	3,750,000	.0
62878U-2H-4	NBN Co Ltd-SENIOR UNSECURED	D.	.09/24/2024	JP MORGAN SECURITIES		2,894,577	2,900,000	.0
62878U-2J-0	NBN Co Ltd-SENIOR UNSECURED	D.	.09/24/2024	JP MORGAN SECURITIES		2,899,478	2,900,000	.0
12575A-AA-5	CMFT Net Lease Master Is-C1MNL 2021-1 A1		.09/24/2024	CANTOR		4,464,518	4,951,334	1,437
78525C-AA-3	S&S Holdings LLC-SECURED		.09/25/2024	U B S SECURITIES		3,880,356	3,874,000	.0
20268A-AA-0	Commonbond Student Loan -CBSLT 2021-BGS		.09/25/2024	GOLDMAN		3,264,439	3,871,833	126
G3908*-AB-6	GAST MIDCO LTD Senior Secured Notes	B.	.09/24/2024	DIRECT		8,369,375	8,369,377	.0
G3908*-AA-8	GAST MIDCO LTD Senior Secured Notes	B.	.09/24/2024	DIRECT		16,738,750	16,738,755	.0
Q74442-AD-8	SAPPHIRE XXIX SERIES 202-SAPP 2024-2 B	B.	.09/25/2024	NATIONAL AUSTRALIA B		3,857,255	3,857,256	.0
Q74442-AC-0	SAPPHIRE XXIX SERIES 202-SAPP 2024-2 A2	B.	.09/25/2024	NATIONAL AUSTRALIA B		2,594,260	2,594,260	.0
26844L-AC-2	EFMT 2024-INV2-EFMT 2024-INV2 A3		.09/27/2024	BARCLAYS CAPITAL INC		4,749,988	4,750,000	22,973
26844L-AB-4	EFMT 2024-INV2-EFMT 2024-INV2 A2		.09/27/2024	BARCLAYS CAPITAL INC		3,149,987	3,150,000	14,809
675935-AU-4	Octagon 60 Ltd-OCT60 2022-1A BR	D.	.09/27/2024	NOMURA SECURITIES IN		9,000,000	9,000,000	.0
92917N-BA-5	Voya CLO 2019-1 Ltd-VOYA 2019-1A CRR	D.	.09/27/2024	CIBC OPPENHEIMER		2,500,000	2,500,000	.0
92917N-BG-2	Voya CLO 2019-1 Ltd-VOYA 2019-1A BRR	D.	.09/27/2024	CIBC OPPENHEIMER		9,200,000	9,200,000	.0
67119G-AS-6	OHA Credit Funding 5 Ltd-OAKC 2020-5A AR	D.	.09/30/2024	CITIGROUP GLOBAL MAR		3,000,000	3,000,000	.0
00440K-AA-1	ACN 3.9 10/04/27		.10/01/2024	JP MORGAN SECURITIES		8,877,533	8,889,000	.0
00440K-AB-9	ACN 4.05 10/04/29		.10/01/2024	JP MORGAN SECURITIES		6,964,790	6,977,000	.0
24703D-BP-5	Dell International LLC /-SENIOR UNSECURE		.10/01/2024	BARCLAYS CAPITAL INC		9,988,300	10,000,000	.0
04009G-AW-7	Ares LIII CLO Ltd-ARES 2019-53A CR	D.	.10/02/2024	NOMURA SECURITIES IN		4,500,000	4,500,000	.0
431318-BG-8	Hilcorp Energy I LP / Hi-SENIOR UNSECURE		.10/02/2024	JP MORGAN SECURITIES		636,000	636,000	.0
58004J-AB-8	MFA 2024-NQM2 Trust-MFRA 2024-NQM2 A2		.10/03/2024	INTLFCSTONE		7,073,507	7,054,768	3,249

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SCHEDULE D - PART 3

Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
92261A-BA-5	Velocity Commercial Capi-VCC 2024-5 A .....	.....	10/03/2024	BARCLAYS CAPITAL INC .....	.....	4,999,761	5,000,000	29,738
634278-AA-8	GKN INDUSTRIES LTD Senior Unsecured Note	D.....	10/02/2024	DIRECT .....	.....	20,131,500	20,131,500	0
07S1E6-AC-0	RESIMAC Premier Series 2-RESI 2024-2 AB	B.....	10/03/2024	NATIONAL AUSTRALIA B .....	.....	2,740,000	2,740,000	0
07S1E6-AF-3	RESIMAC Premier Series 2-RESI 2024-2 D	B.....	10/03/2024	NATIONAL AUSTRALIA B .....	.....	856,250	856,250	0
07S1E6-AJ-5	RESIMAC Premier Series 2-RESI 2024-2 C	B.....	10/03/2024	NATIONAL AUSTRALIA B .....	.....	1,027,500	1,027,500	0
07S1E6-AD-8	RESIMAC Premier Series 2-RESI 2024-2 B	B.....	10/03/2024	NATIONAL AUSTRALIA B .....	.....	1,712,500	1,712,500	0
00112D-AA-4	ACHM Trust 2024-HE2-ACHM 2024-HE2 A .....	.....	10/04/2024	JEFFERIESLLC .....	.....	6,561,671	6,600,000	0
89656Y-AB-1	Trinity Rail Leasing 202-TRL 2020-2A A2 .....	.....	12/02/2024	WELLS FARGO .....	.....	7,614,464	8,245,000	10,342
91631*-AB-2	UPPER PENINSULA POWER CO Senior Secured .....	.....	10/08/2024	DIRECT .....	.....	8,000,000	8,000,000	0
92540P-AB-4	VERUS 2024-8-VERUS 2024-8 A2 .....	.....	10/09/2024	BARCLAYS CAPITAL INC .....	.....	6,999,911	7,000,000	18,571
39571X-AE-4	GreenSky Home Improvemen-GSKY 2024-2 B .....	.....	10/23/2024	VARIOUS .....	.....	8,199,228	8,200,000	2,338
G2242#-AE-3	COATS GROUP PLC Senior Unsecured Notes	D.....	10/09/2024	DIRECT .....	.....	9,250,000	9,250,000	0
48121#-AS-0	JRD HOLDINGS LLC Senior Unsecured Notes .....	.....	10/09/2024	DIRECT .....	.....	6,375,000	6,375,000	0
31684E-AA-5	FIGRE Trust 2023-HE1a2-FIGRE 2023-HE1A2 .....	.....	10/10/2024	DIRECT .....	.....	34,408,722	34,756,847	0
31684F-AA-2	FIGRE Trust 2024-HE5-FIGRE 2024-HE5 A .....	.....	11/04/2024	VARIOUS .....	.....	24,965,840	25,000,000	7,556
19688X-AA-4	COLT 2024-6 Mortgage Loa-COLT 2024-6 A1 .....	.....	10/11/2024	BARCLAYS CAPITAL INC .....	.....	3,999,932	4,000,000	9,582
62934#-AC-1	NLC LOAN FUNDING LLC SER Corp Bond .....	.....	10/10/2024	DIRECT .....	.....	30,000,000	30,000,000	0
17275R-BD-4	Cisco Systems Inc-SENIOR UNSECURED .....	.....	10/15/2024	VARIOUS .....	.....	10,151,532	10,000,000	66,667
226373-AQ-1	ET 5 5/8 05/01/27 .....	.....	10/15/2024	U. S. BANCORP .....	.....	5,010,450	5,000,000	128,906
29250N-CA-1	Enbridge Inc-SENIOR UNSECURED	A.....	10/15/2024	MORGAN .....	.....	5,098,700	5,000,000	8,021
82808M-AE-3	Silver Point CLO 6 Ltd-SPCLO 2024-6A B	D.....	10/15/2024	BOFAMLSEC .....	.....	7,900,000	7,900,000	0
82808M-AG-8	Silver Point CLO 6 Ltd-SPCLO 2024-6A C	D.....	10/15/2024	BOFAMLSEC .....	.....	4,300,000	4,300,000	0
88035K-AA-7	TENET 2024-1A A1-TENET 2024-1A A1 .....	.....	10/15/2024	SUNTRUST CAPITAL MAR .....	.....	4,896,737	4,900,000	0
12510H-AT-7	CARS-DB7 LP-CAUTO 2023-1A A2 .....	.....	10/15/2024	BARCLAYS CAPITAL INC .....	.....	2,011,836	1,972,917	356
00119H-AS-9	AGL CLO 1 LTD-AGL 2019-1A BRR	D.....	10/16/2024	JP MORGAN SECURITIES .....	.....	10,000,000	10,000,000	0
000000-00-0	SPECTRIS PLC Senior Unsecured Notes	B.....	10/16/2024	DIRECT .....	.....	8,151,000	8,151,004	0
000000-00-0	SUNNOVA ENERGY CORP Sunnova SOL VIII Iss .....	.....	10/16/2024	DIRECT .....	.....	316,746	322,000	0
000000-00-0	SUNNOVA ENERGY CORP Sunnova SOL VIII Iss .....	.....	10/16/2024	DIRECT .....	.....	7,233,514	7,370,000	0
Q5S46A-AJ-3	Liberty Funding Pty Ltd-LBRTY 2024-2 C	B.....	10/17/2024	MERRILL LYNCH INTERN .....	.....	1,005,000	1,005,000	0
Q5S46A-AD-6	Liberty Funding Pty Ltd-LBRTY 2024-2 B	B.....	10/17/2024	MERRILL LYNCH INTERN .....	.....	623,100	623,100	0
Q5S46A-AC-8	Liberty Funding Pty Ltd-LBRTY 2024-2 A2	B.....	10/17/2024	MERRILL LYNCH INTERN .....	.....	5,427,000	5,427,001	0
924926-AE-8	Verus Securitization Tru-VERUS 2024-R1 A .....	.....	10/18/2024	BARCLAYS CAPITAL INC .....	.....	8,649,869	8,650,000	32,414
924926-AD-0	Verus Securitization Tru-VERUS 2024-R1 A .....	.....	10/18/2024	BARCLAYS CAPITAL INC .....	.....	5,999,908	6,000,000	21,880
381935-AA-3	GoodLeap Home Improvemen-GDLP 2024-1A A .....	.....	11/21/2024	CITIGROUP GLOBAL MAR .....	.....	13,047,632	13,079,449	2,461
38136N-AY-2	Goldentree Loan Manageme-GLM 2020-8A APR	D.....	10/18/2024	MORGAN .....	.....	12,000,000	12,000,000	20,097
86324E-AA-5	Stream Innovations 2024-STRE 2024-2A A .....	.....	10/18/2024	GOLDMAN .....	.....	11,497,202	11,500,000	0
38136N-BC-9	Goldentree Loan Manageme-GLM 2020-8A CHR	D.....	10/18/2024	MORGAN .....	.....	6,725,000	6,725,000	12,850
38136N-BA-3	Goldentree Loan Manageme-GLM 2020-8A BRR	D.....	10/18/2024	MORGAN .....	.....	7,000,000	7,000,000	12,598
C2100*-AA-0	CANDO RAIL AND TERMINALS Senior Secured .....	.....	10/23/2024	DIRECT .....	.....	10,118,531	10,118,531	0
14448C-AQ-7	Carrier Global Corp-SENIOR UNSECURED .....	.....	10/21/2024	JP MORGAN SECURITIES .....	.....	9,076,800	10,000,000	50,659
03027X-CG-3	American Tower Corp-SENIOR UNSECURED .....	.....	10/21/2024	VARIOUS .....	.....	10,183,284	10,000,000	96,778
036752-BB-8	Elevance Health Inc-SENIOR UNSECURED .....	.....	10/28/2024	VARIOUS .....	.....	16,954,680	17,000,000	0
036752-BC-6	Elevance Health Inc-SENIOR UNSECURED .....	.....	10/22/2024	MORGAN .....	.....	7,980,800	8,000,000	0
62922L-AD-0	NGL Energy Operating LLC-SECURED .....	.....	10/23/2024	WELLS FARGO .....	.....	1,258,000	1,258,000	20,194
36170J-AE-6	GGAM Finance Ltd-SENIOR UNSECURED	D.....	10/23/2024	CITIGROUP GLOBAL MAR .....	.....	2,524,050	2,556,000	14,182
21039C-AD-6	CSTM 6 3/8 08/15/32	D.....	10/24/2024	SUNTRUST CAPITAL MAR .....	.....	1,192,550	1,220,000	16,635
07S00Q-AC-9	RedZed Trust Series 2024-REDZE 2024-3 A2	B.....	10/24/2024	NATIONAL AUSTRALIA B .....	.....	1,591,680	1,591,680	0
07S00Q-AH-8	RedZed Trust Series 2024-REDZE 2024-3 B	B.....	10/24/2024	NATIONAL AUSTRALIA B .....	.....	1,989,600	1,989,600	0
07S00Q-AE-5	RedZed Trust Series 2024-REDZE 2024-3 C	B.....	10/24/2024	NATIONAL AUSTRALIA B .....	.....	795,840	795,840	0
78355H-LD-9	Ryder System Inc-SENIOR UNSECURED .....	.....	10/28/2024	RBC CAPITAL MARKETS .....	.....	4,995,550	5,000,000	0
13005H-AA-8	California Buyer Ltd / A-SENIOR UNSECURE	D.....	10/30/2024	GOLDMAN .....	.....	4,891,375	4,900,000	0
44914#-AQ-4	HYPERTHERM INC Senior Secured Notes ...Se .....	.....	10/25/2024	DIRECT .....	.....	5,000,000	5,000,000	0
049463-AC-6	Atlas Warehouse Lending Company, L.P.-Se .....	.....	10/28/2024	DIRECT .....	.....	75,250,000	75,250,000	0
049463-AB-8	Atlas Warehouse Lending Company, L.P.-Se .....	.....	10/28/2024	DIRECT .....	.....	25,000,000	25,000,000	0
43283N-AB-3	Hilton Grand Vacations T-HGVT 2024-3A B .....	.....	10/29/2024	DEUTSCHE BANK SECURI .....	.....	9,997,414	10,000,000	0
82667C-AD-7	Signal Rail I LLC-SRL 2024-1A B .....	.....	10/30/2024	BAIRD .....	.....	6,058,110	5,981,472	14,213
94106L-CB-3	WM 4 1/2 03/15/28 .....	.....	11/05/2024	MORGAN .....	.....	2,994,570	3,000,000	750
67120G-AE-8	OBX 2024-NQM16 Trust-OBX 2024-NQM16 A3		10/31/2024	MORGAN		2,999,995	3,000,000	16,184

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SCHEDULE D - PART 3

Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
67120G-AD-0	OBX 2024-NQM16 Trust-OBX 2024-NQM16 A2		10/31/2024	MORGAN		4,499,915	4,500,000	23,645
51223*-AF-1	LAKEVIEW LOAN SERVICING Senior Unsecured		10/30/2024	DIRECT		15,000,000	15,000,000	0
67334B-BG-7	RRPF ENGINE LEASING LTD Senior Secured N	C.	10/30/2024	DIRECT		3,000,000	3,000,000	0
67334B-BC-6	RRPF ENGINE LEASING LTD Senior Secured N	C.	10/30/2024	DIRECT		2,000,000	2,000,000	0
31684J-AB-2	FIGRE Trust 2024-SL1-FIGRE 2024-SL1 M1		10/31/2024	GOLDMAN		1,999,954	2,000,000	14,733
31684J-AA-4	FIGRE Trust 2024-SL1-FIGRE 2024-SL1 A1		11/19/2024	VARIOUS		9,560,958	9,562,000	68,822
04941F-MM-9	Securitized Products Management Holdings		10/28/2024	DIRECT		2,466,305	3,000,000	0
38180P-AE-6	Golub Capital Partners C-GCBSL 2019-43A	D.	10/31/2024	BNP PARIBAS		3,900,000	3,900,000	0
88164A-AC-8	Tesla Sustainable Energy-TSET 2024-1A A3		11/01/2024	DEUTSCHE BANK SECURI		4,997,573	5,000,000	0
38138L-BA-5	Goldentree Loan Manageme-GLM 2020-7A CR	D.	11/01/2024	BOFAMLSEC		4,500,000	4,500,000	0
67097L-AX-4	OCF CLO 2017-13 Ltd-OCF 2017-13A B1R2	D.	11/05/2024	CITIGROUP GLOBAL MAR		10,000,000	10,000,000	0
96466C-BC-1	Whitebox Clo II Ltd-WBOX 2020-2A CR2	D.	11/08/2024	MIZUHO SECURITIES		4,660,000	4,660,000	0
00118X-AS-5	AGL CLO 22 Ltd-AGL 2022-22A A1R	D.	11/08/2024	BNP PARIBAS		20,000,000	20,000,000	0
69120B-AG-0	Owl Rock CLO IX LLC-OR 2022-9A AR		11/12/2024	SG COWEN SECURITIES		51,500,000	51,500,000	0
09581J-AU-0	Blue Owl Finance LLC-SENIOR UNSECURED		10/28/2024	EXCHANGE OFFER		9,813,421	10,000,000	24,063
14149Y-BR-8	Cardinal Health Inc-SENIOR UNSECURED		11/13/2024	BOFAMLSEC		24,991,500	25,000,000	0
09581J-AR-7	Blue Owl Finance LLC-SENIOR UNSECURED		10/28/2024	EXCHANGE OFFER		9,953,711	10,000,000	119,792
68902V-AR-8	Otis Worldwide Corp-SENIOR UNSECURED		11/12/2024	MORGAN		5,999,640	6,000,000	0
81257V-AA-9	Seattle Children's Hospi-UNSECURED		11/20/2024	RBC CAPITAL MARKETS		6,639,492	7,310,000	10,994
87169T-AQ-3	Symphony CLO 39 Ltd-SYMP 2023-39A CR	D.	11/14/2024	SCOTIA CAPITAL MARKE		4,500,000	4,500,000	0
118382-BC-3	Buckhorn Park CLO Ltd-BKPRK 2019-1A B1RR	D.	11/14/2024	CITIGROUP GLOBAL MAR		17,500,000	17,500,000	0
00091U-AQ-6	ABPCI Direct Lending Fun-ABPCI 2022-11A		11/14/2024	SG COWEN SECURITIES		45,000,000	45,000,000	0
451102-CJ-4	Icahn Enterprises LP / I-SENIOR UNSECURE		10/24/2024	EXCHANGE OFFER		3,714,703	3,749,000	136,839
19688Q-AB-7	COLT 2024-INV4 Mortgage -COLT 2024-INV4		11/15/2024	BARCLAYS CAPITAL INC		4,999,994	5,000,000	16,417
40436T-BG-0	HPS Loan Management 10-2-HLM 10A-16 A2R3	D.	11/15/2024	DEUTSCHE BANK SECURI		14,750,000	14,750,000	0
64691B-AA-5	IBC CAPITAL LTD USA Senior Secured Notes	D.	11/14/2024	DIRECT		5,793,000	5,793,000	0
64691B-AB-3	IBC CAPITAL LTD USA Senior Secured Notes	D.	11/14/2024	DIRECT		12,000,000	12,000,000	0
94106L-BZ-1	Waste Management Inc-SENIOR UNSECURED		11/18/2024	STIFEL NICOLAUS		9,733,875	10,100,000	134,807
38138K-AL-4	Goldentree Loan Manageme-GLM 2021-11A AR	D.	11/18/2024	WELLS FARGO		10,000,000	10,000,000	0
38138K-AN-0	Goldentree Loan Manageme-GLM 2021-11A BR	D.	11/18/2024	WELLS FARGO		15,000,000	15,000,000	0
38138K-AQ-3	Goldentree Loan Manageme-GLM 2021-11A CR	D.	11/18/2024	WELLS FARGO		5,500,000	5,500,000	0
69371R-TS-5	PACCAR Financial Corp-SENIOR UNSECURED		11/19/2024	VARIOUS		19,999,300	20,000,000	0
14913U-AS-9	CAT 4.6 11/15/27		11/18/2024	VARIOUS		20,024,812	20,000,000	10,222
14149Y-BQ-0	CAH 4.7 11/15/26		11/18/2024	CITADELEQ		9,994,200	10,000,000	0
437076-CX-8	Home Depot Inc/The-SENIOR UNSECURED		11/18/2024	CITADELEQ		10,086,083	10,011,000	204,224
571748-BY-7	Marsh & McLennan Cos Inc-SENIOR UNSECURE		11/18/2024	GOLDMAN		8,663,539	8,669,000	12,052
03027X-CL-2	American Tower Corp-SENIOR UNSECURED		11/18/2024	TORONTO DOMINION SEC		6,973,540	7,000,000	0
581557-BR-5	McKesson Corp-SENIOR UNSECURED		11/19/2024	TORONTO DOMINION SEC		33,643,705	35,500,000	121,785
68389X-BU-8	Oracle Corp-SENIOR UNSECURED		11/19/2024	JP MORGAN SECURITIES		6,717,340	7,000,000	26,678
09290D-AH-4	BlackRock Funding Inc-SENIOR UNSECURED		11/20/2024	BARCLAYS CAPITAL INC		20,088,400	20,000,000	292,611
260003-AP-3	DOV 2.95 11/04/29		11/21/2024	JP MORGAN SECURITIES		10,664,788	11,614,000	17,131
83012V-AC-7	SIXST 2017-8A A2R2-SIXST 2017-8A A2R2	D.	11/21/2024	BNP PARIBAS		7,000,000	7,000,000	0
891947-AA-1	TOWD POINT MORTGAGE TRUS-TPMT 2024-CES6		11/20/2024	NOMURA SECURITIES IN		2,999,974	3,000,000	11,927
857449-AE-2	State Street Bank & Trus-SENIOR UNSECURE		11/20/2024	MORGAN		10,000,000	10,000,000	0
673911-AD-5	ONSLOW BAY FINANCIAL LLC-OBX 2024-NQM17		11/20/2024	BMO CAPITAL MARKETS		4,499,956	4,500,000	18,322
000000-00-0	FIRSTMAC MORTGAGE FUNDIN-FMACB 2024-5PP	B.	11/21/2024	NATIONAL AUSTRALIA B		9,775,500	9,775,502	0
00839Q-AB-1	Affirm Asset Securitizat-AFFRM 2024-X2 B		11/22/2024	BARCLAYS CAPITAL INC		6,582,548	6,583,000	0
04016P-AW-8	Ares XLIII CLO Ltd-ARES 2017-43A BR2	D.	11/22/2024	BNP PARIBAS		4,000,000	4,000,000	0
47048R-AN-5	Jamestown CLO XVI Ltd-JTWN 2021-16A BR	D.	11/22/2024	CIBC OPPENHEIMER		15,000,000	15,000,000	0
47048R-AQ-8	Jamestown CLO XVI Ltd-JTWN 2021-16A CR	D.	11/22/2024	CIBC OPPENHEIMER		3,350,000	3,350,000	0
71953*-AA-6	PIBB MEMBER LLC Senior Secured Note		11/21/2024	DIRECT		9,000,000	9,000,000	0
59801A-BG-8	MidOcean Credit CLO XI L-MIDO 2022-11A C	D.	11/25/2024	MIZUHO SECURITIES		3,475,000	3,475,000	0
000000-00-0	CEAMER FINANCE III LLC 6.79% Senior Secu		11/22/2024	DIRECT		15,000,000	15,000,000	0
64130X-AW-6	Neuberger Berman Loan Ad-NEUB 2018-29A B	D.	11/26/2024	WELLS FARGO		13,000,000	13,000,000	0
64130X-AY-2	Neuberger Berman Loan Ad-NEUB 2018-29A C	D.	11/26/2024	WELLS FARGO		8,850,000	8,850,000	0
43739K-AA-1	HOME 2024-1 BARCLAYS LN TR - HOME 1MPT		11/26/2024	BARCLAYS CAPITAL INC		14,643,664	13,740,746	0
43739K-AB-9	HOME 2024-1 BARCLAYS LN-HOME 1MPT LN BA		11/26/2024	BARCLAYS CAPITAL INC		6,803,112	6,421,501	0
97988Q-AY-0	Woodmont 2017-2 Trust-WDMNT 2017-2A A1RR		11/27/2024	CITIGROUP GLOBAL MAR		10,000,000	10,000,000	0

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1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
43739K--AC-7	HOME 2024-1 BARCLAYS LN-HOME IMPT LN BA		11/26/2024	BARCLAYS CAPITAL INC		2,237,998	2,070,089	0
43739K--AD-5	HOME 2024-1 BARCLAYS LN-HOME IMPT LN BA		11/26/2024	BARCLAYS CAPITAL INC		1,375,790	1,299,087	0
97988Q--BA-1	Woodmont 2017-2 Trust-WDMNT 2017-2A A2RR		11/27/2024	CITIGROUP GLOBAL MAR		40,000,000	40,000,000	0
43739K--AE-3	HOME 2024-1 BARCLAYS LN-HOME IMPT LN BA		11/26/2024	BARCLAYS CAPITAL INC		1,111,555	1,024,483	0
039948--AE-4	Ares LXXV CLO Ltd-ARES 2024-75A B	D.	11/27/2024	NOMURA SECURITIES IN		15,000,000	15,000,000	0
14311U--BC-1	Carlyle Global Market St-CGMS 2016-3A BR	D.	11/27/2024	CIBC OPPENHEIMER		12,925,000	12,925,000	0
14311U--BE-7	Carlyle Global Market St-CGMS 2016-3A CR	D.	11/27/2024	CIBC OPPENHEIMER		4,852,500	4,852,500	0
000000--00-0	Blackrock European Clo X-BECL0 15X B1	B.	11/29/2024	GOLDMAN		11,466,280	11,466,278	0
0744GD--AD-1	Crimson Bond Trust 2024--CRIMS 2024-1 A2	B.	11/29/2024	DBAUS		3,521,880	3,521,880	0
0744GD--AJ-8	Crimson Bond Trust 2024--CRIMS 2024-1 B	B.	11/29/2024	DBAUS		978,300	978,300	0
03073E--AW-5	COR 4.85 12/15/29		12/02/2024	BOFAMILSEC		6,174,024	6,176,000	0
373334--KY-6	SO 4.55 03/15/30		12/02/2024	JP MORGAN SECURITIES		8,017,115	8,036,000	0
78662A--AC-6	Sagard-Halseypoint Clo 8-HLSY 2024-8A C	D.	12/02/2024	GREENSLUDGE CAPITAL		7,500,000	7,500,000	0
78662A--AB-8	Sagard-Halseypoint Clo 8-HLSY 2024-8A B	D.	12/02/2024	GREENSLUDGE CAPITAL		13,000,000	13,000,000	0
82670Q--AU-3	Signal Peak CLO 9 Ltd-SPEAK 2021-9A CR	D.	12/02/2024	DEUTSCHE BANK SECURI		4,000,000	4,000,000	0
871989--AT-6	Symphony CLO 40 Ltd-SYMP 2023-40A CR	D.	12/03/2024	SCOTIA CAPITAL MARKE		4,300,000	4,300,000	0
05684P--AL-0	Bain Capital Credit CLO -BCC 2021-6A A1R	D.	12/03/2024	SC COWEN SECURITIES		12,500,000	12,500,000	0
05684P--AQ-9	Bain Capital Credit CLO -BCC 2021-6A BR	D.	12/03/2024	SC COWEN SECURITIES		4,000,000	4,000,000	0
67092D--BK-4	OCF CLO 2015-10 Ltd-OCF 2015-10A CR3	D.	12/04/2024	WIZUHO SECURITIES		4,000,000	4,000,000	0
92540R--AC-8	Verus Securitization Tru-VERUS 2024-9 A1		12/05/2024	JP MORGAN SECURITIES		10,999,975	11,000,000	19,939
92540R--AD-6	Verus Securitization Tru-VERUS 2024-9 A2		12/05/2024	JP MORGAN SECURITIES		14,229,768	14,230,000	26,994
19688Y--AB-0	COLT 2024-7 Mortgage Loa-COLT 2024-7 A2		12/05/2024	BARCLAYS CAPITAL INC		9,999,843	10,000,000	65,953
19688Y--AA-2	COLT 2024-7 Mortgage Loa-COLT 2024-7 A1		12/05/2024	BARCLAYS CAPITAL INC		11,999,993	12,000,000	75,686
10571D--AE-9	BRAVO Residential Fundin-BRAVO 2024-NQMB		12/05/2024	BOFAMILSEC		3,331,624	3,487,000	17,077
10571D--AC-3	BRAVO Residential Fundin-BRAVO 2024-NQMB		12/05/2024	BOFAMILSEC		5,771,874	6,000,000	29,383
10571D--AD-1	BRAVO Residential Fundin-BRAVO 2024-NQMB		12/05/2024	BOFAMILSEC		6,278,028	6,544,000	32,047
673913--AA-7	OBX 2024-NQM18 Trust-OBX 2024-NQM18 A1		12/05/2024	CITIGROUP GLOBAL MAR		5,249,965	5,250,000	32,335
673913--AB-5	OBX 2024-NQM18 Trust-OBX 2024-NQM18 A2		12/05/2024	CITIGROUP GLOBAL MAR		6,008,986	6,009,000	38,748
000000--00-0	Cairn CLO-CRNL0 2024-19A C	B.	12/06/2024	JEFFERIESLLC		10,762,020	10,762,025	0
50229*-AA-8	LSS FUNDING 2024 1 LLC Senior Term Note		12/04/2024	DIRECT		10,000,000	10,000,000	0
225914--AG-5	Creeksource 2024-1 Dunes-CKSRC 2024-1A C	D.	12/09/2024	BARCLAYS CAPITAL INC		2,000,000	2,000,000	0
04316J--AM-1	Arthur J Gallagher & Co-SENIOR UNSECURED		12/10/2024	BOFAMILSEC		2,081,625	2,083,000	0
04316J--AL-3	Arthur J Gallagher & Co-SENIOR UNSECURED		12/10/2024	BOFAMILSEC		4,196,724	4,200,000	0
80280B--AD-0	SBCLN 2024-B D		12/10/2024	JP MORGAN SECURITIES		5,000,000	5,000,000	0
80280B--AC-2	Santander Bank Auto Cred-SBCLN 2024-B C		12/10/2024	JP MORGAN SECURITIES		5,000,000	5,000,000	0
92841W--AA-7	Vista Point Securitizati-VSTA 2024-CES3		12/10/2024	BMO CAPITAL MARKETS		7,999,955	8,000,000	20,192
82653B--AC-7	Sierra Timeshare 2024-3 -SRFC 2024-3A C		12/11/2024	MITSUBISHI UFJ SEC I		3,281,346	3,284,811	10,679
31684D--AA-7	FIGRE Trust 2024-HE6-FIGRE 2024-HE6 A		12/11/2024	JP MORGAN SECURITIES		11,999,806	12,000,000	34,344
25255J--AN-7	Diameter Capital Clo 3 L-DCLO 2022-3A A2	D.	12/12/2024	RBC CAPITAL MARKETS		10,000,000	10,000,000	0
000000--00-0	CVC Cordatus Loan Fund X-CORDA 26A B1R	B.	12/12/2024	BOFAMILSEC		3,202,805	3,202,806	0
768475--A*-6	River Valley Bancorp - JR SUB DEFERRABLE		12/13/2024	DIRECT		7,122,500	7,000,000	59,354
743615--A*-7	PROSPERITY BKG CO - JR SUB DEFERRABLE I		12/13/2024	DIRECT		4,578,750	4,500,000	38,156
000000--00-0	Avoca CLO XVIII DAC-AVOCA 18A CR	B.	12/13/2024	JEFFERIESLLC		4,198,400	4,198,400	0
37185L--AQ-5	Genesis Energy LP / Gene-SENIOR UNSECURE		12/13/2024	WELLS FARGO		2,510,836	2,533,000	17,177
00249Y--AC-0	ADMT 2024-NQM6-ADMT 2024-NQM6 A1		12/13/2024	PIPERJAFFRAY		8,999,919	9,000,000	26,914
03665J--AS-7	Antares CLO 2017-1 Ltd-ANTR 2017-1A BRR	D.	12/13/2024	BNP PARIBAS		25,000,000	25,000,000	0
00249Y--AD-8	ADMT 2024-NQM6-ADMT 2024-NQM6 A2		12/13/2024	PIPERJAFFRAY		3,999,978	4,000,000	12,498
74989A--AC-1	RRAM 2024-36RA A2R-RRAM 2024-36RA A2R	D.	12/13/2024	AMHERST SECURITIES		15,000,000	15,000,000	0
E5706X--AT-5	Grifols SA-SECURED	B.	12/11/2024	JP MORGAN SECURITIES		1,090,752	1,090,752	0
03330Y--AN-0	Anchorage Capital Clo 20-ANCHC 2021-20A	D.	12/16/2024	DEUTSCHE BANK SECURI		8,100,000	8,100,000	0
70019K--AG-2	Park Blue CLO 2024-VI Lt-PKBLU 2024-6A C	D.	12/16/2024	JP MORGAN SECURITIES		12,750,000	12,750,000	0
70019K--AE-7	Park Blue CLO 2024-VI Lt-PKBLU 2024-6A B	D.	12/16/2024	JP MORGAN SECURITIES		20,000,000	20,000,000	0
37185L--AR-3	Genesis Energy LP / Gene-SENIOR UNSECURE		12/17/2024	WELLS FARGO		537,506	545,000	0
03762Y--BD-8	Apidos Clo Xxv-APID 2016-25A A1R3	D.	12/17/2024	NOMURA SECURITIES IN		6,190,000	6,190,000	0
46658T--AA-2	JP Morgan Mortgage Trust-JPMMT 2024-12 A		12/17/2024	JP MORGAN SECURITIES		21,006,563	21,000,000	66,500
465983--AA-2	JP Morgan Mortgage Trust-JPMMT 2024-NQM1		12/18/2024	JP MORGAN SECURITIES		4,499,945	4,500,000	20,271
465983--AB-0	JP Morgan Mortgage Trust-JPMMT 2024-NQM1		12/18/2024	JP MORGAN SECURITIES		3,999,997	4,000,000	18,837
806851--AM-3	Schlumberger Holdings Co-SENIOR UNSECURE		12/19/2024	DEUTSCHE BANK SECURI		8,717,835	8,700,000	42,292
20826F--BJ-4	ConocoPhillips Co-SENIOR UNSECURED		12/19/2024	VARIOUS		14,813,270	15,000,000	29,375

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CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
13876L-AW-7	Canyon CLO 2020-1 Ltd-CANYC 2020-1A AR2	D.....	..12/19/2024	SCOTIA CAPITAL MARKE .....	.....	6,250,000	6,250,000	0
18915F-AA-0	Clover CLO 2021-3 LLC-OLVR 2021-3A AR .....	.....	..12/19/2024	CIBC OPPENHEIMER .....	.....	7,500,000	7,500,000	0
05683N-AJ-1	Bain Capital Credit CLO -BCC 2021-3A AR	D.....	..12/20/2024	JEFFERIESLLC .....	.....	9,878,750	9,878,750	0
82667F-AG-3	Signal Peak CLO 14 Ltd-SPEAK 2024-14A C	D.....	..12/20/2024	JP MORGAN SECURITIES .....	.....	7,000,000	7,000,000	0
828085-AU-4	Silver Point CLO 1 Ltd-SPCLO 2022-1A CR	D.....	..12/23/2024	BARCLAYS CAPITAL INC .....	.....	8,000,000	8,000,000	0
38180V-AA-1	Golub Capital Partners C-GOCAP 2013-17A	D.....	..12/23/2024	AMHERST SECURITIES .....	.....	50,000,000	50,000,000	0
693436-AA-5	PLP Trust 2020-1-PLP 2020-1A A .....	.....	..12/31/2024	DIRECT .....	.....	8,411,815	7,899,474	75,890
170257-AE-9	CHL Mortgage Pass-Through-CIHL 2006-16 3A .....	.....	..08/01/2024	PAYUP .....	.....	(164)	0	0
1109999999. Subtotal - Bonds - Industrial and Miscellaneous (Unaffiliated)						7,000,114,714	7,100,621,568	21,719,935
29360A-AA-8	ENSTAR FINANCE CO LLC .....	.....	..08/05/2024	SEAPORT GROUP .....	.....	9,612,500	10,000,000	242,778
92857W-BQ-2	Vodafone Group PLC-JR SUBORDINATED	D.....	..10/30/2024	BARCLAYS CAPITAL INC .....	.....	10,575,000	10,000,000	50,556
570535-AW-4	Markel Corp-MARKEL CORP .....	.....	..11/21/2024	VARIOUS .....	.....	14,889,287	14,866,000	219,358
92553P-BC-5	ViaconCBS Inc-VIAC 6 1/4 02/28/57 .....	.....	..11/08/2024	BARCLAYS CAPITAL INC .....	.....	9,350,000	10,000,000	128,472
04018V-AA-1	ARES FINANCE CO-SUBORDINATED .....	.....	..08/08/2024	VARIOUS .....	.....	8,702,921	9,281,500	84,103
29360A-AB-6	Enstar Finance LLC-JR SUBORDINATED .....	.....	..07/19/2024	MIZUHO SECURITIES .....	.....	9,675,000	10,000,000	10,694
842587-DF-1	Southern Co/The-SO 4 01/15/51 .....	.....	..06/20/2024	U B S SECURITIES .....	.....	9,725,000	10,000,000	173,333
726503-AE-5	Plains All American Pipe-PAA FLOAT PERP .....	.....	..08/27/2024	VARIOUS .....	.....	18,653,038	18,685,000	91,818
29273V-AM-2	Energy Transfer LP-ET 7 1/8 PERP .....	.....	..06/06/2024	BARCLAYS CAPITAL INC .....	.....	9,887,500	10,000,000	43,542
05567S-AA-0	BNSF Funding Trust I-BNSF 6.613 12/15/55 .....	.....	..11/18/2024	SEAPORT GROUP .....	.....	1,058,063	1,045,000	23,213
92556H-AE-7	Paramount Global-PARA 6 3/8 03/30/62 .....	.....	..12/12/2024	VARIOUS .....	.....	5,918,133	6,203,000	97,655
26441C-BP-9	Duke Energy Corp-DUK 3 1/4 01/15/2082 .....	.....	..03/27/2024	BOFAMLSEC .....	.....	10,199,400	11,460,000	78,628
29273V-AX-8	Energy Transfer LP-ET 8 05/15/54 .....	.....	..01/10/2024	RBC CAPITAL MARKETS .....	.....	7,000,000	7,000,000	0
53079E-AN-4	Liberty Mutual Group Inc-LIBMUT 7.8 03/1 .....	.....	..02/22/2024	SUMRIDGE PARTNERS LL .....	.....	10,287,500	10,000,000	144,510
05565Q-DW-5	BP Capital Markets PLC-SUBORDINATED	D.....	..09/05/2024	VARIOUS .....	.....	26,022,530	25,229,000	15,797
65339K-CW-8	NextEra Energy Capital H-NEE 6.7 09/01/5 .....	.....	..04/11/2024	VARIOUS .....	.....	22,171,515	22,180,000	12,536
816851-BS-7	SRE 6 7/8 10/01/54 .....	.....	..03/11/2024	BOFAMLSEC .....	.....	10,713,357	10,714,000	0
25746U-DU-0	Dominion Energy Inc-D 7 06/01/54 .....	.....	..05/06/2024	MIZUHO SECURITIES .....	.....	8,333,000	8,333,000	0
65473P-AR-6	NiSource Inc-NI 6.95 11/30/54 .....	.....	..05/22/2024	VARIOUS .....	.....	14,993,750	15,000,000	7,722
00130H-CK-9	AES 7.6 01/15/55 .....	.....	..05/16/2024	CITIGROUP GLOBAL MAR .....	.....	18,291,000	18,291,000	0
65339K-DB-3	NextEra Energy Capital H-NEE 6 3/4 06/15 .....	.....	..06/05/2024	RBC CAPITAL MARKETS .....	.....	12,500,000	12,500,000	0
025537-BA-8	American Electric Power -AEP 6.95 12/15/ .....	.....	..06/18/2024	VARIOUS .....	.....	19,996,190	20,000,000	0
29250N-CF-0	Enbridge Inc-ENBRN 7.2 06/27/54	A.....	..06/24/2024	MIZUHO SECURITIES .....	.....	9,960,000	9,960,000	0
00774M-BK-0	AerCap Ireland Capital D-AER 6.95 03/10/	D.....	..07/08/2024	JP MORGAN SECURITIES .....	.....	4,007,000	4,007,000	0
00773H-AA-5	AerCap Global Aviation T-AER 6 1/2 06/15 .....	.....	..09/26/2024	VARIOUS .....	.....	12,464,219	12,460,000	110,697
172967-PM-7	Citigroup Inc-C 7 PERP .....	.....	..07/23/2024	CITIGROUP GLOBAL MAR .....	.....	29,630,000	29,630,000	0
15189T-BJ-5	CenterPoint Energy Inc-CNP 6.85 02/15/55 .....	.....	..08/12/2024	MORGAN .....	.....	10,000,000	10,000,000	0
26441C-CG-8	Duke Energy Corp-DUK 6.45 09/01/54 .....	.....	..08/19/2024	MORGAN .....	.....	10,000,000	10,000,000	0
95002Y-AC-7	Wells Fargo & Co-WFC 6.85 PERP .....	.....	..07/16/2024	WELLS FARGO .....	.....	16,514,000	16,514,000	0
018820-AD-2	Allianz SE-SUBORDINATED	D.....	..08/27/2024	CITIGROUP GLOBAL MAR .....	.....	9,400,000	9,400,000	0
65473P-AT-2	NiSource Inc-NI 6 3/8 03/31/55 .....	.....	..09/03/2024	GOLDMAN .....	.....	7,500,000	7,500,000	0
816851-BT-5	Sempra-SRE 6.4 10/01/54 .....	.....	..09/04/2024	BARCLAYS CAPITAL INC .....	.....	26,667,000	26,667,000	0
21871X-AT-6	Corebridge Financial Inc-CRBG 6 3/8 09/1 .....	.....	..09/05/2024	CITIGROUP GLOBAL MAR .....	.....	16,667,000	16,667,000	0
65558R-AK-5	Nordea Bank Abp-NDAPH 6.3 PERP	D.....	..09/19/2024	BOFAMLSEC .....	.....	5,059,000	5,059,000	0
883199-AR-2	TXF Float 02/15/42 .....	.....	..10/11/2024	SEAPORT GROUP .....	.....	6,322,750	7,000,000	87,155
05565Q-DX-3	BP Capital Markets PLC-BPLN 6 1/8 PERP	D.....	..11/13/2024	DEUTSCHE BANK SECURI .....	.....	29,997,300	30,000,000	0
639057-AT-5	NatWest Group PLC-NWG 7.3 PERP	D.....	..11/14/2024	RBS SECURITIES INC .....	.....	25,000,000	25,000,000	0
126650-EG-1	CVS Health Corp-CVS 6 3/4 12/10/54 .....	.....	..12/16/2024	VARIOUS .....	.....	19,925,000	20,000,000	13,125
N2563P-BU-7	Argentum Netherlands BV -SUBORDINATED	D.....	..12/04/2024	CANTOR .....	.....	9,990,000	10,000,000	177,292
00130H-CL-7	AES Corp/The-AES 6.95 07/15/55 .....	.....	..12/04/2024	JP MORGAN SECURITIES .....	.....	6,175,074	6,176,000	0
1309999999. Subtotal - Bonds - Hybrid Securities						523,833,027	526,827,500	1,812,983
22228F-AD-8	CounterpointeSRE CPACE 3111 Sunset Blvd .....	.....	..12/05/2024	DIRECT .....	.....	4,265,769	0	0
06763V-AC-9	Barings CLO Ltd 2024-I-BABSN 2024-1A B	D.....	..01/08/2024	MORGAN .....	.....	6,000,000	6,000,000	0
06763V-AE-5	Barings CLO Ltd 2024-I-BABSN 2024-1A C	D.....	..01/08/2024	MORGAN .....	.....	3,500,000	3,500,000	0
06763V-AA-3	Barings CLO Ltd 2024-I-BABSN 2024-1A A	D.....	..01/08/2024	MORGAN .....	.....	14,000,000	14,000,000	0
06761V-AS-6	Barings Clo Ltd 2019-IV-BABSN 2019-4A BR	D.....	..05/13/2024	JP MORGAN SECURITIES .....	.....	10,000,000	10,000,000	67,648
06761V-AQ-0	Barings Clo Ltd 2019-IV-BABSN 2019-4A AR .....	.....	..05/13/2024	JP MORGAN SECURITIES .....	.....	5,750,000	5,750,000	39,597
06761V-AU-1	Barings Clo Ltd 2019-IV-BABSN 2019-4A CR .....	.....	..05/13/2024	JP MORGAN SECURITIES .....	.....	1,000,000	1,000,000	8,856
067936-AG-9	BABSN 2024-2A C-BABSN 2024-2A C	D.....	..05/31/2024	BARCLAYS CAPITAL INC		5,000,000	5,000,000	0

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SCHEDULE D - PART 3

Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
067936-AE-4	BABSN 2024-2A B-BABSN 2024-2A B	D	05/31/2024	BARCLAYS CAPITAL INC		10,000,000	10,000,000	0
067936-AA-2	BABSN 2024-2A A1-BABSN 2024-2A A1	D	05/31/2024	BARCLAYS CAPITAL INC		15,000,000	15,000,000	0
22228#-AF-3	CounterpointeSRE CPACE 2023-1 SUBI Certi	D	08/30/2024	DIRECT		641,006	641,006	0
06759U-AL-7	Barings Clo Ltd 2022-II-BABSN 2022-2A A1	D	07/02/2024	BARCLAYS CAPITAL INC		7,055,000	7,055,000	0
067925-AG-2	Barings Middle Market Lo-BMMLP 2024-IIA	D	08/16/2024	BOFAMLSEC		4,000,000	4,000,000	0
067925-AJ-6	Barings Middle Market Lo-BMMLP 2024-IIA	D	08/16/2024	BOFAMLSEC		5,250,000	5,250,000	0
067925-AC-1	Barings Middle Market Lo-BMMLP 2024-IIA	D	08/16/2024	BOFAMLSEC		20,000,000	20,000,000	0
067925-AE-7	Barings Middle Market Lo-BMMLP 2024-IIA	D	08/16/2024	BOFAMLSEC		3,000,000	3,000,000	0
067926-AA-3	Barings Middle Market Lo-BMMLP 2024-IIA	D	08/16/2024	BOFAMLSEC		1,400,000	1,400,000	0
06764F-AB-5	Barings Middle Market Lo-BMMLP 2024-II E	D	08/16/2024	NATIXIS CAP MKT		5,000,000	5,000,000	0
06764E-AE-2	Barings Middle Market Lo-BMMLP 2024-IA B	D	08/16/2024	NATIXIS CAP MKT		9,250,000	9,250,000	0
06764E-AG-7	Barings Middle Market Lo-BMMLP 2024-IA C	D	08/16/2024	NATIXIS CAP MKT		9,500,000	9,500,000	0
06764E-AJ-1	Barings Middle Market Lo-BMMLP 2024-IA D	D	08/16/2024	NATIXIS CAP MKT		2,500,000	2,500,000	0
06764E-AC-6	Barings Middle Market Lo-BMMLP 2024-IA A	D	08/16/2024	NATIXIS CAP MKT		20,000,000	20,000,000	0
067930-AL-1	Barings Private Credit C-BPCC 2023-1A A1	D	08/27/2024	BNP PARIBAS		25,000,000	25,000,000	0
067930-AQ-0	Barings Private Credit C-BPCC 2023-1A A2	D	08/27/2024	BNP PARIBAS		10,500,000	10,500,000	0
067930-AS-6	Barings Private Credit C-BPCC 2023-1A BR	D	08/27/2024	BNP PARIBAS		15,000,000	15,000,000	0
06764A-AC-4	Barings Loan Partners QL-BABSN LP-4A A	D	08/27/2024	CITIGROUP GLOBAL MAR		34,000,000	34,000,000	0
06764A-AQ-0	Barings Loan Partners QL-BABSN LP-4A B	D	08/27/2024	CITIGROUP GLOBAL MAR		6,000,000	6,000,000	0
06764A-AG-5	Barings Loan Partners QL-BABSN LP-4A C	D	08/27/2024	CITIGROUP GLOBAL MAR		2,750,000	2,750,000	0
06764A-AJ-9	Barings Loan Partners QL-BABSN LP-4A D	D	08/27/2024	CITIGROUP GLOBAL MAR		2,000,000	2,000,000	0
06764B-AA-6	Barings Loan Partners QL-BABSN LP-4A E	D	08/27/2024	CITIGROUP GLOBAL MAR		1,750,000	1,750,000	0
06764A-AA-8	Barings Loan Partners QL-BABSN LP-4A X	D	08/27/2024	CITIGROUP GLOBAL MAR		275,000	275,000	0
22229Q-AA-9	CounterpointeSRE CPACE Habitat 2024 Clas	D	11/01/2024	DIRECT		5,580,184	5,580,184	0
22229Q-AB-7	CounterpointeSRE CPACE Habitat 2024 Clas	D	11/01/2024	DIRECT		472,135	472,135	0
06764C-AB-2	Barings Loan Partners QL-BABSN LP-5A B	D	10/10/2024	CITIGROUP GLOBAL MAR		16,500,000	16,500,000	0
06764C-AC-0	Barings Loan Partners QL-BABSN LP-5A C	D	10/10/2024	CITIGROUP GLOBAL MAR		7,333,333	7,333,333	0
06764C-AD-8	Barings Loan Partners QL-BABSN LP-5A D	D	10/10/2024	CITIGROUP GLOBAL MAR		4,666,667	4,666,667	0
06763Y-AE-9	Barings CLO Ltd 2024-V-BABSN 2024-5A A2	D	10/31/2024	CITIGROUP GLOBAL MAR		12,500,000	12,500,000	0
000000-QQ-0	BEPMC 2024-1X C-BEPMC 2024-1X C	B	11/21/2024	BNP PARIBAS		3,775,680	3,775,679	0
000000-QQ-0	BEPMC 2024-1X B-BEPMC 2024-1X B	B	11/21/2024	BNP PARIBAS		4,090,320	4,090,318	0
06761H-AY-4	Barings CLO Ltd 2019-II-BABSN 2019-2A CR	D	11/20/2024	BOFAMLSEC		9,250,000	9,250,000	0
06761H-AW-8	Barings CLO Ltd 2019-II-BABSN 2019-2A BR	D	11/20/2024	BOFAMLSEC		30,000,000	30,000,000	0
000000-QQ-0	Barings Euro Middle Mark-BEPMC 2024-1A C	B	11/21/2024	BNP PARIBAS		3,775,680	3,775,679	0
000000-QQ-0	Barings Euro Middle Mark-BEPMC 2024-1A A	B	11/21/2024	BNP PARIBAS		19,665,000	19,664,992	0
000000-QQ-0	Barings Euro Middle Mark-BEPMC 2024-1A B	B	11/21/2024	BNP PARIBAS		4,090,320	4,090,318	0
06761K-BC-4	Barings CLO Ltd 2019-III-BABSN 2019-3A C	D	12/10/2024	CIBC OPPENHEIMER		11,500,000	11,500,000	0
06762L-AV-0	Barings CLO Ltd 2020-I-BABSN 2020-1A BR2	D	12/20/2024	BOFAMLSEC		9,000,000	9,000,000	0
1509999999	Subtotal - Bonds - Parent, Subsidiaries and Affiliates					401,586,094	401,586,080	116,101
45249#-AA-0	Image Intl Holdco Initial Term Ln		02/26/2024	BANK LOANS BARINGS		1,156,010	1,161,936	0
64701#-AA-1	IFM USIDF (INTERMEDIATE) B, L.P. - Secur	C	10/01/2024	BANK LOANS BARINGS		4,341,667	4,341,667	0
48275#-AG-0	KREF Lending VII LLC - Term Loan Series		01/02/2024	BANK LOANS BARINGS		(2,512,502)	(2,512,502)	0
88167#-AA-8	Tetragon Financial Group (Delaware) LLC		07/12/2024	BANK LOANS BARINGS		15,000,000	15,000,000	0
63147#-AA-6	Nashville Team Holdings LLC - Term Loan		06/25/2024	BANK LOANS BARINGS		7,500,000	7,500,000	0
00177#-AA-1	AMF Levered II, LLC - Revolver		07/24/2024	BANK LOANS BARINGS		3,516,813	3,516,813	0
88233F-AK-6	Vistra Operations Co LLC-VST TL B3 1L US		01/12/2024	BANK LOANS BARINGS		3,277,241	3,310,345	0
91860*-AA-6	VPC ASSET BACKED OPPORTUNISTIC CREDIT Ho		06/13/2024	BANK LOANS BARINGS		6,388,027	6,388,027	0
48275#-AJ-4	KREF Lending VII LLC - Term Loan Series		01/02/2024	BANK LOANS BARINGS		(1,789,250)	(1,789,250)	0
32013#-AA-2	FIRST EAGLE DIRECT LENDING V-B, LLC - Se		01/31/2024	BANK LOANS BARINGS		652,174	652,174	0
30301*-AA-1	FS CREIT FINANCE MM-1 LLC - Secured Term		10/24/2024	BANK LOANS BARINGS		25,518,076	21,269,050	0
29251#-AB-9	Encina Business Credit SPV LLC Revolving		12/11/2024	BANK LOANS BARINGS		18,080,000	18,080,000	0
70466#-AA-6	Polymer Solutions Group Holdings LLC - T		04/04/2024	BANK LOANS BARINGS		10,346	10,346	0
21257#-AC-8	Convey Health Solutions Inc./Term Loan		12/31/2024	PIK NOTE BUY UP		13,274	13,274	0
92974*-AD-1	WSHP FC ACQUISITION 1A TL L+650 03/30/20		12/31/2024	PIK NOTE BUY UP		3,271	3,271	0
21079#-AB-4	CONTINENTAL ACQUISITION HOLDINGS INC. -		12/31/2024	VARIOUS		9,835	9,835	0
67008*-AA-9	NOVIPAK BUYER LLC INITIAL TERM LN		12/31/2024	PIK NOTE BUY UP		4,005	4,005	0
50541#-AB-3	Laboratories Bidco LLC/Second Amendment		12/31/2024	PIK NOTE BUY UP		2,714	2,714	0
92974*-AE-9	WSHP FC ACQUISITION 1A DDTL L+625 03/30/		12/31/2024	PIK NOTE BUY UP		4,121	4,121	0
57780#-AB-0	MAVERICK ACQUISITION INC. - DELAYED DRA		12/03/2024	VARIOUS		(109,959)	(111,477)	0
74066*-AA-4	PREMIER SPECIALTIES INC. - TERM LOAN		12/31/2024	PIK NOTE BUY UP		10,561	10,561	0

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SCHEDULE D - PART 3

Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
12721#-AC-3	CVP HOLDCO INC. - DELAYED DRAW TERM LOAN		01/31/2024	BANK LOANS BARINGS		113	113	0
45321#-AA-5	Implus Footcare LLC/Spenco Incremental		09/30/2024	PIK NOTE BUY UP		1,048	1,048	0
74354#-AA-1	PROJECT ESSENTIAL BIDCO LLC - TERM LOAN		11/29/2024	PIK NOTE BUY UP		12,695	12,695	0
50541#-AC-1	LABORATORIES BIDCO LLC - THIRD AMENDMENT		12/31/2024	PIK NOTE BUY UP		17,424	17,424	0
816307-A8-1	SelectQuote Inc./Term Loan 10/19		12/31/2024	PIK NOTE BUY UP		21,599	23,707	0
784868-AA-5	SSE BUYER INC.		01/31/2024	PIK NOTE BUY UP		6,439	6,439	0
44961#-AB-1	Implus Footcare LLC/Initial Term Loan 0		12/31/2024	PIK NOTE BUY UP		7,905	7,905	0
62931#-AA-2	NMC Skincare Intermediate Holdings II L		10/04/2024	PIK NOTE BUY UP		4,594	4,594	0
85789#-AB-0	STEALTH HOLDING LLC - DELAYED DRAW TERM		07/11/2024	BANK LOANS BARINGS		(10,900)	(10,900)	0
62931#-AC-8	NMC Skincare Intermediate Holdings II L		10/04/2024	PIK NOTE BUY UP		1,548	1,548	0
50541#-AD-9	LABORATORIES BIDCO LLC - TL		12/31/2024	PIK NOTE BUY UP		61,563	61,563	0
86662#-AB-0	SUN ACQUIRER CORP		06/25/2024	BANK LOANS BARINGS		(311,256)	(311,256)	0
84967#-AA-9	SPRING INSURANCE SOLUTIONS LLC - INITIA		03/31/2024	BANK LOANS BARINGS		8,686	8,686	0
50541#-AE-7	LABORATORIES BIDCO LLC - DELAYED DRAW TE		12/31/2024	PIK NOTE BUY UP		4,192	4,192	0
91839#-AE-6	VPROP OPERATING LLC - TRANCHE A		12/06/2024	PIK NOTE BUY UP		2,932	2,932	0
74309#-AA-7	Production Resource Group, LLC - 2020 De		12/31/2024	VARIOUS		53,175	53,175	0
65658#-AB-0	NORTH HAVEN FALCON BUYER LLC - DELAYED		12/31/2024	VARIOUS		4,169	4,169	0
00452#-AA-7	Accommodations Plus Technologies LLC/Ter		01/30/2024	BANK LOANS BARINGS		51,055	51,055	0
65658#-AA-2	NORTH HAVEN FALCON BUYER LLC - TERM LOA		11/22/2024	VARIOUS		19,254	19,254	0
00797#-AA-5	Aero Operating LLC/Term Loan 1/20		04/01/2024	VARIOUS		16,587	16,587	0
74309#-AB-5	PRG 9/20 Last Out		09/30/2024	PIK NOTE BUY UP		195,550	195,550	0
91839#-AF-3	VPROP OPERATING LLC - TRANCHE B LOAN		12/06/2024	PIK NOTE BUY UP		3,545	3,545	0
74309#-AD-1	PRODUCTION RESOURCE GROUP L.L.C. - SECO		09/30/2024	VARIOUS		14,458	14,458	0
00797#-AB-3	Aero Operating LLC/Delayed Draw Term Loa		07/01/2024	BANK LOANS BARINGS		2,597	2,597	0
91839#-AG-1	VPROP OPERATING LLC - TRANCHE C LOAN		12/06/2024	PIK NOTE BUY UP		16,112	16,112	0
15644G-A#-1	CENTRIC BRANDS 1LEXIT TL L+1000 10/09/20		02/23/2024	VARIOUS		421	421	0
92974#-AA-7	WSHP FC ACQUISITION 2A TL L+625 03/30/20		12/31/2024	PIK NOTE BUY UP		26,338	26,338	0
92974#-AB-5	WSHP FC ACQUISITION LLC - SECOND AMENDME		12/31/2024	PIK NOTE BUY UP		16,894	16,894	0
50541#-AA-5	Laboratories Bidco LLC/Term Loan 9/19		12/31/2024	PIK NOTE BUY UP		17,127	17,127	0
92974#-AC-3	WSHP FC Acquisition LLC/Third Amendment		12/31/2024	PIK NOTE BUY UP		7,881	7,881	0
36457W-AD-3	GALWAY BORROWER LLC - CLOSING DATE TERM		01/31/2024	BANK LOANS BARINGS		3,379	3,379	0
98415D-A8-3	XIFIN Inc./Term Loan 02/20		06/28/2024	PIK NOTE BUY UP		6,757	6,757	0
21079#-AA-6	CONTINENTAL ACQUISITION HOLDINGS INC. -		12/31/2024	VARIOUS		26,672	26,672	0
74309#-AC-3	PRODUCTION RESOURCE GROUP L.L.C. - DELA		06/28/2024	VARIOUS		3,562	3,562	0
84967#-AB-7	SPRING INSURANCE SOLUTIONS LLC - DELAYE		03/31/2024	BANK LOANS BARINGS		1,480	1,480	0
63166#-AA-5	CIP VIII Holdings SPV L.P - Term Loan	C.	12/13/2024	BANK LOANS BARINGS		7,950,990	7,950,990	0
731128-AB-6	Policy Services Company, 1L PIK Toggle T		10/24/2024	PIK NOTE BUY UP		327,681	327,681	0
731128-AC-4	Policy Services Company, 1L PIK Toggle D		10/24/2024	PIK NOTE BUY UP		116,083	116,083	0
67080B-A*-8	NXT Capital Structured Note I, LLC - Cla		08/28/2024	BANK LOANS BARINGS		8,155,125	8,155,125	0
67741#-AA-6	STEPSTONE GROUP EUROPE ALTERNATIVE INVES	D.	06/05/2024	BANK LOANS BARINGS		640,000	640,000	0
62879X-AB-1	NB Select Opportunities ISPV 2022 LLC -		11/07/2024	BANK LOANS BARINGS		10,566,876	10,566,876	0
62879X-AC-9	NB Select Opportunities ISPV 2022 LLC -		11/07/2024	BANK LOANS BARINGS		2,448,681	2,448,681	0
542888-AC-2	LONG TERM CARE GROUP INC AMENDMENT NO 1		10/21/2024	PIK NOTE BUY UP		20,827	20,827	0
05629#-AA-8	BR DSCO I INVESTCO, LLC - Senior Secured		05/01/2024	BANK LOANS BARINGS		1,460,000	1,460,000	0
60510M-B*-8	Mission Lane Credit Card Master Trust -		11/27/2024	BANK LOANS BARINGS		3,333,333	3,333,333	0
60510M-A8-7	Mission Lane Credit Card Master Trust -		11/27/2024	BANK LOANS BARINGS		31,666,667	31,666,667	0
60510M-AF-5	Mission Lane Credit Card Master Trust -		11/27/2024	BANK LOANS BARINGS		6,666,667	6,666,667	0
71384P-A*-2	Perimeter Master Note Business Trust - S		03/06/2024	BANK LOANS BARINGS		11,728,864	12,637,500	0
71384P-A8-0	Perimeter Master Note Business Trust - S		03/06/2024	BANK LOANS BARINGS		2,513,818	2,710,900	0
71384P-AF-8	Perimeter Master Note Business Trust - S		03/06/2024	BANK LOANS BARINGS		2,676,703	2,885,000	0
71384P-B*-1	Perimeter Master Note Business Trust - S		03/06/2024	BANK LOANS BARINGS		3,121,479	3,363,300	0
71384P-B8-9	Perimeter Master Note Business Trust - S		03/06/2024	BANK LOANS BARINGS		3,163,367	3,403,300	0
47236#-AA-5	JEFFERIES DIRECT LENDING OFFSHORE FUND I		12/19/2024	BANK LOANS BARINGS		2,711,890	2,711,890	0
47237#-AA-0	JEFFERIES DIRECT LENDING OFFSHORE FUND I		12/19/2024	BANK LOANS BARINGS		6,008,785	6,008,785	0
47236#-AA-1	JEFFERIES DIRECT LENDING OFFSHORE FD II		12/19/2024	BANK LOANS BARINGS		6,650,960	6,650,960	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 3

Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
47236@-AA-3	JEFFERIES DIRECT LENDING FD II C SPE LLC		12/19/2024	BANK LOANS BARINGS		1,742,780	1,742,780	0
47235@-AA-2	JEFFERIES DIRECT LENDING FUND II SPE LLC		12/19/2024	BANK LOANS BARINGS		9,977,486	9,977,486	0
51514*-AA-0	Landmark Equity Partners XVII-B, L.P. -		08/01/2024	BANK LOANS BARINGS		7,506,800	7,506,800	0
51514@-AA-8	LANDMARK EQUITY PARTNERS XVII-D LLC REVO		10/23/2024	BANK LOANS BARINGS		11,986,000	11,986,000	0
62902@-AA-3	NCL III-PE-D LLC / NCL III-PE-E LLC SECD		10/23/2024	BANK LOANS BARINGS		3,293,600	3,293,600	0
45661*-AA-3	INDUSTRY VENTURES MM HOLDCO, LLC, - Seni		07/26/2024	BANK LOANS BARINGS		10,000,000	10,000,000	0
68656@-AA-9	TPG TIGER HOLDCO, LLC, - Class A Term Lo		11/04/2024	BANK LOANS BARINGS		8,333,383	8,333,383	0
68656@-AB-7	TPG TIGER HOLDCO, LLC, - Class B Term Lo		11/04/2024	BANK LOANS BARINGS		2,777,794	2,777,794	0
40489@-AA-2	HPS Mezzanine Partners 2019, L.P., MP 20		12/17/2024	BANK LOANS BARINGS		(5,499,382)	(5,499,382)	0
40490@-AB-7	HTI Technology & Industries - 2022 Delay		12/19/2024	VARIOUS		116,358	0	0
67119*-AB-3	OT-MM REDF3 Seller, LLC - Series 2022-1		02/23/2024	BANK LOANS BARINGS		1,202,161	1,202,161	0
62907@-AA-0	NEFCO Holding Company, LLC - Term Loan		08/13/2024	BANK LOANS BARINGS		393,735	395,714	0
62907@-AD-4	NEFCO Holding Company, LLC - Delayed Dra		08/13/2024	BANK LOANS BARINGS		71,588	71,948	0
62907@-AB-8	NEFCO Holding Company, LLC - Delayed Dra		08/13/2024	BANK LOANS BARINGS		59,938	60,240	0
62907@-AC-6	NEFCO Holding Company, LLC - Delayed Dra		08/13/2024	BANK LOANS BARINGS		60,403	60,706	0
62879K-AB-9	NB SOF V ISPV 2022 LLC - Class A Term Lo		09/25/2024	BANK LOANS BARINGS		2,275,700	2,275,700	0
75645@-AA-9	Red Cedar Holdings BL.P - Revolver		07/26/2024	BANK LOANS BARINGS		6,667,500	6,667,500	0
12781@-AA-6	CRE II LENDER SUB I, LLC - Term Loan Ser		10/25/2024	BANK LOANS BARINGS		421,661	421,661	0
68144@-AD-2	Olympia Acquisition, Inc-2022 Rolled Ter		11/29/2024	VARIOUS		90,223	90,223	0
46127*-AA-9	Invesco Private Credit Opportunities Hol		12/20/2024	BANK LOANS BARINGS		15,780,000	15,780,000	0
30034@-AA-3	EVERLAKE PRIVATE FUND BORROWER, LLC - Se		12/20/2024	BANK LOANS BARINGS		6,666,667	6,666,667	0
14318*-AA-6	CARLYLE SECURED LENDING III SPV, - Senio		10/29/2024	BANK LOANS BARINGS		9,600,000	9,600,000	0
04250@-AC-9	ARMSTRONG TRANS GROUP LLC / MAXFRB LLC T		10/31/2024	PIK NOTE BUY UP		3,079	3,079	0
96524K-AC-4	WHITEHORSE LIQUIDITY PARTNERS V-R LP TER		10/21/2024	BANK LOANS BARINGS		10,366,823	9,688,033	0
96524K-AB-6	WHITEHORSE LIQUIDITY PARTNERS V-R LP TER		10/21/2024	BANK LOANS BARINGS		10,165,906	9,688,033	0
96524K-AD-2	Dawson Rated Fund 5-R1 LP-Term Loan Clas		10/21/2024	BANK LOANS BARINGS		5,207,813	5,207,813	0
90140*-AA-0	Twin Brook Capital Funding XIV WSPV, LLC		03/28/2024	BANK LOANS BARINGS		3,447,009	3,447,009	0
90139@-AA-1	Twin Brook Capital Funding XIII WSPV, LL		03/28/2024	BANK LOANS BARINGS		7,452,991	7,452,991	0
66577@-AA-7	NORDIC CAPITAL GROUP, L.P - Senior Secur		10/21/2024	BANK LOANS BARINGS		5,409,500	5,409,499	0
14979@-AA-4	CAZ GP OWNERSHIP CD AGGREGATOR - Secured		12/31/2024	DIRECT		9,700,000	9,700,000	0
14979*-AA-6	CAZ GP OWNERSHIP EF AGGREGATOR, L.P. - S		12/31/2024	VARIOUS		9,000,000	9,000,000	0
72305@-AA-7	PINEBRIDGE PRIVATE CREDIT III HOLDINGS L		11/15/2024	BANK LOANS BARINGS		4,150,000	4,150,000	0
12781@-AD-0	CRE II LENDER SUB I, LLC - Term Loan Ser		10/25/2024	BANK LOANS BARINGS		349,464	349,464	0
84724@-AB-1	Sparus Holdings LLC - Delayed Draw Term		05/15/2024	BANK LOANS BARINGS		128,247	128,247	0
L7583@-AA-1	PEMBERTON PD SMA HOLDINGS (LEVERED) S.A.		11/26/2024	BANK LOANS BARINGS		469,094	469,093	0
000000-00-0	Kings III - Delayed Draw Term Loan		08/29/2024	BANK LOANS BARINGS		151,982	151,982	0
L4807*-AA-2	HL SCOPE MASTER SICAV-RAIF SCSp - Senior	C.	12/18/2024	BANK LOANS BARINGS		44,027,778	44,027,778	0
68144@-AB-6	Olympia Acquisition, Inc-2022 2nd Amendn		11/29/2024	PIK NOTE BUY UP		3,401	3,401	0
68144@-AE-0	Olympia Acquisition, Inc - 2023 First Ou		12/20/2024	VARIOUS		6,058	6,764	0
68144@-AC-4	Olympia Acquisition, Inc - 2022 2nd Amen		12/20/2024	VARIOUS		20,602	20,602	0
000000-00-0	SEI HLDG I CORP/SINGER EQUITIES INC CLOS	C.	01/02/2024	BANK LOANS BARINGS		25,141	25,141	0
000000-00-0	Tech 8 SASU New Money A1 Fa	B.	03/14/2024	PIK NOTE BUY UP		15,374	15,374	0
78503@-AA-4	SPV FACILITY I LLC - Senior Secured Revo		12/20/2024	BANK LOANS BARINGS		20,500,000	20,500,000	0
00218F-AB-0	ASPF II 2022-I, LP Class A-1 Loan		09/30/2024	BANK LOANS BARINGS		6,123,375	6,123,377	0
00218F-AE-4	ASPF II 2022-I, LP Class A-2 Loan		09/30/2024	BANK LOANS BARINGS		3,993,506	3,993,506	0
10970@-AA-9	Brinley PD SPV I LLC/Revolving Facility		12/09/2024	BANK LOANS BARINGS		2,406,248	2,406,250	0
000000-00-0	NP Inc. - NP Line of Credit First Lien R		10/25/2024	BANK LOANS BARINGS		3,870,298	3,870,298	0
02325@-AA-8	AMBER CS LLC - Senior Secured Loan		11/26/2024	BANK LOANS BARINGS		7,515,266	7,515,266	0
Y0019@-AD-0	Acclime Holdings HK Limited USD Fac D L	D.	04/29/2024	BANK LOANS BARINGS		454,545	454,545	0
31575*-AA-8	First Eagle DCF-A Funding LLC - Revolvin		07/19/2024	BANK LOANS BARINGS		4,736,831	4,979,249	0
05637@-AA-6	BTC Holdings Fund III LLC Class A-T Ln		12/27/2024	DIRECT		17,500,000	17,500,000	0
95483@-AA-0	WEST NR ACQUISITIONCO LLC 2ND AMEND TERM		12/13/2024	BANK LOANS BARINGS		216,036	218,219	0
928432-A#-0	Visual Edge Technology, Inc./Last Out T		11/22/2024	PIK NOTE BUY UP		82,656	82,656	0
55076*-AA-1	LUXURY MTG CORP REVOLVING LOAN		11/25/2024	BANK LOANS BARINGS		1,000,000	1,000,000	0
84724@-AB-3	Spatial Business Systems - Delayed Draw		11/14/2024	BANK LOANS BARINGS		312,500	312,500	0
00463@-AA-6	Accuserve Solutions, Inc. - Term Loan		12/11/2024	BANK LOANS BARINGS		477,240	477,240	0

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SCHEDULE D - PART 3

Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
82419*-AC-7	Shermco Intermediate Holdings Inc. - 202		..12/19/2024 ..	BANK LOANS BARINGS		114,973	114,973	0
81272*-AB-7	Seattle Soccer LLC - 2023 Multi Draw Ter		..10/22/2024 ..	VARIOUS		6,997,998	6,997,998	0
000000-00-0	Checkout Holding Corp. - 2023 Exit Term		..10/15/2024 ..	PIK NOTE BUY UP		22,749	22,749	0
74142K-AJ-8	Pretium Packaging LLC New 1st Out Ter		..08/01/2024 ..	PIK NOTE BUY UP		3,395	3,395	0
87338*-AC-4	Technosylva - Delayed Draw Term Loan		..10/01/2024 ..	BANK LOANS BARINGS		911,504	911,504	0
L9714*-AA-3	WEST STREET EUROPEAN PRIVATE CREDIT MM S		..12/18/2024 ..	BANK LOANS BARINGS		27,672,117	27,672,121	0
L9714*-AB-1	WEST STREET EUROPEAN PRIVATE CREDIT MM S	C.	..01/25/2024 ..	BANK LOANS BARINGS		750,000	750,000	0
L9714*-AC-9	WEST STREET EUROPEAN PRIVATE CREDIT MM S		..11/14/2024 ..	BANK LOANS BARINGS		24,197,225	24,197,230	0
L9714*-AD-7	WEST STREET EUROPEAN PRIVATE CREDIT MM S	C.	..04/09/2024 ..	BANK LOANS BARINGS		750,000	750,000	0
000000-00-0	ROYAL HOLDCO CORP DDTL A		..03/13/2024 ..	BANK LOANS BARINGS		586,573	586,573	0
74142K-AK-5	Pretium Packaging LLC New 2nd Out Ter		..08/01/2024 ..	PIK NOTE BUY UP		6,475	6,475	0
38050*-AA-7	GoJO Industries Inc. - Term Loan		..09/11/2024 ..	VARIOUS		7,898,198	8,106,476	0
50246*-AF-6	LVNV Funding LLC/ Term Loan 10/2023		..03/05/2024 ..	BANK LOANS BARINGS		(3,750,000)	(3,750,000)	0
09580*-AA-7	BLUE OCEAN INCOME FUND III LP - Class A		..09/09/2024 ..	BANK LOANS BARINGS		3,383,005	3,383,005	0
000000-00-0	CyrusOne LP Senior Term Lo		..12/31/2024 ..	BANK LOANS BARINGS		72,099	22,421,500	0
92213L-AE-3	VARAGON STRUCTURED NOTES ISSUER I, LLC -		..10/28/2024 ..	BANK LOANS BARINGS		4,717,000	4,717,000	0
86614D-AK-4	Summit Materials Cos I L New Incremental		..01/26/2024 ..	BANK LOANS BARINGS		4,750,000	4,761,905	0
09262X-AD-3	Blackstone Credit Rated Fund Trust SPV L		..12/18/2024 ..	BANK LOANS BARINGS		30,211,070	30,211,070	0
000000-00-0	Blackstone Credit Rated Fund Trust SPV L		..12/18/2024 ..	BANK LOANS BARINGS		4,000,000	4,000,000	0
000000-00-0	MB PURCHASER LLC INITIAL TERM LOAN		..01/03/2024 ..	BANK LOANS BARINGS		1,036,397	1,057,548	0
98876*-AE-5	ZB Holdco LLC - 2023 Incremental Delayed		..08/05/2024 ..	BANK LOANS BARINGS		519,796	519,796	0
000000-00-0	Ice House America Closing Dt Term Loan		..01/12/2024 ..	BANK LOANS BARINGS		1,418,919	1,447,876	0
66577*-AB-5	NORDIC CAPITAL GROUP, L.P - Senior Secur		..10/21/2024 ..	BANK LOANS BARINGS		14,425,333	14,425,331	0
48773*-AF-7	Kellermeyer Bergensons Services, LLC - 2		..10/31/2024 ..	VARIOUS		2,223,052	2,223,052	0
000000-00-0	FORTIS PAYMENT SYSTEMS LLC 10TH AMEND DD		..01/31/2024 ..	BANK LOANS BARINGS		419,349	427,907	0
000000-00-0	GLOBAL CRITICAL LOGISTICS LTD GBP 7TH AM		..01/31/2024 ..	BANK LOANS BARINGS		180,235	182,979	0
000000-00-0	SSE Buyer, Inc - 2022 2nd Lien Term Loan		..12/31/2024 ..	VARIOUS		330,883	330,883	0
45116*-AA-0	ICE HOUSE AMERICA LLC INITIAL DDTL		..11/14/2024 ..	BANK LOANS BARINGS		386,100	386,100	0
000000-00-0	ATL II MRO HLDGS INC 1ST AMEND TERM LN		..02/15/2024 ..	BANK LOANS BARINGS		960,463	985,091	0
000000-00-0	COFF BUYER, LLC INITIAL TERM LN		..02/26/2024 ..	BANK LOANS BARINGS		149,031	152,073	0
75279*-AB-2	RANDYS HLDGS INC DELAYED DRAW TERM LOAN		..07/15/2024 ..	BANK LOANS BARINGS		163,812	163,812	0
14741*-AB-9	Cascade Services - Delayed Draw Term Loa		..08/15/2024 ..	BANK LOANS BARINGS		219,259	219,259	0
15644*-AA-4	Centric Brands Inc. - 2024 Term Loan		..02/06/2024 ..	BANK LOANS BARINGS		1,807,916	1,807,916	0
15645*-AB-1	Centric Brands Inc. - 2024 Term Loan A2		..11/06/2024 ..	VARIOUS		1,697,404	1,697,404	0
15645*-AA-3	Centric Brands Inc. - 2024 Term Loan A1		..02/06/2024 ..	BANK LOANS BARINGS		1,865,796	1,865,796	0
N2104K-AB-7	Clear Channel Worldwide CCIBV Fixed Rat		..03/26/2024 ..	BANK LOANS BARINGS		7,920,000	8,000,000	0
12781*-AE-8	CRE II LENDER SUB I, LLC - Term Loan Ser		..10/25/2024 ..	BANK LOANS BARINGS		670,763	670,765	0
000000-00-0	Forest Buyer LLC - Term Loan		..03/15/2024 ..	BANK LOANS BARINGS		534,642	548,351	0
34960*-AE-3	Fortis Payment Systems LLC 10TH AMEND TE		..12/17/2024 ..	BANK LOANS BARINGS		32,050	32,050	0
W8000*-AE-4	Samh+nllsbyggnadsbolaget i Norden AB - T	D.	..03/11/2024 ..	EXCHANGE OFFER		20,000,000	20,000,000	178,333
00463*-AC-2	Accuserve Solutions, Inc. - Delayed Draw		..12/13/2024 ..	BANK LOANS BARINGS		539,091	539,091	0
000000-00-0	Tech 7 SAS Super Senior EU		..03/26/2024 ..	BANK LOANS BARINGS		133,538	133,538	0
000000-00-0	NEFCO Holding Company LLC - 2023 Delayed		..03/28/2024 ..	BANK LOANS BARINGS		180,881	180,881	0
00640*-AA-0	Adams Street Global Secondary Fund 6 LP		..03/15/2024 ..	BANK LOANS BARINGS		9,900,000	10,000,000	0
5626B*-AB-1	MB PURCHASER LLC DDTL		..11/08/2024 ..	BANK LOANS BARINGS		423,019	423,019	0
04940*-AA-9	Atlas Securitized Products Funding 3 LP		..06/27/2024 ..	BANK LOANS BARINGS		67,540,541	67,540,541	0
04940*-AB-7	Atlas Securitized Products Funding 3 LP		..06/27/2024 ..	BANK LOANS BARINGS		5,959,459	5,959,459	0
04494*-AB-1	HXSG INTERMEDIARY 2 LLC INITIAL DDTL		..07/10/2024 ..	BANK LOANS BARINGS		183,603	183,603	0
000000-00-0	Woodland Foods Inc - 2024 Incremental Te		..04/09/2024 ..	BANK LOANS BARINGS		144,106	147,047	0
78029*-AG-4	ROYAL HOLDCO CORP DELAYED DRAW TERM LN B		..12/16/2024 ..	BANK LOANS BARINGS		396,333	396,333	0
000000-00-0	Pregin Ltd - 2024 GBP Incremental Delaye	B.	..04/22/2024 ..	BANK LOANS BARINGS		1,215,256	1,215,256	0
48773*-AH-3	Kellermeyer Bergensons Services, LLC - 2		..10/31/2024 ..	VARIOUS		2,181,321	2,181,321	0
74363*-AB-8	PROSPECT INTER HLDGS LLC/PROSPECT PHYSIC		..10/02/2024 ..	VARIOUS		1,956,837	2,000,037	0
74363*-AA-0	PROSPECT INTER HLDGS LLC/PROSPECT PHYSIC		..10/02/2024 ..	VARIOUS		15,515,938	15,515,938	0
000000-00-0	Innovad NV - 2024 EUR Delayed Draw Term	B.	..04/29/2024 ..	BANK LOANS BARINGS		2,624,301	2,624,301	0
000000-00-0	Coherus Biosciences Inc - Term Loan		..05/08/2024 ..	BANK LOANS BARINGS		3,871,253	3,990,985	0

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SCHEDULE D - PART 3

Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
000000-00-0	Tencarva Machinery Company LLC - 2024 In		05/08/2024	BANK LOANS BARINGS		1,606,948	1,639,743	0
37963#-AC-7	GLOBAL CRITICAL LOGISTICS LLC USD 7TH AM		10/29/2024	BANK LOANS BARINGS		819,247	819,247	0
000000-00-0	IM SQUARE EURO SR BDS C	B.	05/14/2024	BANK LOANS BARINGS		2,419,492	2,487,909	0
239426-AD-1	DAWSON RATED FUND 6-R1 LP - Secured Clas		09/19/2024	BANK LOANS BARINGS		24,298,350	24,298,350	0
239426-AF-6	DAWSON RATED FUND 6-R1 LP - Secured Clas		09/19/2024	BANK LOANS BARINGS		6,074,588	6,074,588	0
000000-00-0	LeadsOnline LLC - Amendment No 6 Term Ln		05/17/2024	BANK LOANS BARINGS		745,598	749,345	0
06784#-AA-0	NSPC-L HLDGS II LP SECURED LOAN FACILITY		05/21/2024	BANK LOANS BARINGS		52,000,000	52,000,000	0
W9001#-AK-7	Solor Bioenergi AB - SEK Term Loan	B.	05/23/2024	BANK LOANS BARINGS		30,409,368	30,716,533	0
000000-00-0	Tech 7 SAS Super Senior EU	B.	06/10/2024	BANK LOANS BARINGS		79,553	79,553	0
67117*-AD-1	OA BUYER INC 2024 INCREMENTAL TERM LN		06/10/2024	BANK LOANS BARINGS		863,432	867,771	0
50246*-AG-4	LVNV Funding LLC - 1st Lien		06/12/2024	BANK LOANS BARINGS		1,250,000	1,250,000	0
09582*-AB-3	Blue Owl Capital Call Facility - Fixed T		06/11/2024	BANK LOANS BARINGS		11,750,000	11,750,000	0
09582*-AC-1	Blue Owl Capital Call Facility - Fixed T		06/12/2024	BANK LOANS BARINGS		6,500,000	6,500,000	0
E8378#-AC-2	REAL BETIS BALOMPIE SAD Senior Secured	B.	06/26/2024	BANK LOANS BARINGS		21,364,000	21,364,006	0
48633#-AB-6	KAVEH VENTURES LLC SR SEC2 TERM LN		12/20/2024	BANK LOANS BARINGS		9,225,079	9,225,079	0
000000-00-0	SPRUCE POWER HOLDING COR Spruce SET Borr		06/26/2024	BANK LOANS BARINGS		19,166,667	19,166,667	0
00268*-AA-5	ASF VIII SUNTORI, L.P and ASF VIII B SUN		06/25/2024	BANK LOANS BARINGS		42,820,000	42,819,997	0
03770*-AA-0	Apollo Asset-Backed Finance Lending Comp		12/02/2024	BANK LOANS BARINGS		9,560,185	9,560,185	0
03770*-AC-6	Apollo Asset-Backed Finance Lending Comp		12/02/2024	BANK LOANS BARINGS		15,296,296	15,296,296	0
03770*-AB-8	Apollo Asset-Backed Finance Lending Comp		12/02/2024	BANK LOANS BARINGS		3,824,073	3,824,074	0
95483#-AB-8	Warner Pacific Insurance Services - Dela		12/13/2024	BANK LOANS BARINGS		990,340	1,001,172	0
05651#-AA-7	BR DSCO II Investco, LLC & BR SCO II-A I		10/01/2024	BANK LOANS BARINGS		10,885,714	10,885,714	0
55314V-AR-7	MI OPOC HOLDINGS INC Term Loan TL-B		11/04/2024	BANK LOANS BARINGS		6,729,565	7,437,943	0
E5000*-AJ-3	ESPAI BARCA FONDO DE TITULIZACION EUR FA	B.	07/01/2024	BANK LOANS BARINGS		9,366,500	9,366,497	0
000000-00-0	TECHNOLOGY SVC STREAM BIDCO PTY LTD AUD		07/01/2024	BANK LOANS BARINGS		1,892,006	1,945,508	0
000000-00-0	A&W HLDG GMBH EUR FAC B1		06/21/2024	BANK LOANS BARINGS		4,826,421	4,824,918	0
000000-00-0	EMPOWER BRANDS FRANCHISI Term Loan TL US		06/25/2024	BANK LOANS BARINGS		1,166,047	1,202,110	0
000000-00-0	INFONIGA HLDG GMBH EUR FACILITY B2	B.	08/23/2024	BANK LOANS BARINGS		620,376	620,375	0
04941*-AD-6	Atlas Securitized Products Funding 1 LP		12/31/2024	VARIOUS		16,725,665	16,856,757	0
04941*-AB-0	Atlas Securitized Products Funding 1 LP		12/31/2024	VARIOUS		16,725,665	16,856,757	0
04941*-AC-8	Atlas Securitized Products Funding 1 LP		12/31/2024	VARIOUS		33,781,304	34,453,256	0
04941*-AA-2	Atlas Securitized Products Funding 1 LP		12/31/2024	VARIOUS		33,781,304	34,453,256	0
000000-00-0	NAW BUYER LLC DELAYED DRAW TERM LN		07/26/2024	BANK LOANS BARINGS		10,713	10,713	0
84729#-AC-4	SPATCO ENERGY SOLUTIONS DOTL B		12/13/2024	BANK LOANS BARINGS		74,931	74,931	0
000000-00-0	SPATCO ENERGY SOLUTIONS INC CLOSING DT T		07/23/2024	BANK LOANS BARINGS		1,444,901	1,474,389	0
84729#-AB-6	SPATCO ENERGY SOLUTIONS Tranche A DOTL		08/30/2024	BANK LOANS BARINGS		235,902	235,902	0
18685P-A*-9	CLIFFWATER ENHANCED LENDING FUND-Senior		07/19/2024	BANK LOANS BARINGS		10,714,284	10,714,286	0
12781#-AF-5	CRE II LENDER SUB I, LLC - Term Loan Ser		07/24/2024	BANK LOANS BARINGS		1,177,017	1,177,017	0
000000-00-0	JETBLUE AIRWAYS CORPORAT Term Loan Class		08/16/2024	BANK LOANS BARINGS		1,020,989	1,020,989	0
000000-00-0	CARRIX INC TERM A-1		08/02/2024	BANK LOANS BARINGS		19,790,000	20,000,000	0
000000-00-0	RPX CORP Term Loan		08/02/2024	BANK LOANS BARINGS		1,568,292	1,568,292	0
000000-00-0	DISA HOLDINGS CORP Incremental DDT		08/13/2024	BANK LOANS BARINGS		24,339	24,339	0
51222H-AN-7	LAKEVIEW LOAN SERVICING Lakeview MSR Tr		10/31/2024	BANK LOANS BARINGS		45,000,000	45,000,000	0
000000-00-0	NEFCO HLDG CO LLC AMEND NO. 3 TERM LN		08/13/2024	BANK LOANS BARINGS		295,359	298,342	0
000000-00-0	KEYSTONE BIDCO BV EUR FAC B TRANCHE B2	B.	08/29/2024	BANK LOANS BARINGS		2,970,676	3,039,055	0
000000-00-0	NAFINCO BV RCF	B.	12/24/2024	BANK LOANS BARINGS		75,974	75,974	0
34559*-AC-8	FOREST BUYER LLC 1ST AMEND TERM LN		08/19/2024	BANK LOANS BARINGS		1,560,352	1,574,382	0
000000-00-0	BKF ENGINEERS Senior Term Loa		08/23/2024	BANK LOANS BARINGS		277,778	283,447	0
12781#-AG-3	CRE II LENDER SUB I, LLC - Term Loan Ser		08/16/2024	BANK LOANS BARINGS		584,289	584,290	0
000000-00-0	COMPLY365 LLC DOTL		08/27/2024	BANK LOANS BARINGS		62,053	62,053	0
000000-00-0	JETBLUE AIRWAYS CORPORAT Term Loan Tranc		08/16/2024	BANK LOANS BARINGS		3,106,460	3,106,459	0
000000-00-0	JETBLUE AIRWAYS CORPORAT Term Loan Tranc		08/16/2024	BANK LOANS BARINGS		1,175,380	1,175,381	0
F9863#-AB-3	XPFIBRE SAS Senior Term Loa	B.	08/30/2024	BANK LOANS BARINGS		12,155,000	12,155,005	0
69451*-AC-3	PPW AERO BUYER INC INCREMENTAL DOTL		12/27/2024	BANK LOANS BARINGS		2,117,923	2,117,923	0
000000-00-0	TECH 7 Super Senior EU		08/28/2024	BANK LOANS BARINGS		41,112	41,112	0
L4830#-AA-1	WEBCENTRAL DEH Incremental CAF	B.	10/30/2024	BANK LOANS BARINGS		2,878,624	2,954,351	0
000000-00-0	XEINADIN GROUP CAF 2	B.	10/24/2024	BANK LOANS BARINGS		1,897,828	1,897,828	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 3

Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
000000-00-0	Hydratech Hldgs 1st Amendment DDTL		10/01/2024	BANK LOANS BARINGS		112,111	112,111	0
000000-00-0	Hydratech Hldgs 1st Amendment Increm Ter		09/03/2024	BANK LOANS BARINGS		147,238	149,481	0
000000-00-0	VICINITY ENERGY INC Term Loan		09/12/2024	BANK LOANS BARINGS		6,917,400	7,000,000	0
000000-00-0	OCULAR THERAPEUTIX INC First Lien Term		09/11/2024	BANK LOANS BARINGS		7,943,000	6,500,000	0
L4467#-AB-7	GREEN LEAF FINCO SARL EUR ADDITIONAL DEL	B.	12/27/2024	BANK LOANS BARINGS		1,884,758	1,884,758	0
98876#-AF-2	ZIYAD INC 2024-1 DDTL		12/13/2024	BANK LOANS BARINGS		354,885	354,885	0
000000-00-0	PRODUCTLIFE GROUP SA Incremental DDT	B.	10/24/2024	BANK LOANS BARINGS		2,166,607	2,166,607	0
000000-00-0	SUNLIGHT FINANCIAL LLC Solar Loan Borr		09/25/2024	BANK LOANS BARINGS		25,699	51,397,512	0
000000-00-0	PINARD EMBALLAGES SAS Unitranche		09/26/2024	BANK LOANS BARINGS		4,544,497	4,649,102	0
000000-00-0	Solar Ln Borrower 2024-1 LLC Class D Loa		09/25/2024	BANK LOANS BARINGS		2,187,800	2,757,500	0
000000-00-0	Solar Ln Borrower 2024-1 LLC Class A Loa		09/25/2024	BANK LOANS BARINGS		32,958,113	34,507,500	0
000000-00-0	Solar Ln Borrower 2024-1 LLC Class C Loa		09/25/2024	BANK LOANS BARINGS		3,587,155	4,757,500	0
000000-00-0	Solar Ln Borrower 2024-1 LLC Class B Loa		09/25/2024	BANK LOANS BARINGS		3,592,064	5,558,750	0
000000-00-0	DF Fund IV Herman Loan - Delayed Draw Te		07/25/2024	BANK LOANS BARINGS		20,937,000	21,000,000	0
71685#-AA-1	PEV Holdings 1066 AB LLC	C.	09/25/2024	BANK LOANS BARINGS		11,880,000	12,000,000	0
71685#-AA-9	PEV Holdings 1067 AB LLC		09/25/2024	BANK LOANS BARINGS		13,860,000	14,000,000	0
000000-00-0	CALDWELL & GREGORY LLC 1L DDTL		12/30/2024	BANK LOANS BARINGS		26,231	26,231	0
12881#-AC-9	CALDWELL & GREGORY LLC 1L Term Loan		09/30/2024	BANK LOANS BARINGS		1,107,321	1,124,184	0
000000-00-0	DISH DBS Issuer ClosingTL		09/27/2024	BANK LOANS BARINGS		4,053,000	4,200,000	0
000000-00-0	DISH DBS IssuerIncrmntlTL		09/27/2024	BANK LOANS BARINGS		1,125,833	1,166,667	0
09263R-AA-1	Blackstone Cooper Asset Holdco LLC-Delay		10/01/2024	BANK LOANS BARINGS		10,714,286	10,714,286	0
000000-00-0	CONNEXUS RESOURCE GROUP INC / ROI SOLUTI		10/03/2024	BANK LOANS BARINGS		648,142	659,686	0
19459K-A*-2	COLLER CREDIT BACKED LOANS & NOTES II LT	C.	10/09/2024	BANK LOANS BARINGS		13,173,794	13,173,794	0
19459K-A@-0	COLLER CREDIT BACKED LOANS & NOTES II LT	C.	10/09/2024	BANK LOANS BARINGS		5,269,518	5,269,518	0
000000-00-0	RAPID BUYER LLC INITIAL TERM LN		10/15/2024	BANK LOANS BARINGS		281,950	286,244	0
000000-00-0	MEHLER LAW ENFORCEMENT G Senior Term Loa	B.	10/17/2024	BANK LOANS BARINGS		2,541,931	2,607,107	0
000000-00-0	WEAVER BIDCO LTD	B.	10/22/2024	BANK LOANS BARINGS		1,590,909	1,623,376	0
000000-00-0	GBP FIRST ADDITIONAL FAC	B.	10/23/2024	BANK LOANS BARINGS		3,968,172	4,059,511	0
000000-00-0	Origin Bidco Ltd EURO FAC B4	B.	10/24/2024	BANK LOANS BARINGS		1,885,633	1,924,115	0
000000-00-0	Origin Bidco Ltd USD FAC B3	D.	10/24/2024	BANK LOANS BARINGS		2,974,225	3,034,923	0
000000-00-0	TECH 7 SAS Super Senior EU	B.	10/29/2024	BANK LOANS BARINGS		46,386	46,386	0
000000-00-0	NEFCO ACQUISITIONS INC DDTL E		11/05/2024	BANK LOANS BARINGS		2,928,175	2,928,175	0
000000-00-0	HILB GROUP LLC Term Loan TL		10/31/2024	BANK LOANS BARINGS		537,366	542,794	0
18914D-AC-2	CLOVER HOLDINGS 2 LLC 7.750% Fixed Ra		12/13/2024	BANK LOANS BARINGS		2,874,000	2,874,000	0
000000-00-0	ATL II MRO HLDGS INC 2ND AMEND INCREM TE		11/01/2024	BANK LOANS BARINGS		1,838,602	1,866,601	0
000000-00-0	CALIFORNIA CUSTOM FRUITS DDTL		11/07/2024	BANK LOANS BARINGS		82,949	82,949	0
000000-00-0	TECHNOSYLVA TSYL TA Term Loan TL US		11/07/2024	BANK LOANS BARINGS		2,480,192	2,505,244	0
B6S2R0-PF-0	Auris Luxembourg III S.a.r.l.	B.	10/31/2024	BANK LOANS BARINGS		1,086,200	1,086,200	0
000000-00-0	ENERGYCO DDTL		12/04/2024	BANK LOANS BARINGS		74,125	74,125	0
000000-00-0	AERO ACCESSORIES INC Senior Term Loa		11/08/2024	BANK LOANS BARINGS		374,211	379,909	0
000000-00-0	SOLIFI GROUP (UK) LTD First Lien TL	C.	11/12/2024	BANK LOANS BARINGS		1,764,096	1,781,915	0
000000-00-0	SPATIAL BUSINESS SYS LLC 2ND AMEND INCRE		11/14/2024	BANK LOANS BARINGS		246,067	249,814	0
000000-00-0	PowerGem Buyer Inc. - Term Loan		11/08/2024	BANK LOANS BARINGS		5,566,139	5,566,139	0
000000-00-0	TRAFFIC AND PARKING CONT DDTL		12/23/2024	BANK LOANS BARINGS		55,894	55,894	0
000000-00-0	TAPCO Buyer LLC - Unitranche Term Loan		11/15/2024	BANK LOANS BARINGS		990,992	1,006,084	0
000000-00-0	ICE HOUSE AMERICA DDTL - 2		12/06/2024	BANK LOANS BARINGS		127,391	127,391	0
000000-00-0	VILLAGE VET LTD Barings DDTL Tr	B.	12/20/2024	BANK LOANS BARINGS		152,680	152,680	0
000000-00-0	AIRX CLIMATE SOLUTIONS Incremental DDT		11/26/2024	BANK LOANS BARINGS		98,355	98,355	0
90286#-AA-0	UHY Advisors Inc. - Term Loan		11/22/2024	BANK LOANS BARINGS		330,226	333,562	0
000000-00-0	PROJECT EOS Unitranche	B.	11/29/2024	BANK LOANS BARINGS		1,330,952	1,365,079	0
000000-00-0	SERENI CAPITAL DDTL 4	B.	12/18/2024	BANK LOANS BARINGS		2,179,870	2,179,869	0
000000-00-0	BECKLAR LLC Senior Term Loa		12/06/2024	BANK LOANS BARINGS		735,805	747,010	0
000000-00-0	TECHNOSYLVA TSYL TA Senior Term Loa		12/06/2024	BANK LOANS BARINGS		1,231,596	1,231,596	0
000000-00-0	VERITAS US INC / VERITAS 15.00% PIK Pref		12/09/2024	BANK LOANS BARINGS		178,602	178,602	0
000000-00-0	WARNER PACIFIC INSURANCE Senior Term Loa		12/13/2024	BANK LOANS BARINGS		425,616	429,915	0
000000-00-0	ROYAL HOLDCO CORP Senior Term Loa		12/17/2024	BANK LOANS BARINGS		1,930,177	1,960,177	0
000000-00-0	VERITAS US INC / VERITAS S-1250 Arctera		12/09/2024	BANK LOANS BARINGS		419,462	419,462	0
000000-00-0	Nordlo Holding AB - SEK 1st Lien Term Lo	B.	12/18/2024	BANK LOANS BARINGS		4,118,308	4,213,103	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 3

Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
000000-00-0	Acclime Holdings HK Limi-2024 TERM LOAN	D.....	..12/24/2024 ..	BANK LOANS BARINGS .....	.....	..... 1,211,875	 1,211,875	0
000000-00-0	NORTHSTAR RECYCLING COMP Senior Term Loa .....	.....	..12/23/2024 ..	BANK LOANS BARINGS .....	.....	..... 950,122	 962,149	0
B6S28Y-LY-0	Tikehau Green Diamond CFO LLC .....	.....	..12/18/2024 ..	BANK LOANS BARINGS .....	.....	..... 20,000,000	 20,000,000	0
88675#-AB-1	TIKEHAU GREEN DIAMOND CFO LLC - Class B .....	.....	..12/18/2024 ..	BANK LOANS BARINGS .....	.....	..... 7,500,000	 7,500,000	0
00241#-AA-5	AMF ENDEAVOUR, LLC, - Senior Secured Loa .....	.....	..12/18/2024 ..	BANK LOANS BARINGS .....	.....	..... 15,200,000	 15,200,000	0
000000-00-0	CLIFFWATER ENHANCED LEND Revolving Facil .....	.....	..12/26/2024 ..	BANK LOANS BARINGS .....	.....	..... 6,832,298	 6,832,298	0
000000-00-0	CLIFFWATER CORPORATE LEN Cliff- TL 12/18 .....	.....	..12/18/2024 ..	BANK LOANS BARINGS .....	.....	..... 22,500,000	 22,500,000	0
1909999999. Subtotal - Bonds - Unaffiliated Bank Loans						1,527,454,455	1,607,267,579	178,333
2509999997. Total - Bonds - Part 3						9,521,796,540	9,703,357,721	24,399,721
2509999998. Total - Bonds - Part 5						648,358,061	650,455,869	2,716,020
2509999999. Total - Bonds						10,170,154,602	10,353,813,596	27,115,741
09069Z-ZG-9	BIOWISH TECHNOLOGIES SERIES F PERP PFD	C.....	..09/05/2024 ..	REINVEST	 3,248,941.000	 160,485	 0.00	0
69078F-15-6	Triton International Ltd-TRITON INTERNAT	D.....	..04/15/2024 ..	SEAPORT GROUP	 55,723.000	 1,105,606	 0.00	0
69078F-13-1	Triton International Ltd-TRITON INTERNAT	D.....	..04/15/2024 ..	SEAPORT GROUP	 24,149.000	 605,829	 0.00	0
61762V-83-8	Morgan Stanley-MORGAN STANLEY .....	.....	..07/23/2024 ..	MORGAN	 1,000,000.000	 25,000,000	 0.00	0
29359U-10-9	Enstar Group Ltd-PREFERRED STOCK	D.....	..12/16/2024 ..	SEAPORT GROUP	 689,890.000	 14,209,445	 0.00	0
4019999999. Subtotal - Preferred Stocks - Industrial and Miscellaneous (Unaffiliated) Perpetual Preferred						41,081,365	XXX	0
55076*-11-1	Luxury Mortgage Corp Series I Preferred .....	.....	..05/28/2024 ..	DIRECT	 500,000.000	 500,000	 0.00	0
14314C-10-5	Carlyle Finance LLC-CARLYLE FINANCE LLC .....	.....	..04/08/2024 ..	SEAPORT GROUP	 100,000.000	 1,990,556	 0.00	0
872652-10-2	TPG Operating Group II L-TPG OPERATING G .....	.....	..02/28/2024 ..	MORGAN	 1,333,600.000	 33,340,000	 0.00	0
04686J-83-8	Athene Holding Ltd-ATHENE HOLDING LTD .....	.....	..02/29/2024 ..	WELLS FARGO	 1,000,000.000	 25,000,000	 0.00	0
30290Y-A*-2	FS Credit Opportunities Series 2029 Term .....	.....	..05/16/2024 ..	DIRECT	 15,000.000	 15,000,000	 0.00	0
03770#-10-0	APOLLO ASSET-BACKED FINANCE LENDING COMP .....	.....	..12/02/2024 ..	DIRECT	 5,736.000	 5,736,110	 0.00	0
000000-00-0	DISH DBS Issuer Pfd 6/29 .....	.....	..09/27/2024 ..	DIRECT	 466,667.000	 450,334	 0.00	0
78500B-40-3	SVB Financial Trust-SVB FINANCIAL TRUST .....	.....	..11/08/2024 ..	EXCHANGE OFFER	 5,000,000.000	 6,070	 0.00	0
759351-80-2	Reinsurance Group of Ame-REINSURANCE GRO .....	.....	..12/05/2024 ..	SEAPORT GROUP	 500,000.000	 12,500,000	 0.00	0
B6S2XZ-LM-5	Cohesity Inc Series G .....	.....	..12/09/2024 ..	DIRECT	 5,488.000	 86,136	 0.00	0
B6S2XZ-W5-0	Cohesity Inc Series G1 .....	.....	..12/09/2024 ..	DIRECT	 3,791.000	 59,501	 0.00	0
4029999999. Subtotal - Preferred Stocks - Industrial and Miscellaneous (Unaffiliated) Redeemable Preferred						94,668,707	XXX	0
4509999997. Total - Preferred Stocks - Part 3						135,750,072	XXX	0
4509999998. Total - Preferred Stocks - Part 5						647,875	XXX	0
4509999999. Total - Preferred Stocks						136,397,947	XXX	0
457187-10-2	INGREDION INC-COMMON STOCK .....	.....	..10/17/2024 ..	BLOOMBERG TRADEBOOK	 2,500.000	 337,570	 0	0
16411R-20-8	CHENIERE ENERGY INC-COMMON STOCK .....	.....	..10/11/2024 ..	BLOOMBERG TRADEBOOK	 5,533.000	 956,315	 0	0
371927-10-4	GENESIS ENERGY L P LTD PARTNERSHIP UNIT .....	.....	..02/27/2024 ..	VARIOUS	 5,644.000	 66,118	 0	0
726503-10-5	PLAINS ALL AMERICAN PIPELINE L.P. LTD PA .....	.....	..03/27/2024 ..	VARIOUS	 86,460.000	 1,454,086	 0	0
864482-10-4	SUBURBAN PROPANE PARTNER-COMMON STOCK .....	.....	..03/22/2024 ..	BLOOMBERG TRADEBOOK	 2,020.000	 42,133	 0	0
86765K-10-9	SUNOCO LP COMMON STK .....	.....	..05/02/2024 ..	MERGER	 74,415.000	 3,409,523	 0	0
37045V-10-0	General Motors Co-COMMON STOCK .....	.....	..02/29/2024 ..	BLOOMBERG TRADEBOOK	 5,600.000	 229,608	 0	0
695156-10-9	PACKAGING CORP OF AMERIC-COMMON STOCK .....	.....	..09/11/2024 ..	BLOOMBERG TRADEBOOK	 800.000	 162,773	 0	0
629183-10-3	EATON CORP PLC-COMMON STOCK	C.....	..10/17/2024 ..	BLOOMBERG TRADEBOOK	 1,750.000	 559,547	 0	0
388689-10-1	GRAPHIC PACKAGING HOLDIN-COMMON STOCK .....	.....	..09/11/2024 ..	BLOOMBERG TRADEBOOK	 4,000.000	 115,705	 0	0
55336V-10-0	MPLX LP COMMON UNIT .....	.....	..05/01/2024 ..	VARIOUS	 89,041.000	 3,527,079	 0	0
49456B-10-1	Kinder Morgan Inc/DE-KINDER MORGAN INC .....	.....	..11/22/2024 ..	VARIOUS	 117,594.000	 3,088,514	 0	0
969457-10-0	WILLIAMS COS INC COMMON STK .....	.....	..11/21/2024 ..	BLOOMBERG TRADEBOOK	 27,689.000	 1,528,049	 0	0
893641-10-0	TransDigm Group Inc-COMMON STOCK .....	.....	..02/29/2024 ..	BLOOMBERG TRADEBOOK	 195.000	 228,356	 0	0
84473L-10-5	SOUTH32 LTD-ADR	C.....	..04/18/2024 ..	BLOOMBERG TRADEBOOK	 21,000.000	 222,204	 0	0
16411Q-10-1	CHENIERE ENERGY PARTNERS-COMMON STOCK .....	.....	..03/27/2024 ..	BLOOMBERG TRADEBOOK	 841.000	 41,243	 0	0
958669-10-3	Western Midstream Partne-COMMON STOCK .....	.....	..11/06/2024 ..	VARIOUS	 12,998.000	 498,693	 0	0
87807B-10-7	TC Energy Corp-COMMON STOCK .....	.....	..10/11/2024 ..	VARIOUS	 52,300.000	 2,135,298	 0	0
45687V-10-6	Ingersoll Rand Inc-COMMON STOCK .....	.....	..02/29/2024 ..	BLOOMBERG TRADEBOOK	 2,500.000	 225,129	 0	0
86614G-10-1	Summit Midstream Partner-COMMON STOCK .....	.....	..06/24/2024 ..	RILY	 9,000.000	 324,990	 0	0
067901-10-8	Barrick Gold Corp-COMMON STOCK .....	.....	..09/11/2024 ..	BLOOMBERG TRADEBOOK	 4,000.000	 78,621	 0	0
23345M-10-7	DT Midstream Inc-COMMON STOCK .....	.....	..11/22/2024 ..	BLOOMBERG TRADEBOOK	 11,472.000	 1,148,772	 0	0
126408-10-3	CSX CORP-COMMON STOCK		..02/29/2024 ..	BLOOMBERG TRADEBOOK	 6,000.000	 228,117	 0	0

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Showing All Long-Term Bonds and Stocks ACQUIRED During Current Year

1	2	3	4	5	6	7	8	9
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends
149123-10-1	Caterpillar Inc-COMMON STOCK		...10/17/2024 ...	BLOOMBERG TRADEBOOK	1,500.000	547,792	.....	.....0
452308-10-9	Illinois Tool Works Inc-COMMON STOCK		...02/29/2024 ...	BLOOMBERG TRADEBOOK	800.000	209,966	.....	.....0
20825C-10-4	ConocoPhillips-COMMON STOCK		...11/22/2024 ...	MERGER	893.000	86,975	.....	.....0
35671D-85-7	FREEMPORT-MCMORAN INC-COMMON STOCK		...04/29/2024 ...	BLOOMBERG TRADEBOOK	3,500.000	182,317	.....	.....0
013091-10-3	Albertsons Cos Inc-COMMON STOCK		...02/13/2024 ...	IN-KIND TRANSFER	0.000	(849,726)	.....	.....0
30231G-10-2	Exxon Mobil Corp-COMMON STOCK		...05/03/2024 ...	MERGER	500.000	113,662	.....	.....0
701094-10-4	Parker-Hannifin Corp-COMMON STOCK		...09/11/2024 ...	BLOOMBERG TRADEBOOK	730.000	401,764	.....	.....0
68994E-10-3	TRANE TECHNOLOGIES PLC-COMMON STOCK	C.....	...02/29/2024 ...	BLOOMBERG TRADEBOOK	800.000	226,144	.....	.....0
000000-00-0	TCS Squeeze Out Share Warrant	B.....	...12/31/2024 ...	BARINGSLLC	46.000	81	.....	.....0
34959A-20-6	Fortescue Ltd-ADR	C.....	...04/29/2024 ...	BLOOMBERG TRADEBOOK	2,000.000	67,582	.....	.....0
37827X-10-0	Glencore PLC-ADR	C.....	...04/29/2024 ...	BLOOMBERG TRADEBOOK	15,000.000	177,805	.....	.....0
36828A-10-1	GE Vernova Inc-COMMON STOCK		...04/02/2024 ...	SPIN OFF	400.000	37,374	.....	.....0
5019999999. Subtotal - Common Stocks - Industrial and Miscellaneous (Unaffiliated) Publicly Traded						21,810,179	XXX	0
000000-00-0	RAPIDAIR COMPRESSED AIR Common Equity	C.....	...10/15/2024 ...	3843	28.000	28,000	.....	.....0
5029999999. Subtotal - Common Stocks - Industrial and Miscellaneous (Unaffiliated) Other						28,000	XXX	0
78463V-10-7	SPDR Gold Shares-ETF		...07/18/2024 ...	BLOOMBERG TRADEBOOK	2,500.000	568,009	.....	.....0
5819999999. Subtotal - Common Stocks - Exchange Traded Funds						568,009	XXX	0
5989999997. Total - Common Stocks - Part 3						22,406,188	XXX	0
5989999998. Total - Common Stocks - Part 5						2,177,785	XXX	0
5989999999. Total - Common Stocks						24,583,973	XXX	0
5999999999. Total - Preferred and Common Stocks						160,981,920	XXX	0
6009999999 - Totals						10,331,136,522	XXX	27,115,741

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
38375B-4Z-2	Government National Mort-GNR 2013-H16 FI		12/01/2024	PAYDOWN		0	0	210,259	214,733	0	0	0	0	0	0	0	0	0	12,557	07/01/2063
38375U-BQ-2	Government National Mort-GNR 2013-H24 BI		11/01/2024	PAYDOWN		0	0	105,216	286,785	0	0	0	0	0	0	0	0	0	19,207	09/01/2063
38375U-CG-3	Government National Mort-GNR 2014-H02 AI		12/01/2024	PAYDOWN		0	0	318,395	280,801	0	0	0	0	0	0	0	0	0	16,813	12/01/2063
38375U-DC-1	Government National Mort-GNR 2014-H01 AI		12/01/2024	PAYDOWN		0	0	712,888	551,075	0	0	0	0	0	0	0	0	0	68,264	01/01/2064
38375U-EF-3	Government National Mort-GNR 2014-H03 IS		12/01/2024	PAYDOWN		0	0	172,889	133,487	0	0	0	0	0	0	0	0	0	13,702	02/01/2064
38375U-MV-9	Government National Mort-GNR 2014-H16 BI		12/01/2024	PAYDOWN		0	0	820,375	436,044	0	0	0	0	0	0	0	0	0	64,993	07/01/2064
38375U-NQ-9	Government National Mort-GNR 2014-H17 DI		12/01/2024	PAYDOWN		0	0	651,972	348,574	0	0	0	0	0	0	0	0	0	49,528	08/01/2064
38375U-PT-1	Government National Mort-GNR 2014-H19 EI		12/01/2024	PAYDOWN		0	0	461,875	293,442	0	0	0	0	0	0	0	0	0	32,373	09/01/2064
38375U-RD-4	Government National Mort-GNR 2014-H23 AI		12/01/2024	PAYDOWN		0	0	1,385,458	1,006,590	0	0	0	0	0	0	0	0	0	18,778	11/01/2064
38375U-UY-4	Government National Mort-GNR 2015-H08 BI		12/01/2024	PAYDOWN		0	0	740,034	585,894	0	0	0	0	0	0	0	0	0	18,928	03/01/2065
38382A-3P-8	Government National Mort-GNR 2019-140 SE		12/20/2024	PAYDOWN		0	0	95,036	142,412	0	0	0	0	0	0	0	0	0	1,565	11/20/2049
38382C-K5-9	Government National Mort-GNR 2020-17 PS		12/20/2024	PAYDOWN		0	0	184,210	244,282	0	0	0	0	0	0	0	0	0	3,255	01/20/2050
38382C-M3-2	Government National Mort-GNR 2020-17 GS		12/20/2024	PAYDOWN		0	0	67,657	86,528	0	0	0	0	0	0	0	0	0	1,252	01/20/2050
38382C-YR-6	Government National Mort-GNR 2020-18 SW		12/20/2024	PAYDOWN		0	0	522,318	743,972	0	0	0	0	0	0	0	0	0	9,759	02/20/2050
38382D-UT-4	Government National Mort-GNR 2020-31 ST		12/20/2024	PAYDOWN		0	0	192,627	266,943	0	0	0	0	0	0	0	0	0	3,748	03/20/2050
38382D-VF-3	Government National Mort-GNR 2020-31 HS		12/20/2024	PAYDOWN		0	0	53,220	29,381	0	0	0	0	0	0	0	0	0	1,080	05/20/2046
38382F-NZ-3	Government National Mort-GNR 2020-62 JS		12/20/2024	PAYDOWN		0	0	276,547	250,792	0	0	0	0	0	0	0	0	0	4,119	05/20/2050
38382G-BE-1	Government National Mort-GNR 2020-86 US		12/20/2024	PAYDOWN		0	0	192,701	360,041	0	0	0	0	0	0	0	0	0	4,371	01/20/2050
38382G-BH-4	Government National Mort-GNR 2020-86 KS		12/20/2024	PAYDOWN		0	0	223,241	217,806	0	0	0	0	0	0	0	0	0	18	06/20/2050
38382G-CT-7	Government National Mort-GNR 2020-86 SK		12/20/2024	PAYDOWN		0	0	442,107	468,444	0	0	0	0	0	0	0	0	0	6,768	06/20/2050
38382H-YB-0	Government National Mort-GNR 2020-116 EI		12/01/2024	PAYDOWN		0	0	211,360	185,136	0	0	0	0	0	0	0	0	0	23,581	08/01/2050
38382K-IV-1	Government National Mort-GNR 2020-146 LI		12/01/2024	PAYDOWN		0	0	373,075	330,183	0	0	0	0	0	0	0	0	0	34,097	10/01/2050
38382L-JB-8	Government National Mort-GNR 2020-176 SQ		12/20/2024	PAYDOWN		0	0	85,375	78,113	0	0	0	0	0	0	0	0	0	1,810	11/20/2050
38382L-R7-8	Government National Mort-GNR 2020-185 YI		12/01/2024	PAYDOWN		0	0	357,165	304,818	0	0	0	0	0	0	0	0	0	33,650	12/01/2050
38382M-CJ-6	Government National Mort-GNR 2020-189 SN		12/20/2024	PAYDOWN		0	0	167,157	149,881	0	0	0	0	0	0	0	0	0	23	12/20/2050
38382M-E8-8	Government National Mort-GNR 2021-9 DI		12/01/2024	PAYDOWN		0	0	340,605	285,985	0	0	0	0	0	0	0	0	0	36,781	01/01/2051
38382M-Z6-9	Government National Mort-GNR 2021-15 SQ		12/20/2024	PAYDOWN		0	0	230,789	205,763	0	0	0	0	0	0	0	0	0	39	10/20/2050
38382F-BU-7	Government National Mort-GNR 2020-77 SU		12/20/2024	PAYDOWN		0	0	209,014	194,891	0	0	0	0	0	0	0	0	0	3,441	09/20/2047
38382F-BW-3	Government National Mort-GNR 2020-77 SQ		12/20/2024	PAYDOWN		0	0	136,022	241,699	0	0	0	0	0	0	0	0	0	2,621	08/20/2049
36179X-NF-9	Ginnie Mae II Pool-POOL #MA8490		12/01/2024	PAYDOWN		2,424,035	2,424,034	2,427,443	2,427,224	0	(3,190)	0	(3,190)	0	2,424,035	0	0	0	71,087	12/01/2052
91282C-GD-7	United States Treasury N-UNSECURED		12/31/2024	MATURITY	1,000,000	1,000,000	1,000,000	999,297	999,642	0	0	0	0	0	1,000,000	0	0	0	36,691	12/31/2024
36179X-QW-9	Ginnie Mae II Pool-POOL #MA8569		12/01/2024	PAYDOWN		2,622,201	2,622,201	2,641,048	2,639,899	0	(17,698)	0	(17,698)	0	2,622,201	0	0	0	79,304	01/01/2053
36179Y-AS-3	Ginnie Mae II Pool-POOL #MA9017		12/01/2024	PAYDOWN		3,148,072	3,148,072	3,117,821	3,118,733	0	29,339	0	29,339	0	3,148,072	0	0	0	178,903	07/01/2053
36179Y-DK-7	Ginnie Mae II Pool-POOL #MA9106		12/01/2024	PAYDOWN		5,698,256	5,698,256	5,646,987	5,648,630	0	49,626	0	49,626	0	5,698,256	0	0	0	200,197	08/01/2053
0109999999 Subtotal - Bonds - U.S. Governments						14,892,564	14,892,563	24,772,183	23,758,623	0	58,077	0	58,077	0	14,892,564	0	0	0	1,053,303	XXX
50065W-AF-3	Korea National Oil Corp-SENIOR UNSECURED	D	01/23/2024	MATURITY		9,000,000	9,000,000	8,950,140	8,999,444	0	556	0	556	0	9,000,000	0	0	0	180,000	01/23/2024
0309999999 Subtotal - Bonds - All Other Governments						9,000,000	9,000,000	8,950,140	8,999,444	0	556	0	556	0	9,000,000	0	0	0	180,000	XXX
70914P-MIE-9	PENNSYLVANIA ST-BUILD AMERICA GEN OBLIG		02/15/2024	CALL 100		880,000	880,000	923,622	889,048	0	(463)	0	(463)	0	888,585	0	(8,585)	(8,585)	20,460	02/15/2026
011770-T7-9	State of Alaska-GENERAL OBLIGATION UNLTD		06/04/2024	CALL 100		1,000,000	1,000,000	1,000,000	1,000,000	0	0	0	0	0	1,000,000	0	0	0	44,120	08/01/2026
011770-T8-7	State of Alaska-GENERAL OBLIGATION UNLTD		06/04/2024	CALL 100		1,000,000	1,000,000	1,000,000	1,000,000	0	0	0	0	0	1,000,000	0	0	0	44,962	08/01/2027
605580-5Q-8	State of Mississippi-GENERAL OBLIGATION		10/01/2024	CALL 100		6,880,000	6,880,000	7,659,642	7,228,172	0	(27,353)	0	(27,353)	0	7,200,819	0	(320,819)	(320,819)	291,296	10/01/2029
686053-GG-8	Oregon School Boards Ass-GENERAL OBLIGAT		06/30/2024	SINKING PAYMENT		1,547,680	1,547,680	1,712,415	1,611,781	0	(64,101)	0	(64,101)	0	1,547,680	0	0	0	73,654	06/30/2028
70914P-TX-0	Commonwealth of Pennsylv-GENERAL OBLIGAT		03/19/2024	CALL 100		10,000,000	10,000,000	8,543,300	9,568,816	0	27,155	0	27,155	0	9,595,971	0	404,029	404,029	140,000	04/01/2027
0509999999 Subtotal - Bonds - U.S. States, Territories and Possessions						21,307,680	21,307,680	20,838,979	21,297,817	0	(64,762)	0	(64,762)	0	21,233,055	0	74,625	74,625	614,492	XXX
442331-QM-9	HOUSTON TX-GENERAL OBLIGATION LTD		03/01/2024	CALL 100		1,100,000	1,100,000	1,366,189	1,252,804	0	(2,542)	0	(2,542)	0	1,250,262	0	(150,262)	(150,262)	34,595	03/01/2032
718814-ZZ-2	PHOENIX AZ-BUILD AMERICA GENERAL OBLIGAT		07/01/2024	CALL 100		1,555,000	1,555,000	1,846,127	1,708,473	0	22,671	0	22,671	0	1,731,144	0	(176,144)	(176,144)	81,933	07/01/2034
057507-HU-2	Bakersfield City School -GENERAL OBLIGAT		05/01/2024	CALL 100		190,000	190,000	190,000	190,000	0	0	0	0	0	190,000	0	0	0	4,171	05/01/2026
283734-TF-8	City of El Paso TX-GENERAL OBLIGATION LT		06/17/2024	CALL 100		1,590,000	1,590,000	1,590,000	1,590,000	0	0	0	0	0	1,590,000	0	0	0	69,053	08/15/2034
134141-ZE-3	Campbell Union School Di-GENERAL OBLIGAT		08/01/2024	CALL 100		650,000	650,000	650,000	650,000	0	0	0	0	0	650,000	0	0	0	35,139	08/01/2027

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
129775-EM-0	City of Calhoun GA-GENERAL OBLIGATION UN		.09/01/2024	MATURITY		1,000,000	1,000,000	1,000,000	1,000,000	0	0	0	0	0	1,000,000	0	0	0	48,210	.09/01/2024
602245-UM-2	County of Milwaukee WI-GENERAL OBLIGATION		.12/01/2024	SINKING PAYMENT		209,263	209,263	290,049	239,234	0	(29,971)	0	(29,971)	0	209,263	0	0	0	21,470	.12/01/2028
73723R-J6-1	City of Portsmouth VA-GENERAL OBLIGATION		.02/01/2024	CALL 100		120,000	120,000	120,000	120,000	0	0	0	0	0	120,000	0	0	0	2,363	.02/01/2030
777543-TY-5	Village of Rosemont IL-GENERAL OBLIGATION		.09/20/2024	EXCHANGE OFFER		1,750,000	1,750,000	1,750,000	1,750,000	0	0	0	0	0	1,750,000	0	0	0	63,921	.12/01/2024
249218-AJ-7	Denver City & County School District No 1		.12/16/2024	TaxMuniOther		375,344	0	0	0	0	0	0	0	0	375,344	0	0	0	0	.12/15/2024
0709999999 Subtotal - Bonds - U.S. Political Subdivisions of States, Territories and Possessions						8,539,607	8,164,263	8,802,365	8,500,511	0	(9,842)	0	(9,842)	0	8,866,013	0	(326,406)	(326,406)	360,855	XXX
25477G-EV-3	District of Columbia-REVENUE BONDS		.10/02/2024	CALL 100.609001		7,545,675	7,500,000	7,500,000	7,500,000	0	0	0	0	0	7,500,000	0	45,675	45,675	331,225	.12/01/2026
68607D-NK-7	OREGON ST DEPT OF TRANSPRTN-BUILD AMERIC		.07/10/2024	CALL 103.507004		3,622,745	3,500,000	3,878,770	3,689,494	0	(12,421)	0	(12,421)	0	3,677,073	0	(54,328)	(54,328)	132,148	.11/15/2030
45201Y-YL-5	ILLINOIS ST HSG DEV AUTH REV PROG SER B		.11/01/2024	CALL 100		1,930,704	1,930,704	1,870,838	1,883,898	0	1,472	0	1,472	0	1,885,371	0	45,333	45,333	43,433	.06/01/2043
544712-2H-4	LOS ANGELES CNTY CA MET -REVENUE BONDS		.10/30/2024	CALL 105.357002		28,277,819	26,840,000	33,094,480	31,379,044	0	(178,224)	0	(178,224)	0	31,200,820	0	(2,923,001)	(2,923,001)	2,176,362	.06/01/2039
231266-FD-4	CURATORS OF THE UNIV OF -REVENUE BONDS		.11/04/2024	CALL 100		655,000	655,000	850,178	779,552	0	9,409	0	9,409	0	788,960	0	(133,960)	(133,960)	39,363	.11/01/2039
544525-NZ-7	LOS ANGELES CA DEPT OF W-REVENUE BONDS		.05/24/2024	CALL 102.572998		4,102,920	4,000,000	4,856,240	4,654,635	0	(11,948)	0	(11,948)	0	4,642,687	0	(539,767)	(539,767)	215,620	.07/01/2039
73358W-CW-2	Port Authority of New Yo-REVENUE BONDS		.01/30/2024	BARCLAYS CAPITAL INC		9,433,800	9,000,000	10,964,390	10,413,798	0	(4,866)	0	(4,866)	0	10,408,932	0	(975,132)	(975,132)	127,058	.11/01/2040
60637B-FA-3	MISSOURI ST HSG DEV COMM-TAXABLE-REF-SPL		.11/01/2024	CALL 100		121,044	121,044	121,044	121,044	0	0	0	0	0	121,044	0	0	0	1,077	.08/01/2036
041083-VB-9	Arkansas Development Fin-REVENUE BONDS		.05/23/2024	CALL 100		134,245	134,245	134,245	134,245	0	0	0	0	0	134,245	0	0	0	1,350	.07/01/2043
04048R-DS-2	Arizona State University-REVENUE BONDS		.05/10/2024	CALL 102.039001		4,081,560	4,000,000	5,141,240	4,485,059	0	(23,820)	0	(23,820)	0	4,461,238	0	(379,678)	(379,678)	213,199	.07/01/2030
01026C-AD-3	Alabama Economic Settlem-REVENUE BONDS		.09/16/2024	MRB002A		11,895,600	12,000,000	12,245,830	12,155,973	0	(10,247)	0	(10,247)	0	12,145,726	0	(250,126)	(250,126)	514,402	.09/15/2032
31392C-EM-2	Fannie Mae REMIC Trust 2-FWI 2002-W2 AF5		.12/01/2024	PAYDOWN		9,851	9,851	9,461	9,460	0	393	0	393	0	9,851	0	0	0	324	.06/01/2032
313398-P7-8	Freddie Mac REMICS-FHR 2334 TD		.12/01/2024	PAYDOWN		5,760	5,760	6,026	5,805	0	(45)	0	(45)	0	5,760	0	0	0	205	.07/01/2031
313399-B9-7	Freddie Mac REMICS-FHR 2344 SN		.12/15/2024	PAYDOWN		0	0	69,515	0	0	3,714	0	3,714	0	0	0	0	0	17	.08/15/2031
31359H-NW-0	Fannie Mae REMICS-FNR 1994-63 PK		.04/01/2024	VARIOUS		447	447	494	447	0	0	0	0	0	447	0	0	0	5	.04/01/2024
31359H-OP-2	Fannie Mae REMICS-FNR 1994-76 KA		.02/01/2024	PAYDOWN		12	12	12	12	0	0	0	0	0	12	0	0	0	0	.04/01/2024
312931-A6-5	Freddie Mac Gold Pool-FG A84529		.12/01/2024	PAYDOWN		2,628	2,628	2,663	2,645	0	(17)	0	(17)	0	2,628	0	0	0	34	.02/01/2039
31339G-HQ-7	Freddie Mac REMICS-FHR 2367 SA		.12/15/2024	PAYDOWN		0	0	94,228	0	0	11,893	0	11,893	0	0	0	0	0	57	.06/15/2031
31359N-2W-0	Fannie Mae REMICS-FNR 1997-19 PG		.12/01/2024	PAYDOWN		9,833	9,833	10,595	9,867	0	(35)	0	(35)	0	9,833	0	0	0	410	.04/01/2024
3133TB-4G-2	Freddie Mac REMICS-FHR 1991 PG		.12/01/2024	PAYDOWN		8,339	8,339	8,646	8,360	0	(21)	0	(21)	0	8,339	0	0	0	249	.09/01/2027
31359V-GF-4	Fannie Mae REMICS-FNR 1999-1 PJ		.12/01/2024	PAYDOWN		24,785	24,785	26,359	25,115	0	(330)	0	(330)	0	24,785	0	0	0	823	.02/01/2029
3133TC-HE-1	Freddie Mac REMICS-FHR 2018 PG		.12/01/2024	PAYDOWN		2,761	2,761	2,914	2,790	0	(29)	0	(29)	0	2,761	0	0	0	94	.01/01/2028
3136AC-FK-2	Fannie Mae REMICS-FNR 2013-4 GI		.12/01/2024	PAYDOWN		0	0	95,087	19,247	0	(3,352)	0	(3,352)	0	0	0	0	0	4,154	.02/01/2043
3133TD-3A-2	Freddie Mac REMICS-FHR 2037 HB		.12/01/2024	PAYDOWN		7,108	7,108	7,774	7,241	0	(134)	0	(134)	0	7,108	0	0	0	344	.03/01/2028
3133TH-S8-1	Freddie Mac REMICS-FHR 2118 PE		.12/01/2024	PAYDOWN		20,748	20,748	21,784	20,957	0	(209)	0	(209)	0	20,748	0	0	0	752	.01/01/2029
313921-JK-5	Fannie Mae REMICS-FNR 2001-57 PD		.12/01/2024	PAYDOWN		10,189	10,189	10,744	10,369	0	(180)	0	(180)	0	10,189	0	0	0	306	.10/01/2031
3133TK-EB-2	Freddie Mac REMICS-FHR 2145 S		.12/15/2024	PAYDOWN		0	0	186,420	0	0	17,774	0	17,774	0	0	0	0	0	149	.04/15/2029
31392B-SC-1	Fannie Mae REMICS-FNR 2002-6 L		.12/01/2024	PAYDOWN		1,197	1,197	1,244	1,215	0	(19)	0	(19)	0	1,197	0	0	0	39	.02/01/2032
3133TR-YA-7	Freddie Mac REMICS-FHR 2292 SI		.12/15/2024	PAYDOWN		0	0	76,858	0	0	4,940	0	4,940	0	0	0	0	0	27	.11/15/2030
31392E-PC-8	Fannie Mae REMICS-FNR 2002-58 PG		.12/01/2024	PAYDOWN		30,555	30,555	32,204	31,106	0	(551)	0	(551)	0	30,555	0	0	0	1,096	.09/01/2032
3133TS-F2-4	Freddie Mac REMICS-FHR 2303 OK		.12/01/2024	PAYDOWN		7,682	7,682	7,933	7,751	0	(69)	0	(69)	0	7,682	0	0	0	252	.04/01/2031
31392H-FC-2	Fannie Mae REMICS-FNR 2002-97 SR		.12/25/2024	PAYDOWN		0	0	145,140	0	0	18,299	0	18,299	0	0	0	0	0	142	.01/25/2033
31393Y-ED-3	Fannie Mae REMICS-FNR 2004-28 SB		.12/25/2024	PAYDOWN		0	0	52,704	9,467	0	3,876	0	3,876	0	0	0	0	0	613	.05/25/2034
3133TU-HJ-0	Freddie Mac REMICS-FHR 2322 SC		.12/15/2024	PAYDOWN		0	0	27,813	0	0	3,120	0	3,120	0	0	0	0	0	60	.05/15/2031
31396W-BR-6	Fannie Mae REMICS-FNR 2007-56 SN		.12/25/2024	PAYDOWN		0	0	61,266	0	0	4,903	0	4,903	0	0	0	0	0	71	.06/25/2037
3133TU-S7-4	Freddie Mac REMICS-FHR 2357 OH		.12/01/2024	PAYDOWN		3,270	3,270	3,429	3,325	0	(55)	0	(55)	0	3,270	0	0	0	114	.09/01/2031
31398M-EL-6	Fannie Mae REMICS-FNR 2010-14 SJ		.12/25/2024	PAYDOWN		0	0	238,030	7,216	0	21,738	0	21,738	0	0	0	0	0	628	.03/25/2040
3137A9-6Y-7	Freddie Mac REMICS-FHR 3850 LS		.12/01/2024	PAYDOWN		0	0	65,204	5,736	0	73	0	73	0	0	0	0	0	16	.05/01/2039
3137AC-TN-9	Freddie Mac REMICS-FHR 3897 LI		.12/01/2024	PAYDOWN		0	0	185,223	52,421	0	(362)	0	(362)	0	0	0	0	0	478	.01/01/2037
3137FA-NH-7	Freddie Mac REMICS-FHR 4709 WI		.12/01/2024	PAYDOWN		0	0	84,943	98,456	0	(1,767)	0	(1,767)	0	0	0	0	0	2,077	.10/01/2038
3137FW-IIC-0	Freddie Mac REMICS-FHR 5020 AI		.12/01/2024	PAYDOWN		0	0	89,383	76,002	0	(3,768)	0	(3,768)	0	0	0	0	0	11,762	.09/01/2050
31392K-SC-6	Freddie Mac REMICS-FHR 2455 OK		.12/01/2024	PAYDOWN		32,841	32,841	34,924	33,577	0	(735)	0	(735)	0	32,841	0	0	0	1,054	.05/01/2032
31392M-SR-9	Freddie Mac REMICS-FHR 2448 TX		.12/01/2024	PAYDOWN		40,522	40,522	42,565	41,160	0	(638)	0	(638)	0	40,522	0	0	0	1,294	.05/01/2032

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identi- fication	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
31397W-F3-4	Freddie Mac REMICS-FHR 3457 ES		12/15/2024	PAYDOWN		0	0	12,883	0	0	1,066	0	1,066	0	0	0	0	0	7	06/15/2038
296122-UT-9	Escambia County Housing -REVENUE BONDS		09/01/2024	CALL 100		206,270	206,270	206,270	206,270	0	0	0	0	0	206,270	0	0	0	1,997	11/01/2038
3133JL-UE-7	Freddie Mac Pool-FREDDIE MAC POOL-FR QU7		12/01/2024	PAYDOWN		1,690,368	1,690,368	1,703,574	1,701,593	0	(11,225)	0	(11,225)	0	1,690,368	0	0	0	16,159	03/01/2051
3133N3-U9-3	Freddie Mac Pool-FREDDIE MAC POOL-FR RE6		12/01/2024	PAYDOWN		327,548	327,548	333,002	332,442	0	(4,895)	0	(4,895)	0	327,548	0	0	0	7,850	11/01/2049
3133N3-V6-6	Freddie Mac Pool-FREDDIE MAC POOL-FR RE6		12/01/2024	PAYDOWN		111,576	111,576	113,198	113,175	0	(1,598)	0	(1,598)	0	111,576	0	0	0	2,032	09/01/2049
3133N3-X3-3	Freddie Mac Pool-FREDDIE MAC POOL-FR RE6		12/01/2024	PAYDOWN		1,102,753	1,102,753	1,129,288	1,128,798	0	(26,045)	0	(26,045)	0	1,102,753	0	0	0	15,744	05/01/2051
31394D-JU-5	Fannie Mae REMIC Trust 2-FNW 2005-W2 A6		03/25/2024	PAYDOWN		0	0	10,555	0	0	0	0	0	0	0	0	0	0	0	05/25/2035
130795-Z6-7	California Statewide Com-REVENUE BONDS		05/15/2024	CALL 100		300,000	300,000	415,125	389,195	0	(1,317)	0	(1,317)	0	387,878	0	(87,878)	(87,878)	11,325	05/15/2040
29270C-WJ-0	Energy Northwest-REVENUE BONDS		07/01/2024	MATURITY		1,000,000	1,000,000	1,000,000	1,000,000	0	0	0	0	0	1,000,000	0	0	0	57,100	07/01/2024
25477P-NF-8	District of Columbia Hou-REVENUE BONDS		08/15/2024	CALL 100		134,413	134,413	134,413	134,413	0	0	0	0	0	134,413	0	0	0	2,185	06/15/2045
19648A-P2-5	Colorado Health Faciliti-REVENUE BONDS		01/01/2024	CALL 100		1,000,000	1,000,000	1,063,860	1,000,000	0	0	0	0	0	1,000,000	0	0	0	27,500	01/01/2035
20281P-BQ-4	Commonwealth Financing A-REVENUE BONDS		06/03/2024	CALL 100		590,000	590,000	687,745	618,455	0	(3,281)	0	(3,281)	0	615,174	0	(25,174)	(25,174)	17,078	06/01/2027
196479-F9-5	Colorado Housing and Fin-REVENUE BONDS		11/01/2024	CALL 100		462,223	462,223	475,988	467,878	0	(8)	0	(8)	0	467,870	0	(5,647)	(5,647)	5,976	03/01/2051
196479-V4-8	Colorado Housing and Fin-REVENUE BONDS		09/01/2024	CALL 100		277,854	277,854	286,009	281,756	0	(136)	0	(136)	0	281,620	0	(3,766)	(3,766)	3,682	11/01/2048
196480-EX-1	Colorado Housing and Fin-REVENUE BONDS		09/01/2024	CALL 100		249,445	249,445	249,445	249,445	0	0	0	0	0	249,445	0	0	0	3,268	01/01/2050
31371K-LU-3	Fannie Mae Pool-POOL #254239		12/01/2024	PAYDOWN		495	495	572	532	0	(37)	0	(37)	0	495	0	0	0	18	03/01/2032
31388T-QZ-9	Fannie Mae Pool-POOL #614372		12/01/2024	PAYDOWN		1,862	1,862	2,130	1,972	0	(110)	0	(110)	0	1,862	0	0	0	71	01/01/2032
3140HN-LY-6	Fannie Mae Pool-POOL #BK8442		12/01/2024	PAYDOWN		1,304,754	1,304,754	1,308,016	1,307,653	0	(2,899)	0	(2,899)	0	1,304,754	0	0	0	11,751	01/01/2051
3140JS-EP-0	Fannie Mae Pool-POOL #BN9141		12/01/2024	PAYDOWN		1,420,955	1,420,955	1,416,070	1,416,403	0	4,552	0	4,552	0	1,420,955	0	0	0	16,380	04/01/2051
3140JX-EE-4	Fannie Mae Pool-POOL #B02832		12/01/2024	PAYDOWN		24,120	24,120	24,632	24,491	0	(372)	0	(372)	0	24,120	0	0	0	432	09/01/2049
3140KO-EL-8	Fannie Mae Pool-POOL #B04638		12/01/2024	PAYDOWN		59,884	59,884	59,987	59,941	0	(57)	0	(57)	0	59,884	0	0	0	1,114	11/01/2049
3140K2-LK-8	Fannie Mae Pool-POOL #B06629		12/01/2024	PAYDOWN		1,917,521	1,917,521	1,926,809	1,925,816	0	(8,295)	0	(8,295)	0	1,917,521	0	0	0	17,127	04/01/2051
454624-U5-4	Indiana Bond Bank-REVENUE BONDS		01/15/2024	MATURITY		965,000	965,000	986,684	965,000	0	0	0	0	0	965,000	0	0	0	26,489	01/15/2024
45129W-KB-5	Idaho Housing & Finance -REVENUE BONDS		07/15/2024	CALL 100		380,000	380,000	478,754	413,922	0	(1,741)	0	(1,741)	0	412,181	0	(32,181)	(32,181)	24,122	07/15/2028
452227-JN-2	State of Illinois-REVENUE BONDS		06/15/2024	SINKING PAYMENT		2,002,000	2,002,000	2,081,040	2,049,578	0	(47,578)	0	(47,578)	0	2,002,000	0	0	0	46,246	06/15/2038
3140K2-PV-0	Fannie Mae Pool-POOL #B06735		12/01/2024	PAYDOWN		2,370,341	2,370,341	2,375,711	2,374,971	0	(4,630)	0	(4,630)	0	2,370,341	0	0	0	26,991	05/01/2051
3140QB-N5-3	Fannie Mae Pool-POOL #CA4011		12/01/2024	PAYDOWN		58,753	58,753	59,679	59,590	0	(838)	0	(838)	0	58,753	0	0	0	1,418	08/01/2049
3140QC-DT-0	Fannie Mae Pool-POOL #CA4613		12/01/2024	PAYDOWN		178,160	178,160	180,981	180,798	0	(2,638)	0	(2,638)	0	178,160	0	0	0	3,593	11/01/2049
3140QC-PN-0	Fannie Mae Pool-POOL #CA4928		12/01/2024	PAYDOWN		63,332	63,332	64,718	64,691	0	(1,358)	0	(1,358)	0	63,332	0	0	0	1,158	01/01/2050
3140QH-NJ-0	Fannie Mae Pool-POOL #CA9392		12/01/2024	PAYDOWN		3,380,213	3,380,213	3,412,959	3,409,023	0	(28,810)	0	(28,810)	0	3,380,213	0	0	0	41,098	03/01/2051
31416K-WP-9	Fannie Mae Pool-POOL #AA2453		12/01/2024	PAYDOWN		447	447	453	452	0	(5)	0	(5)	0	447	0	0	0	11	02/01/2039
31418D-JW-3	Fannie Mae Pool-POOL #MA3876		12/01/2024	PAYDOWN		115,935	115,935	116,225	116,128	0	(193)	0	(193)	0	115,935	0	0	0	2,477	12/01/2049
31418D-YS-5	Fannie Mae Pool-POOL #MA4320		12/01/2024	PAYDOWN		1,217,145	1,217,145	1,240,727	1,239,179	0	(22,033)	0	(22,033)	0	1,217,145	0	0	0	16,233	04/01/2051
45203L-CT-8	Illinois Housing Develop-REVENUE BONDS		08/28/2024	CALL 100		111,120	111,120	111,120	111,033	0	111,033	0	111,033	0	1,921	0	85	85	1,921	09/01/2034
41980U-AB-7	State of Hawaii Departme-REVENUE BONDS		07/01/2024	CALL 100		664,134	664,134	664,101	664,134	0	0	0	0	0	664,134	0	0	0	21,647	01/01/2031
34074M-LW-9	Florida Housing Finance -REVENUE BONDS		07/15/2024	CALL 100		785,000	785,000	785,000	785,000	0	0	0	0	0	785,000	0	0	0	25,752	07/01/2030
34074M-ND-9	Florida Housing Finance -REVENUE BONDS		09/01/2024	CALL 100		343,208	343,208	343,208	343,208	0	0	0	0	0	343,208	0	0	0	5,135	07/01/2037
34074M-PF-2	Florida Housing Finance -REVENUE BONDS		09/01/2024	CALL 100		204,260	204,260	204,260	204,265	0	(1)	0	(1)	0	204,264	0	(4)	(4)	2,372	01/01/2043
45528S-SR-3	Indianapolis Local Publi-REVENUE BONDS		01/15/2024	SINKING PAYMENT		1,648,093	1,648,093	2,021,749	1,805,436	0	(157,343)	0	(157,343)	0	1,648,093	0	0	0	57,410	01/15/2030
443730-FT-8	Hudson County Improvem-REVENUE BONDS		02/01/2024	MATURITY		180,000	180,000	188,856	180,068	0	(68)	0	(68)	0	180,000	0	0	0	5,976	02/01/2024
60416Q-FW-9	Minnesota Housing Financ-REVENUE BONDS		09/01/2024	CALL 100		145,615	145,615	141,975	142,806	0	27	0	27	0	142,833	0	2,783	2,783	1,514	09/01/2041
60416Q-GK-4	Minnesota Housing Financ-REVENUE BONDS		10/01/2024	CALL 100		109,440	109,440	109,440	109,440	0	0	0	0	0	109,440	0	0	0	1,950	08/01/2046
60416Q-GM-0	Minnesota Housing Financ-REVENUE BONDS		12/02/2024	CALL 100		37,498	37,498	32,698	33,200	0	70	0	70	0	33,270	0	4,228	4,228	537	10/01/2046
60416Q-HA-5	Minnesota Housing Financ-REVENUE BONDS		08/01/2024	CALL 100		233,580	233,580	233,580	233,580	0	0	0	0	0	233,580	0	0	0	3,073	03/01/2048
57419R-D6-9	Maryland Community Devel-REVENUE BONDS		08/29/2024	CALL 100		430,000	430,000	445,269	431,939	0	(385)	0	(385)	0	431,554	0	(1,554)	(1,554)	10,215	09/01/2047
60416Q-HE-7	Minnesota Housing Financ-REVENUE BONDS		08/01/2024	CALL 100		281,113	281,113	281,113	281,113	0	0	0	0	0	281,113	0	0	0	3,529	09/01/2048
60416Q-HG-2	Minnesota Housing Financ-REVENUE BONDS		08/01/2024	CALL 100		137,291	137,291	137,291	137,291	0	0	0	0	0	137,291	0	0	0	2,329	11/01/2048
60416Q-HJ-6	Minnesota Housing Financ-REVENUE BONDS		08/01/2024	CALL 100		182,142	182,142	182,142	182,142	0	0	0	0	0	182,142	0	0	0	2,556	01/01/2049
60416Q-HL-1	Minnesota Housing Financ-REVENUE BONDS		08/01/2024	CALL 100		158,851	158,851	158,851	158,851	0	0	0	0	0	158,851	0	0	0	2,843	03/01/2049

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	
										11	12	13	14	15							
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date	
60416Q-HN-7	Minnesota Housing Financ-REVENUE BONDS		12/02/2024	CALL 100		28,074	28,074	28,074	28,074	0	0	0	0	0	28,074	0	0	0	527	06/01/2049	
60416Q-HS-6	Minnesota Housing Financ-REVENUE BONDS		08/01/2024	CALL 100		247,722	247,722	247,722	247,722	0	0	0	0	0	247,722	0	0	0	(5,316)	12/01/2049	
575579-WX-1	Massachusetts Bay Transp-REVENUE BONDS		07/02/2024	CALL 101.949997		2,039,000	2,000,000	2,235,020	2,122,444	0	(6,924)	0	(6,924)	0	2,115,521	0	(76,521)	(76,521)	115,701	07/01/2031	
52518R-BE-5	Lehman Structured Securi-LSSC 2002-GE1 A		02/01/2024	PAYDOWN		13,501	13,501	12,889	60	400	13,041	0	13,441	0	13,501	0	0	0	0	07/01/2024	
567830-BU-7	County of Marin CA-REVENUE BONDS		08/01/2024	CALL 100		1,095,000	1,095,000	1,157,492	1,104,353	0	1,868	0	1,868	0	1,106,221	0	(11,221)	(11,221)	59,240	08/01/2026	
575832-R2-8	Massachusetts State Coll-REVENUE BONDS		05/01/2024	CALL 100		525,000	525,000	525,000	525,000	0	0	0	0	0	525,000	0	0	0	15,194	05/01/2025	
47770V-AY-6	JobsOhio Beverage System-REVENUE BONDS		01/01/2024	CALL 100		725,000	725,000	703,091	704,435	0	0	0	0	0	704,435	0	20,565	20,565	14,446	01/01/2029	
57586N-MW-8	Massachusetts Housing Fi-REVENUE BONDS		12/02/2024	CALL 100		35,000	35,000	35,000	35,000	0	0	0	0	0	35,000	0	0	0	1,114	12/01/2027	
57604P-5P-5	Massachusetts Clean Wate-REVENUE BONDS		08/01/2024	CALL 100		450,000	450,000	537,705	498,878	0	16,262	0	16,262	0	515,140	0	(65,140)	(65,140)	23,364	08/01/2040	
57604T-AA-4	Commonwealth of Massachu-REVENUE BONDS		06/01/2024	MATURITY		3,000,000	3,000,000	3,000,000	3,000,000	0	0	0	0	0	3,000,000	0	0	0	151,590	06/01/2024	
57583R-R9-8	Massachusetts Developmen-REVENUE BONDS		03/01/2024	CALL 100		170,000	170,000	196,775	180,264	0	(366)	0	(366)	0	179,899	0	(9,899)	(9,899)	4,982	03/01/2028	
59334H-FU-4	Miami-Dade County Housin-REVENUE BONDS		10/01/2024	CALL 100		97,741	97,741	97,741	97,741	0	0	0	0	0	97,741	0	0	0	1,188	11/01/2038	
604115-BA-2	Minnesota Public Facilit-REVENUE BONDS		01/19/2024	CALL 100.849998		3,030,542	3,005,000	3,260,215	3,078,264	0	(1,049)	0	(1,049)	0	3,077,215	0	(46,673)	(46,673)	59,036	03/01/2027	
604115-BB-0	Minnesota Public Facilit-REVENUE BONDS		01/19/2024	CALL 102.267998		3,211,215	3,140,000	3,419,617	3,238,788	0	(1,045)	0	(1,045)	0	3,237,742	0	(26,527)	(26,527)	63,193	03/01/2028	
60636Y-HL-8	Missouri Housing Develop-REVENUE BONDS		07/01/2024	VARIOUS		60,000	60,000	60,000	60,000	0	0	0	0	0	60,000	0	0	0	1,898	07/01/2028	
60636Y-MJ-7	Missouri Housing Develop-REVENUE BONDS		08/01/2024	CALL 100		19,314	19,314	19,314	19,314	0	0	0	0	0	19,314	0	0	0	354	01/01/2040	
60637B-ML-1	Missouri Housing Develop-REVENUE BONDS		08/01/2024	CALL 100		356,701	356,701	345,108	347,633	0	53	0	53	0	347,685	0	9,016	9,016	2,752	06/01/2044	
610763-PF-5	Monroe County Water Auth-REVENUE BONDS		08/01/2024	CALL 100		360,000	360,000	360,000	360,000	0	0	0	0	0	360,000	0	0	0	21,218	08/01/2025	
708797-AN-5	Pennsylvania Housing Fin-REVENUE BONDS		08/26/2024	CALL 100		85,371	85,371	85,371	85,327	0	1	0	1	0	85,328	0	42	42	1,513	08/01/2035	
677377-2P-7	Ohio Housing Finance Age-REVENUE BONDS		11/01/2024	CALL 100		850,000	850,000	850,000	850,000	0	0	0	0	0	850,000	0	0	0	12,032	11/01/2041	
67178K-AA-8	Oak Ridge Industrial Dev-REVENUE BONDS		12/15/2024	SINKING PAYMENT		92,485	92,485	86,770	89,206	0	3,279	0	3,279	0	92,485	0	0	0	4,028	12/15/2032	
64971Q-BH-9	New York City Transition-REVENUE BONDS		04/02/2024	CALL 100		9,450,000	9,450,000	9,324,599	9,375,156	0	1,731	0	1,731	0	9,376,887	0	73,113	73,113	168,459	11/01/2033	
64966T-FD-1	New York City Housing De-REVENUE BONDS		12/06/2024	CALL 100		27,000,000	27,000,000	27,573,696	27,029,599	0	(2,601)	0	(2,601)	0	27,026,998	0	(26,998)	(26,998)	1,146,589	02/15/2048	
64972B-R3-1	New York City Housing De-REVENUE BONDS		11/01/2024	SINKING PAYMENT		1,225,000	1,225,000	1,225,000	1,225,000	0	0	0	0	0	1,225,000	0	0	0	32,472	11/01/2025	
64972B-R4-9	New York City Housing De-REVENUE BONDS		11/01/2024	SINKING PAYMENT		1,805,000	1,805,000	1,810,415	1,807,062	0	(2,062)	0	(2,062)	0	1,805,000	0	0	0	51,314	05/01/2028	
64972C-BD-4	New York City Housing De-REVENUE BONDS		11/15/2024	CALL 100		878,274	878,274	878,274	878,274	0	0	0	0	0	878,274	0	0	0	19,753	06/15/2036	
64972C-M6-7	New York City Housing De-REVENUE BONDS		08/01/2024	CALL 100		193,318	193,318	193,318	193,539	0	(2)	0	(2)	0	193,537	0	(219)	(219)	2,515	10/01/2046	
641667-NZ-9	New Albany-Floyd County -REVENUE BONDS		07/15/2024	CALL 100		1,190,000	1,190,000	1,190,000	1,190,000	0	0	0	0	0	1,190,000	0	0	0	32,676	01/15/2027	
647200-2G-8	New Mexico Mortgage Fina-REVENUE BONDS		08/01/2024	CALL 100		157,942	157,942	157,942	157,942	0	0	0	0	0	157,942	0	0	0	1,642	08/01/2035	
647200-4S-0	New Mexico Mortgage Fina-REVENUE BONDS		10/01/2024	CALL 100		340,000	340,000	340,000	340,000	0	0	0	0	0	340,000	0	0	0	4,203	09/01/2040	
686087-MP-9	State of Oregon Housing -REVENUE BONDS		07/01/2024	CALL 100		565,000	565,000	565,000	565,000	0	0	0	0	0	565,000	0	0	0	16,334	07/01/2033	
880558-FA-4	Tennessee State School B-REVENUE BONDS		11/01/2024	CALL 100		2,000,000	2,000,000	2,000,000	2,000,000	0	0	0	0	0	2,000,000	0	0	0	80,140	11/01/2034	
783186-NJ-4	Rutgers The State Univer-REVENUE BONDS		05/01/2024	SINKING PAYMENT		363,346	363,346	438,409	392,705	0	(29,359)	0	(29,359)	0	363,346	0	0	0	9,698	05/01/2029	
88275F-NJ-9	Texas Department of Hous-REVENUE BONDS		12/03/2024	CALL 100		125,000	125,000	125,000	125,031	0	(8)	0	(8)	0	125,023	0	(23)	(23)	3,337	09/01/2039	
88275F-PA-1	Texas Department of Hous-REVENUE BONDS		08/01/2024	CALL 100		62,325	62,325	58,780	59,258	0	28	0	28	0	59,286	0	3,039	3,039	965	09/01/2047	
875287-LD-4	City of Tampa FL-REVENUE BONDS		10/01/2024	MATURITY		2,245,000	2,245,000	2,267,697	2,246,570	0	(1,570)	0	(1,570)	0	2,245,000	0	0	0	120,669	10/01/2024	
97689Q-EL-6	Wisconsin Housing & Econ-REVENUE BONDS		03/01/2024	CALL 100		265,000	265,000	262,352	262,664	0	28	0	28	0	262,691	0	2,309	2,309	4,638	09/01/2046	
92812Q-3U-9	Virginia Housing Develop-REVENUE BONDS		10/01/2024	MATURITY		2,000,000	2,000,000	2,000,000	2,000,000	0	0	0	0	0	2,000,000	0	0	0	64,360	10/01/2024	
92812U-Q3-5	Virginia Housing Develop-REVENUE BONDS		08/25/2024	CALL 100		203,366	203,366	203,366	203,237	0	1	0	1	0	203,238	0	128	128	4,357	12/25/2043	
92812U-Q4-3	Virginia Housing Develop-REVENUE BONDS		08/25/2024	CALL 100		518,975	518,975	518,975	518,975	0	0	0	0	0	518,975	0	0	0	8,546	10/25/2037	
92812U-Q6-8	Virginia Housing Develop-REVENUE BONDS		08/25/2024	CALL 100		211,462	211,462	211,462	211,423	0	0	0	0	0	211,424	0	39	39	3,136	06/25/2041	
93978X-EQ-9	Washington State Housing-REVENUE BONDS		11/01/2024	CALL 100		285,000	285,000	285,000	284,786	0	(59)	0	(59)	0	284,727	0	273	273	3,205	09/01/2040	
92812U-Q7-6	Virginia Housing Develop-REVENUE BONDS		08/25/2024	CALL 100		362,102	362,102	362,102	362,102	0	0	0	0	0	362,102	0	0	0	0	5,523	10/25/2049
93978X-ER-7	Washington State Housing-REVENUE BONDS		08/01/2024	CALL 100		500,000	500,000	497,750	500,000	0	0	0	0	0	500,000	0	0	0	5,119	05/01/2041	
92812U-Q8-4	Virginia Housing Develop-REVENUE BONDS		08/25/2024	CALL 100		685,470	685,470	685,470	685,470	0	0	0	0	0	685,470	0	0	0	9,584	12/25/2049	
92812U-XB-9	Virginia Housing Develop-REVENUE BONDS		04/25/2024	CALL 100		498,548	498,548	537,185	523,431	0	(354)	0	(354)	0	523,077	0	(24,529)	(24,529)	11,842	03/25/2038	
92813T-EE-6	Virginia Housing Develop-REVENUE BONDS		08/25/2024	CALL 100		407,718	407,718	407,718	407,528	0	2	0	2	0	407,531	0	187	187	6,921	08/25/2042	
913366-DG-2	Regents of the Universit-REVENUE BONDS		05/15/2024	CALL 100		335,000	335,000	416,388	367,783	0	(2,012)	0	(2,012)	0	365,771	0	(30,771)	(30,771)	10,817	05/15/2029	
91412G-GX-7	University of California-REVENUE BONDS		08/01/2024	VARIOUS		842,642	835,000	880,224	856,951	0	(7,364)	0	(7,364)	0	849,587	0	(6,945)	(6,945)	27,623	05/15/2031	

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
91743P-DD-4	Utah Housing Corp-REVENUE BONDS		..08/21/2024	CALL 100		..81,227	..81,227	..84,793	..84,506	0	..(33)	0	..(33)	0	..84,473	0	..(3,246)	..(3,246)	1,645	..02/21/2050
91743P-DE-2	Utah Housing Corp-REVENUE BONDS		..11/21/2024	CALL 100		..127,480	..127,480	..132,201	..131,837	0	..(42)	0	..(42)	0	..131,795	0	..(4,315)	..(4,315)	2,130	..03/21/2050
898365-AM-3	Trustees of Boston Colle-REVENUE BONDS		..07/01/2024	MATURITY		..1,220,000	..1,220,000	..1,220,000	..1,220,000	0	0	0	0	0	..1,220,000	0	0	0	49,032	..07/01/2024
940093-R4-1	Washington State Univer-REVENUE BONDS		..10/01/2024	CALL 100		..2,085,000	..2,085,000	..2,697,531	..2,171,720	0	..63,497	0	..63,497	0	..2,235,218	0	..(150,218)	..(150,218)	124,892	..10/01/2027
91476P-GP-7	University of Oklahoma-T-REVENUE BONDS		..07/01/2024	SINKING PAYMENT		..1,190,000	..1,190,000	..1,190,000	..1,190,000	0	0	0	0	0	..1,190,000	0	0	0	52,122	..07/01/2026
3133KP-Q2-7	Freddie Mac Pool-FR RA7673		..12/01/2024	PAYDOWN		..1,286,577	..1,286,577	..1,262,253	..1,262,978	0	..23,599	0	..23,599	0	..1,286,577	0	0	0	35,941	..07/01/2052
31400R-EJ-8	Fannie Mae Pool-POOL #CB5536		..12/01/2024	PAYDOWN		..1,432,861	..1,432,861	..1,449,205	..1,448,699	0	..(15,838)	0	..(15,838)	0	..1,432,861	0	0	0	42,807	..01/01/2053
3133KQ-VY-9	Freddie Mac Pool-FR RA8731		..12/01/2024	PAYDOWN		..2,200,582	..2,200,582	..2,158,519	..2,159,416	0	..41,167	0	..41,167	0	..2,200,582	0	0	0	63,878	..04/01/2053
31400M-4N-1	Fannie Mae Pool-POOL #CB2628		..12/01/2024	PAYDOWN		..805,394	..805,394	..682,068	..686,717	0	..118,678	0	..118,678	0	..805,394	0	0	0	10,901	..01/01/2052
3132DQ-B9-6	Freddie Mac Pool-FR SD2764		..12/01/2024	PAYDOWN		..1,528,639	..1,528,639	..1,502,366	..1,502,768	0	..25,871	0	..25,871	0	..1,528,639	0	0	0	39,558	..04/01/2053
3133KR-BN-3	Freddie Mac Pool-FR RA9045		..12/01/2024	PAYDOWN		..1,987,854	..1,987,854	..1,956,793	..1,957,215	0	..30,639	0	..30,639	0	..1,987,854	0	0	0	53,754	..05/01/2053
3132DQ-AG-1	Freddie Mac Pool-FR SD2707		..12/01/2024	PAYDOWN		..2,765,558	..2,765,558	..2,721,050	..2,721,255	0	..44,303	0	..44,303	0	..2,765,558	0	0	0	72,365	..04/01/2053
31400S-TZ-4	Fannie Mae Pool-POOL #CB6867		..12/01/2024	PAYDOWN		..3,469,335	..3,469,335	..3,354,084	..3,355,128	0	..114,206	0	..114,206	0	..3,469,335	0	0	0	106,604	..08/01/2053
31400S-QC-8	Fannie Mae Pool-POOL #CB6750		..12/01/2024	PAYDOWN		..3,894,328	..3,894,328	..3,766,983	..3,768,311	0	..126,016	0	..126,016	0	..3,894,328	0	0	0	120,829	..07/01/2053
3133KR-MX-9	Freddie Mac Pool-FR RA9374		..12/01/2024	PAYDOWN		..2,209,097	..2,209,097	..2,163,880	..2,164,585	0	..44,512	0	..44,512	0	..2,209,097	0	0	0	59,919	..07/01/2053
31400L-W6-1	Fannie Mae Pool-POOL #FS5168		..12/01/2024	PAYDOWN		..1,218,622	..1,218,621	..1,196,915	..1,197,280	0	..21,341	0	..21,341	0	..1,218,622	0	0	0	34,821	..06/01/2053
3133KS-C6-7	Freddie Mac Pool-FR RA9993		..12/01/2024	PAYDOWN		..3,051,992	..3,051,992	..2,999,536	..3,000,362	0	..51,630	0	..51,630	0	..3,051,992	0	0	0	102,264	..10/01/2053
31418E-T6-7	Fannie Mae Pool-POOL #MA5072		..12/01/2024	PAYDOWN		..2,039,727	..2,039,727	..2,024,907	..2,024,997	0	..14,730	0	..14,730	0	..2,039,727	0	0	0	57,434	..07/01/2053
31418E-XU-9	Fannie Mae Pool-POOL #MA5190		..12/01/2024	PAYDOWN		..1,971,458	..1,971,458	..1,959,059	..1,959,134	0	..12,323	0	..12,323	0	..1,971,458	0	0	0	58,522	..11/01/2053
54473E-NS-9	LOS ANGELES CNTY CA PUBL-REVENUE BONDS		..02/20/2024	DEUTSCHE BANK SECURI		..8,200,440	..6,750,000	..9,007,600	..8,464,783	0	..(9,119)	0	..(9,119)	0	..8,455,664	0	..(255,224)	..(255,224)	287,103	..08/01/2040
57589E-CS-8	Massachusetts Port Autho-REVENUE BONDS		..07/01/2024	CALL 100		..200,000	..200,000	..206,800	..0	0	..(184)	0	..(184)	0	..206,616	0	..(6,616)	..(6,616)	6,202	..07/01/2031
0909999999. Subtotal - Bonds - U.S. Special Revenues						214,757,677	211,043,718	228,372,564	220,637,235	400	214,398	0	214,798	0	220,708,144	0	(5,950,466)	(5,950,466)	8,167,488	XXX
46616M-AA-8	J G WENTWORTH RECV XXII-ASSET BKD NT 10-		..12/15/2024	PAYDOWN		..125,143	..125,143	..125,118	..124,721	0	..421	0	..421	0	..125,143	0	0	0	2,655	..12/15/2048
50543L-AA-0	LABRADOR AVIATION FINANC-SERIES 2016-1A		..12/15/2024	PAYDOWN		..1,126,431	..1,126,431	..1,104,575	..1,120,524	0	..5,907	0	..5,907	0	..1,126,431	0	0	0	25,881	..01/15/2042
46616Q-AA-9	321 HENDERSON RECEIVABLE-SERIES 2011-2A		..12/15/2024	PAYDOWN		..311,557	..311,557	..311,378	..311,388	0	..169	0	..169	0	..311,557	0	0	0	8,487	..09/15/2056
126650-BY-5	CVS PASS-THROUGH TRUST-SENIOR SECURED NO		..12/10/2024	SINKING PAYMENT		..44,305	..44,305	..52,359	..47,978	0	..(2,390)	0	..(2,390)	0	..44,305	0	0	0	1,496	..01/10/2034
345397-YG-2	FORD MOTOR CREDIT CO LLC-SENIOR UNSECURE		..01/09/2024	MATURITY		..1,000,000	..1,000,000	..1,000,000	..1,000,000	0	0	0	0	0	..1,000,000	0	0	0	19,050	..01/09/2024
46616V-AA-8	J G WENTWORTH RECV XXV-ASSET BKD NT 12-1		..12/15/2024	PAYDOWN		..170,712	..170,712	..170,674	..171,958	0	..(1,246)	0	..(1,246)	0	..170,712	0	0	0	3,600	..02/16/2065
869507-AA-1	SUTTONPARK STRUCTURED SE-SERIES 17-1A CL		..11/15/2024	PAYDOWN		..462,054	..462,054	..434,370	..192,836	0	..27,660	0	..27,660	0	..462,054	0	0	0	9,533	..01/15/2071
12479R-AE-7	CAPITAL AUTOMOTIVE REIT-SERIES 17-1A CLA		..12/31/2024	PAYDOWN		0	0	0	0	0	0	0	0	0	0	0	0	0	6,041	..04/15/2047
88606W-AA-0	Thunderbolt Aircraft Lea-SERIES 17-A CLA	D	..07/15/2024	PAYDOWN		..3,797,047	..3,797,047	..3,796,886	..3,797,774	0	..(727)	0	..(727)	0	..3,797,047	0	0	0	68,303	..05/17/2032
824348-AX-4	SHERWIN-WILLIAMS CO-SENIOR UNSECURED		..07/30/2024	MRB0010		..7,674,841	..7,409,000	..7,691,057	..7,679,105	0	..(4,264)	0	..(4,264)	0	..7,674,841	0	0	0	221,444	..06/01/2047
009088-AA-3	AIR CANADA 2015-2AA PTT-FIRST LIEN	A	..12/15/2024	SINKING PAYMENT		..337,549	..337,549	..337,549	..337,598	0	..(49)	0	..(49)	0	..337,549	0	0	0	9,394	..12/15/2027
24736X-AA-6	DELTA AIR LINES 2015-1AA-FIRST LIEN		..07/30/2024	VARIOUS		..4,310,440	..4,560,219	..4,560,219	..4,560,803	0	..(176)	0	..(176)	0	..4,560,627	0	..(250,187)	..(250,187)	140,784	..07/30/2027
009090-AA-9	AIR CANADA 2015-1A PTT-FIRST LIEN	A	..09/15/2024	SINKING PAYMENT		..977,043	..977,043	..977,043	..977,165	0	..(122)	0	..(122)	0	..977,043	0	0	0	17,827	..03/15/2027
90346W-AA-1	US AIRWAYS 2013-1A PTT-FIRST LIEN		..11/15/2024	SINKING PAYMENT		..247,721	..247,721	..247,102	..165	0	..165	0	..165	0	..247,721	0	0	0	7,349	..11/15/2025
24736Y-AA-4	Delta Air Lines 2015-1 C-DAL 3 7/8 07/30		..07/30/2024	SINKING PAYMENT		..153,411	..153,411	..153,411	..153,350	0	..60	0	..60	0	..153,411	0	0	0	4,562	..07/30/2027
009088-AB-1	Air Canada 2015-2 Class -2ND LIEN	A	..12/15/2024	SINKING PAYMENT		..216,986	..216,986	..216,987	..217,025	0	..(76)	0	..(76)	0	..216,986	0	0	0	6,886	..12/15/2027
009089-AA-1	AIR CANADA 2013-1A PTT-FIRST LIEN	A	..11/15/2024	SINKING PAYMENT		..143,083	..143,083	..143,083	..143,100	0	..(17)	0	..(17)	0	..143,083	0	0	0	4,506	..05/15/2025
000366-AA-2	ASSET 2017-1 TRUST-SERIES 17-1A CLASS A		..12/31/2024	VARIOUS		0	0	0	0	0	0	0	0	0	0	0	0	0	6,863	..05/16/2042
G2553Z-AH-5	CPUK FINANCE LTD-UNSECURED	B	..05/17/2024	CALL 100		..254,020	..254,020	..225,129	..245,848	0	..2,001	0	..2,001	..(13,834)	..234,015	..12,648	..7,354	..20,002	8,859	..08/28/2025
25755T-AH-3	DOMINOS PIZZA MASTER ISS-SERIES 17-1A CL		..01/25/2024	PAYDOWN		..57,500	..57,500	..57,477	..57,484	0	..16	0	..16	0	..57,500	0	0	0	592	..07/25/2047
46617T-AA-2	JGWPT XXXI LLC-ASSET BKD SERIES 2014-1 C		..12/15/2024	PAYDOWN		..393,086	..393,086	..392,865	..392,858	0	..229	0	..229	0	..393,086	0	0	0	9,583	..03/15/2063
90932P-AA-6	United Airlines 2014-1 C-SECURED NOTE		..10/11/2024	SINKING PAYMENT		..319,552	..319,552	..319,552	..319,606	0	..(54)	0	..(54)	0	..319,552	0	0	0	9,581	..04/11/2026
46618A-AA-2	JGWPT XXXII LLC-ASSET BKD SERIES 2014-2		..12/15/2024	PAYDOWN		..799,905	..799,905	..798,785	..798,892	0	..1,013	0	..1,013	0	..799,905	0	0	0	15,925	..01/17/2073
68003Z-AC-1	Old National Bancorp/IN-SENIOR UNSECURED		..08/15/2024	MATURITY		..19,000,000	..19,000,000	..19,000,000	..19,000,000	0	0	0	0	0	..19,000,000	0	0	0	783,750	..08/15/2024
06051G-FH-7	Bank of America Corp-SUBORDINATED NOTE		..08/26/2024	MATURITY		..13,000,000	..13,000,000	..12,990,510	..12,998,956	0	..1,044	0	..1,044	0	..13,000,000	0	0	0	546,000	..08/26/2024
02377A-AA-6	American Airlines 2014-1-SECURED NOTE		..10/01/2024	SINKING PAYMENT		..409,800	..409,800	..409,800	..409,861	0	..(61)	0	..(61)	0	..409,800	0	0	0	11,329	..10/01/2026
46625H-JY-7	JPMorgan Chase & Co-SUBORDINATED NOTE		..09/10/2024	MATURITY		..13,000,000	..13,000,000	..12,931,750	..12,994,082	0	..5,918	0	..5,918	0	..13,000,000	0	0	0	503,750	..09/10/2024
02665U-AA-3	AMERICAN HOMES 4 RENT-SERIES 2014-SFR2 C		..03/01/2024	PAYDOWN		..12,527,937	..12,527,937	..12,540,401	..12,524,999	0	..2,938	0	..2,938	0	..12,527,937	0	0	0	118,348	..10/01/2036

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
970630-AA-0	WILLIS ENGINE STRUCTURED-SERIES 17-A CLA		12/15/2024	PAYDOWN		490,185	490,185	489,767	489,952	0	233	0	233	0	490,185	0	0	0	12,249	08/15/2042
43739E-AP-2	HOMEBANC MORTGAGE TRUST-SERIES 2005-1 CL		12/26/2024	PAYDOWN		109,724	109,724	92,541	90,798	0	19,956	432	19,524	0	109,724	0	0	0	3,053	03/25/2035
45254N-JB-4	IMPAC CMB TRUST-SERIES 2004-4 CLASS 2A1		12/01/2024	PAYDOWN		118,095	118,095	113,626	113,787	0	4,303	0	4,303	0	118,095	0	0	0	3,220	09/01/2034
45254N-KX-4	IMPAC CMB TRUST-SERIES 2004-9 CLASS 1A1		12/26/2024	PAYDOWN		13,928	13,928	12,744	13,903	0	(19)	0	(19)	0	13,928	0	0	0	480	01/25/2035
20267U-AA-7	COMMONBOND STUDENT LOAN -SERIES 16-B CLA		12/25/2024	PAYDOWN		188,092	188,092	188,041	188,068	0	24	0	24	0	188,092	0	0	0	2,830	10/25/2040
466247-UG-6	JP MORGAN MORTGAGE TRUST-SERIES 2005-A6		12/01/2024	PAYDOWN		48,026	48,026	42,856	43,151	0	5,752	138	5,614	0	48,026	0	0	0	996	08/01/2035
035229-CQ-4	ANHEUSER-BUSCH COS LLC-DEBENTURE		08/23/2024	KEY CAPITAL MARKETS		7,324,905	6,741,000	8,128,904	7,934,701	0	(73,996)	0	(73,996)	0	7,860,705	0	(535,800)	(535,800)	446,769	01/15/2033
89655Y-AA-4	TRINITY RAIL LEASING L.P.-SERIES 2009-1A		05/30/2024	PAYDOWN		6,697,051	6,697,051	6,843,549	6,731,955	0	(34,904)	0	(34,904)	0	6,697,051	0	0	0	188,454	11/16/2039
92857W-AQ-3	VODAFONE GROUP PLC-UNSECURED BOND	D	03/14/2024	MORGAN		5,458,415	5,203,000	6,821,757	6,657,397	0	(18,600)	0	(18,600)	0	6,638,797	0	(1,180,382)	(1,180,382)	178,658	02/27/2037
92927X-AC-8	WAMU MORTGAGE PASS-THROU-SERIES 2007-HY6		12/01/2024	PAYDOWN		271,975	284,698	245,997	267,030	0	12,551	0	12,551	0	271,975	0	0	0	7,084	06/01/2037
933636-AL-6	WAMU MORTGAGE PASS-THROU-SERIES 2007-HY4		12/01/2024	PAYDOWN		331,396	354,608	339,770	353,946	0	(15,661)	0	(15,661)	0	331,396	0	0	0	16,810	11/01/2036
225401-AC-2	CREDIT SUISSE GROUP AG-SENIOR UNSECURED	D	12/11/2024	U B S SECURITIES		9,837,900	10,000,000	10,000,000	10,000,000	0	0	0	0	0	10,000,000	0	(162,100)	(162,100)	0	01/09/2028
38145G-AH-3	GOLDMAN SACHS GROUP INC/-SENIOR UNSECURE		06/11/2024	BARINGSLLC		7,665,977	8,000,000	7,726,960	7,909,176	0	13,441	0	13,441	0	7,922,618	0	(256,641)	(256,641)	159,444	11/16/2026
59748T-AA-7	MIDLAND COGEN VENTURE-SENIOR SECURED NOT		09/15/2024	SINKING PAYMENT		833,000	833,000	832,999	833,000	0	0	0	0	0	833,000	0	0	0	37,485	03/15/2025
61748H-FK-2	MORGAN STANLEY MORTGAGE -SERIES 2004-10A		12/01/2024	PAYDOWN		369,059	369,059	349,857	363,122	0	5,523	0	5,523	0	369,059	0	0	0	11,863	11/01/2034
12667F-VN-2	COUNTRYWIDE ALTERNATIVE -SERIES 2004-24C		12/01/2024	PAYDOWN		974,145	974,145	973,532	966,818	0	7,327	0	7,327	0	974,145	0	0	0	33,042	11/01/2034
17025R-AA-3	COUNTRYWIDE HOME LOANS-SERIES 2007-HY4 C		12/01/2024	PAYDOWN		139,324	137,420	99,322	105,884	0	31,856	0	31,856	0	139,324	0	0	0	2,425	09/01/2047
23248A-AJ-0	COUNTRYWIDE ASSET-BACKED-SERIES 2007-SEA		12/26/2024	PAYDOWN		43,064	43,064	26,700	55,974	0	(15,445)	0	(15,445)	0	43,064	0	0	0	718	05/25/2036
740816-AD-5	PRES & FELLOWS OF HARVAR-BOND		01/30/2024	SUNTRUST CAPITAL MAR		1,055,389	975,000	1,251,101	1,165,372	0	(794)	0	(794)	0	1,164,578	0	(109,190)	(109,190)	18,281	10/01/2038
75116C-ET-9	RESIDENTIAL ACCREDIT LOA-SERIES 2007-0S6		12/01/2024	PAYDOWN		9,323	14,997	8,971	10,141	0	2,753	0	2,753	0	9,323	0	0	0	465	04/01/2037
28932M-AA-3	Elm Road Generating Stat-SECURED NOTE		08/11/2024	SINKING PAYMENT		424,310	424,310	424,310	424,321	0	(11)	0	(11)	0	424,310	0	0	0	16,648	02/11/2030
761118-FM-5	RESIDENTIAL ACCREDIT LOA-SERIES 2005-0A9		12/01/2024	PAYDOWN		283,592	291,870	233,240	248,990	0	43,042	4,172	38,870	0	283,592	0	0	0	7,027	08/01/2035
855541-AC-2	SUNTRUST ADJUSTABLE RATE-SERIES 2007-S1		12/01/2024	PAYDOWN		124,150	124,150	102,722	106,662	0	21,061	3,373	17,688	0	124,150	0	0	0	4,647	01/01/2037
30259A-AA-0	FDF I Ltd-SERIES 17-3A CLASS A1	D	07/25/2024	PAYDOWN		6,962,682	6,962,682	6,962,682	6,962,682	0	0	0	0	0	6,962,682	0	0	0	207,985	01/25/2036
362341-SG-5	GSR MORTGAGE LOAN TRUST-SERIES 2005-AR6		12/01/2024	PAYDOWN		621,279	621,897	563,592	568,039	0	52,425	0	52,425	0	621,279	0	0	0	24,290	09/01/2035
36242D-BZ-5	GSR MORTGAGE LOAN TRUST-SERIES 2004-9 CL		12/01/2024	PAYDOWN		138,948	138,948	134,953	138,948	0	(137)	0	(137)	0	138,948	0	0	0	3,585	08/01/2034
362480-AD-7	GSC CAPITAL CORP MORTGAG-SERIES 2006-2 C		12/26/2024	PAYDOWN		134,568	133,122	102,968	137,398	0	(5,818)	0	(5,818)	0	134,568	0	0	0	3,730	05/25/2036
37935Z-AL-1	GLOBAL MARINE INC-NOTE		09/19/2024	WELLS FARGO		716,250	750,000	708,750	0	0	625	0	625	0	709,375	0	6,875	6,875	15,896	06/01/2028
126650-BQ-2	CYS HEALTH CORP PASS THRU CTF 30/360		12/10/2024	SINKING PAYMENT		421,714	421,714	495,181	395,441	0	26,274	0	26,274	0	421,714	0	0	0	16,055	01/10/2030
78403D-AH-3	SBA TOWER TRUST-SECURED NOTE		10/11/2024	PAYDOWN		28,303,000	28,303,000	28,624,968	28,388,195	0	(85,195)	0	(85,195)	0	28,303,000	0	0	0	912,536	10/15/2049
03330P-AA-7	ANCHORAGE CREDIT FUNDING-SERIES 18-5A CL	D	10/25/2024	PAYDOWN		5,658,312	5,658,312	5,658,312	5,658,312	0	0	0	0	0	5,658,312	0	0	0	176,911	04/25/2036
841215-AA-4	Southaven Combined Cycle-SECURED		08/15/2024	SINKING PAYMENT		262,816	262,816	262,816	262,822	0	(6)	0	(6)	0	262,816	0	0	0	7,605	08/15/2033
46618H-AA-7	J G WENTWORTH XXXIII LLC-ASSET BKD SER 2		12/15/2024	PAYDOWN		1,062,257	1,062,257	1,063,069	1,062,978	0	(722)	0	(722)	0	1,062,257	0	0	0	19,014	06/15/2077
77879R-AB-2	Rotor Engines Securitized-ROTOR 2011-1A A	D	11/15/2024	PAYDOWN		5,699,098	5,699,098	5,585,116	5,624,532	0	74,566	0	74,566	0	5,699,098	0	0	0	288,264	06/15/2046
2575T-AK-6	Domino's Pizza Master Is-DPABS 2018-1A A		01/25/2024	PAYDOWN		8,750	8,750	8,747	8,750	0	0	0	0	0	8,750	0	0	0	95	07/25/2048
20039F-AA-7	Cometa Energia SA de CV-SECURED	D	10/24/2024	VARIOUS		189,298	187,736	191,678	191,293	0	(725)	0	(725)	0	190,568	0	(1,270)	(1,270)	9,968	04/24/2035
543190-AA-0	LONGTRAIN LEASING III LL-SERIES 2015-1A		09/30/2024	PAYDOWN		8,347,420	8,347,420	8,076,965	8,331,210	0	16,209	0	16,209	0	8,347,420	0	0	0	196,930	01/15/2045
83416W-AB-9	SOLAR STAR FUNDING LLC-SECURED		12/30/2024	SINKING PAYMENT		338,785	338,785	338,785	338,758	0	27	0	27	0	338,785	0	0	0	18,188	06/30/2035
64932Z-AC-8	New York and Presbyteria-UNSECURED		02/20/2024	BOFAMILSEC		7,606,735	8,870,000	8,632,155	8,697,773	0	1,550	0	1,550	0	8,699,323	0	(1,092,588)	(1,092,588)	176,455	08/01/2036
46618L-AA-8	J G WENTWORTH XXXIV LLC-ASSET BKD SER 20		12/15/2024	PAYDOWN		1,197,977	1,197,977	1,186,855	1,194,739	0	3,238	0	3,238	0	1,197,977	0	0	0	21,665	09/15/2072
46625H-JX-9	JPMorgan Chase & Co-SR UNSECURED		05/13/2024	MATURITY		3,800,000	3,800,000	3,781,380	3,799,107	0	893	0	893	0	3,800,000	0	0	0	68,875	05/13/2024
756250-AD-1	Reckitt Benckiser Treasu-SENIOR UNSECURE	D	01/11/2024	JEFFERIESLLC		19,749,400	20,000,000	19,500,000	19,787,407	0	17,773	0	17,773	0	19,805,180	0	(55,780)	(55,780)	30,556	06/26/2024
82340*-AA-5	Shepherds Flat Funding T Trust A-1-A Cer		10/31/2024	SINKING PAYMENT		32,150	32,150	32,845	0	0	(695)	0	(695)	0	32,150	0	0	0	0	04/30/2032
86213C-AB-1	STORE MASTER FUNDING LLC-SERIES 2015-1A		12/20/2024	PAYDOWN		107,500	106,956	107,341	107,341	0	159	0	159	0	107,500	0	0	0	2,428	04/20/2045
740816-AG-8	PRES & FELLOWS OF HARVAR-UNSECURED		01/30/2024	WELLS FARGO		17,589,300	15,000,000	22,210,800	19,921,278	0	(20,599)	0	(20,599)	0	19,900,679	0	(2,311,379)	(2,311,379)	530,833	01/15/2039
63940V-AC-6	Navient Private Educatio-NAVSL 2018-CA B		12/15/2024	PAYDOWN		741,077	741,077	690,894	701,856	0	39,222	0	39,222	0	741,077	0	0	0	27,591	06/16/2042
335934-AL-9	First Quantum Minerals L-SENIOR UNSECURE	A	03/04/2024	CALL 100		4,600,000	4,600,000	4,766,750	4,650,989	0	(6,648)	0	(6,648)	0	4,644,341	0	(44,341)	(44,341)	148,542	04/01/2025
97064E-AA-6	Willis Engine Structured-WESTF 2018-A A		12/15/2024	PAYDOWN		347,922	347,922	347,905	347,925	0	(3)	0	(3)	0	347,922	0	0	0	8,958	09/15/2043
969457-BW-9	Williams Cos Inc/The-SENIOR UNSECURED		01/11/2024	MITSUBISHI UFJ SEC I		5,945,065	5,975,000	5,759,346	5,952,480	0	1,799	0	1,799	0	5,954,279	0	(9,214)	(9,214)	16,614	06/24/2024
85208N-AD-2	Sprint Spectrum Co LLC -FIRST LIEN		12/20/2024	SINKING PAYMENT		5,750,000	5,750,000	5,750,000	5,750,000	0	0	0	0	0	5,750,000	0	0	0	170,272	03/20/2025

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Iden-tification	Description	For-ign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con-sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor-tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con-tractual Maturity Date
46619R-AA-4	J G WENTWORTH XXVY LLC-ASSET BKOD NT 15- ...		.12/15/2024	PAYDOWN		633,671	633,671	634,646	634,424	0	(754)	0	(754)	0	633,671	0	0	0	12,827	.03/15/2058
84858D-AA-6	SPIRIT AIR 2015-1 PTT A-SECURED		.06/04/2024	VARIOUS		2,627,487	2,816,168	2,816,168	2,816,957	0	(105)	0	(105)	0	2,816,852	0	(189,365)	(189,365)	77,378	.04/01/2028
86212V-AE-4	Store Master Funding I-V-SERIES 18-1A CL		.12/20/2024	PAYDOWN		132,500	132,500	132,450	132,475	0	25	0	25	0	132,500	0	0	0	3,079	.10/20/2048
90932Q-AA-4	UNITED AIR 2014-2 A PASS THRU TR-1ST LIE		.09/03/2024	SINKING PAYMENT		216,893	216,893	216,893	216,944	0	(51)	0	(51)	0	216,893	0	0	0	6,096	.09/03/2026
17275G-AA-4	CIRUS-2018-1A A	D	.07/25/2024	PAYDOWN		3,621,219	3,621,219	3,621,219	3,621,219	0	0	0	0	0	3,621,219	0	0	0	173,819	.01/25/2037
25755T-AE-0	DOMINOS PIZZA MASTER ISS-SERIES 2015-1A		.01/25/2024	PAYDOWN		40,000	40,000	40,000	40,000	0	0	0	0	0	40,000	0	0	0	447	.10/25/2045
009098-A*-5	Air Cargo Logistics Ft W Lease-Collatera		.12/10/2024	SINKING PAYMENT		115,885	115,885	115,885	115,885	0	0	0	0	0	115,885	0	0	0	4,155	.11/10/2039
49255P-AA-1	Kestrel Aircraft Funding-KSTRL 2018-1A A	D	.11/15/2024	PAYDOWN		700,417	700,417	680,657	692,173	0	8,244	0	8,244	0	700,417	0	0	0	10,226	.12/15/2038
84858W-AA-4	Spirit Airlines Pass Thr-FIRST LIEN		.06/05/2024	VARIOUS		3,697,395	4,181,813	4,181,813	4,182,811	0	(132)	0	(132)	0	4,182,679	0	(485,284)	(485,284)	112,576	.02/15/2030
233046-AF-8	DNKN 2017-1A A2II		.11/20/2024	PAYDOWN		210,000	210,000	210,000	210,000	0	0	0	0	0	210,000	0	0	0	5,289	.11/20/2047
893647-BE-6	TransDigm Inc-SECURED		.03/28/2024	CALL 100		3,000,000	3,000,000	2,938,500	2,961,754	0	(4,395)	0	(4,395)	0	2,957,360	0	42,640	42,640	100,521	.03/15/2026
78449L-AC-2	SMB 2018-B A2B		.12/16/2024	PAYDOWN		270,658	270,658	265,795	3,644	0	3,644	0	3,644	0	270,658	0	0	0	9,026	.01/15/2037
590498-AA-6	Mesa Air Group, Inc. Class A Notes		.07/15/2024	SINKING PAYMENT		683,779	683,779	683,779	683,880	0	(101)	0	(101)	0	683,779	0	0	0	26,780	.07/15/2029
03073E-AL-9	AMERISOURCEBERGEN CORP-SR UNSECURED		.01/11/2024	JEFFERIESLLC		9,510,820	9,594,000	9,429,943	9,534,369	0	6,507	0	6,507	0	9,540,876	0	(30,056)	(30,056)	55,272	.05/15/2024
101137-AV-9	Boston Scientific Corp-SENIOR UNSECURED		.01/11/2024	WELLS FARGO		11,405,059	11,438,000	11,265,172	11,402,707	0	8,741	0	8,741	0	11,411,448	0	(6,389)	(6,389)	147,979	.03/01/2029
431282-AR-3	Highwoods Realty LP-SENIOR UNSECURED		.03/04/2024	GOLDMAN		6,327,090	7,000,000	6,980,190	6,989,731	0	447	0	447	0	6,989,178	0	(662,088)	(662,088)	115,150	.04/15/2029
38141E-C2-3	GOLDMAN SACHS GROUP INC-SR UNSECURED		.07/08/2024	MATURITY		22,000,000	22,000,000	21,944,760	21,996,650	0	3,350	0	3,350	0	22,000,000	0	0	0	847,000	.07/08/2024
90345W-AA-9	US AIRWAYS 2012-1A PTT-FIRST LIEN		.10/01/2024	VARIOUS		1,699,313	1,699,313	1,699,313	1,699,513	0	(200)	0	(200)	0	1,699,313	0	0	0	96,318	.10/01/2024
909319-AA-3	UNITED AIR 2013-1 A PTT-FIRST LIEN		.08/15/2024	SINKING PAYMENT		349,031	349,031	349,031	349,075	0	(44)	0	(44)	0	349,031	0	0	0	11,256	.08/15/2025
89657B-AA-2	Trinity Rail Leasing 201-TRL 2019-1A A		.12/17/2024	PAYDOWN		2,090,292	2,090,292	1,975,181	2,028,998	0	60,838	0	60,838	0	2,090,292	0	0	0	41,805	.04/17/2049
26078J-AE-0	DowDuPont Inc-SENIOR UNSECURED		.06/15/2024	CALL 105.6476497		19,973,745	18,906,000	25,091,854	24,262,782	0	(137,867)	0	(137,867)	0	24,124,915	0	(4,151,170)	(4,151,170)	586,606	.11/15/2038
316773-CH-1	Fifth Third Bancorp-SUBORDINATED		.03/12/2024	KEY CAPITAL MARKETS		3,605,400	3,000,000	3,001,380	3,002,198	0	369	0	369	0	3,002,567	0	602,833	602,833	132,688	.03/01/2038
459200-KB-6	International Business M-SENIOR UNSECURE		.12/11/2024	VARIOUS		17,920,155	20,159,000	22,781,626	22,506,750	0	(114,040)	0	(114,040)	0	22,392,710	0	(4,472,555)	(4,472,555)	899,343	.05/15/2039
12531W-BA-9	CFRE 2016-3 MTG TR PASS THRU CTF CL A-2		.08/01/2024	PAYDOWN		3,634,597	3,634,597	3,670,899	3,641,146	0	(6,549)	0	(6,549)	0	3,634,597	0	0	0	98,052	.01/01/2048
84861T-AD-0	Spirit Realty LP-SENIOR UNSECURED		.01/23/2024	EXCHANGE OFFER		12,053,204	11,921,000	12,131,408	12,054,939	0	(1,735)	0	(1,735)	0	12,053,204	0	0	0	249,016	.07/15/2029
19421U-AB-0	College Avenue Student L-CASL 2019-A A2		.12/25/2024	PAYDOWN		440,989	440,989	440,827	440,880	0	108	0	108	0	440,989	0	0	0	7,475	.12/28/2048
04686J-AA-9	Athene Holding Ltd-SENIOR UNSECURED		.11/01/2024	MORGAN		14,616,388	15,000,000	15,111,520	15,025,277	0	(14,278)	0	(14,278)	0	15,010,998	0	(394,611)	(394,611)	797,696	.01/12/2028
37960J-AA-6	Global Aircraft Leasing -SR UNSECURED	D	.08/28/2024	VARIOUS		2,603,500	2,603,500	2,227,600	2,363,546	0	138,915	0	138,915	0	2,599,960	0	3,540	3,540	76,622	.09/15/2024
41161P-TN-3	HARBORVIEW MORTGAGE LOAN-SERIES 2005-10		.12/19/2024	PAYDOWN		58,905	58,905	34,249	35,194	0	23,706	0	23,706	0	58,905	0	0	0	1,820	.11/19/2035
00432C-CW-9	ACCESS GROUP INC-SERIES 2005-B CLASS A3		.10/25/2024	PAYDOWN		258,649	258,649	238,604	254,823	0	3,826	0	3,826	0	258,649	0	0	0	7,900	.07/25/2035
46617A-AA-3	JGIPT XXVII LLC-ASSET BKD SERIES 2012-3		.12/16/2024	PAYDOWN		392,890	392,890	388,953	390,402	0	2,419	0	2,419	0	392,890	0	0	0	6,628	.09/15/2065
61746B-DZ-6	Morgan Stanley-SENIOR UNSECURED		.06/11/2024	BARINGSLLC		16,783,572	17,200,000	17,312,924	17,229,416	0	(6,410)	0	(6,410)	0	17,223,006	0	(439,434)	(439,434)	581,336	.01/27/2026
06051G-FU-8	BANK OF AMERICA CORP-SUBORDINATED		.06/11/2024	BARINGSLLC		6,885,116	7,000,000	7,024,720	7,006,332	0	(1,312)	0	(1,312)	0	7,005,020	0	(119,904)	(119,904)	240,547	.03/03/2026
456472-AB-5	Industrias Penoles SAB d-SENIOR UNSECURE	D	.09/05/2024	MERRILL LYNCH INTERN		992,245	1,039,000	1,047,832	1,045,899	0	(738)	0	(738)	0	1,045,161	0	(52,916)	(52,916)	42,400	.09/12/2029
525221-GM-3	LEHMAN XS TRUST-SERIES 2005-9N CLASS 1A1		.12/26/2024	PAYDOWN		805,726	805,726	687,133	667,687	0	(66,452)	0	(66,452)	0	805,726	0	0	0	17,174	.02/25/2036
55446M-AA-5	MACH 1 Cayman 2019-1 Ltd	D	.12/15/2024	PAYDOWN		766,975	766,975	766,950	766,969	0	6	0	6	0	766,975	0	0	0	13,677	.10/15/2039
D65035-AF-5	ProGroup AG-FIRST LIEN	B	.04/05/2024	CALL 100		866,880	866,880	713,426	812,688	0	6,610	0	6,610	(60,469)	758,830	43,705	64,345	108,050	13,283	.03/31/2026
12654Y-AJ-8	Century Plaza Towers 201-CPTS 2019-CPT D		.01/29/2024	BOFAILSEC		7,050,000	10,000,000	8,386,328	8,645,583	0	16,681	0	16,681	0	8,662,264	0	(1,612,264)	(1,612,264)	50,779	.11/01/2039
637071-AM-3	National Oilwell Varco I-SENIOR UNSECURE		.08/08/2024	VARIOUS		9,827,196	10,000,000	10,321,700	10,246,603	0	(23,880)	0	(23,880)	0	10,222,723	0	(395,527)	(395,527)	243,000	.12/01/2029
25755T-AL-4	Domino's Pizza Master Is-DPABS 2019-1A A		.01/25/2024	PAYDOWN		18,750	18,750	18,750	18,750	0	0	0	0	0	18,750	0	0	0	172	.10/25/2049
00652X-AB-4	Adani Transmission Ltd-FIRST LIEN	D	.11/21/2024	SINKING PAYMENT		66,720	66,720	60,835	61,353	0	5,367	0	5,367	0	66,720	0	0	0	2,127	.05/21/2036
071813-BP-3	Baxter International Inc-SENIOR UNSECURE		.08/23/2024	CITADELEQ		3,798,888	5,100,000	5,364,282	5,343,842	0	(4,928)	0	(4,928)	0	5,338,914	0	(1,540,026)	(1,540,026)	183,954	.08/15/2046
72703P-AC-7	Planet Fitness Master Is-2019-1A A2 FIXE		.12/05/2024	PAYDOWN		110,000	110,000	111,363	111,109	0	(1,109)	0	(1,109)	0	110,000	0	0	0	2,652	.12/05/2049
55342U-AL-8	MPT Operating Partnershi-SENIOR UNSECURE		.03/28/2024	GOLDMAN SACHS INTERN		285,077	378,840	256,847	305,089	0	3,703	0	3,703	(32,165)	276,627	28,924	(20,473)	8,451	11,579	.06/05/2028
85573L-AA-9	START Ireland-STARR 2019-1 A	D	.12/15/2024	PAYDOWN		381,196	381,196	381,179	381,193	0	3	0	3	0	381,196	0	0	0	8,437	.03/15/2044
87244C-AL-0	TIAA Churchill Middle Ma-CHMML 2016-1A B	D	.07/19/2024	PAYDOWN		7,200,000	7,200,000	7,200,000	7,200,000	0	0	0	0	0	7,200,000	0	0	0	423,988	.10/20/2030
46627M-CU-9	JP Morgan Alternative Lo-JPALT 2006-A1 2		.12/01/2024	PAYDOWN		29,601	32,591	32,573	21,459	0	22,418	0	22,418	0	29,601	0	0	0	634	.03/01/2036
38175D-AC-4	Golub Capital Partners C-GOCAP 2018-38A	D	.07/12/2024	PAYDOWN		20,000,000	20,000,000	20,000,000	20,000,000	0	0	0	0	0	20,000,000	0	0	0	1,110,714	.07/20/2030
38176K-AC-7	Golub Capital Partners C-GOCAP 2019-42A		.01/17/2024	PAYDOWN		7,000,000	7,000,000	7,000,000	7,000,000	0	0	0	0	0	7,000,000	0	0	0	132,862	.04/20/2031
43133J-AA-6	Hildene TruPS Securitiza-HITR 2019-2A A1	D	.02/22/2024	PAYDOWN		573,248	573,248	571,242	575,255	0	(2,006)	0	(2,006)	0	573,248	0	0	0	10,831	.05/22/2039
26884L-AH-2	EQT Corp-SENIOR UNSECURED		.06/14/2024	CALL 100.195904		10,019,590	10,000,000	9,844,375	9,961,287	0	15,626	0	15,626	0	9,976,913	0	42,678	42,678	532,535	.02/01/2025

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Iden-tification	Description	For-eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con-sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor-tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con-tractual Maturity Date
12510H-AF-7	Capital Automotive Reit-CAUTO 2020-1A A6		.12/15/2024	PAYDOWN		11,750	11,750	10,676	10,802	0	948	0	948	0	11,750	0	0	0	243	.02/15/2050
12510H-AC-4	Capital Automotive Reit-CAUTO 2020-1A A3		.12/15/2024	PAYDOWN		37,107	37,107	36,146	29,646	0	954	0	954	0	37,107	0	0	0	643	.02/15/2050
28416T-AA-3	Elara HGV Timeshare Issu-EHGV 2019-A A		.12/25/2024	PAYDOWN		818,829	818,829	767,140	775,383	0	43,446	0	43,446	0	818,829	0	0	0	10,291	.01/25/2034
29002B-AB-7	Elmwood QLO IV Ltd-ELMW4 2020-1A A	D.	.05/20/2024	PAYDOWN		15,000,000	15,000,000	14,626,250	14,592,436	0	407,564	0	407,564	0	15,000,000	0	0	0	619,518	.04/15/2033
745867-AP-6	PulteGroup Inc-SENIOR UNSECURED		.03/11/2024	BARCLAYS CAPITAL INC		10,648,900	10,000,000	12,655,500	12,269,883	0	(41,219)	0	(41,219)	0	12,228,664	0	(1,579,764)	(1,579,764)	208,958	.05/15/2033
48305Q-AE-3	Kaiser Foundation Hospit-UNSECURED		.01/30/2024	SOUTHWEST SEC.		6,017,976	8,100,000	8,093,844	8,094,128	0	(18)	0	(18)	0	8,094,110	0	(2,076,134)	(2,076,134)	66,137	.11/01/2049
05523R-AD-9	BAE Systems PLC-SENIOR UNSECURED	D.	.03/14/2024	BARCLAYS CAPITAL INC		9,048,100	10,000,000	10,394,600	10,306,433	0	(9,845)	0	(9,845)	0	10,296,588	0	(1,248,488)	(1,248,488)	144,500	.04/15/2030
84861T-AC-2	Spirit Realty LP-SENIOR UNSECURED		.01/23/2024	EXCHANGE OFFER		1,226,650	1,265,000	1,211,275	1,225,817	0	833	0	833	0	1,226,650	0	0	0	20,015	.09/15/2026
571903-BD-4	Marriott International I-SENIOR UNSECURE		.01/11/2024	IFN		5,029,350	5,000,000	4,999,800	5,000,000	0	0	0	0	0	5,000,000	0	29,350	29,350	59,896	.05/01/2025
172967-KU-4	Citigroup Inc-SUBORDINATED		.08/23/2024	CITIGROUP GLOBAL MAR		5,907,960	6,000,000	5,864,580	5,938,618	0	7,993	0	7,993	0	5,946,611	0	(38,651)	(38,651)	268,813	.07/25/2028
06654D-AC-1	Banner Health-UNSECURED		.01/30/2024	JP MORGAN SECURITIES		7,274,400	10,000,000	9,592,100	9,608,952	0	597	0	597	0	9,609,549	0	(2,335,149)	(2,335,149)	185,558	.01/01/2050
984851-AG-0	Yara International ASA-SENIOR UNSECURED	D.	.09/16/2024	VARIOUS		18,119,570	20,000,000	19,079,800	19,254,968	0	73,373	0	73,373	0	19,328,341	0	(1,208,771)	(1,208,771)	494,936	.06/04/2030
87268R-AA-2	TruPS Financials Note Se-TFINS 2019-2A A	D.	.11/29/2024	PAYDOWN		333,655	333,655	333,655	333,655	0	0	0	0	0	333,655	0	0	0	19,421	.02/28/2039
87244C-AJ-5	TIAA Churchill Middle Ma-CHML 2016-1A A	D.	.07/19/2024	PAYDOWN		13,296,377	13,296,377	13,296,377	13,296,377	0	0	0	0	0	13,296,377	0	0	0	617,867	.10/20/2030
46620J-AA-9	J.G. Wentworth XXXVIII L-LENDR 2017-1A A		.12/15/2024	PAYDOWN		311,769	311,769	311,529	311,522	0	247	0	247	0	311,769	0	0	0	6,442	.08/16/2060
78486Q-AE-1	SVB Financial Group-SENIOR UNSECURED		.11/08/2024	DIRECT		13,770,360	23,742,000	13,453,947	13,354,875	0	(71,404)	(27,668)	(43,736)	0	13,382,543	0	387,817	387,817	0	.06/05/2030
10922N-AG-8	Brighthouse Financial In-SENIOR UNSECURE		.09/16/2024	VARIOUS		12,883,960	12,277,000	13,403,025	13,182,234	0	(86,585)	0	(86,585)	0	13,095,649	0	(211,689)	(211,689)	542,602	.05/15/2030
04015K-AB-6	Ares Finance Co II LLC-SENIOR UNSECURED		.07/30/2024	MRB0010		2,521,626	2,600,000	2,495,064	2,514,837	0	6,790	0	6,790	0	2,521,626	0	0	0	52,813	.06/15/2030
37045X-CR-5	General Motors Financial-SENIOR UNSECURE		.01/11/2024	VARIOUS		6,999,850	7,000,000	6,985,020	6,999,670	0	309	0	309	0	6,999,978	0	(128)	(128)	177,508	.01/17/2024
38175J-AA-5	Golub Capital Partners C-GOCAP 2013-17A	D.	.10/25/2024	PAYDOWN		7,205,506	7,205,506	7,205,506	7,205,506	0	0	0	0	0	7,205,506	0	0	0	382,677	.10/25/2030
12530M-AB-1	CF Hippolyta Issuer LLC-SERIES 20-1 CLAS		.12/15/2024	PAYDOWN		43,667	43,667	43,646	43,650	0	17	0	17	0	43,667	0	0	0	477	.07/15/2060
89822P-AA-1	TruPS Financials Note Se-2020-1A A1	D.	.10/15/2024	PAYDOWN		912,640	912,640	912,640	912,640	0	0	0	0	0	912,640	0	0	0	18,726	.04/15/2040
92343V-EA-8	Verizon Communications I-SENIOR UNSECURE		.03/07/2024	GOLDMAN		10,496,750	11,000,000	10,968,980	10,979,433	0	404	0	404	0	10,979,837	0	(483,087)	(483,087)	290,125	.08/10/2033
293791-AF-6	Enterprise Products Oper-SENIOR UNSECURE		.08/26/2024	VARIOUS		11,466,850	10,000,000	13,224,000	12,741,884	0	(168,524)	0	(168,524)	0	12,573,360	0	(1,106,510)	(1,106,510)	678,906	.03/01/2033
83438J-AA-4	Soloso CDO 2007-1 Ltd-SERIES 2007-1A CLA	D.	.10/07/2024	PAYDOWN		2,054,371	2,054,371	1,892,590	1,917,641	0	136,730	0	136,730	0	2,054,371	0	0	0	43,467	.10/07/2037
89413G-AA-6	Trapeza Cdo Xii Ltd-SERIES 2007-12A CLAS	D.	.10/07/2024	PAYDOWN		1,484,031	1,484,031	1,233,600	1,275,915	0	208,116	0	208,116	0	1,484,031	0	0	0	45,432	.04/06/2042
008513-AA-1	Agree LP-SENIOR UNSECURED		.09/18/2024	MRB002A		1,728,912	1,900,000	1,885,788	1,888,646	0	1,134	0	1,134	0	1,889,780	0	(160,868)	(160,868)	53,263	.10/01/2030
65473P-AL-9	NiSource Inc-SENIOR UNSECURED		.03/07/2024	GOLDMAN		15,942,800	20,000,000	18,241,400	18,580,791	0	35,191	0	35,191	0	18,615,982	0	(2,673,182)	(2,673,182)	194,556	.02/15/2031
872480-AA-6	Tif Funding II LLC-SERIES 20-1A CLASS A		.12/20/2024	PAYDOWN		66,667	66,667	60,807	0	0	5,859	0	5,859	0	66,667	0	0	0	348	.08/20/2045
94985A-AA-7	Wells Fargo Mortgage Bac-WFMB5 2006-AR15		.12/01/2024	PAYDOWN		31,684	35,012	32,530	35,167	0	(1,592)	92	(1,684)	0	32,421	0	(737)	(737)	3,103	.10/01/2036
85236K-AD-4	Stack Infrastructure Iss-SIDC 2020-1A A2		.01/24/2024	DEUTSCHE BANK SECURI		4,157,100	4,470,000	4,090,700	4,262,953	0	8,388	0	8,388	0	4,271,341	0	(114,241)	(114,241)	7,286	.08/25/2045
89680H-AA-0	Triton Container Finance-TOF 2020-1A A		.12/20/2024	PAYDOWN		3,104,696	3,104,696	2,675,015	2,637,204	0	397,394	0	397,394	0	3,104,696	0	0	0	43,608	.09/20/2045
33830J-AA-3	Five Guys Funding LLC-GUYS 2017-1A A2		.12/31/2024	PAYDOWN		0	0	0	0	0	0	0	0	0	0	0	0	0	173,059	.07/25/2047
68655*-AA-2	TPG Partner Holdings, L. Senior Note Ser	C.	.09/30/2024	CA_CASH_CLOSE		4,147,429	4,147,429	4,147,429	4,147,429	0	0	0	0	0	4,147,429	0	0	0	123,179	.09/30/2030
87407R-AA-4	TAL Advantage VII LLC-TAL 2020-1A A		.12/20/2024	PAYDOWN		1,229,550	1,229,550	1,081,133	1,103,733	0	125,818	0	125,818	0	1,229,550	0	0	0	15,782	.09/20/2045
459506-AR-2	International Flavors & -SENIOR UNSECURE		.03/04/2024	BARCLAYS CAPITAL INC		13,941,000	20,000,000	20,525,445	20,472,734	0	(4,189)	0	(4,189)	0	20,468,545	0	(6,527,545)	(6,527,545)	201,527	.11/15/2040
41161P-UK-7	HarborView Mortgage Loan-SERIES 05-11 CL		.12/19/2024	PAYDOWN		93,915	93,915	66,236	103,980	0	0	0	0	0	93,915	0	0	0	2,165	.08/19/2045
34961P-AL-4	Fortress Credit BSL V Lt-FCBSL 2017-2A B	D.	.04/11/2024	PAYDOWN		16,000,000	16,000,000	16,000,000	16,000,000	0	0	0	0	0	16,000,000	0	0	0	217,840	.07/11/2030
88315L-AJ-7	Textainer Marine Contain-SERIES 2020-3A	D.	.12/20/2024	PAYDOWN		982,800	982,800	861,179	868,024	0	114,776	0	114,776	0	982,800	0	0	0	11,251	.09/20/2045
880451-AZ-2	Tennessee Gas Pipeline C-SENIOR UNSECURE		.09/16/2024	CITADELEQ		12,861,380	14,000,000	13,972,140	13,981,993	0	2,090	0	2,090	0	13,984,082	0	(1,122,702)	(1,122,702)	424,044	.03/01/2030
09748R-AA-6	Bojangles Issuer LLC-BOJA 2020-1A A2		.10/20/2024	PAYDOWN		7,860,000	7,860,000	7,860,000	7,860,000	0	0	0	0	0	7,860,000	0	0	0	299,522	.10/20/2050
12563L-AS-6	CLI Funding VI LLC-2020-3A A		.12/18/2024	PAYDOWN		1,100,000	1,100,000	1,008,699	1,014,777	0	85,223	0	85,223	0	1,100,000	0	0	0	12,359	.10/18/2045
04686J-AC-5	Athene Holding Ltd-SENIOR UNSECURED		.09/16/2024	VARIOUS		19,606,338	20,350,000	20,787,222	20,697,662	0	(29,974)	0	(29,974)	0	20,667,688	0	(1,061,351)	(1,061,351)	798,360	.01/15/2031
12327F-AA-5	Business Jet Securities -BJETS 2020-1A A		.04/15/2024	PAYDOWN		1,576,243	1,576,243	1,576,220	1,576,232	0	11	0	11	0	1,576,243	0	0	0	25,204	.11/15/2035
34960J-AW-5	Fortress Credit Opportun-FCO 2015-6A BTR	D.	.03/11/2024	MIZUHO SECURITIES		7,009,800	7,000,000	7,000,000	7,000,000	0	0	0	0	0	7,000,000	0	9,800	9,800	231,621	.07/10/2030
15674H-AA-3	Cerberus Loan Funding XX-SERIES 2020-2A	D.	.12/31/2024	PAYDOWN		0	0	0	0	0	0	0	0	0	0	0	0	0	60,024	.10/15/2032
59576#-AA-4	Middle Market Credit Fund II SPV, LLC-CL		.11/08/2024	CA_CASH_CLOSE		20,573,277	12,719,487	12,719,487	12,719,487	0	0	0	0	0	20,573,277	0	0	0	1,125,621	.11/03/2030
67181D-AB-7	Oak Street Investment Gr-SERIES 20-1A CL		.12/20/2024	PAYDOWN		186,471	186,471	186,393	186,414	0	57	0	57	0	186,471	0	0	0	1,622	.11/20/2050
1104AM-AA-4	BRITISH AIR 20-1 A PPT-FIRST LIEN		.11/15/2024	SINKING PAYMENT		147,947	147,947	147,947	147,928	0	20	0	20	0	147,947	0	0	0	3,930	.11/15/2032
30260L-AA-3	FEL Energy VI Sarl-SECURED	D.	.12/01/2024	SINKING PAYMENT		42,373	42,373	38,136	38,350	0	4,023	0	4,023	0	42,373	0	0	0	1,525	.12/01/2040
81761T-AC-9	ServiceMaster Funding LL-SERIES 20-1 CLA		.04/30/2024	PAYDOWN		25,000	25,000	21,938	22,972	0	2,028	0	2,028	0	25,000	0	0	0	255	.01/30/2051

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
90352W-AD-6	ITE Rail Fund Levered LP-SERIES 21-1A CL		12/30/2024	PAYDOWN		808,238	808,238	786,146	787,707	0	20,531	0	20,531	0	808,238	0	0	0	10,303	02/28/2051
83012A-AA-7	Sixth Street Specialty L-SENIOR UNSECURE		06/11/2024	BARINGSLLC		11,582,762	12,500,000	12,408,500	12,455,330	0	7,384	0	7,384	0	12,462,714	0	(879,952)	(879,952)	269,097	08/01/2026
19424K-AB-9	College Avenue Student L-CASL 2021-A A2		11/25/2024	PAYDOWN		812,990	812,990	812,828	812,860	0	130	0	130	0	812,990	0	0	0	6,377	07/25/2051
36321P-AE-0	Galaxy Pipeline Assets B-SECURED	D	09/30/2024	SINKING PAYMENT		38,487	38,487	34,854	35,328	0	3,159	0	3,159	0	38,487	0	0	0	838	09/30/2040
38173M-AB-8	Golub Capital BDC Inc-SENIOR UNSECURED		06/11/2024	BARINGSLLC		9,201,085	10,000,000	9,969,900	9,984,967	0	2,400	0	2,400	0	9,987,367	0	(786,282)	(786,282)	199,306	08/24/2026
84861T-AJ-7	Spirit Realty LP-SENIOR UNSECURED		01/23/2024	EXCHANGE OFFER		28,583,951	31,595,000	28,067,040	28,564,502	0	19,448	0	19,448	0	28,583,951	0	0	0	374,401	02/15/2032
28166L-AA-2	EDvestinU Private Educat-EDVES 2021-A A		12/25/2024	PAYDOWN		885,593	885,593	773,890	776,763	0	108,830	0	108,830	0	885,593	0	0	0	8,692	11/25/2045
79588T-AD-2	Sammons Financial Group -SENIOR UNSECURE		09/18/2024	MRB002A		12,009,241	13,730,000	12,977,223	13,073,757	0	52,979	0	52,979	0	13,126,735	0	(1,117,495)	(1,117,495)	425,458	04/16/2031
548661-EA-1	Lowe's Cos Inc-SENIOR UNSECURED		03/14/2024	BARCLAYS CAPITAL INC		8,516,400	10,000,000	9,944,000	9,954,620	0	1,371	0	1,371	0	9,955,991	0	(1,439,591)	(1,439,591)	121,771	04/01/2044
071734-AK-3	Bausch Health Cos Inc-SENIOR UNSECURED	A	12/31/2024	VARIOUS		3,462,300	9,000,000	3,462,300	3,462,300	0	0	0	0	0	3,462,300	0	0	0	0	02/15/2029
98920M-AA-0	ZAXBY'S FUNDING LLC-ZAXBY 2021-1A A2		10/30/2024	PAYDOWN		180,010	180,010	163,890	167,294	0	12,716	0	12,716	0	180,010	0	0	0	3,643	07/30/2051
05178T-AA-9	Aurora Military Housing -SECURED		07/15/2024	SINKING PAYMENT		25,499	25,499	25,499	25,501	0	(2)	0	(2)	0	25,499	0	0	0	1,183	07/15/2034
038923-AJ-7	Arbor Realty Trust Inc-SENIOR UNSECURED		04/01/2024	MATURITY		7,500,000	7,500,000	7,500,000	7,500,000	0	0	0	0	0	7,500,000	0	0	0	215,625	04/01/2024
038413-AA-8	Aqua Finance Trust 2020-AQFIT 2020-AA A		12/17/2024	PAYDOWN		742,341	742,341	742,204	742,208	0	133	0	133	0	742,341	0	0	0	6,333	07/17/2046
04544P-AD-1	Asset Backed Securities -ABSHE 2006-HE5		03/25/2024	PAYDOWN		233,975	233,975	152,039	233,973	0	2	0	2	0	233,975	0	0	0	4,156	07/25/2036
03665L-AA-1	Antares CLO 2018-3 LTD-ANTR 2018-3A A1	D	08/22/2024	PAYDOWN		8,428,743	8,428,743	8,428,743	8,429,319	0	(576)	0	(576)	0	8,428,743	0	0	0	445,017	01/20/2031
03839W-AA-9	Aquarion Co-SENIOR UNSECURED		08/15/2024	MATURITY		12,000,000	12,000,000	11,949,360	11,995,995	0	4,005	0	4,005	0	12,000,000	0	0	0	480,000	08/15/2024
02660T-AA-9	American Home Mortgage I-AH 2004-1 4A		12/01/2024	PAYDOWN		173,552	173,552	171,600	173,552	0	(68)	0	(68)	0	173,552	0	0	0	4,304	03/12/2031
038370-AA-0	Aqua Finance Trust 2019-AQFIT 2019-A A		12/15/2024	PAYDOWN		252,695	252,695	252,656	252,643	0	52	0	52	0	252,695	0	0	0	4,200	07/16/2040
00703Q-AD-4	Adjustable Rate Mortgage-ARMT 2006-3 4A1		12/26/2024	PAYDOWN		395,957	395,957	203,543	154,470	0	272,587	9,779	262,808	0	395,957	0	0	0	6,045	08/25/2036
007036-GS-9	Adjustable Rate Mortgage-ARMT 2005-2 2A1		12/01/2024	PAYDOWN		83,929	83,929	78,526	81,464	0	1,977	0	1,977	0	83,929	0	0	0	3,365	06/01/2035
02146T-AL-1	Alternative Loan Trust 2-CWALT 2008-24C8		12/01/2024	PAYDOWN		28,158	27,669	14,108	14,380	0	13,487	0	13,487	0	28,158	0	0	0	515	08/01/2036
000844-AA-8	ABPCI Direct Lending Fun-ABPCI 2020-8A A	D	06/05/2024	PAYDOWN		28,000,000	28,000,000	28,030,000	28,000,000	0	0	0	0	0	28,000,000	0	0	0	1,325,624	04/20/2032
00846U-AN-1	Agilent Technologies Inc-SENIOR UNSECURE		03/11/2024	BARCLAYS CAPITAL INC		8,439,900	10,000,000	9,982,200	9,986,794	0	489	0	489	0	9,987,283	0	(1,547,383)	(1,547,383)	115,639	03/12/2031
00077B-4W-0	ABN Amro Mortgage Corp-AMAC 2002-9 A30		12/01/2024	PAYDOWN		865	865	872	843	0	22	0	22	0	865	0	0	0	28	12/01/2032
000780-NL-6	ABN Amro Mortgage Corp-AMAC 2003-12 2A		12/01/2024	PAYDOWN		343	343	348	337	0	6	0	6	0	343	0	0	0	10	12/01/2033
03235T-AA-5	Amur Finance VI LLC-ACEF 2014-1A A		12/20/2024	VARIOUS		2,277,283	2,277,283	91,091	273,274	2,004,009	2,180,317	2,180,317	2,004,009	0	2,277,283	0	0	0	205,947	12/20/2024
00217L-AC-6	AREIT 2019-CRE3 Trust-AREIT 2019-CRE3 AS		04/15/2024	PAYDOWN		8,726,565	8,726,565	8,726,565	8,726,565	0	0	0	0	0	8,726,565	0	0	0	271,134	09/14/2036
000825-AA-7	ACAM 2019-FL1 Ltd-ACAM 2019-FL1 A	D	04/16/2024	PAYDOWN		256,673	256,673	256,673	256,673	0	0	0	0	0	256,673	0	0	0	5,538	11/17/2034
00436W-AA-3	Accelerated Assets 2018-AALLC 2018-1 A		12/02/2024	PAYDOWN		553,966	553,966	553,826	553,898	0	67	0	67	0	553,966	0	0	0	11,483	12/02/2033
00164T-AA-6	AMC East Communities LLC-SECURED		07/15/2024	SINKING PAYMENT		578,571	578,571	606,842	584,113	0	(5,543)	0	(5,543)	0	578,571	0	0	0	26,832	01/15/2028
00176B-AH-6	AMMC CLO XIII Ltd-AMMC 2013-13A B2L1	D	05/01/2024	STIFEL NICOLAUS		256,452	258,000	251,550	250,419	0	(1,093)	0	(1,093)	0	249,326	0	7,126	7,126	16,593	07/24/2029
00176B-AK-9	AMMC CLO XIII Ltd-AMMC 2013-13A B2L2	D	05/01/2024	STIFEL NICOLAUS		257,226	258,000	258,000	253,153	0	(1,330)	0	(1,330)	0	251,823	0	5,403	5,403	17,295	07/24/2029
03765H-AA-9	Apollo Management Holdin-SENIOR UNSECURE		05/30/2024	MATURITY		12,742,000	12,742,000	12,687,583	12,738,942	0	3,058	0	3,058	0	12,742,000	0	0	0	254,840	05/30/2024
00176B-AM-5	AMMC CLO XIII Ltd-AMMC 2013-13A B3LR	D	07/31/2024	BOFAILSEC		87,788	283,186	2,359	(35,475)	0	29,721	0	29,721	0	19,250	0	68,538	68,538	28,587	07/24/2029
00176D-AN-9	AMMC CLO XIII Ltd-AMMC 2013-13A B1LR	D	07/24/2024	PAYDOWN		601,000	601,000	601,000	601,000	0	0	0	0	0	601,000	0	0	0	42,122	07/24/2029
007036-SE-7	Adjustable Rate Mortgage-ARMT 2005-9 5A1		12/26/2024	PAYDOWN		151,960	151,960	106,005	189,252	0	(41,349)	0	(41,349)	0	151,960	0	0	0	3,355	11/25/2035
00205G-AB-3	APT Pipelines Ltd-SENIOR UNSECURED	D	09/16/2024	CA CASH CLOSE		6,975,010	7,000,000	6,992,650	6,998,809	0	786	0	786	0	6,999,994	0	(24,584)	(24,584)	288,283	03/23/2025
01450B-AA-6	ALESKO Preferred Funding-ALESC 15A A1		11/25/2024	PAYDOWN		17,354,534	17,354,534	15,883,947	16,766,880	0	587,653	0	587,653	0	17,354,534	0	0	0	1,064,244	12/23/2037
00178L-AD-1	AMMC CLO 21 LTD-AMMC 2017-21A C	D	03/11/2024	RBC CAPITAL MARKETS		873,452	872,900	872,900	872,900	0	0	0	0	0	872,900	0	552	552	24,721	11/02/2030
02665U-AB-1	American Homes 4 Rent 20-AH4R 2014-SFR2		03/01/2024	PAYDOWN		7,000,000	7,000,000	7,093,796	7,003,551	0	(3,551)	0	(3,551)	0	7,000,000	0	0	0	75,075	10/01/2036
01448Q-AA-8	ALESKO Preferred Funding-ALESC 4A A1	D	10/30/2024	PAYDOWN		3,579,244	3,579,244	3,365,734	3,520,338	0	58,907	0	58,907	0	3,579,244	0	0	0	56,179	07/30/2034
01448T-AA-2	ALESKO Preferred Funding-ALESC 5A A1	D	12/23/2024	PAYDOWN		1,536,139	1,536,139	1,312,879	1,631,604	0	(95,464)	0	(95,464)	0	1,536,139	0	0	0	62,826	12/23/2034
01448T-AB-0	ALESKO Preferred Funding-ALESC 5A A2	D	12/23/2024	PAYDOWN		151,966	151,966	108,598	127,403	0	24,563	0	24,563	0	151,966	0	0	0	11,808	12/23/2034
01448X-AA-3	ALESKO Preferred Funding-ALESC 6A A1	D	12/23/2024	PAYDOWN		2,662,062	2,662,062	2,402,027	2,454,100	0	207,962	0	207,962	0	2,662,062	0	0	0	193,612	03/23/2035
01449S-AB-1	ALESKO Preferred Funding-ALESC 13A A1	D	03/25/2024	PAYDOWN		541,327	541,327	416,822	438,593	0	69,133	0	69,133	0	541,327	0	0	0	16,912	09/23/2037
014498-AB-5	ALESKO Preferred Funding-ALESC 14A A1	D	06/24/2024	PAYDOWN		5,901,650	5,901,650	4,187,685	4,818,924	0	1,082,726	0	1,082,726	0	5,901,650	0	0	0	154,659	09/23/2037
01449C-AB-8	ALESKO Preferred Funding-ALESC 8A A1A	D	12/23/2024	PAYDOWN		158,422	158,422	120,995	144,914	0	(257,924)	0	(257,924)	0	158,422	0	0	0	10,207	12/23/2035
01449C-AA-6	ALESKO Preferred Funding-ALESC 8A A1B	D	12/23/2024	PAYDOWN		272,288	272,288	216,190	218,787	0	24,039	0	24,039	0	272,288	0	0	0	17,572	12/23/2035
01449T-AA-1	ALESKO Preferred Funding-ALESC 9A A1	D	12/23/2024	PAYDOWN		1,890,541	1,890,541	1,380,111	1,469,253	0	421,289	0	421,289	0	1,890,541	0	0	0	122,485	06/23/2036
01450A-AA-8	ALESKO Preferred Funding-ALESC 11A A1A	D	09/23/2024	PAYDOWN		1,787,443	1,787,443	1,345,051	1,390,550	0	394,080	0	394,080	0	1,787,443	0	0	0	64,160	12/23/2036
01449W-AA-4	ALESKO Preferred Funding-ALESC 10A A1	D	09/23/2024	PAYDOWN		1,738,090	1,738,090	1,546,279	1,654,134	0	83,956	0	83,956	0	1,738,090	0	0	0	104,719	09/23/2036

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identi- fication	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
017480-AZ-9	Allegiance Bank/Texas-SUBORDINATED		12/15/2024	CALL 100		8,000,000	8,000,000	8,000,000	8,000,000	0	0	0	0	0	8,000,000	0	0	0	692,920	12/15/2027
02146P-AF-2	Alternative Loan Trust 2-CWALT 2006-HY12		12/01/2024	PAYDOWN		251,143	251,143	161,097	197,153	0	51,387	0	51,387	0	251,143	0	0	0	5,477	08/01/2036
02150V-AA-3	Alternative Loan Trust 2-CWALT 2007-HY7C		12/26/2024	PAYDOWN		41,640	39,873	32,218	38,637	0	(8,442)	0	(8,442)	0	41,640	0	0	0	1,572	08/25/2037
02152A-AS-8	Alternative Loan Trust 2-CWALT 2007-16CB		12/25/2024	PAYDOWN		120,953	124,692	75,926	78,156	0	27,980	(27,722)	55,702	0	120,953	0	0	0	3,160	08/25/2037
02660T-DH-3	American Home Mortgage I-AHM 2005-1 6A		12/01/2024	PAYDOWN		87,701	87,701	76,409	98,784	0	(12,322)	0	(12,322)	0	87,701	0	0	0	2,741	06/01/2045
02660T-EK-5	American Home Mortgage I-AHM 2005-2 1A1		12/26/2024	PAYDOWN		195,027	195,027	182,533	189,193	0	3,169	0	3,169	0	195,027	0	0	0	5,308	09/25/2045
02660V-AE-8	American Home Mortgage A-AHMA 2005-1 3A1		12/26/2024	PAYDOWN		6,155	6,155	5,020	5,973	0	140	0	140	0	6,155	0	0	0	116	11/25/2035
02665X-AB-5	American Homes 4 Rent 20-AH4R 2014-SFR3		09/01/2024	PAYDOWN		14,600,000	14,600,000	14,972,121	14,634,698	0	(34,698)	0	(34,698)	0	14,600,000	0	0	0	460,009	12/01/2036
02665X-AC-3	American Homes 4 Rent 20-AH4R 2014-SFR3		09/01/2024	PAYDOWN		5,600,000	5,600,000	5,599,651	5,597,902	0	2,098	0	2,098	0	5,600,000	0	0	0	193,032	12/01/2036
02666B-AG-1	American Homes 4 Rent 20-AH4R 2015-SFR2		12/01/2024	PAYDOWN		0	0	0	0	3	0	0	3	0	0	0	0	0	0	10/01/2052
02660L-AA-8	American Home Mortgage A-AHMA 2006-4 1A1		12/26/2024	PAYDOWN		20,711	20,711	15,533	7,504	0	13,852	0	13,852	0	20,711	0	0	0	354	10/25/2046
026929-AA-7	American Home Mortgage I-AHM 2006-3 11A1		12/26/2024	PAYDOWN		81,310	81,310	62,254	65,679	0	11,612	0	11,612	0	81,310	0	0	0	2,534	12/25/2046
03073E-AT-2	AmerisourceBergen Corp-SENIOR UNSECURED		03/11/2024	BARCLAYS CAPITAL INC		13,779,840	16,000,000	15,698,860	15,756,091	0	6,456	0	6,456	0	15,762,547	(1,982,707)	(1,982,707)	213,600	03/15/2031	
12510H-AB-6	CARS-DB4 LP-CAUTO 2020-1A A2		12/15/2024	PAYDOWN		28,473	28,473	28,469	28,470	0	4	0	4	0	28,473	0	0	0	468	02/15/2050
118230-AN-1	Buckeye Partners LP-SENIOR UNSECURED		10/15/2024	MATURITY		4,421,000	4,421,000	4,131,979	4,387,912	0	33,088	0	33,088	0	4,421,000	0	0	0	192,314	10/15/2024
125431-AH-9	CHL Mortgage Pass-Through-CIHL 2006-HYB4		12/01/2024	PAYDOWN		79,446	79,130	77,402	54,000	0	25,674	0	25,674	0	79,446	0	0	0	1,899	06/01/2036
12640W-AC-4	CSMC Series 2008-3R-CSMC 2008-3R 1A2		12/01/2024	PAYDOWN		105,909	107,267	98,357	101,131	0	5,819	0	5,819	0	105,909	0	0	0	2,422	07/01/2037
12593F-BC-7	COMM 2015-LC21 Mortgage -COMM 2015-LC21		11/01/2024	PAYDOWN		1,719,878	1,719,878	1,731,097	1,721,648	0	(1,771)	0	(1,771)	0	1,719,878	0	0	0	30,294	07/01/2048
12632Q-AW-3	COMM 2014-CORE18 Mortgag-COMM 2014-CR18		02/01/2024	PAYDOWN		3,090,945	3,090,945	3,121,720	3,091,825	0	(880)	0	(880)	0	3,090,945	0	0	0	27,155	07/01/2047
10901A-AA-4	Brigade Debt Funding II -BDF 2018-2A A	D	10/25/2024	PAYDOWN		2,765,711	2,765,711	2,765,711	2,765,711	0	0	0	0	0	2,765,711	0	0	0	117,633	10/25/2035
12544B-AE-3	CHL Mortgage Pass-Through-CIHL 2007-HY5 3		12/01/2024	PAYDOWN		52,005	52,005	40,475	45,726	0	6,144	0	6,144	0	52,005	0	0	0	1,499	09/01/2037
12632Q-AX-1	COMM 2014-CORE18 Mortgag-COMM 2014-CR18		06/01/2024	PAYDOWN		5,000,000	5,000,000	5,149,633	5,005,469	0	(5,469)	0	(5,469)	0	5,000,000	0	0	0	92,952	07/01/2047
12564K-AA-6	CIM Trust 2021-J1-CIM 2021-J1 A1		12/01/2024	PAYDOWN		790,477	790,477	811,227	809,805	0	(19,273)	0	(19,273)	0	790,477	0	0	0	10,978	03/01/2051
09630A-AE-6	BlueMountain CLO 2018-3 -BLUEM 2018-3A A	D	03/21/2024	PAYDOWN		18,000,000	18,000,000	18,000,000	18,000,000	0	0	0	0	0	18,000,000	0	0	0	519,448	10/25/2030
09628V-AN-4	BlueMountain CLO 2016-3 -BLUEM 2016-3A A	D	04/02/2024	PAYDOWN		8,000,000	8,000,000	8,000,000	8,000,000	0	0	0	0	0	8,000,000	0	0	0	218,284	11/15/2030
09259E-AB-4	BlackRock TOP Capital Co-SENIOR UNSECURE		06/11/2024	BARINGSLLC		9,409,982	10,000,000	9,959,400	9,982,166	0	3,584	0	3,584	0	9,985,750	(575,768)	(575,768)	239,083	02/09/2026	
12635R-AW-8	CSAIL 2015-C4 Commercial-CSAIL 2015-C4 A		06/01/2024	PAYDOWN		115,511	115,511	120,114	(745)	0	115,511	0	115,511	0	115,511	0	0	0	1,739	11/01/2048
07386H-QZ-7	Bear Stearns ALT-A Trust-BALTA 2005-2 2A		12/01/2024	PAYDOWN		206,569	204,394	175,210	169,869	0	35,599	0	35,599	0	206,569	0	0	0	6,965	04/01/2035
07386H-PD-7	Bear Stearns ALT-A Trust-BALTA 2004-12 2		12/01/2024	PAYDOWN		11,616	11,616	10,658	11,043	0	544	0	544	0	11,616	0	0	0	340	01/01/2035
07384M-KH-5	Bear Stearns ARM Trust 2-BSARM 2004-10 2		12/01/2024	PAYDOWN		68,287	68,287	63,677	67,203	0	817	0	817	0	68,287	0	0	0	2,142	01/01/2035
07325V-AE-4	Bayview Financial Acquis-BAYV 2007-A 1A4		12/01/2024	PAYDOWN		2,243,230	2,243,230	1,884,314	2,089,993	0	134,535	0	134,535	0	2,243,230	0	0	0	69,919	05/01/2037
07386Y-AE-4	Bear Stearns ARM Trust 2-BSARM 2007-5 3A		12/01/2024	PAYDOWN		81,090	83,950	76,659	76,841	0	(11,198)	(36,346)	25,148	0	81,090	0	0	0	4,826	08/01/2047
05950T-AC-9	Banc of America Mortgage-BOAMS 2006-B 2A		12/01/2024	PAYDOWN		37,000	38,265	37,294	31,430	0	(1,163)	0	(1,163)	0	30,480	0	6,520	6,520	950	11/01/2046
05584A-AA-8	BRE Grand Islander Times-HGVGI 2017-1A A		03/25/2024	PAYDOWN		530,872	530,872	530,738	530,857	0	15	0	15	0	530,872	0	0	0	3,704	05/25/2029
07384Y-TL-0	Bear Stearns Asset Backe-BSABS 2004-SD2		12/01/2024	PAYDOWN		45,212	45,212	45,721	46,443	0	(1,253)	0	(1,253)	0	45,212	0	0	0	1,892	03/01/2044
05492A-AJ-0	BFNS 2017-1-BFNS 2017-1A AR	D	12/31/2024	PAYDOWN		0	0	0	0	0	0	0	0	0	0	0	0	0	186,726	01/25/2029
05532B-AA-6	BCC Middle Market CLO 20-BMMC 2018-1A A1		03/13/2024	PAYDOWN		16,510,093	16,510,093	16,510,093	16,510,093	0	0	0	0	0	16,510,093	0	0	0	428,858	10/20/2030
07384M-Q8-8	Bear Stearns ARM Trust 2-BSARM 2004-3 2A		12/01/2024	PAYDOWN		47,092	47,092	47,240	47,092	0	26	0	26	0	47,092	0	0	0	1,410	07/01/2034
05946X-Y7-2	Banc of America Funding -BAFC 2005-8 2A8		12/01/2024	PAYDOWN		37,291	44,769	42,236	43,755	0	(1,681)	(1,886)	205	0	37,291	0	0	0	4,298	01/01/2036
05951F-AB-0	Banc of America Funding -BAFC 2007-1 TA1		12/01/2024	PAYDOWN		5,656	5,375	5,106	4,248	0	1,167	0	1,167	0	5,656	0	0	0	166	01/01/2037
05950F-AD-7	Banc of America Funding -BAFC 2006-4 A4		12/25/2024	PAYDOWN		0	0	32,983	0	0	1,437	0	1,437	0	0	0	0	0	7	07/25/2036
125585-AF-6	CIT Group Securitization-CIT 1995-1 A5		12/31/2024	VARIOUS		0	0	0	0	0	0	0	0	0	0	0	0	0	431	04/15/2024
07389N-AC-9	Bear Stearns Asset Backe-BSABS 2006-SD4		12/01/2024	PAYDOWN		36,508	36,508	28,996	29,619	0	7,878	904	6,974	0	36,508	0	0	0	867	10/01/2036
07325D-AF-1	Bayview Financial Mortga-BAYV 2006-C 1A5		12/01/2024	PAYDOWN		30,607	30,607	24,413	28,443	0	2,980	1,000	1,980	0	30,607	0	0	0	608	11/01/2036
05952G-AT-8	Banc of America Funding -BAFC 2007-D 3A1		12/01/2024	PAYDOWN		4,213	10,443	9,876	10,406	0	(433)	0	427	(860)	4,213	0	0	0	464	06/01/2037
05952G-AV-3	Banc of America Funding -BAFC 2007-D 3A3		12/01/2024	PAYDOWN		5,229	15,027	14,204	14,955	0	(1,636)	606	(2,242)	0	5,229	0	0	0	353	06/01/2037

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Iden- tification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
10901U-AA-0	Brigade Debt Funding I L-BDF 2018-1A A	0	10/25/2024	PAYDOWN		1,923,975	1,923,975	1,923,975	1,923,975	0	0	0	0	0	1,923,975	0	0	0	68,096	04/25/2036
05949C-PP-5	Banc of America Mortgage-BOAMS 2005-L 4A		12/01/2024	PAYDOWN		360,966	363,035	343,522	341,848	0	20,905	0	20,905	0	360,966	0	0	0	9,415	01/01/2036
12566U-AN-4	CitiMortgage Alternative-CMALT 2007-A2 1		12/01/2024	PAYDOWN		33,338	39,137	30,251	33,486	0	5,244	1,267	0	0	33,338	0	0	0	1,435	02/01/2037
05951V-AV-1	Banc of America Funding -BAFC 2006-I 6A1		12/20/2024	PAYDOWN		144,698	117,309	96,716	116,325	0	(29,648)	0	(29,648)	0	144,698	0	0	0	1,829	12/20/2046
05946X-VY-9	Banc of America Funding -BAFC 2005-F 2A1		12/01/2024	PAYDOWN		69,698	91,833	85,575	93,888	0	(12,818)	0	(12,818)	0	69,698	0	0	0	4,499	09/01/2035
058927-AG-9	Banc of America Funding -BAFC 2006-A 3A2		12/01/2024	PAYDOWN		25,105	27,595	24,092	26,498	0	(11,334)	0	(11,334)	0	25,105	0	0	0	913	02/01/2036
12558M-AG-7	CIT Home Equity Loan Tru-CITHE 2002-1 AF		12/01/2024	PAYDOWN		17,727	17,727	18,148	17,622	0	105	0	105	0	17,727	0	0	0	509	02/01/2030
05541T-AM-3	BGC Partners Inc-SENIOR UNSECURED		10/01/2024	MATURITY		10,000,000	10,000,000	9,956,100	9,992,647	0	7,353	0	7,353	0	10,000,000	0	0	0	375,000	10/01/2024
107015-AA-7	Bremer Financial Corp-SUBORDINATED		12/30/2024	MATURITY		22,000,000	22,000,000	22,000,000	22,000,000	0	0	0	0	0	22,000,000	0	0	0	1,716,000	12/30/2024
05950M-AJ-9	Banc of America Funding -BAFC 2006-G 3A3		12/01/2024	PAYDOWN		420,599	420,599	403,250	414,981	0	3,362	0	3,362	0	420,599	0	0	0	14,085	07/01/2036
12564E-AA-0	CIM Trust 2021-J2-CIM 2021-J2 A1		12/01/2024	PAYDOWN		1,735,722	1,735,722	1,755,248	1,753,782	0	(17,891)	0	(17,891)	0	1,735,722	0	0	0	24,790	04/01/2051
05532T-AF-9	BCAP LLC 2010-RR1 Trust-BCAP 2010-RR1 2A		12/01/2024	PAYDOWN		791,819	791,819	344,441	1,197,846	0	(341,349)	111,901	(453,250)	0	791,819	0	0	0	21,667	06/01/2045
05532E-CE-3	BCAP LLC 2009-RR10 Trust-BCAP 2009-RR10		12/01/2024	PAYDOWN		43,781	46,721	13,440	29,426	0	14,156	0	14,156	0	43,781	0	0	0	1,710	06/01/2037
058931-AD-8	Banc of America Funding -BAFC 2006-3 2A1		12/01/2024	PAYDOWN		659,361	670,075	546,487	541,356	0	125,308	0	125,308	0	659,361	0	0	0	12,825	03/01/2036
058931-BL-9	Banc of America Funding -BAFC 2006-3 5A8		12/01/2024	PAYDOWN		2,410	2,883	2,926	2,91	0	291	0	291	0	2,410	0	0	0	74	03/01/2036
058933-AN-2	Banc of America Funding -BAFC 2006-D 5A1		12/01/2024	PAYDOWN		38,262	41,866	38,233	38,874	0	2,647	0	2,647	0	38,262	0	0	0	1,760	05/01/2036
05946X-R7-0	Banc of America Funding -BAFC 2005-7 2A2		12/25/2024	PAYDOWN		0	0	69,820	0	0	7,447	0	7,447	0	0	0	0	0	4	11/25/2035
059523-AN-0	Banc of America Funding -BAFC 2007-5 4A3		12/25/2024	PAYDOWN		0	0	441,877	97,898	0	12,033	0	12,033	0	0	0	0	0	6,361	07/25/2037
059523-AX-8	Banc of America Funding -BAFC 2007-5 7A1		12/01/2024	PAYDOWN		112,716	74,833	43,660	54,372	0	16,436	0	16,436	0	112,716	0	0	0	8,806	07/01/2047
05946X-XP-3	Banc of America Funding -BAFC 2005-E 3A1		12/01/2024	PAYDOWN		167,321	172,813	169,464	176,369	0	(3,928)	0	(3,928)	0	167,321	0	0	0	5,269	05/01/2035
073880-AG-1	Bear Stearns ARM Trust 2-BSARM 2007-1 3A		12/01/2024	PAYDOWN		97,079	61,176	51,563	56,030	0	(18,023)	0	(18,023)	0	97,079	0	0	0	1,365	02/01/2047
05949T-AX-7	Banc of America Funding -BAFC 2006-1 1A2		12/01/2024	PAYDOWN		103,877	103,877	113,383	114,171	0	(10,294)	0	(10,294)	0	103,877	0	0	0	2,984	01/01/2036
07384Y-KF-2	Bear Stearns Asset Backe-BSABS 2003-AC4		12/01/2024	PAYDOWN		180,501	180,501	174,338	178,318	0	8,497	5,951	2,546	0	180,501	0	0	0	5,846	09/01/2033
05948X-T2-7	Banc of America Mortgage-BOAMS 2004-A 2A		12/01/2024	PAYDOWN		56,991	56,991	56,136	56,880	0	85	0	85	0	56,991	0	0	0	1,523	02/01/2034
05949A-H8-6	Banc of America Mortgage-BOAMS 2005-A 2A		12/01/2024	PAYDOWN		64,030	64,030	61,909	64,030	0	(71)	0	(71)	0	64,030	0	0	0	2,354	02/01/2035
05949A-H9-4	Banc of America Mortgage-BOAMS 2005-A 2A		12/01/2024	PAYDOWN		79,962	79,962	77,863	79,962	0	(70)	0	(70)	0	79,962	0	0	0	2,676	02/01/2035
05954D-AL-0	Banc of America Funding -BAFC 2007-E 6A1		12/01/2024	PAYDOWN		861	870	754	782	0	(1,508)	0	(1,508)	0	861	0	0	0	28	09/01/2037
05949C-GW-0	Banc of America Mortgage-BOAMS 2005-8 A9		12/01/2024	PAYDOWN		60,943	66,596	64,862	63,183	0	3,586	0	3,586	0	60,943	0	0	0	1,464	09/01/2035
12566V-AE-2	CitiMortgage Alternative-CMALT 2007-A4 1		12/01/2024	PAYDOWN		32,088	42,131	36,804	36,872	0	5,348	0	5,348	0	32,088	0	0	0	3,317	04/01/2037
05949C-HM-1	Banc of America Mortgage-BOAMS 2005-I 1A		12/01/2024	PAYDOWN		441,026	441,038	378,875	388,458	0	52,160	(22)	52,182	0	441,026	0	0	0	10,460	10/01/2035
05950R-BG-3	Banc of America Funding -BAFC 2006-6 3A2		12/25/2024	PAYDOWN		0	0	56,654	0	0	1,041	0	1,041	0	0	0	0	0	0	08/25/2036
05951K-AN-3	Banc of America Funding -BAFC 2006-7 1A1		12/01/2024	PAYDOWN		49,380	55,885	47,692	50,952	0	4,888	239	4,649	0	49,380	0	0	0	1,124	09/01/2036
05951U-AC-5	Banc of America Funding -BAFC 2006-8T2 A		12/01/2024	PAYDOWN		1,003	1,123	1,062	851	0	304	0	304	0	1,003	0	0	0	28	10/01/2036
10948W-AA-1	Brightsphere Investment -SENIOR UNSECURE		06/12/2024	VARIOUS		27,279,495	28,500,000	27,928,615	28,318,174	0	28,824	0	28,824	0	28,346,999	0	(1,067,504)	(1,067,504)	1,154,817	07/27/2026
05950P-AF-0	Banc of America Funding -BAFC 2006-H 2A3		12/01/2024	PAYDOWN		112,766	120,597	105,638	102,438	0	20,381	0	20,381	0	112,766	0	0	0	2,087	09/01/2046
12543X-AD-8	CHL Mortgage Pass-Through-CIHL 2006-19 1A		12/01/2024	PAYDOWN		55,307	42,736	24,261	26,015	0	18,419	0	18,419	0	55,307	0	0	0	1,470	01/01/2037
07386H-UG-4	Bear Stearns ALT-A Trust-BALTA 2005-5 21		12/01/2024	PAYDOWN		276	276	251	265	0	10	0	10	0	276	0	0	0	9	07/01/2035
05608B-AA-8	BX Commercial Mortgage T-BX 2019-IMC A		04/15/2024	PAYDOWN		9,522,370	9,522,370	9,522,370	9,522,370	0	0	0	0	0	9,522,370	0	0	0	205,909	04/15/2034
059522-AA-0	Banc of America Funding -BAFC 2007-C 6A1		12/20/2024	PAYDOWN		282,622	282,622	243,055	322,189	0	(41,183)	0	(41,183)	0	282,622	0	0	0	6,569	05/20/2047
059522-AU-6	Banc of America Funding -BAFC 2007-C 1A2		12/01/2024	PAYDOWN		296,188	293,607	256,573	261,605	0	28,006	(28,266)	56,272	0	296,188	0	0	0	12,125	05/01/2036
05953Y-AH-4	Banc of America Funding -BAFC 2007-4 1A1		12/01/2024	PAYDOWN		16,047	15,956	13,944	13,024	0	3,036	0	3,036	0	16,047	0	0	0	480	05/01/2037
12489W-JQ-8	Credit-Based Asset Servi-CBASS 2004-CB4		12/01/2024	PAYDOWN		2,189	2,189	2,184	2,174	0	15	0	15	0	2,189	0	0	0	44	05/01/2035
07384M-S7-8	Bear Stearns ARM Trust 2-BSARM 2004-5 2A		12/01/2024	PAYDOWN		193,746	193,746	194,591	193,746	0	13	0	13	0	193,746	0	0	0	3,379	07/01/2034
05990E-AD-2	Banc of America Funding -BAFC 2012-R6 2A		12/27/2024	PAYDOWN		261,378	234,539	204,110	257,188	0	(28,041)	0	(28,041)	0	261,378	0	0	0	5,763	07/26/2036
05949C-KS-4	Banc of America Mortgage-BOAMS 2005-J 2A		12/01/2024	PAYDOWN		3,023	2,944	2,877	3,038	0	(90)	0	(90)	0	3,023	0	0	0	146	11/01/2035
05949C-KX-3	Banc of America Mortgage-BOAMS 2005-J 4A		12/01/2024	PAYDOWN		53,479	54,560	44,607	48,438	0	8,089	(349)	8,438	0	53,479	0	0	0	2,024	11/01/2035
05990H-AH-6	Banc of America Funding -BAFC 2010-R2 1A		12/01/2024	PAYDOWN		126,474	131,495	83,200	88,618	0	40,671	0	40,671	0	126,474	0	0	0	4,491	08/01/2037
05990H-AQ-6	Banc of America Funding -BAFC 2010-R2 3A		12/01/2024	PAYDOWN		182,139	182,139	177,073	179,473	0	2,598	0	2,598	0	182,139	0	0	0	8,213	07/01/2035
05990H-AT-0	Banc of America Funding -BAFC 2010-R2 4A		12/01/2024	PAYDOWN		37,195	98,872	77,161	84,676	0	2,639	0	2,639	0	37,195	0	0	0	2,359	08/01/2036

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
066836-AB-3	Baptist Health South Flo-FIRST LIEN		.02/20/2024	JP MORGAN SECURITIES		13,027,500	15,000,000	15,145,200	15,120,159	0	(853)	0	(853)	0	15,119,307	0	(2,091,807)	(2,091,807)	175,489	.11/15/2041
073870-AG-2	Bear Stearns ALT-A Trust-BALTA 2007-2 2A		.12/01/2024	PAYDOWN		14,789	15,585	8,255	8,935	0	5,238	0	5,238	0	14,789	0	0	0	(389)	.04/01/2037
05533N-AJ-3	BCAP LLC 2010-RR12 Trust-BCAP 2010-RR12		.12/01/2024	PAYDOWN		113,037	116,962	102,384	113,606	0	2,266	0	2,266	0	113,037	0	0	0	2,135	.06/01/2037
05956E-AB-8	Banc of America Funding -BAFC 2010-R6 1A		.04/01/2024	PAYDOWN		85,334	85,334	84,054	85,313	0	21	0	21	0	85,334	0	0	0	1,341	.02/01/2035
09581J-AA-4	BLUE OWL FIN LLC-SENIOR UNSECURED		.10/28/2024	VARIOUS		18,743,311	20,000,000	19,394,800	19,505,175	0	41,972	0	41,972	0	19,547,147	0	(803,836)	(803,836)	517,053	.06/10/2031
3137BL-AR-9	Freddie Mac Multifamily -FMMV M036 A		.09/15/2024	CALL 100		4,905,000	4,905,000	5,039,888	4,931,931	0	(8,071)	0	(8,071)	0	4,923,861	0	(18,861)	(18,861)	141,706	.12/01/2029
30260G-AA-4	FCI Funding 2021-1 LLC-FCITL 2021-1A A		.08/15/2024	PAYDOWN		1,816,776	1,816,776	1,816,696	1,816,759	0	17	0	17	0	1,816,776	0	0	0	9,429	.04/15/2033
30312U-AA-1	FS Rialto 2019-FL1-FSRIA 2019-FL1 A	D	.03/16/2024	VARIOUS		20,196	0	0	0	0	0	0	0	0	0	0	20,196	20,196	14,086	.12/16/2036
302637-AG-8	FS KKR MM QLO 1 LLC-FSKMM 2019-1A A1R		.10/15/2024	PAYDOWN		5,960,206	5,960,206	5,960,206	5,960,206	0	0	0	0	0	5,960,206	0	0	0	274,610	.01/15/2031
29273R-AJ-5	Energy Transfer LP-SENIOR UNSECURED		.02/01/2024	MATURITY		9,000,000	9,000,000	8,926,290	8,998,883	0	1,117	0	1,117	0	9,000,000	0	0	0	220,500	.02/01/2024
26208L-AC-2	DRIVEN BRANDS FUNDING LL-HONK 2018-1A A2		.07/29/2024	PAYDOWN		6,615,000	6,615,000	6,615,000	6,615,334	0	(334)	0	(334)	0	6,615,000	0	0	0	242,267	.04/20/2048
26209X-AC-5	DRIVEN BRANDS FUNDING LL-HONK 2020-2A A2		.10/20/2024	PAYDOWN		166,137	166,137	166,137	166,137	0	0	0	0	0	166,137	0	0	0	4,771	.01/20/2051
25755T-AJ-9	Domino's Pizza Master Is-DPABS 2018-1A A		.01/25/2024	PAYDOWN		17,500	17,500	17,500	17,501	0	(1)	0	(1)	0	17,500	0	0	0	180	.07/25/2048
25755T-AM-2	Domino's Pizza Master Is-DPABS 2019-1AW		.01/25/2024	PAYDOWN		53,750	53,750	53,777	53,750	0	0	0	0	0	53,750	0	0	0	1,294	.10/25/2049
28852E-AA-7	Ellington Clo II Ltd-EQLO 2017-2A A	D	.05/15/2024	PAYDOWN		1,936,842	1,936,842	1,936,842	1,936,842	0	0	0	0	0	1,936,842	0	0	0	41,614	.02/15/2029
254010-AD-3	Dignity Health-SECURED		.11/01/2024	MATURITY		4,000,000	4,000,000	4,000,000	4,000,000	0	0	0	0	0	4,000,000	0	0	0	152,480	.11/01/2024
29977G-AB-8	TIAA FSB Holdings Inc-SUBORDINATED		.10/06/2024	CALL 100		2,000,000	2,000,000	2,000,000	2,000,000	0	0	0	0	0	2,000,000	0	0	0	169,199	.03/15/2026
126694-HP-6	CHL Mortgage Pass-Through-CIHL 2005-25 A1		.09/01/2024	PAYDOWN		19,812	17,229	9,036	8,740	0	9,626	0	9,626	0	19,812	0	0	0	571	.11/01/2035
22284H-AC-7	Covenant Credit Partners-COV 2017-1A B	D	.10/15/2024	PAYDOWN		3,379,331	3,379,331	3,379,331	3,379,331	0	0	0	0	0	3,379,331	0	0	0	232,944	.10/15/2029
193051-AA-7	Cold Storage Trust 2020-COLD 2020-ICE5		.08/15/2024	PAYDOWN		1,965,981	1,965,981	1,943,864	1,946,392	0	19,589	0	19,589	0	1,965,981	0	0	0	84,528	.11/15/2037
16162X-AD-9	Chase Mortgage Finance T-CHASE 2006-S3 1		.01/25/2024	PAYDOWN		1,255	1,255	1,100	1,129	0	1,255	0	1,255	0	1,255	0	0	0	9	.11/25/2036
16159W-AC-8	Chase Home Lending Mortg-CHASE 2019-1 A3		.12/01/2024	PAYDOWN		135,709	135,709	138,932	138,975	0	(3,267)	0	(3,267)	0	135,709	0	0	0	2,483	.03/01/2050
251510-MD-2	Deutsche Alt-B Securitie-DBALT 2006-AB1		.12/01/2024	PAYDOWN		45,853	45,225	45,152	31,683	0	24,212	0	24,212	0	45,853	0	0	0	1,367	.02/01/2036
161546-CW-4	Chase Funding Trust Ser1-CFAB 2002-3 1A5		.12/01/2024	PAYDOWN		206,725	206,725	204,667	205,787	0	938	0	938	0	206,725	0	0	0	8,480	.06/01/2032
12669F-VH-3	CHL Mortgage Pass-Through-CIHL 2004-6 2A1		.12/01/2024	PAYDOWN		19,530	19,530	19,566	19,150	0	416	0	416	0	19,530	0	0	0	563	.05/01/2034
23242L-AB-9	CIHEQ Revolving Home Equ-CIHEL 2006-F 2A		.12/16/2024	PAYDOWN		32,167	32,167	22,477	30,216	0	1,462	0	1,462	0	32,167	0	0	0	994	.07/15/2036
15672R-AA-3	Cerberus Loan Funding XX-CERB 2018-3A A1	D	.10/15/2024	PAYDOWN		4,045,409	4,045,409	4,045,409	4,045,409	0	0	0	0	0	4,045,409	0	0	0	202,520	.07/15/2030
161630-BA-5	Chase Mortgage Finance T-CHASE 2007-A1 1		.12/01/2024	PAYDOWN		10,232	10,232	9,905	10,139	0	78	0	78	0	10,232	0	0	0	218	.02/01/2037
12646U-AK-4	CSMC Trust 2013-IVR1-CSMC 2013-IVR1 A2		.12/01/2024	PAYDOWN		95,470	95,470	89,264	90,111	0	5,359	0	5,359	0	95,470	0	0	0	1,724	.03/01/2043
126694-QJ-0	CHL Mortgage Pass-Through-CIHL 2005-HYB8		.12/01/2024	PAYDOWN		369,127	369,636	335,562	361,573	0	(64,966)	0	(64,966)	0	369,127	0	0	0	11,901	.12/01/2035
28852L-AA-1	Ellington Clo III Ltd-EQLO 2018-3A A1	D	.10/21/2024	PAYDOWN		8,884,279	8,884,279	8,884,279	8,888,705	0	(4,427)	0	(4,427)	0	8,884,279	0	0	0	468,518	.07/20/2030
17312V-AA-6	Citigroup Mortgage Loan -CMLTI 2007-6 1A		.12/01/2024	PAYDOWN		14,486	11,520	4,020	6,787	0	6,602	0	6,602	0	14,486	0	0	0	225	.03/01/2037
14856G-AA-8	Castlelake Aircraft Stru-CLAST 2021-1A A		.12/15/2024	PAYDOWN		787,220	787,220	787,198	787,220	0	0	0	0	0	787,220	0	0	0	7,856	.01/15/2046
16162W-PV-5	Chase Mortgage Finance T-CHASE 2005-A2 1		.12/01/2024	PAYDOWN		9,991	13,834	11,887	11,047	0	2,606	0	2,606	0	9,991	0	0	0	305	.01/01/2036
14576A-AA-0	Cars Net Lease Mortgage -CARM 2020-1A A1		.12/15/2024	PAYDOWN		70,000	70,000	69,971	69,979	0	21	0	21	0	70,000	0	0	0	764	.12/15/2050
14576A-AB-8	Cars Net Lease Mortgage -CARM 2020-1A A2		.12/15/2024	PAYDOWN		7,500	7,500	7,495	7,497	0	3	0	3	0	7,500	0	0	0	101	.12/15/2050
14576A-AC-6	Cars Net Lease Mortgage -CARM 2020-1A A3		.12/15/2024	PAYDOWN		13,417	13,417	13,177	11,244	0	239	0	239	0	13,417	0	0	0	215	.12/15/2050
14310Q-AA-6	Carlyle GMS Finance MM C-CGFM 2015-1A A1		.07/02/2024	PAYDOWN		33,000,000	33,000,000	33,000,000	33,000,000	0	0	0	0	0	33,000,000	0	0	0	1,580,779	.10/15/2031
14310Q-AE-8	Carlyle GMS Finance MM C-CGFM 2015-1A A1		.07/02/2024	PAYDOWN		17,000,000	17,000,000	17,000,000	16,998,341	0	1,659	0	1,659	0	17,000,000	0	0	0	510,353	.10/15/2031
14310Q-AG-3	Carlyle GMS Finance MM C-CGFM 2015-1A A2		.07/02/2024	PAYDOWN		15,000,000	15,000,000	15,000,000	15,000,000	0	0	0	0	0	15,000,000	0	0	0	845,892	.10/15/2031
12667F-EG-6	Alternative Loan Trust 2-CWALT 2004-J2 3		.12/01/2024	PAYDOWN		77,990	77,990	77,442	77,764	0	226	0	226	0	77,990	0	0	0	2,121	.04/01/2034
12668A-AC-6	Alternative Loan Trust 2-CWALT 2005-IM1		.12/26/2024	PAYDOWN		(8,242)	(9,407)	(6,168)	(5,257)	0	29,064	0	29,064	0	(8,242)	0	0	0	1	.01/25/2036
12667F-SE-1	Alternative Loan Trust 2-CWALT 2005-6CB		.12/01/2024	PAYDOWN		127,870	123,653	107,161	110,053	0	14,272	75	14,197	0	127,870	0	0	0	2,998	.04/01/2035
12648H-BB-0	CSMC Trust 2014-IVR2-CSMC 2014-IVR2 B1		.12/01/2024	PAYDOWN		179,699	179,699	176,105	176,717	0	2,962	0	2,962	0	179,699	0	0	0	3,684	.04/01/2044
17307G-EB-7	Citigroup Mortgage Loan -CMLTI 2005-8 1A		.12/01/2024	PAYDOWN		231,352	231,424	196,159	208,200	0	22,351	0	22,351	0	231,352	0	0	0	2,592	.10/01/2035
12667G-AA-1	Alternative Loan Trust 2-CWALT 2005-13CB		.12/25/2024	PAYDOWN		461,492	461,290	398,390	360,766	0	104,027	0	104,027	0	461,492	0	0	0	9,812	.05/25/2035
12667G-AC-7	Alternative Loan Trust 2-CWALT 2005-13CB		.12/01/2024	PAYDOWN		63,394	63,211	51,899	55,613	0	7,782	145	7,637	0	63,394	0	0	0	1,754	.05/01/2035
12667F-RE-7	Alternative Loan Trust 2-CWALT 2004-J6 1		.12/01/2024	PAYDOWN		97,470	97,470	98,932	97,505	0	(35)	0	(35)	0	97,470	0	0	0	1,945	.08/01/2025
12667F-RG-2	Alternative Loan Trust 2-CWALT 2004-J6 2		.12/01/2024	PAYDOWN		5,169	5,169	5,195	5,172	0	(3)	0	(3)	0	5,169	0	0	0	278	.11/01/2031
152314-KJ-8	Centex Home Equity Loan -CXHE 2004-C AF5		.12/01/2024	PAYDOWN		301,921	301,921	301,166	300,477	0	1,470	0	1,470	0	301,921	0	0	0	7,978	.06/01/2034

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
28851Q-AE-3	Ellington Clo I Ltd-EQLO 2017-1A AR	D	10/15/2024	PAYDOWN		12,081,050	12,081,050	12,081,050	12,081,050	0	0	0	0	0	12,081,050	0	0	0	426,505	10/15/2029
28851Q-AN-3	Ellington Clo I Ltd-EQLO 2017-1A B2R	D	10/15/2024	PAYDOWN		20,600,000	20,600,000	20,600,000	20,600,000	0	0	0	0	0	20,600,000	0	0	0	531,274	10/15/2029
12646W-AH-7	CSMC Trust 2013-IVR2-CSMC 2013-IVR2 A2		12/01/2024	PAYDOWN		56,822	56,822	53,093		0	3,272	0	3,272	0	56,822	0	0	0	863	04/01/2043
12669G-A5-0	CHL Mortgage Pass-Through-CIHL 2005-HYB3		12/01/2024	PAYDOWN		130,835	130,835	119,060	130,065	0	720	0	720	0	130,835	0	0	0	2,756	06/01/2035
12647H-BC-9	CSMC Trust 2013-8R-CSMC 2013-8R 4A2		12/30/2024	PAYDOWN		1,654,732	1,632,682	1,185,018	1,507,469	0	15,352	0	15,352	0	1,654,732	0	0	0	41,620	12/27/2036
15673F-AA-8	CERBERUS LOAN FUNDING XX-CERB 2019-2A A1	D	03/21/2024	PAYDOWN		12,000,000	12,000,000	11,272,500	12,401,365	0	(401,365)	0	(401,365)	0	12,000,000	0	0	0	388,439	01/15/2032
12668A-XL-4	Alternative Loan Trust 2-CWALT 2005-63 5		12/01/2024	PAYDOWN		61,583	50,826	46,283	46,040	0	7,808	0	7,808	0	61,583	0	0	0	620	12/01/2035
12646X-AJ-1	CSMC Trust 2013-IVR3-CSMC 2013-IVR3 A2		12/01/2024	PAYDOWN		216,575	216,575	205,069	207,738	0	8,731	0	8,731	0	216,575	0	0	0	3,932	05/01/2043
12647G-BZ-0	CSMC Trust 2013-IVR4-CSMC 2013-IVR4 A20		12/01/2024	PAYDOWN		25,032	25,032	24,449	24,518	0	510	0	510	0	25,032	0	0	0	443	07/01/2024
126694-LC-0	CHL Mortgage Pass-Through-CIHL 2005-24 A3		12/01/2024	PAYDOWN		10,920	29,415	22,316	21,662	0	3,873	90	3,783	0	10,920	0	0	0	613	11/01/2035
126650-AN-0	CVS Pass-Through Trust-FIRST LIEN		12/10/2024	SINKING PAYMENT		333,212	333,212	340,801	333,212	0	5,749	0	5,749	0	333,212	0	0	0	12,009	10/10/2025
126650-AW-0	CVS Pass-Through Trust-FIRST LIEN		12/10/2024	SINKING PAYMENT		279,578	279,578	279,578	279,580	0	(2)	0	(2)	0	279,578	0	0	0	8,112	01/11/2027
126694-MH-8	CHL Mortgage Pass-Through-CIHL 2005-HYB7		12/01/2024	PAYDOWN		392,057	456,013	364,810	401,664	0	36,145	0	36,145	0	392,057	0	0	0	12,237	11/01/2035
12669G-R4-5	CHL Mortgage Pass-Through-CIHL 2005-15 A8		12/01/2024	PAYDOWN		21,518	21,591	12,945	12,905	0	28,176	(3,939)	32,115	0	21,518	0	0	0	515	08/01/2035
126694-BE-7	CHL Mortgage Pass-Through-CIHL 2005-HYB6		12/01/2024	PAYDOWN		30,216	25,537	21,832	23,078	0	3,387	0	3,387	0	30,216	0	0	0	825	10/01/2035
12641T-AB-2	CSMC Series 2009-SR-CSMC 2009-SR 1A2		12/01/2024	PAYDOWN		632,580	665,428	507,290	542,774	0	108,018	0	108,018	0	632,580	0	0	0	12,182	06/01/2036
140501-AB-3	Capital Southwest Corp-SENIOR UNSECURED		12/09/2024	CALL 100		10,000,000	10,000,000	10,211,000	10,088,769	0	(44,749)	0	(44,749)	0	10,044,020	0	(44,020)	(44,020)	611,250	01/31/2026
19687Y-AA-3	COLT 2020-RPL1 Trust-COLT 2020-RPL1 A1		12/01/2024	PAYDOWN		1,934,403	1,934,403	1,934,401	1,934,376	0	27	0	27	0	1,934,403	0	0	0	14,164	01/01/2065
12647P-AK-4	CSMC Trust 2013-7-CSMC 2013-7 A6		12/01/2024	PAYDOWN		144,029	144,029	138,808	139,429	0	4,153	0	4,153	0	144,029	0	0	0	126	08/01/2043
12668B-YA-5	Alternative Loan Trust 2-CWALT 2006-7CB		12/01/2024	PAYDOWN		10,846	10,677	9,222	5,123	0	5,795	0	5,795	0	10,846	0	0	0	421	05/01/2036
26894B-AA-4	Eagle Bancorp Inc-SUBORDINATED		09/01/2024	MATURITY		4,000,000	4,000,000	4,000,000	4,000,000	0	0	0	0	0	4,000,000	0	0	0	230,000	09/01/2024
126694-UJ-5	CHL Mortgage Pass-Through-CIHL 2005-31 1A		12/01/2024	PAYDOWN		400,033	395,634	322,787	337,454	0	59,204	0	59,204	0	400,033	0	0	0	11,823	01/01/2036
126694-UM-8	CHL Mortgage Pass-Through-CIHL 2005-31 2A		12/01/2024	PAYDOWN		112,514	113,255	108,973	109,028	0	4,741	0	4,741	0	112,514	0	0	0	3,014	01/01/2036
126694-UN-6	CHL Mortgage Pass-Through-CIHL 2005-31 2A		12/01/2024	PAYDOWN		173,799	174,930	168,315	168,400	0	6,614	0	6,614	0	173,799	0	0	0	4,520	01/01/2036
126670-JP-4	CHL Mortgage Pass-Through-CIHL 2005-HYB9		12/01/2024	PAYDOWN		44,264	48,295	37,761	41,634	0	5,795	0	5,795	0	44,264	0	0	0	1,911	02/01/2036
17322N-AD-6	Citigroup Mortgage Loan -CMLTI 2014-J1 A		12/01/2024	PAYDOWN		25,534	25,534	25,382	25,033	0	501	0	501	0	25,534	0	0	0	513	06/01/2044
282523-AK-5	1828 CLO Ltd-GUG64 2016-1A A1S2	D	10/15/2024	PAYDOWN		4,192,560	4,192,560	4,192,560	4,192,560	0	0	0	0	0	4,192,560	0	0	0	119,471	10/15/2031
12669D-US-5	CHL Mortgage Pass-Through-CIHL 2002-39 A1		12/01/2024	PAYDOWN		221,572	221,684	220,874	215,760	0	(6)	0	(6)	0	215,654	0	5,917	5,917	4,844	02/01/2033
12669F-A8-6	CHL Mortgage Pass-Through-CIHL 2004-11 2A		12/01/2024	PAYDOWN		297,935	297,935	241,328	267,224	0	28,784	0	28,784	0	297,935	0	0	0	6,257	07/01/2034
251510-CV-3	Deutsche Alt-A Securitie-DBALT 2005-1 1A		12/25/2024	PAYDOWN		104,993	104,993	76,251	87,918	0	15,503	0	15,503	0	104,993	0	0	0	2,857	02/25/2035
12648T-AQ-2	CSMC Trust 2014-IVR3-CSMC 2014-IVR3 B1		12/01/2024	PAYDOWN		474,289	474,289	471,621	471,101	0	3,199	0	3,199	0	474,289	0	0	0	10,447	07/01/2044
12669G-GH-8	CHL Mortgage Pass-Through-CIHL 2004-HYB8		12/01/2024	PAYDOWN		101,353	101,353	82,856	91,170	0	9,437	0	9,437	0	101,353	0	0	0	2,733	01/01/2035
12667F-AN-2	Alternative Loan Trust 2-CWALT 2005-7CB		12/01/2024	PAYDOWN		210,667	209,535	173,491	177,813	0	34,428	2,468	31,960	0	210,667	0	0	0	6,383	03/01/2038
12669G-BY-6	CHL Mortgage Pass-Through-CIHL 2004-HYB7		12/01/2024	PAYDOWN		66,776	66,776	67,068	65,745	0	1,059	0	1,059	0	66,776	0	0	0	2,473	11/01/2034
12669G-BZ-3	CHL Mortgage Pass-Through-CIHL 2004-HYB7		12/01/2024	PAYDOWN		194,494	194,494	195,342	191,415	0	3,162	0	3,162	0	194,494	0	0	0	7,203	11/01/2034
25150M-AC-0	Deutsche Alt-A Securitie-DBALT 2007-RMP1		12/26/2024	PAYDOWN		189,482	189,482	149,217	211,291	0	(24,020)	0	(24,020)	0	189,482	0	0	0	2,073	12/25/2036
17307G-ED-6	Citigroup Mortgage Loan -CMLTI 2004-HYB2		12/01/2024	PAYDOWN		125,850	125,850	113,366	114,898	0	9,611	161	9,450	0	125,850	0	0	0	3,185	03/01/2034
17307G-RE-0	Citigroup Mortgage Loan -CMLTI 2005-2 1A		12/01/2024	PAYDOWN		33,086	33,086	30,801	32,591	0	440	0	440	0	33,086	0	0	0	760	05/01/2035
17307G-VN-5	Citigroup Mortgage Loan -CMLTI 2005-WF2		12/01/2024	PAYDOWN		956	956	796	742	0	742	0	742	0	956	0	0	0	37	08/01/2035
17307G-TY-4	Citigroup Mortgage Loan -CMLTI 2005-3 24		12/01/2024	PAYDOWN		507,616	510,043	485,178	429,093	0	80,426	0	80,426	0	507,616	0	0	0	11,681	08/01/2035
17307G-W9-5	Citigroup Mortgage Loan -CMLTI 2005-11 A		12/01/2024	PAYDOWN		3,373	3,373	3,264	3,381	0	(18)	0	(18)	0	3,373	0	0	0	152	11/01/2035
17309A-AD-1	CitiMortgage Alternative-CMALT 2006-A1 1		12/01/2024	PAYDOWN		133,231	120,068	114,360	115,867	0	(4,147)	(1,541)	(2,606)	0	133,231	0	0	0	3,061	07/01/2036
17309A-AF-6	CitiMortgage Alternative-CMALT 2006-A1 1		12/01/2024	PAYDOWN		184,072	165,647	157,023	153,294	0	23,711	0	23,711	0	184,072	0	0	0	4,510	04/01/2036
12665V-AA-0	CVS Pass-Through Trust S-FIRST LIEN		12/11/2024	VARIOUS		3,409,393	3,705,352	3,705,352	3,705,359	0	(1)	0	(1)	0	3,705,358	0	(295,965)	(295,965)	125,883	08/11/2036
17309N-AG-6	Citicorp Residential Mor-CRMSI 2006-1 M1		12/01/2024	PAYDOWN		728,316	728,316	697,818	723,216	0	3,499	0	3,499	0	728,316	0	0	0	17,818	07/01/2036
17312H-AF-6	Citicorp Residential Mor-CRMSI 2007-2 A6		12/01/2024	PAYDOWN		651	651	627	648	0	3	0	3	0	651	0	0	0	14	06/01/2037
22541S-PJ-1	CSFB Mortgage-Backed Tru-CSFB 2004-AR6 C		12/26/2024	PAYDOWN		36,122	36,122	28,717	33,209	0	1,996	0	1,996	0	36,122	0	0	0	1,380	10/25/2034
17315X-AF-8	Citigroup Mortgage Loan -CMLTI 2009-9 2A		11/01/2024	PAYDOWN		467,963	432,420	327,573	397,754	0	43,284	0	43,284	0	467,963	0	0	0	15,599	11/01/2035
251510-LM-3	Deutsche Alt-A Securitie-DBALT 2006-AR1		08/01/2024	PAYDOWN		32,053	31,018	27,848	30,500	0	1,553	0	1,553	0	32,053	0	0	0	455	02/01/2036

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
17323M-AE-5	Citigroup Mortgage Loan -CMLT1 2015-A B3		12/01/2024	PAYDOWN		1,228,898	1,228,898	1,116,761	1,134,594	0	93,920	0	93,920	0	1,228,898	0	0	0	28,611	06/01/2058
126673-DR-0	CIABS Asset-Backed Certi-CWL 2004-7 MF2		12/01/2024	PAYDOWN		562,469	562,469	575,125	559,185	0	4,579	0	4,579	0	562,469	0	0	0	12,768	10/01/2034
126694-D7-0	CHL Mortgage Pass-Through-CIHL 2006-HYB2		10/01/2024	PAYDOWN		0	4,953	4,520	5,399	0	(481)	0	(481)	0	0	0	0	0	0	04/01/2036
23305M-AA-3	DBCORE 2014-ARCP Mortgag-DBCCR 2014-ARCP		01/01/2024	PAYDOWN		5,000,000	5,000,000	5,149,992	5,000,000	0	0	0	0	0	5,000,000	0	0	0	35,318	01/01/2034
251563-FP-2	Deutsche Mortgage Securi-DMSI 2004-4 7AR		12/25/2024	PAYDOWN		0	0	39,298	229	0	1,177	0	1,177	0	0	0	0	0	77	06/25/2034
212168-AA-6	Continental Wind LLC-FIRST LIEN		08/31/2024	SINKING PAYMENT		450,608	450,608	450,608	450,608	0	0	0	0	0	450,608	0	0	0	19,369	02/28/2033
23332U-AD-6	DSLA Mortgage Loan Trust-DSLA 2004-AR1 A		12/19/2024	PAYDOWN		107,388	107,388	94,199	109,134	0	(8,403)	0	(8,403)	0	107,388	0	0	0	2,677	09/19/2044
21075W-CJ-2	ContiMortgage Home Equit-CONHE 1996-1 A7		12/31/2024	PAYDOWN		0	0	0	0	0	1,279	0	1,279	0	0	0	0	0	18	03/01/2027
22541Q-CZ-3	Credit Suisse First Bost-CSFB 2003-AR15		12/26/2024	PAYDOWN		100,950	100,950	100,950	103,013	0	(2,230)	0	(2,230)	0	100,950	0	0	0	3,350	06/25/2033
22541Q-XS-6	Credit Suisse First Bost-CSFB 2003-23 DB		12/01/2024	PAYDOWN		205,176	205,176	205,304	204,815	0	410	0	410	0	205,176	0	0	0	5,146	09/01/2033
22540U-FJ-9	Credit Suisse First Bost-CSFB 2003-1 1A1		12/01/2024	PAYDOWN		27,022	27,022	28,002	27,374	0	(351)	0	(351)	0	27,022	0	0	0	1,067	02/01/2033
21872M-AG-7	CoreVest American Financ-CAFL 2018-2 B		12/01/2024	PAYDOWN		2,000,136	2,000,136	2,000,065	2,000,107	0	29	0	29	0	2,000,136	0	0	0	47,306	11/01/2052
225458-LD-8	CSFB MORTGAGE-BACKED PAS-CSFB 2005-3 6A1		12/01/2024	PAYDOWN		65,789	65,789	58,058	62,740	0	3,048	0	3,048	0	65,789	0	0	0	2,346	07/01/2036
22942M-BF-2	CSMC Mortgage-Backed Tru-CSMC 2006-8 5A1		12/01/2024	PAYDOWN		81,494	81,507	79,470	79,445	0	2,063	0	2,063	0	81,494	0	0	0	2,173	10/01/2026
25150N-AB-0	Deutsche Alt-A Securitie-DBALT 2006-AR5		12/26/2024	PAYDOWN		187,975	187,975	88,609	68,271	0	121,928	671	121,257	0	187,975	0	0	0	1,764	10/25/2036
126670-NY-0	CIABS Asset-Backed Certi-CWL 2005-16 2AF		10/01/2024	PAYDOWN		25,424	25,424	24,349	638,896	0	(613,472)	0	(613,472)	0	25,424	0	0	0	508	05/01/2036
233046-AH-4	DB Master Finance LLC-DNKN 2017-1AI A21I		11/20/2024	PAYDOWN		120,000	120,000	119,944	119,977	0	23	0	23	0	120,000	0	0	0	2,512	11/20/2047
233046-AM-3	DB Master Finance LLC-DNKN 2019-1AI A23W		11/20/2024	PAYDOWN		180,000	180,000	181,922	181,127	0	(1,127)	0	(1,127)	0	180,000	0	0	0	4,502	05/20/2049
22541Q-FV-9	CSFB MORTGAGE-BACKED PAS-CSFB 2003-17 1A		12/01/2024	PAYDOWN		40,903	40,903	41,283	40,840	0	63	0	63	0	40,903	0	0	0	1,197	06/01/2033
251510-EP-4	DEUTSCHE ALT-A SECURITIE-DBALT 2005-3 5A		12/25/2024	PAYDOWN		249,360	249,360	187,161	236,627	13,808	(1,075)	0	12,733	0	249,360	0	0	0	7,162	06/25/2035
46627M-EC-7	JP Morgan Alternative Lo-UPALT 2006-S1 1		12/01/2024	PAYDOWN		21,650	28,849	18,303	16,669	0	11,936	403	11,533	0	21,650	0	0	0	1,330	03/01/2036
46616M-AB-6	JG Wentworth XXII LLC-HENDR 2010-3A B		12/15/2024	PAYDOWN		48,307	48,307	48,305	48,310	0	(3)	0	(3)	0	48,307	0	0	0	1,838	12/15/2050
466247-L6-8	JP Morgan Mortgage Trust-JPMIT 2006-A2 1		12/01/2024	PAYDOWN		458,057	458,057	436,585	458,049	0	8	0	8	0	458,057	0	0	0	10,884	08/01/2034
46617L-AA-9	JGIWPT XXX LLC-HENDR 2013-3A A		12/15/2024	PAYDOWN		598,797	598,797	598,313	598,383	0	414	0	414	0	598,797	0	0	0	12,738	01/17/2073
46651N-AA-2	JOL Air Ltd-JOLAR 2019-1 A		12/15/2024	PAYDOWN		1,215,500	1,215,500	1,218,248	1,215,730	0	(230)	0	(230)	0	1,215,500	0	0	0	26,121	04/15/2044
46651G-AC-3	JP Morgan Mortgage Trust-JPMIT 2019-7 A3		12/01/2024	PAYDOWN		76,876	76,876	77,837	77,937	0	(1,063)	0	(1,063)	0	76,876	0	0	0	1,318	02/01/2050
46628L-AB-4	JP Morgan Mortgage Trust-JPMIT 2006-A4 1		12/01/2024	PAYDOWN		5,864	5,641	4,041	4,012	0	1,715	(1)	1,716	0	5,864	0	0	0	175	06/01/2036
46591K-AC-7	JP Morgan Mortgage Trust-JPMIT 2019-8 A3		12/01/2024	PAYDOWN		195,476	195,476	198,011	202,363	0	(7,372)	0	(7,372)	0	195,476	0	0	0	3,538	03/01/2050
466247-RP-0	JP Morgan Mortgage Trust-JPMIT 2005-A4 2		12/01/2024	PAYDOWN		28,786	28,786	25,548	28,224	0	(2,511)	0	(2,511)	0	28,786	0	0	0	996	07/01/2035
46590K-AD-6	JP Morgan Chase Commerci-JPMCC 2015-UP1		03/01/2024	PAYDOWN		335,838	335,838	339,194	336,425	0	(587)	0	(587)	0	335,838	0	0	0	4,086	01/01/2049
46616P-AA-1	JGIWPT XXIII LLC-HENDR 2011-1A A		12/15/2024	PAYDOWN		196,175	196,175	196,124	196,125	0	50	0	50	0	196,175	0	0	0	4,825	10/15/2056
47232A-AC-2	Jefferies Resecuritizati-JMAC 2008-R3 1A		12/01/2024	PAYDOWN		65,201	66,741	25,107	37,812	0	27,144	0	27,144	0	65,201	0	0	0	1,919	03/01/2036
472321-AA-6	Jefferies Resecuritizati-JMAC 2008-R2 1A		12/01/2024	PAYDOWN		580,253	580,253	444,711	569,574	0	10,323	0	10,323	0	580,253	0	0	0	18,124	10/01/2035
46617J-AA-4	JGIWPT XXIX LLC-HENDR 2013-2A A		12/15/2024	PAYDOWN		371,333	371,333	371,245	371,327	0	6	0	6	0	371,333	0	0	0	8,764	03/15/2062
47232T-AB-3	Jefferies Resecuritizati-JMAC 2009-R3 1A		12/01/2024	PAYDOWN		80,028	80,028	70,024	75,804	0	4,004	0	4,004	0	80,028	0	0	0	2,521	12/01/2035
47232A-AE-8	Jefferies Resecuritizati-JMAC 2008-R3 2A		12/01/2024	PAYDOWN		345,756	345,756	245,487	345,756	0	(3,942)	0	(3,942)	0	345,756	0	0	0	6,590	06/01/2036
46632Y-AB-0	JP Morgan Mortgage Trust-JPMIT 2008-R3 1		12/01/2024	PAYDOWN		192,787	195,212	24,819	(14,736)	0	208,256	0	208,256	0	192,787	0	0	0	6,735	06/01/2036
472321-AD-0	Jefferies Resecuritizati-JMAC 2008-R2 2A		12/01/2024	PAYDOWN		107,692	107,692	46,488	93,649	0	12,824	0	12,824	0	107,692	0	0	0	4,084	01/01/2037
472321-AG-3	Jefferies Resecuritizati-JMAC 2008-R2 1A		12/01/2024	PAYDOWN		1,748	92,425	20,287	26,397	0	389	0	389	0	1,748	0	0	0	2,774	10/01/2035
47232A-AH-1	Jefferies Resecuritizati-JMAC 2008-R3 3A		12/01/2024	PAYDOWN		221,137	153,804	30,035	64,882	0	125,530	0	125,530	0	221,137	0	0	0	3,388	05/01/2037
46632Y-AD-6	JP Morgan Mortgage Trust-JPMIT 2008-R3 2		07/01/2024	PAYDOWN		(74,885)	59	20	20	0	(52,429)	0	(52,429)	0	(74,885)	0	0	0	(57)	08/01/2037
472321-AH-1	Jefferies Resecuritizati-JMAC 2008-R2 2A		12/01/2024	PAYDOWN		8,191	(828)	(226)	(146)	0	6,088	0	6,088	0	8,191	0	0	0	(32)	01/01/2037
45669A-AC-6	IndyMac INDA Mortgage Lo-INDA 2007-AR1 2		12/01/2024	PAYDOWN		41,834	41,851	36,353	36,050	0	6,119	0	6,119	0	41,834	0	0	0	1,305	03/01/2037
45661X-AB-8	IndyMac INDX Mortgage Lo-INDX 2006-AR13		12/25/2024	PAYDOWN		74,755	74,755	44,806	50,453	0	24,134	0	24,134	0	74,755	0	0	0	1,703	07/25/2036
45660N-X9-1	IndyMac INDX Mortgage Lo-INDX 2004-AR6 5		12/01/2024	PAYDOWN		34,645	34,645	28,409	32,245	0	2,300	0	2,300	0	34,645	0	0	0	1,120	10/01/2034
472321-AK-4	Jefferies Resecuritizati-JMAC 2008-R2 3A		12/01/2024	PAYDOWN		335,351	291,848	100,994	185,324	0	132,394	0	132,394	0	335,351	0	0	0	8,046	01/01/2039
45660L-V9-7	IndyMac INDX Mortgage Lo-INDX 2005-AR31		12/01/2024	PAYDOWN		22,611	22,611	20,241	22,750	0	(244)	0	(244)	0	22,611	0	0	0	603	01/01/2036
45660L-CK-3	IndyMac INDX Mortgage Lo-INDX 2005-AR2 1		12/26/2024	PAYDOWN		26,539	25,160	16,543	19,309	0	6,408	450	5,958	0	26,539	0	0	0	1,429	02/25/2035
45660K-AA-9	IndyMac INDX Mortgage Lo-INDX 2006-AR39		12/26/2024	PAYDOWN		93,216	99,095	79,833	100,757	0	(129,599)	0	(129,599)	0	93,216	0	0	0	3,260	02/25/2037

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Iden-tification	Description	For-eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con-sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor-tization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con-tractual Maturity Date
45384B-AA-4	Independent Bank Group 1-SUBORDINATED		.08/01/2024	MATURITY		13,000,000	13,000,000	12,912,500	12,991,993	0	8,007	0	8,007	0	13,000,000	0	0	0	763,750	.08/01/2024
45254N-MZ-7	Impac CMB Trust Series 2-1MM 2005-2 1A2		.12/26/2024	PAYDOWN		118,530	118,530	96,305	110,514	0	2,837	0	2,837	0	118,530	0	0	0	4,064	.04/25/2035
45254N-NT-0	Impac CMB Trust Series 2-1MM 2005-3 M1		.12/26/2024	VARIOUS		9,764	12,066	4,129	6,034	7,755	(24,831)	3,994	(21,070)	0	9,764	0	0	0	445	.08/25/2035
36655L-AB-1	Garrison Funding 2018-2 -GRMML 2018-2RA	D	.08/20/2024	PAYDOWN		5,088,273	5,088,273	5,088,273	5,088,273	0	0	0	0	0	5,088,273	0	0	0	146,464	.11/20/2029
36655L-AD-7	Garrison Funding 2018-2 -GRMML 2018-2RA	D	.08/20/2024	PAYDOWN		1,225,000	1,225,000	1,195,141	1,213,823	0	11,177	0	11,177	0	1,225,000	0	0	0	75,046	.11/20/2029
34961W-AC-9	Fortress Credit Opportun-FCO 2018-11A A1		.11/18/2024	PAYDOWN		10,413,572	10,413,572	9,567,469	10,322,837	0	90,735	0	90,735	0	10,413,572	0	0	0	503,287	.04/15/2031
34961W-AJ-4	Fortress Credit Opportun-FCO 2018-11A BT	D	.03/11/2024	SCOTIA CAPITAL MARKE		700,875	700,000	697,594	702,406	0	(2,406)	0	(2,406)	0	700,000	0	.875	.875	21,222	.04/15/2031
34961W-AL-9	Fortress Credit Opportun-FCO 2018-11A C		.11/18/2024	PAYDOWN		4,500,000	4,500,000	4,455,000	4,545,000	0	(45,000)	0	(45,000)	0	4,500,000	0	0	0	369,388	.04/15/2031
34961W-AU-9	Fortress Credit Opportun-FCO 2018-11A BF	D	.11/18/2024	PAYDOWN		8,700,000	8,700,000	8,700,000	8,700,000	0	0	0	0	0	8,700,000	0	0	0	315,317	.04/15/2031
32051G-SQ-9	First Horizon Alternativ-FHAMS 2005-AA7		.12/01/2024	PAYDOWN		284,744	277,508	243,155	243,570	0	34,529	(116)	34,645	0	284,744	0	0	0	10,953	.09/01/2035
362341-FN-4	GSR Mortgage Loan Trust -GSR 2005-AR4 3A		.12/01/2024	PAYDOWN		180,426	180,370	137,950	176,946	0	77,659	.713	76,946	0	180,426	0	0	0	7,043	.07/01/2035
36361W-AW-6	Gallatin CLO IX 2018-1 L-GALL 2018-1A B3	D	.04/22/2024	PAYDOWN		3,238,610	3,238,610	3,238,610	3,237,524	0	1,086	0	1,086	0	3,238,610	0	0	0	42,666	.01/21/2028
4663M-AM-1	JP Morgan Resecuritizati-JPMRR 2009-6 2A		.12/01/2024	PAYDOWN		52,746	52,882	5,342	(3,737)	0	56,736	0	56,736	0	52,746	0	0	0	1,882	.04/01/2035
362341-AA-4	GSR Mortgage Loan Trust -GSR 2006-AR1 2A		.12/01/2024	PAYDOWN		31,451	30,088	28,787	29,548	0	(4,216)	0	(4,216)	0	31,451	0	0	0	946	.01/01/2036
362341-AF-3	GSR Mortgage Loan Trust -GSR 2006-AR1 3A		.12/01/2024	PAYDOWN		29,645	28,678	28,211	1,526	0	1,526	0	1,526	0	29,645	0	0	0	1,612	.01/01/2036
36185N-6N-5	GMACM Mortgage Loan Trus-GMACM 2005-AR2		.12/01/2024	PAYDOWN		236,313	236,313	197,453	206,327	0	28,820	0	28,820	0	236,313	0	0	0	6,715	.05/01/2035
36157N-FL-3	GE Mortgage Services LLC-GEOMS 1997-HE4		.12/01/2024	PAYDOWN		5,312	5,312	4,190	1,897	0	3,633	0	3,633	0	5,312	0	0	0	130	.12/01/2028
360271-AJ-9	Fulton Financial Corp-SUBORDINATED		.11/15/2024	MATURITY		8,000,000	8,000,000	7,954,880	7,994,998	0	5,002	0	5,002	0	8,000,000	0	0	0	360,000	.11/15/2024
46634D-AX-6	JP Morgan Resecuritizati-JPMRR 2010-1 3A		.12/01/2024	PAYDOWN		175,795	204,941	96,780	116,359	0	73,424	0	73,424	0	175,795	0	0	0	7,762	.04/01/2037
35041J-AA-3	Foundation Finance Trust-FFIN 2019-1A A		.07/15/2024	PAYDOWN		398,908	398,908	398,846	398,039	0	869	0	869	0	398,908	0	0	0	4,604	.11/15/2034
32056J-AA-2	First Horizon Mortgage P-FHASI 2007-AR3		.12/01/2024	PAYDOWN		108,218	108,271	47,477	49,707	0	59,859	1,298	58,561	0	108,218	0	0	0	2,609	.11/01/2037
46620V-AA-2	J.G. Wentworth XXXIX LLC-HENDR 2017-2A A		.12/15/2024	PAYDOWN		505,137	505,137	504,909	505,137	0	0	0	0	0	505,137	0	0	0	9,827	.09/15/2072
45783N-AA-5	InStar Leasing III LLC-INSTR 2021-1A A		.12/15/2024	PAYDOWN		192,289	192,289	192,185	192,212	0	77	0	77	0	192,289	0	0	0	2,442	.02/15/2054
32051G-XQ-3	First Horizon Mortgage P-FHASI 2005-AR5		.12/01/2024	PAYDOWN		44,246	44,246	40,052	37,858	0	13,574	0	13,574	0	44,246	0	0	0	2,496	.11/01/2035
32051G-XV-2	First Horizon Mortgage P-FHASI 2005-AR5		.12/01/2024	PAYDOWN		56,837	56,932	56,118	54,563	0	2,500	0	2,500	0	56,837	0	0	0	1,608	.11/01/2035
32010L-AN-4	First Eagle Commercial L-INSTR 2016-1A A		.10/25/2024	PAYDOWN		4,078,522	4,078,522	4,078,469	4,078,330	0	192	0	192	0	4,078,522	0	0	0	91,094	.01/25/2032
362341-XC-8	GSR Mortgage Loan Trust -GSR 2005-AR7 4A		.12/01/2024	PAYDOWN		12,175	(183)	(2,096)	(114)	0	27,809	(9,147)	36,956	0	12,175	0	0	0	(9)	.11/01/2035
362341-XE-4	GSR Mortgage Loan Trust -GSR 2005-AR7 5A		.12/01/2024	PAYDOWN		200,932	158,383	137,384	138,364	0	16,877	0	16,877	0	200,932	0	0	0	8,484	.11/01/2035
362341-XG-9	GSR Mortgage Loan Trust -GSR 2005-AR7 6A		.12/01/2024	PAYDOWN		68,925	68,925	65,548	68,015	0	846	0	846	0	68,925	0	0	0	1,848	.11/01/2035
36228F-UJ-3	GSR Mortgage Loan Trust -GSR 2003-7F 4A1		.12/01/2024	PAYDOWN		118,390	118,390	115,467	115,259	0	3,132	0	3,132	0	118,390	0	0	0	4,156	.10/01/2032
39538W-BE-7	GreenPoint Mortgage Fund-GPMF 2005-HY1 M		.12/26/2024	PAYDOWN		1,493,313	1,493,313	1,077,985	1,769,558	0	(420,757)	0	(420,757)	0	1,493,313	0	0	0	40,362	.07/25/2035
34956N-AA-0	Fortress Credit Bsl VII -FCBSL 2019-1A A	D	.11/20/2024	PAYDOWN		12,375,000	12,375,000	12,375,000	12,375,000	0	0	0	0	0	12,375,000	0	0	0	886,470	.07/23/2032
456618-AF-4	IndyMac INDX Mortgage Lo-INDX 2006-AR8 A		.01/25/2024	PAYDOWN		6,500	6,500	5,759	7,241	0	(741)	0	(741)	0	6,500	0	0	0	25	.07/25/2046
32027L-AE-5	First Franklin Mortgage -FFML 2006-FF14		.12/26/2024	PAYDOWN		123,134	123,134	107,800	122,827	0	306	0	306	0	123,134	0	0	0	2,539	.10/25/2036
35952F-AB-6	Fort Huachuca-YPG Commun-UNSECURED		.12/15/2024	SINKING PAYMENT		459,240	459,240	494,371	466,945	0	(7,705)	0	(7,705)	0	459,240	0	0	0	36,739	.12/15/2026
46630G-AN-5	JP Morgan Mortgage Trust-JPMMT 2007-A1 4		.12/01/2024	PAYDOWN		1,495	1,495	1,398	1,488	0	3	0	3	0	1,495	0	0	0	42	.07/01/2035
36321B-AB-7	Galaxy Xxiv Clo Ltd-GALXY 2017-24A B	D	.03/07/2024	PAYDOWN		4,000,000	4,000,000	3,876,250	3,996,733	0	3,267	0	3,267	0	4,000,000	0	0	0	111,651	.01/15/2031
36242D-FS-7	GSR Mortgage Loan Trust -GSR 2004-11 2A1		.12/01/2024	PAYDOWN		76,164	76,164	76,567	76,164	0	11	0	11	0	76,164	0	0	0	2,476	.09/01/2034
36242D-FX-6	GSR Mortgage Loan Trust -GSR 2004-11 3A1		.12/01/2024	PAYDOWN		3,338	3,338	3,344	3,338	0	0	0	0	0	3,338	0	0	0	109	.09/01/2034
47232C-AH-7	Jefferies Resecuritizati-JMAC 2009-R1 4A		.12/01/2024	PAYDOWN		34,303	61,168	52,846	53,157	0	(8,651)	.952	(9,603)	0	29,459	0	4,844	4,844	1,403	.06/01/2037
45254T-TN-4	Impac Secured Assets Tru-IMSA 2006-1 2A1		.12/26/2024	PAYDOWN		683	683	478	942	0	(270)	0	(270)	0	683	0	0	0	10	.05/25/2036
36244S-AD-0	GSAA Home Equity Trust 2-GSAA 2006-13 AF		.12/01/2024	PAYDOWN		249,475	249,475	70,214	72,968	0	184,209	2,570	181,639	0	249,475	0	0	0	2,801	.07/01/2036
347466-AE-4	Fort Irwin Land LLC-UNSECURED		.12/15/2024	SINKING PAYMENT		460,771	460,771	433,325	444,833	0	15,938	0	15,938	0	460,771	0	0	0	18,385	.12/15/2035
398186-AA-4	Griffin Coal Mining Co P-SENIOR UNSECURE	D	.04/26/2024	VARIOUS		(569,702)	0	0	0	0	(569,702)	0	(569,702)	0	(569,702)	0	0	0	0	.10/07/2023
32052E-AA-7	First Horizon Mortgage P-FHASI 2006-AR3		.12/01/2024	PAYDOWN		3,501	4,228	2,762	2,694	0	1,446	64	1,382	0	3,501	0	0	0	106	.11/01/2036
46627M-AD-9	JP Morgan Alternative Lo-JPALT 2005-S1 1		.11/01/2024	PAYDOWN		11,920	9,269	1,989	3,520	0	57,491	(2,861)	60,352	0	11,920	0	0	0	450	.12/01/2035
46627M-CY-1	JP Morgan Alternative Lo-JPALT 2006-A1 3		.12/01/2024	PAYDOWN		684,820	684,820	523,611	527,226	0	164,725	5,659	159,066	0	684,820	0	0	0	19,417	.03/01/2036
46628V-AH-9	JP Morgan Alternative Lo-JPALT 2006-S3 A		.12/01/2024	PAYDOWN		0	149,381	99,825	106,708	0	(7,106)	0	(7,106)	0	0	0	0	0	3,176	.08/01/2036
46630B-AE-3	JP Morgan Alternative Lo-JPALT 2008-R3 3		.12/01/2024	PAYDOWN		68,349	68,349	61,925	54,770	0	13,579	0	13,579	0	68,349	0	0	0	1,079	.05/01/2037
46635B-AD-3	JP Morgan Resecuritizati-JPMRR 2010-7 1A		.12/01/2024	PAYDOWN		678,884	678,884	477,426	561,482	0	111,730	0	111,730	0	678,884	0	0	0	22,689	.03/01/2039

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
3622EA-AA-8	GSAA TRUST-GSAA 2007-3 1A1A		12/26/2024	PAYDOWN		396,530	396,530	219,196	212,229	0	190,061	4,873	185,188	0	396,530	0	0	0	1,776	03/25/2047
319820-AX-7	First Commonwealth Bank-SUBORDINATED		06/01/2024	CALL 100		8,000,000	8,000,000	8,000,000	8,000,000	0	0	0	0	0	8,000,000	0	0	0	303,605	06/01/2028
46632T-AA-3	JP Morgan Mortgage Trust-JPMMT 2008-R2 1		12/01/2024	PAYDOWN		394,876	394,876	317,870	374,614	0	18,700	0	18,700	0	394,876	0	0	0	10,437	07/01/2037
36165V-AQ-9	GCIC CLO II LLC-GCIC 2018-IIRA A2R		11/18/2024	PAYDOWN		20,000,000	20,000,000	20,000,000	20,000,000	0	0	0	0	0	20,000,000	0	0	0	538,458	01/20/2031
362341-DP-1	GSR Mortgage Loan Trust -GSR 2005-6F 1A5		12/01/2024	PAYDOWN		123,065	123,065	123,527	123,352	0	(287)	0	(287)	0	123,065	0	0	0	4,145	07/01/2035
36298G-AA-7	GSPA Monetization Trust-SECURED		12/09/2024	SINKING PAYMENT		1,023,744	1,023,744	1,038,072	1,027,593	0	(3,849)	0	(3,849)	0	1,023,744	0	0	0	36,206	10/09/2029
34417M-AB-3	FOCUS Brands Funding LLC-FOCUS 2017-1A A		10/30/2024	PAYDOWN		60,000	60,000	60,000	60,000	0	0	0	0	0	60,000	0	0	0	1,910	04/30/2047
34417O-AB-4	FOCUS Brands Funding LLC-FOCUS 2018-1W A		12/31/2024	MATURITY		6,175,000	6,175,000	6,510,766	6,334,462	0	(159,462)	0	(159,462)	0	6,175,000	0	0	0	90,866	11/29/2023
34417R-AA-4	FOCUS Brands Funding LLC-FOCUS 2017-1A A		07/01/2024	PAYDOWN		3,820,000	3,820,000	3,820,000	0	0	0	0	0	0	3,820,000	0	0	0	98,407	04/30/2047
46630P-AP-0	JP Morgan Mortgage Trust-JPMMT 2007-A2 3		12/01/2024	PAYDOWN		890	890	852	657	0	238	0	238	0	890	0	0	0	30	04/01/2037
34960J-AS-4	Fortress Credit Opportun-FCO 2015-6A A1T	D	07/10/2024	PAYDOWN		7,928,666	7,928,666	7,413,303	7,914,030	0	14,636	0	14,636	0	7,928,666	0	0	0	320,087	07/10/2030
34960J-BC-8	Fortress Credit Opportun-FCO 2015-6A BFR	D	08/14/2024	PAYDOWN		11,000,000	11,000,000	11,000,000	11,000,000	0	(658)	0	(658)	0	11,000,000	0	0	0	458,871	07/10/2030
46631N-DT-3	JP Morgan Mortgage Trust-JPMMT 2007-S3 1	D	11/01/2024	PAYDOWN		161,534	106,677	52,424	58,015	0	73,800	2,455	71,345	0	161,534	0	0	0	5,801	08/01/2037
381362-AL-6	GoldenTree Credit Opport-GTOCP 2012-1A A	D	12/31/2024	PAYDOWN		0	0	0	0	0	0	0	0	0	0	0	0	0	131,835	06/15/2034
38141G-WQ-3	Goldman Sachs Group Inc-/SENIOR UNSECURE		09/29/2024	CALL 100		21,150,000	21,150,000	21,150,000	21,150,000	0	0	0	0	0	21,150,000	0	0	0	692,028	09/29/2025
38172H-AA-2	Golub Capital Partners C-GOCAP 2019-45A	D	08/23/2024	PAYDOWN		8,000,000	8,000,000	8,000,000	8,000,000	0	0	0	0	0	8,000,000	0	0	0	465,141	10/20/2031
45660L-DB-2	IndyMac INDX Mortgage Lo-INDX 2005-AR1 1		12/01/2024	PAYDOWN		17,260	17,260	17,130	17,260	0	(3)	0	(3)	0	17,260	0	0	0	611	03/01/2035
40431H-AD-9	HSI Asset Loan Obligatio-HALO 2006-2 1A4		09/25/2024	PAYDOWN		0	0	11,313	0	0	7	0	7	0	0	0	0	0	15	12/25/2036
40170F-AA-4	Guggenheim MM CLO 2018-1-SPIM 2018-1A A1	D	10/15/2024	PAYDOWN		14,945,520	14,945,520	14,945,520	14,945,520	0	0	0	0	0	14,945,520	0	0	0	676,697	01/15/2031
40170F-AJ-5	Guggenheim MM CLO 2018-1-SPIM 2018-1A A2	D	10/15/2024	PAYDOWN		4,782,566	4,782,566	4,782,566	4,782,743	0	(176)	0	(176)	0	4,782,566	0	0	0	125,774	01/15/2031
38678W-AA-6	Greenwich Capital Struct-GCSP 2005-1 A1		12/01/2024	PAYDOWN		50,867	50,867	50,612	51,545	0	(725)	0	(725)	0	50,867	0	0	0	1,328	09/01/2034
38176Y-AC-7	Golub Capital Partners C-GOCAP 2019-46A	C	04/20/2024	PAYDOWN		15,000,000	15,000,000	15,000,000	15,000,000	0	0	0	0	0	15,000,000	0	0	0	255,133	04/20/2032
36242D-H4-8	GSR Mortgage Loan Trust -GSR 2005-AR2 1A		12/01/2024	PAYDOWN		31,911	31,911	29,278	29,278	0	740	0	740	0	31,911	0	0	0	753	04/01/2035
36242D-H9-7	GSR Mortgage Loan Trust -GSR 2005-AR2 4A		12/01/2024	PAYDOWN		246,572	246,572	239,637	246,572	0	(187)	0	(187)	0	246,572	0	0	0	10,690	04/01/2035
38177B-AA-0	Golub Capital BDC CLO 20-GCBDC 2018-1A A		11/18/2024	VARIOS		36,276,806	36,269,491	36,269,491	36,269,491	0	0	0	0	0	36,269,491	0	7,315	7,315	1,386,804	01/20/2031
466247-OP-1	JP Morgan Mortgage Trust-JPMMT 2005-A3 7		12/01/2024	PAYDOWN		27,633	27,633	25,407	23,191	0	4,626	0	4,626	0	27,633	0	0	0	1,321	06/01/2035
390556-AL-2	Great Lakes CLO 2014-1 L-GRTLK 2014-1A A	D	04/15/2024	PAYDOWN		3,283,034	3,283,034	3,283,034	3,284,776	0	(1,742)	0	(1,742)	0	3,283,034	0	0	0	92,812	10/15/2029
390556-AN-8	Great Lakes CLO 2014-1 L-GRTLK 2014-1A B	D	10/15/2024	PAYDOWN		5,000,000	5,000,000	5,000,000	5,017,702	0	(17,702)	0	(17,702)	0	5,000,000	0	0	0	303,247	10/15/2029
36242D-QY-2	GSR Mortgage Loan Trust -GSR 2004-15F 2A		12/01/2024	PAYDOWN		13,991	13,991	12,449	12,444	0	1,546	0	1,546	0	13,991	0	0	0	431	12/01/2034
42770Q-AA-0	HERO Funding Trust 2014-HERO 2014-2A A		09/20/2024	PAYDOWN		167,217	167,217	167,103	167,172	0	45	0	45	0	167,217	0	0	0	5,758	09/21/2040
39809L-AC-8	Greystone CRE Notes 2019-GSTNE 2019-FL2	D	05/07/2024	PERFTRUSTOP		4,987,500	5,000,000	5,014,063	5,000,000	0	0	0	0	0	5,000,000	0	(12,500)	(12,500)	142,901	09/15/2037
41162G-AA-0	HarborView Mortgage Loan-HVMLT 2006-11 A		12/19/2024	PAYDOWN		45,157	45,052	40,617	44,467	0	(113,278)	0	(113,278)	0	45,157	0	0	0	1,133	12/19/2036
43739E-CL-9	HomeBanc Mortgage Trust -HMBT 2006-1 1A1		12/01/2024	PAYDOWN		15,599	15,633	13,642	13,925	0	1,665	0	1,665	0	15,599	0	0	0	348	04/01/2037
46628K-AC-4	JP Morgan Mortgage Trust-JPMMT 2006-A3 2		12/01/2024	PAYDOWN		13,093	13,093	11,563	10,642	0	2,485	0	2,485	0	13,093	0	0	0	355	05/01/2036
42770R-AA-8	HERO Funding Trust 2014-HERO 2014-1A A		09/20/2024	PAYDOWN		93,135	93,135	93,134	93,135	0	0	0	0	0	93,135	0	0	0	3,903	09/20/2038
33803W-AA-7	Fishers Lane Associates -SECURED		12/05/2024	SINKING PAYMENT		1,028,750	1,028,750	1,028,750	1,028,751	0	(1)	0	(1)	0	1,028,750	0	0	0	23,594	08/05/2030
44409M-AA-4	Hudson Pacific Propertie-SENIOR UNSECURE		03/04/2024	BARCLAYS CAPITAL INC		7,740,000	9,000,000	8,983,350	8,993,152	0	300	0	300	0	8,993,452	0	(1,253,452)	(1,253,452)	123,438	11/01/2035
46619X-AA-1	JG Wentworth XXXVII LLC-HENDR 2015-3A A		12/15/2024	PAYDOWN		340,395	340,395	340,097	340,134	0	261	0	261	0	340,395	0	0	0	7,247	03/17/2070
41161P-CX-9	HarborView Mortgage Loan-HVMLT 2004-1 1A		12/19/2024	PAYDOWN		18,758	18,758	17,794	17,810	0	929	4	925	0	18,758	0	0	0	624	04/19/2034
41161P-EX-7	HarborView Mortgage Loan-HVMLT 2004-5 2A		12/01/2024	PAYDOWN		38,051	38,051	30,536	36,942	0	939	0	939	0	38,051	0	0	0	805	06/01/2034
41161P-EZ-2	HarborView Mortgage Loan-HVMLT 2004-5 3A		12/01/2024	PAYDOWN		25,004	25,004	24,894	25,004	0	(9)	0	(9)	0	25,004	0	0	0	573	06/01/2034
41161P-FV-0	HarborView Mortgage Loan-HVMLT 2004-6 5A		12/01/2024	PAYDOWN		166,749	166,749	169,039	170,208	0	(3,481)	0	(3,481)	0	166,749	0	0	0	5,255	08/01/2034
41161P-MV-2	HarborView Mortgage Loan-HVMLT 2005-4 1A		12/01/2024	PAYDOWN		49,479	49,479	34,918	(250)	33,487	0	0	33,487	0	2,550	15,992	15,992	0	0	07/01/2035
41161V-AC-4	HarborView Mortgage Loan-HVMLT 2006-7 2A		12/19/2024	PAYDOWN		17,816	17,593	12,499	15,745	0	431	0	431	0	17,816	0	0	0	626	09/19/2046
43133A-AA-5	Hildene TruPS Financials-HITR 2018-1A A1	D	10/10/2024	PAYDOWN		4,420,561	4,420,561	4,332,150	4,361,095	0	59,466	0	59,466	0	4,420,561	0	0	0	171,166	10/10/2038
36242D-WI-0	GSR Mortgage Loan Trust -GSR 2005-AR3 6A		12/01/2024	PAYDOWN		39,419	39,419	37,039	35,487	0	3,990	0	3,990	0	39,419	0	0	0	1,449	05/01/2035
42234Q-AD-4	Heartland Financial USA -SUBORDINATED		12/30/2024	MATURITY		6,000,000	6,000,000	6,000,000	6,000,221	0	(221)	0	(221)	0	6,000,000	0	0	0	517,500	12/30/2024
433674-AA-6	NRZ Excess Spread-Collat-NZES 2020-PLS1		12/25/2024	PAYDOWN		734,050	734,050	734,048	734,049	0	1	0	1	0	734,050	0	0	0	14,456	12/25/2025
47232Q-AA-8	Jefferies Resecuritizati-JMAC 2008-R1 A		12/26/2024	PAYDOWN		132,582	173,609	158,980	166,020	0	4,570	0	4,570	0	132,582	0	0	0	8,924	06/25/2047
38175C-AA-0	Golub Capital Partners C-GOCAP 2014-21A	D	01/25/2024	VARIOS		12,766,319	12,759,016	12,750,510	12,759,016	0	0	0	0	0	12,759,016	0	7,303	7,303	1,926,330	01/25/2031
411707-AD-4	Hardee's Funding LLC-HNGRY 2018-1A A2II		04/05/2024	PAYDOWN		13,265,000	13,265,000	13,265,000	13,265,000	0	0	0	0	0	13,265,000	0	0	0	191,789	06/20/2048

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
46617F-AA-2	JGWPT XXVIII LLC-HENDR 2013-1A A		12/16/2024	PAYDOWN		320,887	320,887	319,962	319,875	0	1,012	0	1,012	0	320,887	0	0	0	5,566	04/15/2067
46603V-AB-1	IVY Hill Middle Market C-IVYH 14A A2	D	03/08/2024	PAYDOWN		7,000,000	7,000,000	7,000,000	7,000,000	0	0	0	0	0	7,000,000	0	0	0	202,181	04/18/2030
44929F-BG-6	ICG US CLO 2014-3 Ltd-ICG 2014-3A B2PR	D	11/25/2024	PAYDOWN		6,250,000	6,250,000	6,250,000	6,250,581	0	(581)	0	(581)	0	6,250,000	0	0	0	290,000	04/25/2031
617526-AD-0	Morgan Stanley ABS Capit-MSAC 2007-HE1 A		12/26/2024	PAYDOWN		174,244	174,244	88,373	105,833	0	67,245	0	67,245	0	174,244	0	0	0	1,782	11/25/2036
561409-AC-7	Malvern Bancorp Inc-SUBORDINATED		02/15/2024	CALL 100		5,000,000	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	0	0	128,052	02/15/2027
56577P-AC-3	Marathon CLO IX Ltd-MCLO 2017-9A A1B	D	03/13/2024	PAYDOWN		4,000,000	4,000,000	4,000,000	4,000,000	0	0	0	0	0	4,000,000	0	0	0	118,785	04/15/2029
56577P-AE-9	Marathon CLO IX Ltd-MCLO 2017-9A A2	D	03/13/2024	PAYDOWN		7,500,000	7,500,000	7,452,000	7,500,000	0	0	0	0	0	7,500,000	0	0	0	228,930	04/15/2029
62946A-AA-2	NP SPE II LLC-NPRL 2016-1A A1		12/20/2024	PAYDOWN		1,318,308	1,318,308	1,318,308	1,318,331	0	(31)	0	(31)	0	1,318,308	0	0	0	33,948	04/20/2046
58942H-AB-7	Mercy Health/OH-SECURED		06/11/2024	BARINGSLLC		7,654,984	8,000,000	8,000,000	8,000,070	0	(70)	0	(70)	0	8,000,000	0	(345,016)	(345,016)	244,900	08/01/2027
61945C-AD-5	Mosaic Co/The-SENIOR UNSECURED		03/11/2024	BARCLAYS CAPITAL INC		22,030,635	22,132,000	26,452,048	25,814,605	0	(67,568)	0	(67,568)	0	25,747,037	0	(3,716,401)	(3,716,401)	395,364	11/15/2033
61759X-AC-6	Morgan Stanley Re-REMIC -MSRR 2010-P8 1C		12/01/2024	PAYDOWN		(9)	34,879	23,581	1,925	0	1,925	0	1,925	0	(9)	0	0	0	1,536	01/01/2037
55312H-AA-7	MMcapS Funding XVII Ltd-MMCAP 17A A1	D	12/02/2024	PAYDOWN		1,054,540	1,054,540	1,004,898	1,046,817	0	7,723	0	7,723	0	1,054,540	0	0	0	18,689	12/01/2035
62946A-AC-8	NP SPE II LLC-NPRL 2017-1A A1		12/20/2024	PAYDOWN		1,252,912	1,252,912	1,252,900	1,252,912	0	(8)	0	(8)	0	1,252,912	0	0	0	24,311	10/21/2047
525241-AL-9	Lehman XS Trust 2007-1-LXS 2007-1 WF1		12/01/2024	PAYDOWN		61,273	69,164	44,672	47,799	0	17,748	0	17,748	0	61,273	0	0	0	1,471	01/01/2037
52520M-CE-1	Lehman Mortgage Trust 20-LMT 2005-2 3A7		12/01/2024	PAYDOWN		26,838	31,020	21,024	16,840	0	14,644	333	14,311	0	26,838	0	0	0	618	12/01/2035
525221-EM-5	Lehman XS Trust Series 2-LXS 2005-7N 1A1		12/26/2024	PAYDOWN		116,087	116,087	85,140	101,160	0	9,191	0	9,191	0	116,087	0	0	0	2,762	12/25/2035
585481-AA-0	Mid-State Capital Corp 2-MDST 2005-1 A		12/01/2024	PAYDOWN		150,277	150,277	144,266	150,277	0	0	0	0	0	150,277	0	0	0	5,177	01/01/2040
48669R-AB-7	Great Lakes Kcap F3c Sen-KCAP 2017-1A B		12/20/2024	PAYDOWN		4,043,457	4,043,457	4,015,464	4,061,978	0	(18,521)	0	(18,521)	0	4,043,457	0	0	0	278,830	12/20/2029
57643M-LZ-5	MASTR Asset Securitizati-MASTR 2006-1 1A		12/01/2024	PAYDOWN		30,542	30,542	20,693	20,843	0	9,822	123	9,699	0	30,542	0	0	0	387	05/01/2036
61033C-AL-0	Monroe Capital MML CLO V-MCMML 2018-2A A	D	07/22/2024	PAYDOWN		15,505,464	15,505,464	15,505,464	15,503,712	0	1,751	0	1,751	0	15,505,464	0	0	0	177,623	11/22/2030
61751D-AE-4	Morgan Stanley Mortgage -MSM 2006-17XS A		12/01/2024	PAYDOWN		153,001	153,001	45,494	47,074	0	109,778	1,886	107,892	0	153,001	0	0	0	1,054	10/01/2046
55283A-AA-7	MCA Fund Holding LLC-MCA 2020-1 A		11/01/2024	PAYDOWN		5,987,415	5,987,415	6,000,003	5,992,815	0	(5,401)	0	(5,401)	0	5,987,415	0	0	0	142,031	11/01/2035
47233D-AB-7	Jefferies Resecuritizati-JMAC 2009-R11 1		12/01/2024	PAYDOWN		138,876	153,630	17,577	138,876	0	85,099	0	85,099	0	138,876	0	0	0	4,023	09/01/2036
61690Q-AD-1	Morgan Stanley Bank of A-MSBAM 2015-C23		12/01/2024	PAYDOWN		276,778	276,778	287,241	278,237	0	(1,459)	0	(1,459)	0	276,778	0	0	0	8,756	07/01/2050
61915R-AK-2	MortgageIT Trust 2005-3-MHL 2005-3 A1		12/25/2024	PAYDOWN		2,194	2,194	1,261	2,590	0	(474)	0	(474)	0	2,194	0	0	0	88	08/25/2035
61758V-AD-0	Morgan Stanley Re-REMIC -MSRR 2010-R2 3B		12/01/2024	PAYDOWN		169,200	169,200	70,131	104,662	0	68,897	4,359	64,538	0	169,200	0	0	0	11,292	10/01/2037
494386-AB-1	Kimberly-Clark de Mexico-SENIOR UNSECURE	D	04/08/2024	MATURITY		3,000,000	3,000,000	2,991,840	2,999,627	0	373	0	373	0	3,000,000	0	0	0	57,000	04/08/2024
61751Q-AB-1	Morgan Stanley Home Equi-MSHEL 2007-1 A2		12/26/2024	PAYDOWN		171,022	171,022	98,017	66,676	0	106,291	0	106,291	0	171,022	0	0	0	2,445	12/25/2036
55272X-AA-0	MFA Financial Inc-SENIOR UNSECURED		06/15/2024	MATURITY		15,000,000	15,000,000	14,850,000	14,983,913	0	16,087	0	16,087	0	15,000,000	0	0	0	468,750	06/15/2024
58408T-AA-8	Michael Kors USA Inc-SENIOR UNSECURED		11/01/2024	MATURITY		10,200,000	10,200,000	7,966,540	9,705,494	0	494,506	0	494,506	0	10,200,000	0	0	0	433,500	11/01/2024
57645T-AA-5	MASTR Adjustable Rate Mo-MARM 2007-HF2 A		07/25/2024	PAYDOWN		547,140	547,140	479,905	546,471	0	669	0	669	0	547,140	0	0	0	3,981	09/25/2037
47760Q-AB-9	Jimmy Johns Funding LLC-JIMMY 2017-1 A2		10/30/2024	PAYDOWN		72,000	72,000	72,000	72,000	0	0	0	0	0	72,000	0	0	0	2,181	07/30/2047
55274Q-AK-1	MASTR Asset Securitizati-MASTR 2006-2 1A		12/01/2024	PAYDOWN		15,256	15,337	14,456	10,784	0	4,548	0	4,548	0	15,256	0	0	0	770	06/01/2036
62942K-AA-4	NPP Mortgage Trust 2013--NPPMT 2013-1 A1		12/01/2024	PAYDOWN		420,689	420,689	402,239	405,542	0	14,957	0	14,957	0	420,689	0	0	0	8,654	07/01/2043
58549W-AA-1	Mid-State Trust XI-MDST 11 A1		12/15/2024	PAYDOWN		228,764	228,764	228,757	228,764	0	0	0	0	0	228,764	0	0	0	6,412	07/15/2038
576433-XW-1	MASTR Adjustable Rate Mo-MARM 2005-2 3A1		12/01/2024	PAYDOWN		20,920	20,920	20,084	20,435	0	461	0	461	0	20,920	0	0	0	551	03/01/2035
59023N-AW-8	Merrill Lynch Mortgage I-MLMI 2006-AF2 P		05/01/2024	PAYDOWN		1,793	1,793	1,076	388	0	1,406	0	1,406	0	1,793	0	0	0	0	10/01/2036
61690A-AD-6	Morgan Stanley Bank of A-MSBAM 2015-C27		02/01/2024	PAYDOWN		31,099	31,099	31,770	31,173	0	(74)	0	(74)	0	31,099	0	0	0	270	12/01/2047
52523M-AD-2	Lehman XS Trust 2006-15-LXS 2006-15 A4		12/26/2024	PAYDOWN		80,375	80,154	44,307	74,064	0	253	0	253	0	80,375	0	0	0	2,036	10/25/2036
54319Q-AB-8	Longtrain Leasing III LL-LTRAN 2015-1A A		09/30/2024	PAYDOWN		54,980,678	50,176,635	49,271,472	50,025,533	0	151,102	0	151,102	0	54,980,678	0	0	0	1,612,761	01/15/2045
576431-AJ-9	MASTR Adjustable Rate Mo-MARM 2017-1 2A1		10/01/2024	PAYDOWN		1,828	1,828	1,461	1,984	0	1,984	0	1,984	0	1,828	0	0	0	48	11/01/2036
576433-D5-2	MASTR Adjustable Rate Mo-MARM 2005-7 3A1		10/01/2024	PAYDOWN		705	588	343	383	0	275	30	245	0	705	0	0	0	13	09/01/2035
576433-GM-2	MASTR Adjustable Rate Mo-MARM 2003-6 6A1		12/01/2024	PAYDOWN		20,211	20,211	19,453	19,479	0	729	0	729	0	20,211	0	0	0	368	12/01/2033
576433-QD-1	MASTR Adjustable Rate Mo-MARM 2004-7 5A1		10/01/2024	PAYDOWN		9,281	9,281	8,817	9,182	0	182	0	182	0	9,281	0	0	0	233	07/01/2034
576433-C5-3	MASTR Adjustable Rate Mo-MARM 2005-6 5A2		12/01/2024	PAYDOWN		32,613	32,614	25,253	27,482	0	4,968	0	4,968	0	32,613	0	0	0	429	07/01/2035
576433-XA-9	MASTR Adjustable Rate Mo-MARM 2005-1 3A1		12/01/2024	PAYDOWN		8,948	8,948	8,501	8,534	0	411	0	411	0	8,948	0	0	0	158	02/01/2035
576434-J7-0	MASTR Alternative Loan T-MALT 2005-2 4A3		12/25/2024	PAYDOWN		170,115	170,115	141,408	195,801	0	(25,686)	0	(25,686)	0	170,115	0	0	0	4,888	03/25/2035
55819T-AS-0	Madison Park Funding XX -MDPK 2016-20A B	D	10/21/2024	PAYDOWN		13,500,000	13,500,000	13,162,500	13,387,030	0	112,970	0	112,970	0	13,500,000	0	0	0	963,521	07/27/2030
576433-HM-1	MASTR Adjustable Rate Mo-MARM 2003-7 4A1		12/01/2024	PAYDOWN		162,824	162,824	158,346	162,003	0	762	0	762	0	162,824	0	0	0	7,373	01/01/2034
61748H-UF-6	Morgan Stanley Mortgage -MSM 2006-1AR 1A		12/25/2024	PAYDOWN		27,702	25,236	18,135	14,051	0	11,970	121	11,849	0	27,702	0	0	0	473	02/25/2036

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
CUSIP Identi- fication	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	11	12	13	14	15	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
										Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value						
576434-W5-9	MASTR Alternative Loan T-MALT 2005-6 3A1		12/01/2024	PAYDOWN		13,467	13,467	9,812	13,016	0	451	0	451	0	13,467	0	0	0	417	12/01/2035
585495-AA-2	Mello Mortgage Capital A-MELLO 2021-MTG1		12/01/2024	PAYDOWN		1,715,609	1,715,609	1,736,696	1,735,778	0	(20,127)	0	(20,127)	0	1,715,609	0	0	0	20,907	04/01/2051
61748H-AW-1	Morgan Stanley Mortgage -MSM 2004-5AR 4A		12/01/2024	PAYDOWN		153,669	153,669	155,394	156,664	0	(3,036)	0	(3,036)	0	153,669	0	0	0	4,654	07/01/2034
59023P-AB-9	Merrill Lynch Mortgage I-MLCC 2006-3 2A1		12/01/2024	PAYDOWN		45,462	45,462	39,056	39,285	0	6,398	288	6,110	0	45,462	0	0	0	1,815	10/01/2036
59151K-AK-4	Methanex Corp-SENIOR UNSECURED	A	12/01/2024	MATURITY		1,000,000	1,000,000	994,970	999,432	0	568	0	568	0	1,000,000	0	0	0	42,500	12/01/2024
610331-AA-8	Monroe Capital ABS Fundi-MCAF 2021-1A A2	D	10/22/2024	PAYDOWN		3,573,872	3,573,872	3,573,872	3,573,872	0	0	0	0	0	3,573,872	0	0	0	111,165	04/22/2031
61033W-AC-6	Monroe Capital MML CLO I-MCMLL 2019-2A A	D	10/22/2024	PAYDOWN		3,411,578	3,411,578	3,411,578	3,411,578	0	0	0	0	0	3,411,578	0	0	0	70,035	10/22/2031
61690F-AL-7	Morgan Stanley Bank of A-MSBAM 2015-C22		12/01/2024	PAYDOWN		1,312,979	1,312,979	1,313,799	1,312,735	0	243	0	243	0	1,312,979	0	0	0	42,342	04/01/2048
60688H-AA-3	MMcapS Funding XVIII Ltd-SECURED	D	06/26/2024	SINKING PAYMENT		386,715	386,715	297,534	300,352	0	86,363	0	86,363	0	386,715	0	0	0	11,800	12/26/2039
61034H-AA-2	Monroe Capital MML CLO V-MCMLL 2018-1A A	D	07/15/2024	PAYDOWN		6,202,966	6,202,966	6,202,966	6,202,966	0	(4,919)	0	(4,919)	0	6,202,966	0	0	0	250,842	04/15/2030
61034H-AC-8	Monroe Capital MML CLO V-MCMLL 2018-1A B	D	07/15/2024	PAYDOWN		2,400,000	2,400,000	2,400,000	2,400,000	0	0	0	0	0	2,400,000	0	0	0	133,904	04/15/2030
61749L-AP-6	Morgan Stanley Mortgage -MSM 2006-8AR 5A		12/01/2024	PAYDOWN		182,858	182,858	133,829	156,163	0	26,695	0	26,695	0	182,858	0	0	0	8,936	06/01/2036
61749L-BM-2	Morgan Stanley Mortgage -MSM 2006-8AR 6A		12/01/2024	PAYDOWN		19,211	19,211	14,912	13,813	0	5,409	0	5,409	0	19,211	0	0	0	1,110	06/01/2036
61751M-AU-8	Morgan Stanley Mortgage -MSM 2007-10XS A		12/01/2024	PAYDOWN		159,176	159,176	144,999	152,540	0	6,122	0	6,122	0	159,176	0	0	0	2,949	02/01/2037
61915R-AU-0	MortgageIT Trust 2005-5-MHL 2005-5 A1		12/26/2024	PAYDOWN		97,209	97,209	62,700	87,662	0	7,210	0	7,210	0	97,209	0	0	0	2,996	12/25/2035
75971F-AY-9	RENAISSANCE HOME EQUITY -RANC 2007-3W AF		07/01/2024	PAYDOWN		63,117	63,117	45,444	49,429	0	10,524	0	10,524	0	63,117	0	0	0	1,320	09/01/2037
75156V-AD-7	RAMP Series 2006-RS3 Tru-RAMP 2006-RS3 A		12/26/2024	PAYDOWN		222,406	231,554	171,063	171,034	0	55,351	(2,930)	58,281	0	222,406	0	0	0	6,900	05/25/2036
75115L-AA-5	RALI Series 2007-QH7 Tru-RALI 2007-QH7 1		12/26/2024	PAYDOWN		133,061	133,061	122,416	129,471	0	3,473	0	3,473	0	133,061	0	0	0	2,596	08/25/2037
75115B-AC-3	RALI Series 2006-QA5 Tru-RALI 2006-QA5 2		12/01/2024	PAYDOWN		73,806	109,880	76,521	82,269	0	15,098	(860)	15,958	0	73,806	0	0	0	4,541	07/01/2036
74969M-AA-3	RMF Proprietary Issuance-PPIT 2020-1 A		10/25/2024	PAYDOWN		853,315	853,315	853,315	853,315	0	0	0	0	0	853,315	0	0	0	21,624	04/26/2060
74968R-AA-3	RMF Proprietary Issuance-PPIT 2019-1 A		11/25/2024	PAYDOWN		1,746,562	1,746,562	1,733,042	1,737,369	0	5,305	0	5,305	0	1,746,562	0	0	0	42,993	10/25/2063
74958W-AC-0	RFMSI Series 2007-SA1 Tr-RFMSI 2007-SA1		12/01/2024	PAYDOWN		43,109	40,456	22,945	20,948	0	28,709	0	28,709	0	43,109	0	0	0	1,440	02/01/2037
74958T-AB-9	RFMSI Series 2007-SA3 Tr-RFMSI 2007-SA3		12/01/2024	PAYDOWN		60,314	51,986	39,476	39,162	0	14,517	0	14,517	0	60,314	0	0	0	1,019	07/01/2037
74951P-DQ-8	RESI Finance LP 2005-A-RESIF 2005-A B3	D	05/10/2024	PAYDOWN		198,110	732,197	324,579	(25,881)	0	223,990	0	223,990	0	198,110	0	0	0	15,640	03/10/2037
749357-AA-7	RCKT Mortgage Trust 2019-RCKT 2019-1 A1		12/01/2024	PAYDOWN		608,420	608,420	617,832	622,684	0	(14,329)	0	(14,329)	0	608,420	0	0	0	13,959	09/01/2049
74930X-BB-2	RBSSP Resecuritization T-RBSSP 2012-1 4B		08/01/2024	PAYDOWN		286,523	286,523	273,630	286,523	0	0	0	0	0	286,523	0	0	0	588,180	01/01/2029
74929F-AK-5	RBSSP Resecuritization T-RBSSP 2010-3 4A		12/01/2024	PAYDOWN		94,045	94,045	92,487	94,045	0	(37)	0	(37)	0	94,045	0	0	0	1,895	12/01/2035
74928U-AM-9	RBSSP Resecuritization T-RBSSP 2009-12 5		12/01/2024	PAYDOWN		98,324	85,877	60,817	76,639	0	12,024	0	12,024	0	98,324	0	0	0	1,863	08/01/2036
74928U-AX-5	RBSSP Resecuritization T-RBSSP 2009-12 8		12/01/2024	PAYDOWN		80,092	84,826	36,081	50,396	0	27,491	0	27,491	0	80,092	0	0	0	2,679	06/01/2036
74928U-BV-8	RBSSP Resecuritization T-RBSSP 2009-12 1		12/27/2024	PAYDOWN		1,666,842	1,666,842	1,358,476	1,542,991	0	87,025	0	87,025	0	1,666,842	0	0	0	72,328	10/25/2035
74928R-AB-0	RBSSP Resecuritization T-RBSSP 2009-10 1		12/01/2024	PAYDOWN		9,893	9,688	6,370	6,587	0	3,091	(44)	3,135	0	9,893	0	0	0	293	08/01/2035
74927T-AC-5	RBSSP Resecuritization T-RBSSP 2010-9 3A		12/27/2024	PAYDOWN		254,405	254,405	238,822	223,340	0	34,538	0	34,538	0	254,405	0	0	0	4,866	10/26/2034
74927B-AK-6	RBSSP Resecuritization T-RBSSP 2009-8 7A		06/01/2024	PAYDOWN		10,035	10,035	10,825	16,989	0	(6,954)	0	(6,954)	0	10,035	0	0	0	2,828	09/01/2037
749574-AC-3	RFMSI Series 2006-SA2 Tr-RFMSI 2006-SA2		12/01/2024	PAYDOWN		21,658	23,051	16,709	12,768	0	10,010	0	10,010	0	21,658	0	0	0	727	08/01/2036
74387L-AC-5	Provident Funding Mortga-PFMT 2019-1 A2		12/01/2024	PAYDOWN		216,802	216,802	219,817	219,505	0	(2,693)	0	(2,693)	0	216,802	0	0	0	3,560	12/01/2049
743874-AC-3	Provident Funding Mortga-PFMT 2020-1 A2		12/01/2024	PAYDOWN		103,228	103,228	104,696	104,634	0	(1,398)	0	(1,398)	0	103,228	0	0	0	1,950	02/01/2050
74331C-AB-4	Progress Residential 202-PROG 2020-SFR1		06/01/2024	PAYDOWN		4,500,000	4,500,000	4,499,945	4,499,612	0	388	0	388	0	4,500,000	0	0	0	45,743	04/01/2037
677071-AF-9	Ohana Military Communiti-UNSECURED		10/01/2024	SINKING PAYMENT		255,628	255,628	258,714	256,262	0	(634)	0	(634)	0	255,628	0	0	0	10,927	10/01/2026
677071-AM-4	Ohana Military Communiti-UNSECURED		10/01/2024	SINKING PAYMENT		251,932	251,932	259,341	252,527	0	(595)	0	(595)	0	251,932	0	0	0	7,005	10/01/2026
67181D-AA-9	Oak Street Investment Gr-OAKIG 2020-1A A		12/20/2024	PAYDOWN		201,913	201,913	200,899	186,462	0	1,016	0	1,016	0	201,913	0	0	0	1,417	11/20/2050
67098A-AM-1	OBX 2019-INV1 Trust-OBX 2019-INV1 A12		12/01/2024	PAYDOWN		562,543	562,543	514,727	543,731	0	9,916	0	9,916	0	562,543	0	0	0	10,573	11/01/2048
74928F-AY-6	RBSSP Resecuritization T-RBSSP 2009-3 6A		12/01/2024	PAYDOWN	(4)	66,560	66,560	40,688	15,265	0	27,066	0	27,066	0	(4)	0	0	0	2,617	03/01/2036
7674135-EM-6	Oakwood Mortgage Investo-OAK 1999-A M2		12/01/2024	PAYDOWN	0	(4,317)	(4,317)	(3,819)	(625)	0	6,890	0	6,890	0	0	0	0	0	(118)	04/01/2029
74387Y-AD-5	Provident Funding Mortga-PFMT 2021-1 A2A		12/01/2024	VARIOUS		14,														

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
74042J-AA-1	Preferred Term Securitie-SECURED	D	12/23/2024	PAYDOWN		954,031	954,031	805,842	863,095	0	90,937	0	90,937	0	954,031	0	0	0	28,935	03/22/2038
74923G-AC-7	RALI Series 2007-QA1 Tru-RALI 2007-QA1 A		12/26/2024	PAYDOWN		211,501	222,603	166,675	177,244	0	39,543	0	39,543	0	211,501	0	0	0	4,966	01/25/2037
74928X-BB-6	RBSSP Resecuritization T-RBSSP 2009-6 3A		12/27/2024	PAYDOWN		335,208	335,215	224,604	266,635	0	60,455	(1,484)	61,939	0	335,208	0	0	0	10,634	01/26/2036
67190A-AA-4	Oak Street Investment Gr-OAKIG 2021-1A A		12/20/2024	PAYDOWN		260,628	260,628	250,010	251,363	0	9,265	0	9,265	0	260,628	0	0	0	1,479	01/20/2051
67190A-AB-2	Oak Street Investment Gr-OAKIG 2021-1A A		12/20/2024	PAYDOWN		167,398	167,398	166,571	159,252	0	825	0	825	0	167,398	0	0	0	1,205	01/20/2051
69403W-AA-5	Pacific Beacon LLC-FIRST LIEN		07/15/2024	VARIOUS		2,349,874	2,355,790	2,598,578	2,377,345	0	(21,555)	0	(21,555)	0	2,355,790	0	(5,916)	(5,916)	106,773	07/15/2026
637138-AC-2	Truist Financial Corp-SENIOR UNSECURED		09/30/2024	MATURITY		15,000,000	15,000,000	15,000,000	15,000,000	0	0	0	0	0	15,000,000	0	0	0	637,500	09/30/2024
67113A-AP-5	OBX 2019-EXP3 Trust-OBX 2019-EXP3 1A8		12/01/2024	PAYDOWN		52,664	52,664	52,746	52,802	0	(139)	0	(139)	0	52,664	0	0	0	1,163	10/01/2059
62947A-AB-9	NP SPE II LLC-NPRL 2019-2A A2		07/19/2024	PAYDOWN		94,804	94,804	94,800	94,798	0	5	0	5	0	94,804	0	0	0	915	11/19/2049
65535V-MJ-4	Nomura Asset Acceptance -NAA 2005-AR3 1A		12/26/2024	PAYDOWN		136,185	136,185	106,285	108,636	0	29,688	2,192	27,496	0	136,185	0	0	0	2,945	07/25/2035
679574-AG-8	Old Dominion Electric Co-FIRST LIEN		12/01/2024	SINKING PAYMENT		604,167	604,167	650,981	621,429	0	(17,262)	0	(17,262)	0	604,167	0	0	0	56,278	12/01/2028
679574-AH-6	Old Dominion Electric Co-FIRST LIEN		12/01/2024	SINKING PAYMENT		166,656	166,656	173,178	169,337	0	(2,681)	0	(2,681)	0	166,656	0	0	0	14,189	12/01/2028
65540E-BR-9	Nomura Resecuritization -NMRR 2014-1R 3A		06/26/2024	PAYDOWN		1,276,270	1,276,270	1,065,685	1,239,774	247,080	(210,585)	0	36,495	0	1,276,270	0	0	0	21,258	07/26/2036
70469X-AN-4	Peaks CLO 2 Ltd-PEAKS 2017-2A 1A1R	D	10/21/2024	PAYDOWN		11,690,200	11,690,200	10,754,984	11,545,966	0	144,234	0	144,234	0	11,690,200	0	0	0	661,108	07/20/2031
693436-A#-#	PLP Trust 2020-1-PLP 2020-1A A		12/31/2024	VARIOUS		0	0	0	0	6,446,689	(2,506,557)	0	3,940,132	0	0	0	0	0	0	03/31/2041
693456-AA-3	PMT Loan Trust 2013-J1-PMTLT 2013-J1 A1		12/01/2024	PAYDOWN		158,455	158,455	154,394	154,808	0	3,564	0	3,564	0	158,455	0	0	0	2,455	09/01/2043
643529-AC-4	New Century Alternative -NCAMT 2006-ALT2		12/01/2024	PAYDOWN		53,116	53,116	9,716	10,014	0	44,428	426	44,002	0	53,116	0	0	0	433	10/01/2036
643529-AD-2	New Century Alternative -NCAMT 2006-ALT2		12/01/2024	PAYDOWN		24,233	24,233	16,115	4,637	0	20,051	0	20,051	0	24,233	0	0	0	222	10/01/2036
650119-AA-8	New York University-UNSECURED		07/01/2024	CALL 100		413,000	413,000	444,589	426,040	0	2,321	0	2,321	0	428,360	0	(15,360)	(15,360)	21,625	07/01/2032
74958X-AF-1	RFMSI Series 2007-SA2 Tr-RFMSI 2007-SA2		12/01/2024	PAYDOWN		181,992	78,717	71,755	75,880	0	17,483	0	17,483	0	181,992	0	0	0	3,541	04/01/2037
64352V-MP-3	New Century Home Equity -NCHET 2005-A A5		12/01/2024	PAYDOWN		355,126	355,126	334,706	341,074	0	13,576	0	13,576	0	355,126	0	0	0	10,611	08/01/2035
74928D-AV-7	RBSSP Resecuritization T-RBSSP 2009-1 7A		12/01/2024	PAYDOWN		196,843	182,674	84,380	135,683	0	53,807	0	53,807	0	196,843	0	0	0	2,698	06/01/2037
74042T-AA-9	Preferred Term Securitie-SECURED	D	03/22/2024	PAYDOWN		82,885	82,885	58,020	55,276	0	27,609	0	27,609	0	82,885	0	0	0	415	12/22/2037
651587-AG-2	NewMarket Corp-SENIOR UNSECURED		08/08/2024	VARIOUS		9,252,576	10,000,000	9,876,300	9,907,355	0	6,949	0	6,949	0	9,914,304	0	(661,728)	(661,728)	237,000	03/18/2031
74042H-AA-5	Preferred Term Securitie-SECURED	D	12/23/2024	PAYDOWN		6,141,991	6,141,991	4,737,745	5,247,832	0	894,159	0	894,159	0	6,141,991	0	0	0	112,184	12/22/2035
74042H-AB-3	Preferred Term Securitie-SECURED	D	12/23/2024	PAYDOWN		86,603	86,603	73,674	86,603	0	0	0	0	0	86,603	0	0	0	2,582	12/22/2035
74043A-AC-5	Preferred Term Securitie-FIRST LIEN	D	12/23/2024	PAYDOWN		321,755	321,755	369,996	278,104	0	43,651	0	43,651	0	321,755	0	0	0	6,056	12/22/2036
74043A-AD-3	Preferred Term Securitie-SECURED	D	12/23/2024	PAYDOWN		4,516,954	4,516,954	4,192,298	4,359,814	0	157,140	0	157,140	0	4,516,954	0	0	0	85,768	12/22/2036
681919-BD-7	Omnicom Group Inc-SENIOR UNSECURED		08/08/2024	VARIOUS		10,191,183	12,000,000	11,978,760	11,983,659	0	510	0	510	0	11,984,169	0	(1,792,986)	(1,792,986)	214,193	08/01/2031
64830Y-AC-1	NRZ Excess Spread-Collat-NZES 2021-FNT1		12/25/2024	PAYDOWN		703,129	703,129	703,122	703,124	0	5	0	5	0	703,129	0	0	0	12,604	03/25/2026
65539C-AK-2	Nomura Resecuritization -NMRR 2011-4RA 1		12/01/2024	PAYDOWN		144,906	141,906	117,908	124,126	0	556	0	556	0	144,906	0	0	0	3,502	12/01/2036
681936-BB-5	Omega Healthcare Investo-SENIOR UNSECURE		04/01/2024	MATURITY		8,900,000	8,900,000	9,067,797	8,897,445	0	2,555	0	2,555	0	8,900,000	0	0	0	220,275	04/01/2024
680223-AJ-3	Old Republic Internation-SENIOR UNSECURE		10/01/2024	MATURITY		15,000,000	15,000,000	15,744,450	15,066,998	0	(66,998)	0	(66,998)	0	15,000,000	0	0	0	731,250	10/01/2024
68268N-AP-8	ONEOK Partners LP-SENIOR UNSECURED		12/15/2024	CALL 100		15,114,000	15,114,000	15,658,708	15,300,546	0	(187,596)	0	(187,596)	0	15,112,950	0	1,050	1,050	925,733	03/15/2025
67400F-AC-5	Oaktree CLO 2018-1 Ltd-OAKCL 2018-1A A1B	D	04/10/2024	PAYDOWN		10,800,000	10,800,000	10,800,000	10,800,000	0	0	0	0	0	10,800,000	0	0	0	367,591	10/20/2030
691204-AA-9	Owl Rock CLO III Ltd-OR 2020-3A A1L	D	04/11/2024	PAYDOWN		20,000,000	20,000,000	19,840,000	19,946,492	0	53,508	0	53,508	0	20,000,000	0	0	0	718,462	04/20/2032
74922M-AA-9	RALI Series 2006-QA6 Tru-RALI 2006-QA6 A		12/26/2024	PAYDOWN		110,104	102,440	89,565	108,931	0	(24,546)	0	(24,546)	0	110,104	0	0	0	3,462	07/25/2036
714046-AH-2	PerkinElmer Inc-SENIOR UNSECURED		07/30/2024	VARIOUS		9,520,973	10,000,000	9,996,500	9,997,427	0	221	0	221	0	9,997,648	0	(476,675)	(476,675)	193,021	03/15/2031
74040Y-AB-8	Preferred Term Securitie-SECURED	D	12/31/2024	PAYDOWN		0	0	0	0	0	(7,206)	0	(7,206)	0	0	0	0	0	0	07/03/2033
71429M-AB-1	Perrigo Finance Unlimate-SENIOR UNSECURE	D	06/05/2024	VARIOUS		9,665,915	10,000,000	9,845,950	9,949,458	0	8,914	0	8,914	0	9,958,372	0	(292,456)	(292,456)	289,918	03/15/2026
71429M-AC-9	Perrigo Finance Unlimate-SENIOR UNSECURE	D	06/05/2024	VARIOUS		9,167,749	10,000,000	9,917,000	9,951,922	0	2,282	0	2,282	0	9,954,205	0	(786,456)	(786,456)	194,922	06/15/2032
74042M-AA-4	Preferred Term Securitie-SECURED	D	03/22/2024	VARIOUS		8,632,523	8,632,523	7,501,870	7,933,491	0	94,697	0	94,697	0	8,028,188	0	604,335	604,335	118,012	09/22/2036
62955M-AA-4	NRZ FHT Excess LLC-NZES 2020-FHT1 A		12/25/2024	PAYDOWN		300,017	300,017	300,010	300,010	0	7	0	7	0	300,017	0	0	0	8,374	11/25/2025
693684-AA-0	PSMC 2020-1 Trust-PSMC 2020-1 A1		12/01/2024	PAYDOWN		279,211	279,211	285,450	287,771	0	(8,591)	0	(8,591)	0	279,211	0	0	0	3,939	01/01/2050
749389-AA-0	RCKT Mortgage Trust 2020-RCKT 2020-1 A1		12/01/2024	PAYDOWN		317,508	317,508	303,220	291,516	0	29,192	0	29,192	0	317,508	0	0	0	5,214	02/01/2050
69374X-AA-8	PSMC 2019-2 Trust-PSMC 2019-2 A1		12/01/2024	PAYDOWN		164,367	164,367	167,654	166,936	0	(2,292)	0	(2,292)	0	164,367	0	0	0	2,511	10/01/2049
69375B-AA-5	PSMC 2019-3 Trust-PSMC 2019-3 A1		12/01/2024	PAYDOWN		55,142	55,142	55,943	56,358	0	(1,235)	0	(1,235)	0	55,142	0	0	0	899	11/01/2049
70806U-AA-0	PennantPark CLO II Ltd-PNTPK 2020-2A A1	D	05/20/2024	PAYDOWN		9,000,000	9,000,000	9,000,000	9,000,000	0	0	0	0	0	9,000,000	0	0	0	406,179	01/15/2032
70806U-AE-2	PennantPark CLO II Ltd-PNTPK 2020-2A B1	D	05/20/2024	PAYDOWN		2,000,000	2,000,000	2,000,000	2,000,000	0	0	0	0	0	2,000,000	0	0	0	98,998	01/15/2032
69478X-AC-9	Pacific Premier Bancorp -SUBORDINATED		09/03/2024	MATURITY		5,000,000	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	0	0	287,500	09/03/2024
62960N-AA-5	NXT Capital CLO 2020-1 L-NXTC 2020-1A A		09/05/2024	PAYDOWN		18,000,000	18,000,000	18,000,000	18,000,000	0	0	0	0	0	18,000,000	0	0	0	981,299	01/20/2031

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Iden- tification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
70337U-10-0	Patrons' Legacy-PATRL 5.775 12/23/22		12/31/2024	SINKING PAYMENT		(3,018,287)	(3,018,287)	(2,917,915)	.0	0	(100,372)	0	(100,372)	0	(3,018,287)	0	0	0	288	06/23/2026
70338A-10-3	Patrons' Legacy-PATRL 5.646 05/17/22		12/31/2024	SINKING PAYMENT		(1,325,415)	(1,325,415)	(1,325,415)	.0	0	0	0	0	0	(1,325,415)	0	0	0	0	12/17/2053
70339C-10-9	Patrons' Legacy-PATRL 6.673 12/04/23		03/04/2024	SINKING PAYMENT	(2)	(2)	(2)	(2)	(2)	0	0	0	0	0	(2)	0	0	0	0	09/04/2025
70469Q-AL-3	Peaks CLO 1 Ltd-PEAKS 2014-1A A2R	D	01/23/2024	RBC CAPITAL MARKETS		4,443,907	4,439,423	4,168,112	4,653,150	0	(239,095)	0	(239,095)	0	4,414,055	0	29,852	29,852	78,653	07/25/2030
74042D-AA-4	Preferred Term Securitie-SECURED	D	09/23/2024	PAYDOWN		1,253,325	1,253,325	1,153,843	1,170,745	0	82,581	0	82,581	0	1,253,325	0	0	0	47,976	03/22/2038
74922Q-AA-0	RALI Series 2006-QA8 Tru-RALI 2006-QA8 A		12/26/2024	PAYDOWN		21,740	21,373	16,361	23,734	0	(2,818)	0	(2,818)	0	21,740	0	0	0	715	09/25/2036
74041E-AA-3	Preferred Term Securitie-SECURED	D	09/23/2024	PAYDOWN		2,117,141	2,117,141	1,756,143	1,945,094	0	172,047	0	172,047	0	2,117,141	0	0	0	83,203	03/23/2035
74043C-AA-5	Preferred Term Securitie-SECURED	D	12/23/2024	PAYDOWN		2,575,465	2,575,465	1,967,281	2,155,046	0	420,418	0	420,418	0	2,575,465	0	0	0	72,637	03/22/2037
74041E-AL-9	Preferred Term Securitie-SECURED	D	12/23/2024	PAYDOWN		1,677,106	1,677,106	1,477,950	1,517,373	0	159,734	0	159,734	0	1,677,106	0	0	0	102,278	03/23/2035
67448Q-AC-5	OBX 2019-EXP1 Trust-OBX 2019-EXP1 1A3		12/01/2024	PAYDOWN		151,542	151,542	150,784	150,557	0	1,003	0	1,003	0	151,542	0	0	0	3,783	01/01/2059
74042E-AA-2	Preferred Term Securitie-SECURED	D	12/23/2024	PAYDOWN		3,768,498	3,768,498	3,032,790	3,204,972	0	563,526	0	563,526	0	3,768,498	0	0	0	249,272	06/13/2035
74040T-AC-7	Preferred Term Securitie-PRETSL FLOAT 12	D	12/23/2024	PAYDOWN		29,970	29,970	28,612	29,110	0	861	0	861	0	29,970	0	0	0	1,172	12/23/2031
74042F-AA-9	Preferred Term Securitie-SECURED	D	09/23/2024	PAYDOWN		970,691	970,691	778,776	850,597	0	120,094	0	120,094	0	970,691	0	0	0	9,388	06/22/2037
75995Q-DM-7	Renaissance Home Equity -RANC 2004-3 AF5		12/01/2024	PAYDOWN		455,048	455,048	401,580	406,360	0	48,435	0	48,435	0	455,048	0	0	0	11,525	11/01/2034
89413C-AA-5	Trapeza CDO X Ltd-TRAP 2006-10A A1	D	10/07/2024	PAYDOWN		18,921,625	18,921,625	17,620,763	17,836,928	0	1,084,697	0	1,084,697	0	18,921,625	0	0	0	560,100	07/06/2041
89656C-AA-1	Trinity Rail Leasing 201-TRL 2010-1A A		12/16/2024	PAYDOWN		2,201,938	2,201,938	2,307,178	2,256,841	0	(54,903)	0	(54,903)	0	2,201,938	0	0	0	66,495	10/16/2040
89413A-AA-9	Trapeza Cdo IX Ltd-TRAP 2005-9A A1	D	10/28/2024	PAYDOWN		181,700	181,700	163,241	170,119	0	11,581	0	11,581	0	181,700	0	0	0	7,638	01/27/2040
89412K-AA-8	Trapeza Cdo XI Ltd-TRAP 2006-11A A1	D	04/10/2024	PAYDOWN		20,846,233	20,846,233	19,725,748	21,075,542	0	(229,309)	0	(229,309)	0	20,846,233	0	0	0	608,914	10/10/2041
89657A-AC-0	Trinity Rail Leasing 201-TRL 2020-1A A		12/17/2024	PAYDOWN		546,820	546,820	546,688	546,733	0	87	0	87	0	546,820	0	0	0	5,800	10/17/2050
89657B-AB-0	Trinity Rail Leasing 201-TRL 2019-2A A1		12/17/2024	PAYDOWN		2,024,696	2,024,696	2,024,216	2,024,475	0	220	0	220	0	2,024,696	0	0	0	26,334	10/18/2049
81745M-AA-9	Sequoia Mortgage Trust 2-SEMT 2013-2 A		12/01/2024	PAYDOWN		253,801	253,801	227,355	230,246	0	23,457	0	23,457	0	253,801	0	0	0	2,343	02/01/2043
83546D-AL-2	Sonic Capital LLC-SONIC 2020-1AW A21W		12/20/2024	PAYDOWN		75,833	75,833	77,160	77,025	0	(1,192)	0	(1,192)	0	75,833	0	0	0	1,287	01/20/2050
82922T-AA-7	Sinai Health System-SECURED		07/25/2024	CALL 100		210,000	210,000	210,000	210,000	0	0	0	0	0	210,000	0	0	0	4,838	01/20/2036
83546D-AM-0	Sonic Capital LLC-SONIC 2020-1AW A21W		12/20/2024	PAYDOWN		189,583	189,583	201,479	196,679	0	(7,096)	0	(7,096)	0	189,583	0	0	0	2,602	01/20/2050
817743-AA-5	SERVPRO Master Issuer LL-SPRO 2019-1A A2		10/25/2024	PAYDOWN		182,500	182,500	183,633	182,976	0	(476)	0	(476)	0	182,500	0	0	0	4,428	10/25/2049
78488L-AA-8	SWC Funding LLC 2018-1-SWC 2018-1A A		05/15/2024	PAYDOWN		11,556,803	11,556,803	11,475,457	11,549,539	0	7,263	0	7,263	0	11,556,803	0	0	0	247,526	08/15/2033
81745J-AA-6	Sequoia Mortgage Trust 2-SEMT 2013-11 A1		12/01/2024	PAYDOWN		92,776	92,776	91,529	91,680	0	1,090	0	1,090	0	92,776	0	0	0	1,743	09/01/2043
88607A-AA-7	Thunderbolt III Aircraft-TBOLT 2019-1 A	D	12/15/2024	PAYDOWN		1,700,265	1,700,265	1,700,200	1,700,249	0	16	0	16	0	1,700,265	0	0	0	38,889	11/15/2039
88607B-AA-5	Thunderbolt III Aircraft-TBOLT 2019-1 E	D	02/14/2024	DIRECT		0	7,200,000	7,200,000	644,400	0	155,786	0	155,786	0	0	0	0	0	0	11/15/2039
88522Q-GB-3	Thornburg Mortgage Secur-TMST 2004-4 1A		12/25/2024	PAYDOWN		21,237	21,237	20,255	20,735	0	478	0	478	0	21,237	0	0	0	487	12/25/2044
88522Q-GK-3	Thornburg Mortgage Secur-TMST 2004-4 5A		12/01/2024	PAYDOWN		56,775	56,775	54,007	54,493	0	2,261	0	2,261	0	56,775	0	0	0	1,307	12/01/2044
89707W-AB-4	Tropic CDO III Ltd-TROPC 2004-1A A2L	D	10/15/2024	PAYDOWN		7,450,598	7,450,598	6,118,431	6,689,167	0	761,431	0	761,431	0	7,450,598	0	0	0	305,945	07/15/2034
81743A-AA-7	SEQUOIA MORTGAGE TRUST 2-SEMT 2019-5 A1		12/01/2024	PAYDOWN		242,877	242,877	247,127	247,591	0	(5,444)	0	(5,444)	0	242,877	0	0	0	576	12/01/2049
83612T-AR-3	Soundview Home Loan Trus-SVHE 2007-OPT1		12/25/2024	PAYDOWN		0	0	52,592	5,888	0	5,099	0	5,099	0	0	0	0	0	896	06/25/2037
86358R-DX-2	Structured Asset Securit-SASC 2001-SB1 A		12/01/2024	PAYDOWN		357,608	357,608	310,282	315,261	0	42,347	0	42,347	0	357,608	0	0	0	6,254	08/01/2031
86359D-EY-9	STRUCTURED ASSET SECURIT-SASC 2005-PF2 A		12/25/2024	PAYDOWN		0	0	121,690	24,467	0	(1,971)	0	(1,971)	0	0	0	0	0	97	04/25/2035
86360B-AG-3	Structured Adjustable Ra-SARM 2006-4 4A1		12/01/2024	PAYDOWN		417,393	429,083	315,518	323,943	0	115,555	13,988	101,567	0	417,393	0	0	0	16,926	05/01/2036
86360B-AJ-7	Structured Adjustable Ra-SARM 2006-4 5A1		12/01/2024	PAYDOWN		86,210	83,128	60,384	61,388	0	37,364	3,524	33,840	0	86,210	0	0	0	4,410	05/01/2036
88606X-10-0	Thunderbolt II Aircraft -TBOLT 2018-A G	D	02/14/2024	DIRECT		0	29	6,238,342	371,093	0	(36,997)	0	(36,997)	0	0	0	0	0	0	09/15/2038
89171U-AG-4	Towd Point Mortgage Trus-TPMT 2015-4 M2		12/01/2024	PAYDOWN		4,899,674	4,899,674	4,844,254	4,891,589	0	8,085	0	8,085	0	4,899,674	0	0	0	96,665	04/01/2055
81748M-AA-6	Sequoia Mortgage Trust 2-SEMT 2020-1 A1		12/01/2024	PAYDOWN		209,545	209,545	214,358	214,677	0	(5,148)	0	(5,148)	0	209,545	0	0	0	3,745	02/01/2050
76042E-AA-7	Republic Finance Issuanc-REPS 2020-A A		10/20/2024	PAYDOWN		4,514,541	4,514,541	4,513,758	4,514,414	0	126	0	126	0	4,514,541	0	0	0	43,809	11/20/2030
76111B-UQ-9	RALI Series 2006-QS2 Tru-RALI 2006-QS2 1		12/01/2024	PAYDOWN		8,358	9,506	8,804	8,325	0	4,036	0	4,036	0	8,358	0	0	0	759	02/01/2036
76112B-NM-8	GIACM Mortgage Loan Trus-GIACM 2005-AA1		12/01/2024	PAYDOWN		584,131	555,002	494,589	512,630	0	43,997	0	43,997	0	584,131	0	0	0	17,853	05/01/2035
881561-VY-7	Terwin Mortgage Trust Se-TMTS 2005-12AL		12/01/2024	PAYDOWN		368,573	368,573	355,869	362,319	0	6,050	0	6,050	0	368,573	0	0	0	7,126	07/01/2036
78386N-BC-2	SACO I Inc-SACO 1999-3 1B1		12/01/2024	PAYDOWN		32,038	32,038	31,192	31,800	0	182	0	182	0	32,038	0	0	0	972	04/01/2039
81745A-AB-3	Sequoia Mortgage Trust 2-SEMT 2013-5 A2		12/01/2024	PAYDOWN		191,940	191,940	181,714	183,237	0	8,638	0	8,638	0	191,940	0	0	0	2,523	05/01/2043
83611M-JX-7	Soundview Home Loan Trus-SVHE 2005-OPT4		12/26/2024	PAYDOWN		653,478	653,478	499,910	653,478	0	0	0	0	0	653,478	0	0	0	9,485	12/25/2035
88522Q-NM-8	Thornburg Mortgage Secur-TMST 2005-2 A1		12/26/2024	PAYDOWN		50,740	50,740	50,772	50,709	0	38	0	38	0	50,740	0	0	0	1,786	07/25/2045
76111B-FL-7	RALI Series 2005-QA9 Tru-RALI 2005-QA9 C		12/01/2024	PAYDOWN		171,336	173,134	167,853	165,224	0	21,633	0	21,633	0	171,336	0	0	0	6,831	08/01/2035
76111B-GT-9	RALI Series 2005-QS13 Tr-RALI 2005-QS13		12/25/2024	PAYDOWN		0	0	7,881	0	0	261	0	261	0	0	0	0	0	31	09/25/2035

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
816181-AC-4	Office Properties Income-SENIOR UNSECURE		.01/11/2024	MIZUHO SECURITIES		8,150,000	10,000,000	9,799,000	9,973,208	0	1,157	0	1,157	0	9,974,365	0	(1,824,365)	(1,824,365)	206,250	.02/01/2025
761118-KH-0	RALI Series 2005-QS15 Tr-RALI 2005-QS15		.12/01/2024	PAYDOWN		20,672	27,870	25,744	19,834	0	7,815	0	7,815	0	20,672	0	0	0	893	.10/01/2035
81748K-AA-0	Sequoia Mortgage Trust 2-SEMT 2020-2 A1		.12/01/2024	PAYDOWN		507,613	507,613	520,144	527,782	0	(20,335)	0	(20,335)	0	507,613	0	0	0	11,421	.03/01/2050
87151Q-AC-0	Symetra Financial Corp-SENIOR UNSECURED		.06/25/2024	CALL 100		7,750,000	7,750,000	7,808,203	7,754,338	0	(4,040)	0	(4,040)	0	7,750,297	0	(297)	(297)	311,076	.07/15/2024
761118-BU-1	RALI Series 2005-QA8 Tru-RALI 2005-QA8 N		.12/01/2024	PAYDOWN		429,314	448,910	359,736	379,442	0	70,708	10,807	59,901	0	429,314	0	0	0	3,969	.07/01/2035
78473T-AJ-9	STARM Mortgage Loan Trus-STARM 2007-2 4A		.05/01/2024	PAYDOWN		2,734	2,734	1,551	1,477	0	1,326	0	1,326	0	2,734	0	0	0	49	.04/01/2037
76971E-AA-2	RMF Buyout Issuance Trus-RBIT 2020-HB1 A		.11/25/2024	PAYDOWN		3,645,610	3,645,610	3,645,606	3,656,716	0	(11,106)	0	(11,106)	0	3,645,610	0	0	0	30,114	.10/25/2050
805564-EM-9	Saxon Asset Securities T-SAST 1999-3 BF1		.11/01/2024	PAYDOWN		(867)	7,609	7,609	6,710	0	4,038	0	4,038	0	(867)	0	0	0	609	.12/01/2032
760985-S6-9	RFSC Series 2004-RP1 Tru-RFSC 2004-RP1A		.12/26/2024	PAYDOWN		82,604	88,138	87,698	79,956	0	8,277	0	8,277	0	82,604	0	0	0	4,886	.11/25/2042
86359B-AU-2	Structured Asset Securit-SASC 2005-4XS 1		.12/01/2024	PAYDOWN		387,687	387,687	362,487	387,687	0	(910)	0	(910)	0	387,687	0	0	0	10,086	.03/01/2035
863579-C3-0	Structured Adjustable Ra-SARM 2005-21 6A		.12/01/2024	PAYDOWN		113,084	113,068	99,266	102,742	0	10,184	0	10,184	0	113,084	0	0	0	2,676	.11/01/2035
76110H-HB-5	RALI Series 2004-QA6 Tru-RALI 2004-QA6 N		.12/01/2024	PAYDOWN		37,352	36,861	30,129	31,985	0	5,797	.912	4,885	0	37,352	0	0	0	1,005	.12/01/2034
863579-J9-0	Structured Adjustable Ra-SARM 2005-22 1A		.12/01/2024	PAYDOWN		57,786	57,028	44,154	53,513	0	17,571	4,058	13,513	0	57,786	0	0	0	(34)	.12/01/2035
81745C-AA-1	Sequoia Mortgage Trust 2-SEMT 2013-7 A1		.12/01/2024	PAYDOWN		154,709	154,709	139,408	141,818	0	12,890	0	12,890	0	154,709	0	0	0	2,293	.06/01/2043
863579-RP-5	Structured Adjustable Ra-SARM 2005-11 1A		.12/01/2024	PAYDOWN		30,526	46,990	36,917	41,085	0	(24,397)	(15,996)	(8,401)	0	30,526	0	0	0	2,650	.05/01/2035
863579-SU-3	Structured Adjustable Ra-SARM 2005-12 3A		.12/01/2024	PAYDOWN		72,521	72,521	55,701	62,088	0	10,332	0	10,332	0	72,521	0	0	0	1,615	.06/01/2035
863579-ZL-5	Structured Adjustable Ra-SARM 2005-20 3A		.12/01/2024	PAYDOWN		256,267	256,387	217,800	217,766	0	38,585	0	38,585	0	256,267	0	0	0	313	.10/01/2035
86359B-LE-9	Structured Adjustable Ra-SARM 2004-2 4A1		.12/01/2024	PAYDOWN		30,965	30,965	29,843	30,394	0	548	0	548	0	30,965	0	0	0	1,059	.03/01/2034
81745R-AB-6	Sequoia Mortgage Trust 2-SEMT 2013-3 A2		.12/01/2024	PAYDOWN		214,515	214,515	198,337	200,121	0	14,308	0	14,308	0	214,515	0	0	0	3,200	.03/01/2043
88156E-AB-2	Terwin Mortgage Trust 20-TMTS 2006-17HE		.12/26/2024	PAYDOWN		423,018	423,013	364,998	487,076	0	(70,001)	0	(70,001)	0	423,018	0	0	0	17,554	.01/25/2038
83611M-HM-3	Soundview Home Loan Trus-SVHE 2005-B M2		.12/01/2024	PAYDOWN		74,218	70,532	38,528	61,819	0	(44,996)	0	(44,996)	0	74,218	0	0	0	699	.05/01/2035
86359A-ME-0	Structured Asset Securit-SASC 2003-AL1 A		.12/01/2024	PAYDOWN		59,809	59,809	52,154	57,166	0	2,643	0	2,643	0	59,809	0	0	0	1,130	.04/01/2031
86359A-MG-5	Structured Asset Securit-SASC 2003-AL1 A		.12/01/2024	PAYDOWN		23,001	23,001	16,200	21,705	124	1,172	0	1,296	0	23,001	0	0	0	0	.04/01/2031
844741-BF-4	Southwest Airlines Co-SENIOR UNSECURED		.08/08/2024	VARIOUS		14,166,619	15,000,000	14,920,200	14,948,838	0	4,753	0	4,753	0	14,953,591	0	(786,972)	(786,972)	386,896	.02/10/2030
759950-EM-6	Renaissance Home Equity -RAINC 2004-4 AFS		.12/01/2024	PAYDOWN		636,426	636,426	574,573	54,272	0	54,272	0	54,272	0	636,426	0	0	0	11,844	.02/01/2035
76110H-T9-0	RALI Series 2005-QA2 Tru-RALI 2005-QA2 N		.12/01/2024	PAYDOWN		32,142	32,142	17,652	17,664	0	14,059	(666)	14,725	0	32,142	0	0	0	841	.02/01/2035
85572R-AA-7	Start Ltd/Bermuda-STARR 2018-1 A	D	.12/15/2024	PAYDOWN		2,518,943	2,518,943	2,511,217	2,514,957	0	3,985	0	3,985	0	2,518,943	0	0	0	73,585	.05/15/2043
86358R-XY-8	Structured Asset Securit-SASC 2002-AL1 A		.12/01/2024	PAYDOWN		101,071	102,164	65,932	91,690	0	9,970	96	9,874	0	101,070	0	0	0	1,994	.02/01/2032
86358R-XZ-5	Structured Asset Securit-SASC 2002-AL1 A		.12/01/2024	PAYDOWN		125,287	125,591	43,298	55,237	779	159,933	(92,124)	252,836	0	125,287	0	0	0	1,632	.02/01/2032
86358R-YB-7	Structured Asset Securit-SASC 2002-AL1 A		.12/01/2024	PAYDOWN		29,833	31,747	22,404	21,634	6,193	931	0	7,124	0	29,833	0	0	0	0	.02/01/2032
86212V-AA-2	Store Master Funding I-V-STR 2016-1A A1		.12/20/2024	PAYDOWN		246,177	246,177	246,047	246,128	0	50	0	50	0	246,177	0	0	0	5,315	.10/20/2046
86212V-AD-6	Store Master Funding I-V-STR 2018-1A A1		.04/20/2024	PAYDOWN		10,595,731	10,595,731	10,538,855	10,552,115	0	43,616	0	43,616	0	10,595,731	0	0	0	137,350	.10/20/2048
863572-LV-3	Structured Asset Securit-SASC 1996-4 A		.12/01/2024	PAYDOWN		4,799	4,799	4,499	4,678	0	105	0	105	0	4,799	0	0	0	189	.09/01/2031
863579-UL-0	Structured Adjustable Ra-SARM 2005-15 1A		.12/01/2024	PAYDOWN		5,950	6,044	3,735	3,666	0	18,339	(1,204)	19,543	0	5,950	0	0	0	921	.07/01/2035
863579-UU-0	Structured Adjustable Ra-SARM 2005-15 4A		.12/01/2024	PAYDOWN		121,521	121,574	101,906	101,936	0	26,013	(8,093)	34,106	0	121,521	0	0	0	(1,145)	.07/01/2035
87264A-BF-1	T-Mobile USA Inc-FIRST LIEN		.07/30/2024	MRB0010		5,395,266	5,000,000	5,620,500	5,434,447	0	(39,181)	0	(39,181)	0	5,395,266	0	0	0	153,385	.04/15/2030
863579-XR-4	Structured Adjustable Ra-SARM 2005-18 8A		.12/01/2024	PAYDOWN		698,803	655,382	566,543	584,074	0	105,219	16,213	89,006	0	698,803	0	0	0	18,780	.09/01/2035
86359A-WR-0	Structured Asset Securit-SASC 2003-AL2 A		.12/01/2024	PAYDOWN		411,393	411,393	357,023	366,484	0	44,909	0	44,909	0	411,393	0	0	0	6,946	.01/01/2031
86359A-WT-6	Structured Asset Securit-SASC 2003-AL2 A		.12/25/2024	PAYDOWN		83,576	83,576	64,975	70,818	0	12,757	0	12,757	0	83,576	0	0	0	0	.01/25/2031
86359F-AB-8	Structured Asset Securit-SASC 2006-S2 A2		.12/25/2024	PAYDOWN		16,829	16,829	13,084	6,910	0	9,918	0	9,918	0	16,829	0	0	0	356	.06/25/2036
81748J-AA-3	Sequoia Mortgage Trust 2-SEMT 2019-4 A1		.12/01/2024	PAYDOWN		272,386	272,386	278,089	281,446	0	(10,191)	0	(10,191)	0	272,386	0	0	0	6,981	.11/01/2049
885220-DX-8	Thornburg Mortgage Secur-TMST 2003-4 M1		.12/25/2024	PAYDOWN		60,355	60,355	51,000	62,640	0	(3,191)	0	(3,191)	0	60,355	0	0	0	1,986	.09/25/2043
86359L-NA-3	Structured Asset Mortgage-SAMI 2005-AR6 2		.12/26/2024	PAYDOWN		192,867	192,867	135,743	202,308	0	(10,282)	0	(10,282)	0	192,867	0	0	0	5,503	.09/25/2045
87267J-AA-1	TruPS Financials Note Se-TFINS 2018-2A A	D	.09/30/2024	PAYDOWN		2,924,808	2,924,808	2,924,808	2,924,808	0	0	0	0	0	2,924,808	0	0	0	112,807	.09/30/2039
863579-VH-8	Structured Adjustable Ra-SARM 2005-17 1A		.12/01/2024	PAYDOWN		62,553	62,553	59,875	62,477	(55)	59,875	(55)	59,875	0	62,553	0	0	0	1,999	.08/01/2035
863579-VI-5	Structured Adjustable Ra-SARM 2005-17 5A		.12/25/2024	PAYDOWN		45,649	45,721	31,949	24,398	0	33,328	0	33,328	0	45,649	0	0	0	1,577	.08/25/2035
881561-CH-5	Terwin Mortgage Trust Se-TMTS 2003-6HE M		.12/26/2024	PAYDOWN		288,283	288,283	273,329	288,283	0	0	0	0	0	288,283	0	0	0	3,376	.11/25/2033
881561-LE-2	Terwin Mortgage Trust Se-TMTS 2004-11HE		.12/26/2024	PAYDOWN		26,225	26,225	21,013	28,801	0	(3,129)	0	(3,129)	0	26,225	0	0	0	1,032	.10/25/2035
881561-LR-3	Terwin Mortgage Trust 20-TMTS 2004-19HE		.12/26/2024	PAYDOWN		31,026	31,026	22,843	35,515	0	(14,125)	0	(14,125)	0	31,026	0	0	0	1,684	.10/25/2034

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identi- fication	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
88157V-AB-3	Terwin Mortgage Trust 20-TMST 2007-6ALT		12/26/2024	PAYDOWN		93,615	93,615	48,680	81,848	0	10,309	0	10,309	0	93,615	0	0	0	601	08/25/2038
881561-LS-1	Terwin Mortgage Trust 20-TMST 2004-19HE		06/25/2024	PAYDOWN		71,107	71,107	56,343	71,047	0	60	0	60	0	71,107	0	0	0	2,555	10/25/2034
86268H-AA-6	Strata CLO I Ltd-STRTA 2018-1A A	D	01/16/2024	PAYDOWN		1,481,282	1,481,282	1,481,282	1,483,204	0	(1,922)	0	(1,922)	0	1,481,282	0	0	0	27,428	01/15/2031
88432F-AY-5	THL Credit Wind River 20-WINDR 2015-1A A	D	04/10/2024	PAYDOWN		8,000,000	8,000,000	8,000,000	8,000,000	0	0	0	0	0	8,000,000	0	0	0	274,212	10/20/2030
885220-KW-2	Thornburg Mortgage Secur-TMST 2006-2 A2B		12/26/2024	PAYDOWN		78,980	79,661	69,757	72,603	0	5,002	(6,326)	11,328	0	78,980	0	0	0	2,032	04/25/2036
89171D-AD-9	Towd Point Mortgage Trus-TPMT 2015-1 A4		02/01/2024	PAYDOWN		818,815	818,815	838,517	821,603	0	(2,788)	0	(2,788)	0	818,815	0	0	0	4,543	10/01/2053
89707Y-AA-2	Tropic CDO IV Ltd-TROPIC 2004-4A A1L	D	10/15/2024	PAYDOWN		1,399,942	1,399,942	1,086,895	1,271,262	0	128,679	0	128,679	0	1,399,942	0	0	0	57,491	04/15/2035
98625L-AJ-1	Generate CLO Ltd.	D	05/22/2024	PAYDOWN		8,500,000	8,500,000	8,500,000	8,501,804	0	(1,804)	0	(1,804)	0	8,500,000	0	0	0	252,528	10/22/2031
98875N-AC-9	Zais Clo 9 Ltd-ZAIS9 2018-2A B1	D	04/22/2024	PAYDOWN		2,200,000	2,200,000	2,200,000	2,200,000	0	0	0	0	0	2,200,000	0	0	0	86,253	07/20/2031
98944P-AB-3	Zephyrus Capital Aviatio-ZCAP 2018-1 A	C	12/15/2024	PAYDOWN		1,463,248	1,463,248	1,441,570	1,454,381	0	8,867	0	8,867	0	1,463,248	0	0	0	40,622	10/15/2038
97652P-AL-5	WinWater Mortgage Loan T-WIN 2014-1 A11		12/01/2024	PAYDOWN		75,736	75,736	75,262	75,268	0	468	0	468	0	75,736	0	0	0	1,399	06/01/2044
97650W-AF-5	Wintrust Financial Corp-SUBORDINATED		06/13/2024	MATURITY		5,000,000	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	0	0	125,000	06/13/2024
98875N-AJ-4	Zais Clo 9 Ltd-ZAIS9 2018-2A B2	D	04/22/2024	PAYDOWN		19,000,000	19,000,000	19,000,000	19,000,000	0	0	0	0	0	19,000,000	0	0	0	336,300	07/20/2031
94989Y-AY-9	Wells Fargo Commercial M-WFCM 2016-C32 A		08/01/2024	PAYDOWN		525,092	525,092	530,330	526,021	0	(930)	0	(930)	0	525,092	0	0	0	12,972	01/01/2059
95058X-AE-8	Wendy's Funding LLC-WEN 2018-1A A211		12/15/2024	PAYDOWN		80,977	80,977	77,425	79,753	0	1,224	0	1,224	0	80,977	0	0	0	1,966	03/15/2048
94989Q-AV-2	Wells Fargo Commercial M-WFCM 2015-SG1 A		12/01/2024	PAYDOWN		261,700	261,700	269,591	262,927	0	(1,227)	0	(1,227)	0	261,700	0	0	0	9,393	09/01/2048
94989N-BD-8	Wells Fargo Commercial M-WFCM 2015-C30 A		12/01/2024	PAYDOWN		89,471	89,471	89,094	89,376	0	95	0	95	0	89,471	0	0	0	1,841	09/01/2058
95002K-AA-1	Wells Fargo Mortgage Bac-WFMB 2020-1 A1		12/01/2024	PAYDOWN		246,341	246,341	249,266	250,747	0	(5,114)	0	(5,114)	0	246,341	0	0	0	3,634	12/01/2049
95002F-AA-2	Wells Fargo Mortgage Bac-WFMB 2019-4 A1		12/01/2024	PAYDOWN		184,551	184,551	187,838	189,422	0	(4,999)	0	(4,999)	0	184,551	0	0	0	4,101	09/01/2049
95058X-AG-3	Wendy's Funding LLC-WEN 2019-1A A21		12/15/2024	PAYDOWN		251,622	251,622	251,622	251,622	0	0	0	0	0	251,622	0	0	0	5,954	06/15/2049
94984D-AC-8	Wells Fargo Mortgage Bac-WFMB 2006-AR13		12/01/2024	PAYDOWN		168,522	45,196	35,358	42,438	0	18,363	(6,395)	24,758	0	168,522	0	0	0	2,627	09/01/2036
94354K-AA-8	WAVE 2019-1 LLC-WAAV 2019-1 A		12/15/2024	PAYDOWN		795,334	795,334	795,299	794,816	0	518	0	518	0	795,334	0	0	0	20,472	09/15/2044
92979D-AC-9	Wachovia Mortgage Loan T-WMLT 2007-A 2A1		12/01/2024	PAYDOWN		369,770	367,310	326,699	326,493	0	(1,003)	(48,319)	47,316	0	369,770	0	0	0	14,609	03/01/2037
91412N-AG-5	University of Chicago/Th-UNSECURED		10/01/2024	MATURITY		455,000	455,000	454,977	455,000	0	0	0	0	0	455,000	0	0	0	13,946	10/01/2024
94986M-AA-0	Wells Fargo Mortgage Bac-WFMB 2007-AR10		12/01/2024	PAYDOWN		233,411	240,147	241,498	242,156	0	11,660	0	11,660	0	233,411	0	0	0	6,950	01/01/2038
94986M-AF-9	Wells Fargo Mortgage Bac-WFMB 2007-AR10		12/01/2024	PAYDOWN		65,615	65,161	53,809	57,259	0	(4,029)	0	(4,029)	0	57,816	0	7,799	7,799	1,511	01/01/2038
93363P-AA-8	WalMu Mortgage Pass-Throu-WAMU 2006-AR14		12/01/2024	PAYDOWN		61,666	56,780	52,840	53,201	0	586	0	586	0	61,666	0	0	0	1,578	11/01/2036
93363P-AC-4	WalMu Mortgage Pass-Throu-WAMU 2006-AR14		12/01/2024	PAYDOWN		633,870	625,998	587,900	626,041	0	(128,290)	0	(128,290)	0	633,870	0	0	0	18,122	11/01/2036
93363P-AD-2	WalMu Mortgage Pass-Throu-WAMU 2006-AR14		12/01/2024	PAYDOWN		9,744	9,663	8,843	9,107	0	(405)	0	(405)	0	9,744	0	0	0	404	11/01/2036
92922F-GY-8	WalMu Mortgage Pass-Throu-WAMU 2003-S11 3		12/25/2024	PAYDOWN		30,293	30,293	30,360	30,293	0	1	0	1	0	30,293	0	0	0	1,649	11/25/2033
910304-AA-2	United Financial Bancorp-SUBORDINATED		10/01/2024	MATURITY		4,000,000	4,000,000	4,000,000	4,000,000	0	0	0	0	0	4,000,000	0	0	0	230,000	10/01/2024
98920U-AB-0	TruPS Financials Note Se-TFINS 2018-1A A	D	09/30/2024	PAYDOWN		13,581	13,581	13,445	13,581	0	0	0	0	0	13,581	0	0	0	942	03/30/2039
93363N-AB-1	WalMu Mortgage Pass-Throu-WAMU 2006-AR12		12/01/2024	PAYDOWN		53,911	54,588	51,603	54,785	0	(596)	0	(596)	0	53,911	0	0	0	842	10/01/2036
98887T-AB-4	Zais Clo 6 Ltd-ZAIS6 2017-1A A2	D	07/15/2024	PAYDOWN		10,750,000	10,750,000	10,750,000	10,751,191	0	(1,191)	0	(1,191)	0	10,750,000	0	0	0	579,399	07/15/2029
98887T-AG-1	Zais Clo 6 Ltd-ZAIS6 2017-1A BR	D	10/15/2024	PAYDOWN		43,271,369	38,467,326	38,467,326	38,467,326	0	0	0	0	0	43,271,369	0	0	0	2,631,081	07/15/2029
989203-AA-2	TruPS Financials Note Se-TFINS 2017-2A A	D	12/20/2024	PAYDOWN		499,187	499,187	489,204	500,591	0	(13,277)	0	(13,277)	0	499,187	0	0	0	26,543	09/20/2039
989203-AB-0	TruPS Financials Note Se-TFINS 2017-2A A	D	12/20/2024	PAYDOWN		228,200	228,200	223,636	232,764	0	(14,082)	0	(14,082)	0	228,200	0	0	0	12,134	09/20/2039
97064F-AA-3	Willis Engine Structured-WESTF 2020-A A		12/15/2024	PAYDOWN		639,223	639,223	639,214	639,223	0	0	0	0	0	639,223	0	0	0	10,589	03/15/2045
89708B-AA-1	Tropic CDO V Ltd-TROPIC 2006-5A A1L1	D	10/15/2024	PAYDOWN		538,012	538,012	484,575	485,607	0	52,404	0	52,404	0	538,012	0	0	0	25,391	07/15/2036
89821J-AA-6	TruPS Financials Note Se-TFINS 2019-1A A	D	11/04/2024	PAYDOWN		519,474	519,474	519,474	519,474	0	0	0	0	0	519,474	0	0	0	39,872	02/02/2039
90342N-AA-5	US Capital Funding V Ltd-USCAP 2006-5A A	D	10/10/2024	PAYDOWN		560,007	560,007	464,806	485,453	0	74,555	0	74,555	0	560,007	0	0	0	9,798	10/10/2040
92922T-R5-7	WalMu Mortgage Pass-Throu-WAMU 2003-ARS A		12/01/2024	PAYDOWN		849,945	849,945	694,830	773,022	0	74,672	0	74,672	0	849,945	0	0	0	30,620	06/01/2033
903329-AC-4	US Capital Funding I Ltd-USCAP FLOAT 05/	D	02/01/2024	CALL 100		2,117,500	2,117,500	2,046,464	2,072,415	0	(93,286)	0	(93,286)	0	1,979,129	0	138,371	138,371	68,713	05/01/2034
90390K-AB-0	US Capital Funding II Lt-USCAP FLOAT 08/	D	08/01/2024	CALL 100		601,6														

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
949890-AV-1	Wells Fargo Commercial M-WFCM 2015-C27 A		12/01/2024	PAYDOWN		1,594,348	1,594,348	1,561,651	1,589,881	0	4,467	0	4,467	0	1,594,348	0	0	0	37,080	02/01/2048
949890-AW-9	Wells Fargo Commercial M-WFCM 2015-C27 A		12/01/2024	PAYDOWN		1,970,047	1,970,047	1,988,516	1,971,927	0	(1,880)	0	(1,880)	0	1,970,047	0	0	0	73,652	02/01/2048
92925V-AF-7	WaMu Mortgage Pass-Throu-WAMU 2007-HY1 2		12/01/2024	PAYDOWN		185,215	178,957	144,560	172,131	0	(12,859)	28,101	(40,960)	0	185,215	0	0	0	4,348	02/01/2037
93934N-AR-6	Washington Mutual Mortga-WMALT 2006-5 2C		12/25/2024	PAYDOWN		3,013	12,139	9,590	2,890	0	26,299	0	26,299	0	3,013	0	0	0	763	07/25/2036
92922F-4T-0	WaMu Mortgage Pass-Throu-WAMU 2003-S4 2A		12/01/2024	PAYDOWN		155,874	155,874	156,507	156,076	0	(196)	0	(196)	0	155,874	0	0	0	6,357	06/01/2033
92922F-3N-6	WaMu Mortgage Pass-Throu-WAMU 2005-AR12		12/01/2024	PAYDOWN		161,492	161,492	153,662	158,069	0	3,212	0	3,212	0	161,492	0	0	0	4,941	10/01/2035
92922F-3Q-9	WaMu Mortgage Pass-Throu-WAMU 2005-AR12		12/01/2024	PAYDOWN		4,966	4,966	4,832	4,966	0	(11)	0	(11)	0	4,966	0	0	0	134	09/01/2035
92922F-7C-6	WaMu Mortgage Pass-Throu-WAMU 2005-AR16		12/01/2024	PAYDOWN		101,858	94,768	80,030	80,825	0	15,831	0	15,831	0	101,858	0	0	0	14,311	12/01/2035
92922F-8T-8	WaMu Mortgage Pass-Throu-WAMU 2005-AR18		12/01/2024	PAYDOWN		228,915	193,834	187,777	193,254	0	(13,363)	0	(13,363)	0	228,915	0	0	0	4,456	01/01/2036
92922F-J5-8	WaMu Mortgage Pass-Throu-WAMU 2005-AR6 2		12/25/2024	PAYDOWN		322,673	322,673	268,322	340,156	0	(18,799)	0	(18,799)	0	322,673	0	0	0	10,073	04/25/2045
92925C-CC-4	WaMu Mortgage Pass-Throu-WAMU 2006-AR1 1		12/01/2024	PAYDOWN		42,810	42,810	34,569	36,682	0	6,103	0	6,103	0	42,810	0	0	0	1,105	01/01/2046
933636-AA-0	WaMu Mortgage Pass-Throu-WAMU 2007-HY4 1		12/01/2024	PAYDOWN		72,091	86,340	76,797	84,630	0	(4,905)	0	(4,905)	0	72,091	0	0	0	1,695	04/01/2037
933636-AG-7	WaMu Mortgage Pass-Throu-WAMU 2007-HY4 3		12/01/2024	PAYDOWN		270,916	273,533	259,016	267,522	0	(1,903)	0	(1,903)	0	270,916	0	0	0	6,405	04/01/2037
92939F-AT-6	WFRBS Commercial Mortgag-WFRBS 2014-C21		05/01/2024	PAYDOWN		1,859,318	1,859,318	1,926,718	1,862,286	0	(2,968)	0	(2,968)	0	1,859,318	0	0	0	28,107	08/01/2047
92977Y-BW-0	Wachovia Mortgage Loan T-WMLT 2005-B 244		12/01/2024	PAYDOWN		84,580	84,193	78,117	81,064	0	3,152	0	3,152	0	84,580	0	0	0	2,560	10/01/2035
92990G-AG-8	WaMu Mortgage Pass-Throu-WAMU 2007-HY5 2		12/01/2024	PAYDOWN		787,177	686,394	531,686	613,551	0	(39,058)	0	(39,058)	0	787,177	0	0	0	34,637	05/01/2037
92990G-AJ-2	WaMu Mortgage Pass-Throu-WAMU 2007-HY5 3		12/01/2024	PAYDOWN		147,710	147,791	134,389	139,194	0	8,091	0	8,091	0	147,710	0	0	0	(3,383)	05/01/2037
93363E-AB-1	WaMu Mortgage Pass-Throu-WAMU 2006-AR10		12/01/2024	PAYDOWN		65,142	64,340	61,672	64,761	0	(1,250)	0	(1,250)	0	65,142	0	0	0	1,807	09/01/2036
939336-X9-9	WaMu Mortgage Pass-Throu-WAMU 2005-AR1 A		12/25/2024	PAYDOWN		195,633	195,598	163,709	180,950	0	13,177	0	13,177	0	195,633	0	0	0	5,836	01/25/2045
74041N-AA-3	Preferred Term Securitie-SECURED	D	12/31/2024	PAYDOWN		1,803,087	1,803,087	1,714,041	1,803,087	0	0	0	0	0	1,803,087	0	0	0	0	12/24/2033
023135-CA-2	Amazon.com Inc-SENIOR UNSECURED		07/30/2024	MRB0010		11,994,503	12,000,000	12,084,840	12,076,351	0	(2,136)	0	(2,136)	0	12,074,215	0	(79,712)	(79,712)	247,250	05/12/2041
62922L-AA-6	NGL Energy Operating LLC-SECURED		02/06/2024	CALL 101.875		2,546,875	2,500,000	2,591,250	2,529,438	0	(4,376)	0	(4,376)	0	2,525,062	0	21,814	21,814	96,354	02/01/2026
19425A-AE-4	College Avenue Student L-CASL 2021-B D		12/25/2024	PAYDOWN		944,144	944,144	943,712	943,886	0	259	0	259	0	944,144	0	0	0	19,116	06/25/2052
24703T-AC-0	Dell International LLC /-FIRST LIEN		10/11/2024	CALL 100.677117		4,768,068	4,736,000	4,798,366	4,781,075	0	(23,981)	0	(23,981)	0	4,757,095	0	10,974	10,974	343,242	07/15/2025
24703T-AD-8	Dell International LLC /-FIRST LIEN		03/19/2024	CALL 101.679		1,189,644	1,170,000	1,188,065	1,185,561	0	(1,521)	0	(1,521)	0	1,184,040	0	5,604	5,604	18,391	06/15/2026
12795*-AA-2	CGA Capital Corp Pass Thru Ctf's Series 2		12/10/2024	SINKING PAYMENT		1,035,935	1,035,935	1,035,935	1,035,935	0	0	0	0	0	1,035,935	0	0	0	26,465	03/10/2031
90319*-AA-1	UOA Fayetteville (Univer Senior Secured		12/15/2024	SINKING PAYMENT		462,784	462,784	467,412	466,507	0	(3,649)	0	(3,649)	0	462,784	0	0	0	11,022	03/15/2041
19425A-AD-6	College Avenue Student L-CASL 2021-B C		12/25/2024	PAYDOWN		708,205	708,205	708,100	708,142	0	62	0	62	0	708,205	0	0	0	7,474	06/25/2052
174610-AW-5	Citizens Financial Group-SUBORDINATED		03/25/2024	VARIOUS		20,231,358	26,587,000	26,587,000	26,587,000	0	0	0	0	0	26,587,000	0	(6,355,642)	(6,355,642)	337,083	09/30/2032
05608W-AN-4	BX Trust-BX 2021-SOAR E		05/15/2024	PAYDOWN		516,671	516,671	516,671	516,671	0	0	0	0	0	516,671	0	0	0	7,548	06/15/2038
05463*-AA-7	Axiom Hoya LLC Senior Unsecured Notes		10/05/2024	SINKING PAYMENT		80,625	80,625	80,625	80,625	0	0	0	0	0	80,625	0	0	0	3,061	12/31/2050
95023A-AE-0	Wellfleet QLO Ltd-WELF 2021-2A C	D	03/11/2024	INTLFCSTONE		4,386,008	4,400,000	4,400,000	4,400,000	0	0	0	0	0	4,400,000	0	(13,992)	(13,992)	145,232	07/15/2034
30227F-AJ-9	Extended Stay America Tr-ESA 2021-ESH D		12/15/2024	PAYDOWN		789,738	789,738	789,738	789,738	0	0	0	0	0	789,738	0	0	0	31,028	07/15/2038
34107*-AA-7	Florida Pipeline Holding Senior Secured		08/15/2024	SINKING PAYMENT		1,656,126	1,656,126	1,656,126	1,656,126	0	0	0	0	0	1,656,126	0	0	0	38,113	08/15/2038
29002V-AE-8	ELM10 2021-3A C-ELM10 2021-3A C	D	04/22/2024	PAYDOWN		5,000,000	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	0	0	194,744	10/20/2034
96928*-FV-4	William Blair & Company, Trust Certifica		12/15/2024	SINKING PAYMENT		252,927	252,927	252,927	252,927	0	0	0	0	0	252,927	0	0	0	5,641	09/15/2044
96928*-DZ-7	William Blair & Company, Trust Certifica		12/15/2024	SINKING PAYMENT		852,018	852,018	859,848	854,073	0	(1,590)	0	(1,590)	0	852,018	0	0	0	26,213	10/15/2029
91855*-AA-3	VA (Ponce, PR) CTL Trust Certificate		12/15/2024	SINKING PAYMENT		228,119	228,119	228,119	228,119	0	0	0	0	0	228,119	0	0	0	7,202	08/15/2042
91845*-AA-2	VZ (Senior Note) CTL Pas Trust Certificate		12/15/2024	SINKING PAYMENT		423,227	423,227	423,227	423,226	0	(9)	0	(9)	0	423,227	0	0	0	8,860	05/15/2035
91841*-AA-8	Virginia (Lafayette, IN) Trust Certifica		12/15/2024	SINKING PAYMENT		311,635	311,635	311,635	311,635	0	0	0	0	0	311,635	0	0	0	6,824	08/15/2036
26848*-AA-5	EDX/GE Inventory Supply Pass-Thru Certif		10/15/2024	SINKING PAYMENT		412,955	412,955	412,955	412,961	0	(6)	0	(6)	0	412,955	0	0	0	11,327	01/15/2029
22977*-AA-9	CTL Pass-Thru Trust Seri Trust Certifica		12/15/2024	SINKING PAYMENT		317,563	317,563	317,563	317,563	0	0	0	0	0	317,563	0	0	0	7,807	12/15/2033
50196*-AA-5	LON North American Fund Corp Bond		10/01/2024	VARIOUS		226,754	226,754	226,754	226,754	0	0	0	0	0	226,754	0	0	0	(12,903)	07/26/2034
96928*-CX-3	William Blair & Company, Trust Certifica		12/15/2024	SINKING PAYMENT		443,797	443,797	448,269	445,945	0	(1,960)	0	(1,960)	0	443,797	0	0	0	15,030	01/15/2035
82817*-AA-7	Silver Spring Metro Cent Senior Note Tra		12/05/2024	SINKING PAYMENT		257,182	257,182	257,179	257,180	0	2	0	2	0	257,182	0	0	0	5,217	07/17/2029
12733*-AA-3	CTL Pass-Thru Trust Seri Trust Certifica		12/15/2024	SINKING PAYMENT		322,944	322,944	322,944	322,944	0	0	0	0	0	322,944	0	0	0	5,456	10/15/2043
05586*-AA-9	BGS Spartanburg 2017 Trust Certificate		12/15/2024	SINKING PAYMENT		488,150	488,150	488,150	488,150	0	0	0	0	0	488,150	0	0	0	12,401	07/15/2032
36850*-AA-9	Geisinger (Jenkins Towns Trust Certifica		12/15/2024	SINKING PAYMENT		572,681	572,681	572,681	572,681	0	0	0	0	0	572,681	0	0	0	10,478	12/15/2033
16877*-AA-0	Childress Klien-Cambridg Senior Secured		12/05/2024	SINKING PAYMENT		794,331	794,331	795,325	794,959	0	19	0	19	0	794,331	0	0	0	(26,009)	01/05/2036

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
16372#-AA-0	Chemical Bank Pass-Thru Certificate		12/10/2024	SINKING PAYMENT		224,237	224,237	224,237	224,237	0	0	0	0	0	224,237	0	0	0	6,258	06/10/2044
42249#-AA-7	HealthPartners, Inc. Senior Note Series		05/21/2024	CALL 100		1,964,757	1,964,757	1,964,757	1,964,795	0	56	0	56	0	1,964,851	0	(94)	(94)	50,784	05/15/2030
82817#-AA-9	Silver Spring Metro Cent Senior Note Tra		12/05/2024	SINKING PAYMENT		507,903	507,903	507,903	507,903	0	0	0	0	0	507,903	0	0	0	10,567	01/05/2029
26443#-AA-6	Dulles Discovery 1 Contr Pass-Thru Certi		12/05/2024	SINKING PAYMENT		596,055	596,055	596,055	596,055	0	0	0	0	0	596,055	0	0	0	15,475	06/05/2037
12724#-AA-6	CVS (Clawson & Richmond Trust Certificat		12/15/2024	SINKING PAYMENT		510,666	510,666	515,584	513,959	0	(3,161)	0	(3,161)	0	510,666	0	0	0	11,282	01/15/2035
77775#-BV-2	Rosenthal & Rosenthal, I Senior Note		01/31/2024	SINKING PAYMENT		4,000,000	4,000,000	4,000,000	4,000,000	0	0	0	0	0	4,000,000	0	0	0	212,800	01/31/2026
12707#-AA-9	CVS (NC SC PA & VA) Con Trust Certifica		12/15/2024	SINKING PAYMENT		450,708	450,708	450,708	450,709	0	0	0	0	0	450,708	0	0	0	11,966	01/15/2044
22960#-AA-0	CTL PASS THRU TR SER 2013 (OCHSNER SLIDE		12/15/2024	SINKING PAYMENT		988,839	988,839	988,839	988,848	0	(10)	0	(10)	0	988,839	0	0	0	26,994	12/15/2028
00195#-AA-9	Amazon (Toledo Oh) Trust Certificate		12/31/2024	SINKING PAYMENT		511,398	511,398	511,398	511,398	0	0	0	0	0	511,398	0	0	0	12,246	10/31/2040
22163#-AA-1	Costco (Oceanside NY) Le Trust Certifica		12/15/2024	SINKING PAYMENT		316,162	316,162	316,162	316,162	0	0	0	0	0	316,162	0	0	0	5,405	12/15/2041
00193#-AA-5	Amazon (Tulsa Ok) Trust Certificate		12/31/2024	SINKING PAYMENT		311,046	311,046	311,046	311,030	0	16	0	16	0	311,046	0	0	0	8,324	09/30/2039
00191#-AA-3	Amazon (Tucson Az) Trust Certificate		12/31/2024	SINKING PAYMENT		156,299	156,299	156,299	156,170	0	139	0	139	0	156,299	0	0	0	4,046	08/31/2039
22973#-AA-3	Great West Casualty Comp Trust Certifica		12/15/2024	SINKING PAYMENT		351,045	351,045	352,225	351,946	0	(880)	0	(880)	0	351,045	0	0	0	10,298	12/15/2028
22970#-AA-8	BNSF (Dayton, Texas) Con Trust Certifica		12/01/2024	SINKING PAYMENT		741,510	741,510	741,510	741,530	0	(20)	0	(20)	0	741,510	0	0	0	21,734	05/15/2034
13177#-AA-8	Camargo Investments I LL Senior Note		12/20/2024	CA_CASH_CLOSE		266,803	266,803	266,803	266,803	0	0	0	0	0	266,803	0	0	0	18,760	05/31/2025
26847#-AA-8	Edx/Ge Inventory Supply Pass-Thru Certif		10/15/2024	SINKING PAYMENT		452,533	452,533	452,533	452,535	0	(3)	0	(3)	0	452,533	0	0	0	9,345	04/15/2028
05279#-AA-9	Autoliv ASP, Inc. Trust Certificate Tran		12/15/2024	SINKING PAYMENT		296,629	296,629	296,629	296,629	0	0	0	0	0	296,629	0	0	0	8,861	05/15/2034
22965#-AA-3	WAG (Edina, Minnesota) C Trust Certifica		12/15/2024	SINKING PAYMENT		196,925	196,925	198,985	198,110	0	(1,121)	0	(1,121)	0	196,925	0	0	0	5,493	07/15/2037
06424#-AA-1	Bank Of America (Houston Pass-Thru Certi		12/15/2024	SINKING PAYMENT		394,827	394,827	397,253	396,183	0	(1,270)	0	(1,270)	0	394,827	0	0	0	7,445	12/31/2029
00184#-AA-4	Amazon (Euclid Oh) Trust Certificate		12/31/2024	SINKING PAYMENT		142,487	142,487	142,487	142,418	0	75	0	75	0	142,487	0	0	0	3,638	06/30/2039
2684#-AA-9	EDX/GE Inventory Supply Pass-Thru Certif		10/15/2024	SINKING PAYMENT		212,372	212,372	212,372	212,372	0	0	0	0	0	212,372	0	0	0	4,415	01/15/2030
75086#-AA-3	Rainier Gsa Portfolio I US Govt Lease Ba		12/15/2024	SINKING PAYMENT		269,318	269,318	269,318	269,318	0	0	0	0	0	269,318	0	0	0	11,256	07/15/2036
7433#-AA-6	Project Axis Garner NC C Trust Certificat		12/15/2024	SINKING PAYMENT		471,971	471,971	471,971	471,977	0	(7)	0	(7)	0	471,971	0	0	0	10,265	11/15/2039
9692#-FK-8	William Blair & Company, Trust Certifica		12/15/2024	SINKING PAYMENT		541,572	541,572	541,572	541,597	0	(27)	0	(27)	0	541,572	0	0	0	19,559	11/15/2032
9692#-EZ-6	William Blair & Company, Trust Certifica		12/15/2024	SINKING PAYMENT		597,200	597,200	597,200	597,201	0	(1)	0	(1)	0	597,200	0	0	0	16,664	09/15/2033
22160#-AA-6	Costco (Monterey Park C Trust Certifica		12/20/2024	SINKING PAYMENT		129,389	129,389	129,389	129,370	0	20	0	20	0	129,389	0	0	0	3,670	06/20/2043
35826#-AA-4	County of Fresno CA Trust Certificates		12/15/2024	SINKING PAYMENT		408,514	408,514	412,591	411,426	0	(2,819)	0	(2,819)	0	408,514	0	0	0	10,484	06/15/2038
9692#-FX-0	William Blair & Company, Trust Certifica		12/15/2024	SINKING PAYMENT		946,569	946,569	946,569	946,569	0	(1)	0	(1)	0	946,569	0	0	0	20,736	02/15/2036
9692#-EN-3	William Blair & Company, Trust Certifica		12/15/2024	SINKING PAYMENT		498,651	498,651	504,020	500,794	0	(1,881)	0	(1,881)	0	498,651	0	0	0	11,392	02/15/2034
872280-#A-9	TCG BDC, Inc. Senior Note Series 2020		12/31/2024	MATURITY		5,000,000	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	0	0	225,000	12/31/2024
00191#-AA-5	Amazon (Oklahoma City Ok Trust Certifica		12/31/2024	SINKING PAYMENT		297,488	297,488	297,488	297,455	0	36	0	36	0	297,488	0	0	0	7,956	09/30/2039
70215#-AA-8	Partstat (Varian 2020 I Pass-Thru Certif		12/15/2024	SINKING PAYMENT		603,918	603,918	603,918	603,918	0	0	0	0	0	603,918	0	0	0	9,843	03/15/2030
62935#-AB-6	NOAA Maryland LLC Senior Note Tranche B		07/30/2024	CA_CASH_CLOSE		10,723,812	10,000,000	10,100,000	10,073,971	0	(2,710)	0	(2,710)	0	10,071,261	0	652,551	652,551	396,713	05/15/2035
00910#-A*-4	Air Cargo Logistics Ctl Trust Certificat		12/10/2024	SINKING PAYMENT		162,402	162,402	162,402	162,402	0	0	0	0	0	162,402	0	0	0	4,604	02/10/2041
0558#-AA-7	BGS Huntersville 2017 Trust Certificate		12/15/2024	SINKING PAYMENT		401,496	401,496	401,496	401,497	0	0	0	0	0	401,496	0	0	0	9,808	05/15/2038
26067#-AA-3	Dow (Midland Mi) Control Trust Certifica		12/15/2024	SINKING PAYMENT		640,089	640,089	642,969	641,543	0	(1,352)	0	(1,352)	0	640,089	0	0	0	18,581	03/15/2034
30292#-AA-2	FBI Bronx Control Trust Pass-Thru Certif		12/15/2024	SINKING PAYMENT		586,284	586,284	586,284	586,284	0	0	0	0	0	586,284	0	0	0	12,516	07/15/2033
04249#-AD-3	Army & Air Force Exchang Senior Note		10/15/2024	VARIOUS		154,120	154,120	154,120	154,120	0	0	0	0	0	154,120	0	0	0	4,216	10/15/2024
36200#-AA-8	GE Huntsville 2020B Leas Trust Certifica		12/15/2024	SINKING PAYMENT		61,232	61,232	61,232	61,232	0	0	0	0	0	61,232	0	0	0	1,524	04/15/2046
3619#-AA-0	GE Huntsville 2020A Leas Trust Certifica		12/15/2024	SINKING PAYMENT		259,436	259,436	259,436	259,436	0	0	0	0	0	259,436	0	0	0	6,457	04/15/2046
05587#-AA-8	BGS Fedex Series 2017A Trust Certificate		12/15/2024	SINKING PAYMENT		414,217	414,217	414,217	414,228	0	(12)	0	(12)	0	414,217	0	0	0	10,788	03/15/2037
43722#-AA-1	Home Depot (Monterey Par Trust Certifica		12/15/2024	SINKING PAYMENT		266,972	266,972	266,972	266,972	0	0	0	0	0	266,972	0	0	0	5,397	06/15/2038
00225#-AA-3	Amazon (Grand Rapids, M Trust Certifica		12/31/2024	SINKING PAYMENT		145,794	145,794	145,794	145,685	0	118	0	118	0	145,794	0	0	0	3,774	09/30/2039
05590#-AA-9	BPHQ 2017 Trust Certificate BP Corp Nort		12/15/2024	SINKING PAYMENT		214,405	214,405	214,405	214,405	0	0	0	0	0	214,405	0	0	0	5,414	11/15/2032
12585#-AA-4	CHP (Fresno Ca) Trust Certificate		12/15/2024	SINKING PAYMENT		1,609,504	1,609,504	1,609,504	1,609,504	0	0	0	0	0	1,609,504	0	0	0	28,028	02/15/2028
23316#-AA-5	DEA (Nashville TN) LLC Pass-Thru Certifi		12/05/2024	SINKING PAYMENT		368,794	368,794	368,794	368,794	0	0	0	0	0	368,794	0	0	0	7,479	08/05/2040
77775#-BU-4	Rosenthal & Rosenthal, I Senior Note		01/15/2024	SINKING PAYMENT		2,000,000	2,000,000	2,000,000	2,000,135	0	(135)	0	(135)	0	2,000,000	0	0	0	87,600	01/15/2025
12697#-AA-7	Cric KY HQ LLC Senior Secured Note		12/15/2024	SINKING PAYMENT		164,900	164,900	164,900	164,902	0	(3)	0	(3)	0	164,900	0	0	0	3,448	03/15/2042
31307#-AA-9	FDL-CC LLC Senior Note Tranche A-1		12/15/2024	SINKING PAYMENT		139,528	139,528	139,550	139,539	0	(10)	0	(10)	0	139,528	0	0	0	4,028	02/15/2035

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identi- fication	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
31307#-AC-5	FDL-CC LLC Senior Note Tranche A-3		12/15/2024	SINKING PAYMENT		79,599	79,599	79,602	79,601	0	(3)	0	(3)	0	79,599	0	0	0	2,269	06/15/2037
12694*-AA-4	CVS (New Albany, IN) Trust Certificate		12/15/2024	SINKING PAYMENT		190,248	190,248	190,248	190,248	0	0	0	0	0	190,248	0	0	0	6,898	01/15/2041
50243#-AA-8	LVCVA (Las Vegas NV) Rec Trust Certifica		12/15/2024	SINKING PAYMENT		602,759	602,759	602,759	602,759	0	0	0	0	0	602,759	0	0	0	(33,159)	12/15/2039
31429#-AA-2	Fedex Chino Control Pass Trust Certifica		12/15/2024	SINKING PAYMENT		848,957	848,957	848,957	848,957	0	0	0	0	0	848,957	0	0	0	16,332	10/15/2035
96928*-FQ-5	William Blair & Company, Trust Certifica		12/15/2024	SINKING PAYMENT		613,461	613,461	613,461	613,461	0	0	0	0	0	613,461	0	0	0	13,422	09/15/2033
35824#-AA-4	Fresno County (Rowell Bu Trust Certifica		12/15/2024	SINKING PAYMENT		15,388	15,388	15,529	15,503	0	(113)	0	(113)	0	15,388	0	0	0	274	05/15/2040
36248#-AA-0	GSA (Anchorage AK) CTL P Pass-Thru Certi		12/15/2024	SINKING PAYMENT		1,444,595	1,444,595	1,457,596	1,449,422	0	(4,159)	0	(4,159)	0	1,444,595	0	0	0	27,579	11/15/2030
96928*-FH-5	William Blair & Company, Trust Certifica		12/15/2024	SINKING PAYMENT		1,591,204	1,591,204	1,591,204	1,591,204	0	0	0	0	0	1,591,204	0	0	0	55,630	04/15/2025
91854*-AA-4	VZ (Irving TX)(Senior No Trust Certifica		12/15/2024	SINKING PAYMENT		390,698	390,698	390,698	390,699	0	0	0	0	0	390,698	0	0	0	9,040	08/15/2036
90378#-AA-1	U.S. Department of Agric Trust Certifica		12/15/2024	SINKING PAYMENT		186,393	186,393	186,393	186,393	0	0	0	0	0	186,393	0	0	0	3,277	04/15/2038
90272*-AA-0	UHC (Senior Note) CTL Pa Trust Certifica		12/15/2024	SINKING PAYMENT		247,762	247,762	247,762	247,716	0	50	0	50	0	247,762	0	0	0	7,099	05/15/2033
43722*-AA-5	Home Depot South Windsor Pass-Thru Certi		12/15/2024	SINKING PAYMENT		221,522	221,522	221,522	221,522	0	0	0	0	0	221,522	0	0	0	4,089	10/15/2040
96928*-DJ-3	William Blair & Company, Trust Certifica		12/15/2024	SINKING PAYMENT		604,261	604,261	604,261	604,262	0	(1)	0	(1)	0	604,261	0	0	0	17,339	09/15/2031
24023#-AA-7	DC Department of Correct Pass-Thru Certi		12/15/2024	SINKING PAYMENT		362,039	362,039	362,039	362,485	0	(481)	0	(481)	0	362,039	0	0	0	18,029	03/15/2033
63946T-AA-9	NB Direct Access Insuran Senior Secured		11/14/2024	VARIOUS		2,929,682	1,634,815	1,634,815	1,634,815	0	0	0	0	0	2,929,670	0	0	0	236,919	07/29/2025
74351#-AA-6	Project Arrow Oak Creek Trust Certificate		12/10/2024	SINKING PAYMENT		507,154	507,154	507,154	507,154	0	0	0	0	0	507,154	0	0	0	11,329	07/10/2040
85235*-AA-6	St Louis County Control Trust Certificat		12/15/2024	SINKING PAYMENT		1,241,794	1,241,794	1,241,794	1,241,794	0	0	0	0	0	1,241,794	0	0	0	46,782	12/15/2036
86909#-AA-5	Susquehanna (18 Properti Trust Certifica		12/23/2024	SINKING PAYMENT		220,126	220,126	220,127	220,127	0	0	0	0	0	220,126	0	0	0	7,908	12/23/2036
87228#-AA-1	TCG BDC, Inc. Senior Note Series 2019		12/31/2024	MATURITY		7,500,000	7,500,000	7,500,000	7,500,000	0	0	0	0	0	7,500,000	0	0	0	356,250	12/31/2024
87819#-AA-2	TD Bank (Miami, FL) CTL Trust Certificat		12/15/2024	SINKING PAYMENT		188,079	188,079	188,079	188,079	0	0	0	0	0	188,079	0	0	0	8,587	01/15/2038
90253#-AA-1	UA (Portland OR) CTL Pas Trust Certifica		12/15/2024	SINKING PAYMENT		1,016,165	1,016,165	1,026,204	1,020,791	0	(4,208)	0	(4,208)	0	1,016,165	0	0	0	31,707	02/15/2032
89441#-AA-4	Traverse City Control Tr Trust Certifica		12/15/2024	SINKING PAYMENT		397,331	397,331	401,305	403,505	0	(6,353)	0	(6,353)	0	397,331	0	0	0	13,182	11/15/2039
96928*-FY-8	William Blair & Company, Trust Certifica		12/15/2024	SINKING PAYMENT		353,589	353,589	353,589	353,590	0	0	0	0	0	353,589	0	0	0	9,682	01/15/2035
96930#-AA-9	William Blair & Company Trust Certificat		12/15/2024	SINKING PAYMENT		275,094	275,094	275,094	275,095	0	0	0	0	0	275,094	0	0	0	6,561	08/15/2035
92982#-AA-5	Wec 2000B-CSF-11 LLC Senior Secured Note		12/15/2024	SINKING PAYMENT		134,783	134,783	137,654	136,321	0	(1,429)	0	(1,429)	0	134,783	0	0	0	3,128	09/15/2030
96928*-DA-2	William Blair & Company, Trust Certifica		12/15/2024	SINKING PAYMENT		860,399	860,399	869,669	863,424	0	(2,520)	0	(2,520)	0	860,399	0	0	0	25,266	08/15/2031
92983*-AA-6	WEC 99J-4 LLC Senior Secured Note		12/15/2024	SINKING PAYMENT		80,517	80,517	82,232	81,698	0	(1,138)	0	(1,138)	0	80,517	0	0	0	1,867	09/15/2034
92982*-AA-3	WEC 99J-22 LLC Senior Secured Note		11/15/2024	CALL 100		79,125	79,125	80,810	80,605	0	(26)	0	(26)	0	80,579	0	(1,454)	(1,454)	1,700	09/15/2039
92981#-AA-6	WEC 99J-58 LLC Senior Secured Note		12/15/2024	SINKING PAYMENT		131,060	131,060	133,851	132,555	0	(1,390)	0	(1,390)	0	131,060	0	0	0	3,041	09/15/2030
96038#-AA-8	Westin (St Louis MO) Lea Trust Certifica		12/15/2024	SINKING PAYMENT		110,579	110,579	110,579	110,579	0	0	0	0	0	110,579	0	0	0	3,156	07/15/2047
92983#-AA-4	WEC 99J-72 LLC Senior Secured Note		07/15/2024	CALL 100		56,067	56,067	57,261	57,115	0	(10)	0	(10)	0	57,105	0	(1,039)	(1,039)	801	09/15/2039
96928*-CR-6	William Blair & Company, Trust Certificat		12/15/2024	SINKING PAYMENT		213,321	213,321	213,321	213,321	0	0	0	0	0	213,321	0	0	0	7,634	05/15/2034
96042#-AA-4	Westkin Portfolio (LAS & Trust Certifica		12/15/2024	SINKING PAYMENT		360,772	360,772	364,379	363,506	0	(2,663)	0	(2,663)	0	360,772	0	0	0	11,938	11/15/2038
62878Y-AA-2	NOTHING BUNDT CAKES-BUNDT 2021-1 A2		10/30/2024	PAYDOWN		25,000	25,000	25,000	25,000	0	0	0	0	0	25,000	0	0	0	654	07/30/2051
95040Q-AL-8	Welltower Inc-SENIOR UNSECURED		08/08/2024	VARIOUS		9,412,427	10,000,000	10,005,500	10,004,394	0	(362)	0	(362)	0	10,004,032	0	(591,606)	(591,606)	289,514	01/15/2031
81761T-AG-0	ServiceMaster Funding LL-SERV 2021-1 A21		04/30/2024	PAYDOWN		40,000	40,000	40,000	40,000	0	0	0	0	0	40,000	0	0	0	467	07/30/2051
12510H-AN-0	Capital Automotive REIT-CAUTO 2021-1A A4		12/15/2024	PAYDOWN		90,000	90,000	85,860	86,551	0	3,449	0	3,449	0	90,000	0	0	0	1,348	08/15/2051
09261L-AC-2	Blackstone Secured Lendi-SENIOR UNSECURE		06/11/2024	BARINGSLLC		7,675,287	8,000,000	8,124,160	8,051,200	0	(11,430)	0	(11,430)	0	8,039,770	0	(364,483)	(364,483)	262,611	01/15/2026
09261X-AB-8	Blackstone Secured Lendi-SENIOR UNSECURE		06/11/2024	BARINGSLLC		6,948,136	7,500,000	7,409,325	7,453,560	0	7,333	0	7,333	0	7,460,893	0	(512,757)	(512,757)	151,823	09/16/2026
64755#-AA-9	New Mountain Guardian III Senior Notes S		08/16/2024	CA CASH CLOSE		3,189,150	3,189,150	3,189,150	3,189,150	0	0	0	0	0	3,189,150	0	0	0	108,708	07/15/2025
38136N-AU-0	Goldentree Loan Manageme-GLM 2020-8A CR	D	10/31/2024	PAYDOWN		6,725,000	6,725,000	6,725,000	6,725,000	0	0	0	0	0	6,725,000	0	0	0	520,854	10/20/2034
83615P-AE-7	Sound Point Clo XXXI Ltd-SNDPT 2021-3A C	D	02/12/2024	BOFAMLSEC		4,881,900	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	(118,100)	(118,100)	121,026	10/25/2034
78449X-AA-0	SMB Private Education Lo-SMB 2020-B A1A		12/15/2024	PAYDOWN		876,366	876,366	859,660	864,555	0	11,810	0	11,810	0	876,366	0	0	0	5,846	07/15/2053
03328W-AU-2	Anchorage Capital CLO 9 -ANCHC 2016-9A B	D	07/24/2024	PAYDOWN		3,250,000	3,250,000	3,250,000	3,250,000	0	0	0	0	0	3,250,000	0	0	0	187,293	07/15/2032
94950A-AS-9	Wellfleet CLO 2020-2 Ltd-WELF 2020-2A CR	D	07/30/2024	CITIGROUP GLOBAL MAR		3,829,208	3,825,000	3,825,000	3,825,000	0	0	0	0	0	3,825,000	0	4,208	4,208	242,730	07/15/2034
05685A-AJ-7	Bain Capital Credit CLO-BCC 2021-4A C	D	11/04/2024	PAYDOWN		7,000,000	7,000,000	7,000,000	7,000,000	0	0	0	0	0	7,000,000	0	0	0	545,721	10/20/2034
27830Q-AQ-1	Eaton Vance CLO 2020-1 L-EATON 2020-1A D	D	08/08/2024	PAYDOWN		2,500,000	2,500,000	2,500,000	2,500,000	0	0	0	0	0	2,500,000	0	0	0	179,516	10/15/2034
67115L-AC-8	Oak Hill Credit Partners-OKC 2021-16A B	D	09/24/2024	PAYDOWN		13,600,000	13,600,000	13,600,000	13,600,000	0	0	0	0	0	13,600,000	0	0	0	928,904	10/18/2034
P4900*-AB-2	Gran Americas Usme Provi Senior Secured	D	11/30/2024	SINKING PAYMENT		58,005	58,005	58,005	58,005	0	0	0	0	0	58,005	0	0	0	1,664	03/31/2031
P4900*-AA-4	Gran Americas Usme Provi Senior Secured	D	11/30/2024	SINKING PAYMENT		652,255	652,255	652,255	652,255	0	0	0	0	0	652,255	0	0	0	18,631	03/31/2031

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
67097L-AM-8	OPC CLO 2017-13 Ltd-OPC 2017-13A A2R	D	11/26/2024	PAYDOWN		11,500,000	11,500,000	11,500,000	11,500,000	0	0	0	0	0	11,500,000	0	0	0	833,225	07/15/2030
00981@-AA-9	Akron Childrens Hospital Trust Certifica		12/15/2024	SINKING PAYMENT		108,139	108,139	109,220	109,089	0	(940)	0	(940)	0	108,139	0	0	0	2,724	08/15/2050
53948W-AA-1	Loan Asset Issuer LLC - Series 2021 NG-1		12/26/2024	CA CASH_CLOSE		2,259,877	2,259,877	2,259,877	2,259,877	0	0	0	0	0	2,259,877	0	0	0	41,656	10/25/2046
05682E-AG-8	Bain Capital Credit CLO -BOC 2021-5A C	D	11/26/2024	PAYDOWN		4,600,000	4,600,000	4,600,000	4,600,000	0	0	0	0	0	4,600,000	0	0	0	355,238	10/23/2034
29002H-AQ-2	Elmwood CLO III Ltd-ELMW3 2019-3A CR	D	06/20/2024	PAYDOWN		5,000,000	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	0	0	261,582	10/20/2034
29002H-AS-8	Elmwood CLO III Ltd-ELMW3 2019-3A DR	D	06/20/2024	PAYDOWN		2,500,000	2,500,000	2,500,000	2,500,000	0	0	0	0	0	2,500,000	0	0	0	148,583	10/20/2034
61747Y-EF-8	Morgan Stanley-SUBORDINATED		09/16/2024	CITIGROUP GLOBAL MAR		29,261,050	35,000,000	32,687,500	32,937,725	0	96,402	0	96,402	0	33,034,126	0	(3,773,076)	(3,773,076)	871,815	09/16/2036
06051G-KC-2	Bank of America Corp-SUBORDINATED		09/16/2024	CITIGROUP GLOBAL MAR		8,413,000	10,000,000	9,313,000	9,387,487	0	28,542	0	28,542	0	9,416,029	0	(1,003,029)	(1,003,029)	245,442	09/21/2036
55821L-AE-4	Madison Park Funding XXX-MDPK 2021-39A C	D	09/17/2024	PAYDOWN		3,900,000	3,900,000	3,900,000	3,900,000	0	0	0	0	0	3,900,000	0	0	0	271,738	10/22/2034
86271P-AG-0	Strata CLO II Ltd-STRTA 2021-1A C	D	07/09/2024	PAYDOWN		10,000,000	10,000,000	10,000,000	10,000,000	0	0	0	0	0	10,000,000	0	0	0	618,521	10/20/2033
86271P-AE-5	Strata CLO II Ltd-STRTA 2021-1A B	D	07/09/2024	PAYDOWN		11,000,000	11,000,000	11,000,000	11,000,000	0	0	0	0	0	11,000,000	0	0	0	616,085	10/20/2033
63942G-AA-1	Navient Private Educatio-NAVSL 2021-FA A		12/15/2024	PAYDOWN		565,636	565,636	483,619	0	0	82,017	0	82,017	0	565,636	0	0	0	2,571	02/18/2070
00190Y-BH-7	Ares XXVII CLO Ltd-ARES 2013-2A CR2	D	11/26/2024	PAYDOWN		9,250,000	9,250,000	9,250,000	9,250,000	0	0	0	0	0	9,250,000	0	0	0	709,512	10/28/2034
00900L-AS-3	AIMCO CLO Series 2015-A-AIMCO 2015-AA CR	D	09/03/2024	PAYDOWN		3,750,000	3,750,000	3,750,000	3,750,000	0	0	0	0	0	3,750,000	0	0	0	254,862	10/17/2034
38138D-AS-5	Goldentree Loan Manageme-GLM 2019-5A CR	D	08/05/2024	PAYDOWN		5,000,000	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	0	0	308,591	10/20/2032
97314D-AG-3	KVK CLO 2016-1 Ltd-KVK 2016-1A CR2	D	07/15/2024	BNP PARIBAS		4,504,995	4,500,000	4,500,000	4,500,000	0	0	0	0	0	4,500,000	0	4,995	4,995	272,535	10/15/2034
09581J-AC-0	Blue Owl Finance LLC-SENIOR UNSECURED		10/28/2024	EXCHANGE OFFER		9,813,421	10,000,000	9,802,400	9,810,082	0	3,339	0	3,339	0	9,813,421	0	0	0	436,563	10/07/2051
67118A-AN-5	OPG Trust 2021-PORT-OPG 2021-PORT E		04/15/2024	PAYDOWN		208,829	208,829	207,092	208,283	0	545	0	545	0	208,829	0	0	0	6,056	10/15/2036
67118A-AQ-8	OPG Trust 2021-PORT-OPG 2021-PORT F		04/15/2024	PAYDOWN		83,431	83,431	83,222	82,921	0	510	0	510	0	83,431	0	0	0	2,092	10/15/2036
67098D-AW-3	OHA Credit Funding 4 Ltd-OKAC 2019-4A CR	D	12/16/2024	PAYDOWN		4,200,000	4,200,000	4,200,000	4,200,000	0	0	0	0	0	4,200,000	0	0	0	325,573	10/22/2036
08888@-AA-4	Bidtellect, Inc. Promissory Note		12/31/2024	CORPORATE ACTION		418,158	1	0	0	0	0	0	0	0	0	0	418,158	418,158	0	06/30/2023
67118A-AS-4	OPG Trust 2021-PORT-OPG 2021-PORT G		04/15/2024	PAYDOWN		83,398	83,398	83,191	82,883	0	515	0	515	0	83,398	0	0	0	2,218	10/15/2036
05609K-AL-3	BX Commercial Mortgage T-BX 2021-XL2 F		09/15/2024	PAYDOWN		1,024,127	1,024,127	1,019,003	1,019,075	0	5,052	0	5,052	0	1,024,127	0	0	0	33,138	10/15/2038
86271P-AJ-4	Strata CLO II Ltd-STRTA 2021-1A D	D	07/09/2024	PAYDOWN		9,000,000	9,000,000	8,910,000	8,847,973	0	152,027	0	152,027	0	9,000,000	0	0	0	655,294	10/20/2033
05609K-AJ-8	BX Commercial Mortgage T-BX 2021-XL2 E		09/15/2024	PAYDOWN		409,651	409,651	407,602	407,578	0	2,073	0	2,073	0	409,651	0	0	0	12,568	10/15/2038
05609K-AN-9	BX Commercial Mortgage T-BX 2021-XL2 G		09/15/2024	PAYDOWN		1,228,952	1,228,952	1,222,803	1,222,763	0	6,189	0	6,189	0	1,228,952	0	0	0	42,860	10/15/2038
03330Y-AE-0	Anchorage Capital Clo 20-ANCHC 2021-20A	D	12/23/2024	PAYDOWN		10,000,000	10,000,000	10,000,000	10,000,000	0	0	0	0	0	10,000,000	0	0	0	754,116	01/20/2035
041242-AA-6	Arko Corp-SENIOR UNSECURED		09/18/2024	STIFEL NICOLAUS		4,270,250	4,495,000	4,433,838	4,448,144	0	4,905	0	4,905	0	4,453,049	0	(182,799)	(182,799)	194,534	11/15/2029
389286-AA-3	Gray Escrow II Inc-SENIOR UNSECURED		05/20/2024	VARIOUS		849,794	1,377,000	1,377,000	1,377,000	0	0	0	0	0	1,377,000	0	(527,206)	(527,206)	38,080	11/15/2031
74042W-AA-2	Preferred Term Securitie-SECURED		12/23/2024	PAYDOWN		1,793,645	1,793,645	1,703,033	1,793,645	0	0	0	0	0	1,793,645	0	0	0	10,770	09/23/2035
05609R-AL-8	BX Trust-BX 2021-BXMF D		09/15/2024	PAYDOWN		1,405,156	1,405,156	1,393,816	1,401,602	0	3,554	0	3,554	0	1,405,156	0	0	0	76,913	10/15/2026
05609R-AN-4	BX Trust-BX 2021-BXMF E		09/15/2024	PAYDOWN		2,629,914	2,629,914	2,608,638	2,623,310	0	6,604	0	6,604	0	2,629,914	0	0	0	155,766	10/15/2026
74969P-AA-6	RP Escrow Issuer LLC-SECURED		02/22/2024	EXCHANGE OFFER		5,006,633	5,000,000	5,025,000	5,008,076	0	(1,443)	0	(1,443)	0	5,006,633	0	0	0	48,854	12/15/2025
58403Y-AU-0	Med Trust 2021-MDLN-MED 2021-MDLN E		07/15/2024	PAYDOWN		7,961,790	7,961,790	7,961,790	7,961,790	0	0	0	0	0	7,961,790	0	0	0	404,827	11/15/2038
58403Y-AX-4	Med Trust 2021-MDLN-MED 2021-MDLN F		07/15/2024	PAYDOWN		8,957,013	8,957,013	8,957,013	8,957,013	0	0	0	0	0	8,957,013	0	0	0	500,476	11/15/2038
58403Y-AR-7	Med Trust 2021-MDLN-MED 2021-MDLN D		07/15/2024	PAYDOWN		10,284,642	10,284,642	10,143,494	10,298,629	0	(13,988)	0	(13,988)	0	10,284,642	0	0	0	452,956	11/15/2038
75003@-AA-5	Renewable Energy Alterna Senior Secured		12/31/2024	SINKING PAYMENT		10,201	10,201	10,201	10,201	0	0	0	0	0	10,201	0	0	0	3,110	12/31/2046
35908W-AB-6	Frontier Communications -2ND LIEN		12/13/2024	STIFEL NICOLAUS		3,000,000	3,000,000	3,022,500	3,014,484	0	(4,726)	0	(4,726)	0	3,009,758	0	(9,758)	(9,758)	255,500	01/15/2030
00085K-AS-2	ABPCI Direct Lending Fun-ABPCI 2019-7A A		03/28/2024	PAYDOWN		10,000,000	10,000,000	10,000,000	10,000,000	0	0	0	0	0	10,000,000	0	0	0	291,800	10/20/2031
44107T-BA-3	Host Hotels & Resorts LP-SENIOR UNSECURE		07/30/2024	VARIOUS		8,803,713	10,000,000	9,465,600	9,556,804	0	16,525	0	16,525	0	9,573,329	0	(769,616)	(769,616)	145,483	12/15/2031
94950N-AS-1	Wellfleet Clo 2019-1 Ltd-WELF 2019-1A BR	D	03/11/2024	INTLFCSTONE		5,491,255	5,500,000	5,500,000	5,500,000	0	0	0	0	0	5,500,000	0	(8,745)	(8,745)	177,066	07/20/2032
03666L-AS-1	Antares CLO 2020-1 Ltd-ANTR 2020-1A CR	D	03/11/2024	SMBC NIKKO SECURITIE		11,974,800	12,000,000	12,000,000	12,000,000	0	0	0	0	0	12,000,000	0	(25,200)	(25,200)	382,912	10/23/2033
94950N-AU-6	Wellfleet Clo 2019-1 Ltd-WELF 2019-1A CR	D	05/23/2024	WELLS FARGO		9,007,200	9,000,000	9,000,000	9,000,000	0	0	0	0	0	9,000,000	0	7,200	7,200	506,764	07/20/2032
03666L-AU-6	Antares CLO 2020-1 Ltd-ANTR 2020-1A DR	D	12/20/2024	MRB002A		4,999,470	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	(530)	(530)	535,836	10/23/2033
74333W-AJ-1	Progress Residential Trust-PROG 2021-SFR		12/01/2024	PAYDOWN		820,747	820,747	820,717	820,725	0	23	0	23	0	820,747	0	0	0	20,252	12/01/2040
67181D-AM-3	Oak Street Investment Gr-OKIG 2021-2A A		12/20/2024	PAYDOWN		1,250	1,250	1,250	1,250	0	0	0	0	0	1,250	0	0	0	41	11/20/2051
892231-AB-7	Townsquare Media Inc-SECURED		01/02/2024	STIFEL NICOLAUS		3,948,420	4,029,000	4,180,148	4,084,122	0	(398)	0	(398)	0	4,083,724	0	(135,304)	(135,304)	148,459	02/01/2026
256746-AJ-7	Dollar Tree Inc-SENIOR UNSECURED		07/30/2024	VARIOUS		34,261,239	39,447,000	38,421,114	38,600,247	0	30,969	0	30,969	0	38,631,216	0	(4,369,977)	(4,369,977)	423,840	12/01/2031
53950T-AB-1	Loan Asset Issuer LLC, Series 2021 M-2 -		12/10/2024	CA CASH_CLOSE		26,849,254	26,849,254	26,849,254	26,849,254	0	0	0	0	0	26,849,254	0	0	0	485,213	11/10/2033
53950T-AC-9	Loan Asset Issuer LLC, Series 2021 M-2 -		12/10/2024	CA CASH_CLOSE		13,424,627	13,424,627	13,424,627	13,424,627	0	0	0	0	0	13,424,627	0	0	0	296,463	11/10/2033
53950T-AD-7	Loan Asset Issuer LLC, Series 2021 M-2 -		12/10/2024	CA CASH_CLOSE		10,739,702	10,739,702	10,739,702	10,739,702	0	0	0	0	0	10,739,702	0	0	0	325,739	11/10/2033
53950T-AE-5	Loan Asset Issuer LLC, Series 2021 M-2 -		12/10/2024	CA CASH_CLOSE		10,739,702	10,739,702	10,739,702	10,739,702	0	0	0	0	0	10,739,702	0	0	0	436,068	11/10/203

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
53950T-AA-3	Loan Asset Issuer LLC, Series 2021 M-2		12/10/2024	CA_CASH_CLOSE		71,255,948	66,451,905	66,451,905	66,451,905	0	0	0	0	0	71,255,948	0	0	0	997,549	11/10/2033
27829P-AS-5	Eaton Vance CLO 2020-2 L-EATON 2020-2A C	D	10/03/2024	PAYDOWN		3,300,000	3,300,000	3,300,000	3,300,000	0	0	0	0	0	3,300,000	0	0	0	249,072	01/15/2035
92982*-AA-7	WEC 99J-27 LLC Senior Secured Note		07/15/2024	VARIOUS		58,674	58,674	59,924	59,772	0	89	0	89	0	59,761	0	(1,087)	(1,087)	839	09/15/2039
92981*-AA-4	WEC 99J-73 LLC Senior Secured Note		11/18/2024	CALL 100		97,197	97,197	99,268	99,015	0	45	0	45	0	98,989	0	(1,792)	(1,792)	2,193	09/15/2039
96928*-CQ-8	William Blair & Company, Trust Certificat		12/15/2024	SINKING PAYMENT		174,232	174,232	174,232	174,232	0	0	0	0	0	174,232	0	0	0	6,355	06/15/2033
36249@-AA-1	GSA Gth I US Government Lease-Backed Pas		12/15/2024	SINKING PAYMENT		618,030	618,030	618,030	618,030	0	(15)	0	(15)	0	618,030	0	0	0	10,511	05/15/2038
64755@-AB-7	New Mountain Guardian III Senior Notes S		08/16/2024	CA_CASH_CLOSE		1,200,000	1,200,000	1,200,000	1,200,000	0	0	0	0	0	1,200,000	0	0	0	41,477	07/15/2025
143122-AE-9	CARLYLE US CLO 2021-11 L-CGMS 2021-11A C	D	07/10/2024	PAYDOWN		5,000,000	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	0	0	275,366	01/25/2033
67112C-AN-7	OZLM XIX Ltd-OZLM 2017-19A A2AR	D	08/05/2024	PAYDOWN		8,600,000	8,600,000	8,600,000	8,600,000	0	0	0	0	0	8,600,000	0	0	0	523,534	01/15/2035
67256K-AB-0	Prop 2017-1 Ltd-ABS SSNR 5.30 03/15/42		12/15/2024	PAYDOWN		785,908	785,908	785,439	785,908	0	0	0	0	0	785,908	0	0	0	13,855	03/15/2042
93934N-AC-9	Washington Mutual Mortga-WMALT 2006-5 1A		12/01/2024	PAYDOWN		21,732	40,704	34,684	37,159	0	2,150	507	1,643	0	21,732	0	0	0	992	07/01/2036
92990G-AD-5	WaMu Mortgage Pass-Throu-WAMU 2007-HY5 2		12/01/2024	PAYDOWN		259,379	238,490	228,242	232,530	0	9,259	0	9,259	0	259,379	0	0	0	6,034	05/01/2037
863579-XC-7	Structured Adjustable Ra-SARM 2005 - 18		12/01/2024	PAYDOWN		335,335	306,051	203,669	203,208	0	116,405	0	116,405	0	335,335	0	0	0	8,557	09/01/2035
46631N-AA-7	JP Morgan Mortgage Trust-JPMMT 2007-S3 1		11/01/2024	PAYDOWN		4,200	4,200	2,318	2,373	0	1,880	52	1,828	0	4,200	0	0	0	171	08/01/2037
65535V-SJ-8	Nomura Asset Acceptance -NAA 2006-AP2 A2		11/01/2024	PAYDOWN		89,082	89,082	31,431	33,577	0	57,981	2,653	55,328	0	89,082	0	0	0	1,227	01/01/2036
466247-J4-6	JP Morgan Mortgage Trust-JPMMT 2006-A2 2		12/01/2024	PAYDOWN		7,591	7,591	6,769	6,775	0	811	0	811	0	7,591	0	0	0	197	04/01/2036
12668A-PC-3	Alternative Loan Trust 2-CWALT 2005-54CB		12/01/2024	PAYDOWN		83,934	95,403	74,120	78,117	0	15,145	737	14,408	0	83,934	0	0	0	2,898	11/01/2035
466247-ZP-1	JP Morgan Mortgage Trust-JPMMT 2005-S3 1		11/01/2024	PAYDOWN		9,229	9,229	5,307	5,051	0	4,178	0	4,178	0	9,229	0	0	0	331	01/01/2036
92925V-AP-5	WaMu Mortgage Pass-Throu-WAMU 2007-HY1 5		12/01/2024	PAYDOWN		82,082	82,396	71,764	74,932	0	(13,019)	0	(13,019)	0	82,082	0	0	0	2,114	02/01/2037
36242D-VA-8	GSR Mortgage Loan Trust -GSR 2005-1F 1A6		12/01/2024	PAYDOWN		61,665	61,665	60,710	59,742	0	1,923	0	1,923	0	61,665	0	0	0	2,591	02/01/2035
02147W-AT-6	Alternative Loan Trust 2-CWALT 2006-26CB		10/01/2024	PAYDOWN		24,209	39,199	27,121	10,558	0	10,558	0	10,558	0	24,209	0	0	0	1,455	09/01/2036
12628L-AD-2	CSAB Mortgage-Backed Tru-CSAB 2006-4 A2A		12/01/2024	PAYDOWN		94,282	94,282	19,301	20,601	0	74,993	1,307	73,686	0	94,282	0	0	0	578	12/01/2036
74958Y-AE-2	RFMSI Series 2007-S4 Tru-RFMSI 2007-S4 A		12/25/2024	PAYDOWN		12,600	18,095	13,934	15,877	0	1,776	770	1,006	0	12,600	0	0	0	576	04/25/2037
12638P-AB-5	CSMC Mortgage-Backed Tru-CSMC 2007-3 1A1		12/01/2024	PAYDOWN		24,843	24,843	7,854	16,882	0	16,882	315	16,567	0	24,843	0	0	0	87	04/01/2037
46630W-AL-4	JP Morgan Mortgage Trust-JPMMT 2007-S2 1		12/01/2024	PAYDOWN		12,379	12,293	6,835	6,384	0	5,961	9	5,952	0	12,379	0	0	0	475	06/01/2037
93364F-AH-4	WaMu Mortgage Pass-Throu-WAMU 2007-HY7 3		12/01/2024	PAYDOWN		101,469	118,697	119,871	120,985	0	(2,244)	0	(2,244)	0	101,469	0	0	0	2,631	07/01/2037
170257-AE-5	CHL Mortgage Pass-Throu-CWHL 2006-16 3A		12/01/2024	PAYDOWN		24,551	(34,516)	(18,815)	16,519	0	16,516	3	16,516	0	24,551	0	0	0	(818)	11/01/2036
94986C-AA-2	Wells Fargo Mortgage Bac-WFMB 2007-AR4		12/01/2024	PAYDOWN		312,739	55,621	43,891	50,738	0	93,334	(12,718)	106,052	0	312,738	0	0	0	3,233	08/01/2037
32051G-T7-0	First Horizon Alternativ-FHAMS 2006-FA1		12/01/2024	PAYDOWN		39,922	59,671	30,214	31,341	0	20,229	1,157	19,072	0	39,922	0	0	0	1,702	04/01/2036
14316E-AS-8	CARLYLE US CLO 2019-2 LT-CGMS 2019-2A BR	D	10/09/2024	PAYDOWN		5,000,000	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	0	0	388,754	07/15/2032
12544D-AG-4	CHL Mortgage Pass-Throu-CWHL 2007-14 A7		12/01/2024	PAYDOWN		1,266	1,270	752	796	0	480	7	473	0	1,266	0	0	0	76	09/01/2037
12545E-AK-2	CHL Mortgage Pass-Throu-CWHL 2007-J2 2A		11/01/2024	PAYDOWN		100,216	43,865	20,351	18,878	0	54,100	0	54,100	0	100,216	0	0	0	952	07/01/2037
12669G-AK-4	CHL Mortgage Pass-Throu-CWHL 2005-J3 1A		12/01/2024	PAYDOWN		206,579	205,292	164,126	164,648	0	41,608	687	40,921	0	206,579	0	0	0	5,124	09/01/2035
43741B-AA-7	HomeBanc Mortgage Trust -HMBT 2007-1 11A		12/01/2024	PAYDOWN		79,750	84,555	83,988	81,456	0	2,417	0	2,417	0	79,750	0	0	0	2,496	04/01/2047
058931-AT-3	Banc of America Funding -BAFC 2006-3 4A1		12/01/2024	PAYDOWN		454,680	453,095	390,127	460,988	0	29,102	38,326	(9,224)	0	454,680	0	0	0	21,352	03/01/2036
46630W-AB-6	JP Morgan Mortgage Trust-JPMMT 2007-S2 1		08/01/2024	PAYDOWN		25,636	25,636	13,891	13,689	0	11,947	0	11,947	0	25,636	0	0	0	1,096	06/01/2037
12566U-AE-4	CitiMortgage Alternative-CMALT 2007-A2 1		12/01/2024	PAYDOWN		16,893	24,966	23,103	24,071	0	297	133	164	0	16,893	0	0	0	1,541	02/01/2037
12566X-AM-0	CitiMortgage Alternative-CMALT 2007-A7 2		12/01/2024	PAYDOWN		39,058	43,416	40,845	42,699	0	1,236	768	468	0	39,058	0	0	0	508	07/01/2037
17309B-AB-3	Citigroup Mortgage Loan -CMLTI 2006-WF2		12/01/2024	PAYDOWN		18,988	18,988	7,877	8,158	0	11,142	306	10,836	0	18,988	0	0	0	274	05/01/2036
17309V-AH-6	CitiMortgage Alternative-CMALT 2006-A4 1		12/01/2024	PAYDOWN		58,792	60,701	58,355	59,020	0	1,755	0	1,755	0	58,792	0	0	0	2,272	09/01/2036
225458-L5-5	Credit Suisse First Bost-CSFB 2005-7 1A1		12/01/2024	PAYDOWN		18,805	18,807	17,723	16,910	0	1,426	(651)	2,077	0	18,805	0	0	0	117	08/01/2035
75116F-BH-1	RALI Series 2007-QS9 Tru-RALI 2007-QS9 A		12/01/2024	PAYDOWN		88,901	107,150	95,534	101,289	0	5,612	955	4,657	0	88,901	0	0	0	6,300	07/01/2037
126694-2H-0	CHL Mortgage Pass-Throu-CWHL 2006-10 1A		11/01/2024	PAYDOWN		45,755	43,752	23,124	23,695	0	20,895	62	20,833	0	45,755	0	0	0	1,533	05/01/2036
225458-2Y-3	Credit Suisse First Bost-CSFB 2005-8 9A1		12/01/2024	PAYDOWN		19,137	7,376	5,887	6,074	0	4,995	(873)	5,868	0	19,137	0	0	0	1,724	09/01/2035
02147X-AR-8	Alternative Loan Trust 2-CWALT 2006-32CB		12/01/2024	PAYDOWN		18,792	17,415	11,457	5,848	0	5,848	16	5,832	0	18,792	0	0	0	395	11/01/2036
12544H-BF-6	CHL Mortgage Pass-Throu-CWHL 2007-HY7 A		12/01/2024	PAYDOWN		807	879	1,099	844	0	(144)	0	(144)	0	807	0	0	0	16	11/01/2037
87222E-AB-4	TBW Mortgage-Backed Trus-TBW 2007-1 A2		12/26/2024	PAYDOWN		59,162	59,162	13,893	15,814	0	43,184	632	42,552	0	59,162	0	0	0	383	03/25/2037
86363G-AF-1	Structured Adjustable Ra-SARM 2007-3 3A1		11/01/2024	PAYDOWN		0	254	117	114	0	3	0	3	0	0	0	0	0	4	04/01/2047
87222E-AC-2	TBW Mortgage-Backed Trus-TBW 2007-1 A3		12/01/2024	PAYDOWN		63,363	63,363	18,071	18,925	0	45,307	1,112	44,195	0	63,363	0	0	0	450	03/01/2037

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
126694-CS-5	CHL Mortgage Pass-Throug-CIHL 2005-21 A1		12/01/2024	PAYDOWN		74,215	74,565	56,036	56,371	0	18,468	335	18,133	0	74,215	0	0	0	2,870	10/01/2035
69337B-AH-7	PHH Alternative Mortgage-PHAM 2007-1 21		12/01/2024	PAYDOWN		114,599	130,941	114,119	121,857	0	7,560	0	7,560	0	114,599	0	0	0	3,370	02/01/2037
93934F-KP-6	Washington Mutual Mortga-WMALT 2006-1 3A		12/01/2024	PAYDOWN		2,249	3,490	3,500	3,676	0	(103)	0	(103)	0	2,249	0	0	0	93	02/01/2036
17025A-AH-5	CHL Mortgage Pass-Throug-CIHL 2006-17 AB		06/25/2024	PAYDOWN		0	(161)	(100)	(59)	0	24	0	24	0	0	0	0	0	(2)	12/25/2036
76111B-UG-1	RALI Series 2006-QS2 Tru-RALI 2006 QS2 1		12/01/2024	PAYDOWN		40,253	46,709	44,334	45,424	0	2,031	(102)	2,133	0	40,253	0	0	0	2,720	02/01/2036
87222S-AD-9	TBW Mortgage-Backed Trus-TBW 2006-5 A3		12/01/2024	PAYDOWN		990,730	990,730	899,673	938,577	0	48,134	0	48,134	0	990,730	0	0	0	12,838	11/01/2036
12669G-3S-8	CHL Mortgage Pass-Throug-CIHL 2005-16 A2		12/01/2024	PAYDOWN		123,970	123,849	93,932	94,652	0	30,562	0	29,609	0	123,970	0	0	0	3,911	09/01/2035
225470-VF-7	CSMC Mortgage-Backed Tru-CSMC 2006-1 3A1		12/01/2024	PAYDOWN		338,646	336,791	186,660	191,296	0	151,863	5,516	146,347	0	338,646	0	0	0	12,957	02/01/2036
16165M-AG-3	ChaseFlex Trust Series 2-CFKX 2006-2 A5		12/01/2024	PAYDOWN		307,441	306,314	280,177	282,388	0	23,772	0	23,772	0	307,442	0	0	0	4,780	09/01/2036
07386X-AH-9	Bear Stearns ALT-A Trust-BALTA 2007-1 21		11/01/2024	PAYDOWN		4,709	30,198	16,198	(1,967)	0	(3,224)	(1,257)	(1,967)	0	4,709	0	0	0	578	01/01/2047
93363B-AA-6	WaMu Mortgage Pass-Throu-WAMU 2006-AR19		12/01/2024	PAYDOWN		64,196	60,658	58,632	59,333	0	(14,233)	0	(14,233)	0	64,196	0	0	0	2,438	01/01/2047
46627M-EJ-2	JP Morgan Alternative Lo-IPALT 2006-S1 1		12/01/2024	PAYDOWN		56,319	54,289	34,257	35,184	0	20,052	194	19,858	0	56,319	0	0	0	2,067	03/01/2036
76111B-GS-1	RALI Series 2005-QS13 Tr-RALI 2005-QS13		12/25/2024	PAYDOWN		171,043	167,682	135,004	139,598	0	29,210	631	28,579	0	171,043	0	0	0	3,589	09/25/2035
74923H-AQ-4	RALI Series 2007-QS4 Tru-RALI 2007 QA 3A		12/01/2024	PAYDOWN		67,531	76,182	69,382	69,964	0	5,190	0	5,190	0	67,531	0	0	0	2,710	03/01/2037
75115D-AA-3	RALI Series 2006-QS13 Tr-RALI 2006-QS13		12/25/2024	PAYDOWN		9,539	19,610	13,817	15,535	0	1,468	0	1,197	0	9,539	0	0	0	435	09/25/2036
76111B-SC-3	RALI Series 2006-QS1 Tru-RALI 2006-QS1 A		12/01/2024	PAYDOWN		120,026	166,530	147,418	154,423	0	9,216	1,700	7,516	0	120,026	0	0	0	4,750	01/01/2036
93934F-MD-1	Washington Mutual Mortga-WMALT 2006-2 2C		12/01/2024	PAYDOWN		35,546	105,746	69,343	71,117	0	25,170	(18,039)	43,209	0	35,546	0	0	0	4,202	03/01/2036
073880-AD-8	Bear Stearns ARM Trust 2-BSARM 2007-1 2A		12/01/2024	PAYDOWN		76,240	100,295	88,007	93,997	0	58	(7,847)	7,905	0	76,240	0	0	0	2,832	02/01/2047
126694-AF-2	CHL Mortgage Pass-Throug-CIHL 2006-HYB3		12/01/2024	PAYDOWN		98,311	92,129	88,477	91,807	0	665	0	665	0	98,311	0	0	0	1,053	05/01/2036
16162Y-AL-9	Chase Mortgage Finance T-CHASE 2006-S4 A		03/25/2024	PAYDOWN		0	1	1	0	0	0	0	0	0	0	0	0	0	0	12/25/2036
93936N-AA-1	Washington Mutual Mortga-WMALT 2007-4 1A		12/01/2024	PAYDOWN		19,827	25,926	26,793	25,953	0	64	0	64	0	19,827	0	0	0	728	06/01/2037
71367E-AA-4	PERENfra Laguna LLC Senior Secured Notes		10/15/2024	SINKING PAYMENT		229,206	229,206	229,206	229,206	0	0	0	0	0	229,206	0	0	0	16,411	10/15/2049
78444B-AA-6	SIP HoldCo LLC Senior Secured Notes		12/16/2024	SINKING PAYMENT		360,136	360,136	360,136	360,136	0	0	0	0	0	360,136	0	0	0	15,980	12/15/2046
372460-AC-9	Genuine Parts Co-SENIOR UNSECURED		08/08/2024	VARIOUS		24,816,717	28,300,000	26,365,446	26,669,076	0	105,403	0	105,403	0	26,774,480	0	(1,957,763)	(1,957,763)	788,494	02/01/2032
66415-AA-8	Northeast Energy Center Senior Secured N		12/31/2024	SINKING PAYMENT		576,932	576,932	576,932	576,932	0	0	0	0	0	576,932	0	0	0	23,161	12/31/2038
64016N-AC-1	Neighborhood Issuer 2022-1-NBLY 2022-1A A2		10/30/2024	PAYDOWN		40,000	40,000	35,366	36,280	0	3,720	0	3,720	0	40,000	0	0	0	924	01/30/2052
870674-AA-6	SweiHan PV Power Co PJSC-SECURED	D	07/31/2024	SINKING PAYMENT		28,262	28,262	27,084	27,130	0	1,133	0	1,133	0	28,262	0	0	0	628	01/31/2049
37045X-DS-2	General Motors Financial-SENIOR UNSECURE		03/07/2024	GOLDMAN		35,318,999	42,083,000	40,940,224	41,121,495	0	19,021	0	19,021	0	41,140,515	0	(5,821,516)	(5,821,516)	866,092	01/12/2032
52186S-BC-8	Lear Corp-SENIOR UNSECURED		03/14/2024	BARCLAYS CAPITAL INC		8,042,100	10,000,000	9,571,800	9,645,849	0	8,176	0	8,176	0	9,654,024	0	(1,611,924)	(1,611,924)	175,500	01/15/2032
120568-BC-3	Bunge Ltd Finance Corp-SENIOR UNSECURED		08/08/2024	VARIOUS		9,324,232	10,000,000	9,825,800	9,858,365	0	10,203	0	10,203	0	9,868,568	0	(544,337)	(544,337)	198,611	05/14/2031
929043-AL-1	Vornado Realty LP-SENIOR UNSECURED		03/06/2024	SUNTRUST CAPITAL MAR		7,700,000	10,000,000	10,061,600	10,050,043	0	(1,298)	0	(1,298)	0	10,048,745	0	(2,348,745)	(2,348,745)	91,139	06/01/2031
681936-BL-3	Omega Healthcare Investo-SENIOR UNSECURE		09/16/2024	BBVA SECURITIES INC.		9,451,800	10,000,000	10,209,600	10,159,623	0	(18,790)	0	(18,790)	0	10,140,833	0	(689,033)	(689,033)	348,403	10/01/2029
14040H-CG-8	Capital One Financial Co-SUBORDINATED		08/26/2024	JP MORGAN SECURITIES		8,052,000	10,000,000	9,264,100	9,382,366	0	41,511	0	41,511	0	9,423,877	0	(1,371,877)	(1,371,877)	254,248	07/29/2032
875484-AL-1	Tanger Properties LP-SENIOR UNSECURED		09/16/2024	FTS		4,334,400	5,000,000	4,689,300	4,744,091	0	21,038	0	21,038	0	4,765,129	0	(430,729)	(430,729)	143,611	09/01/2031
224044-CN-5	Cox Communications Inc-SENIOR UNSECURED		08/08/2024	VARIOUS		30,413,975	34,783,000	33,748,862	33,939,967	0	60,574	0	60,574	0	34,000,541	0	(3,586,566)	(3,586,566)	580,698	06/15/2031
458140-BV-1	Intel Corp-SENIOR UNSECURED		12/11/2024	U. S. BANCORP		2,664,200	4,000,000	3,793,280	3,808,540	0	7,808	0	7,808	0	3,816,348	0	(1,152,148)	(1,152,148)	149,333	08/12/2041
87264A-BB-0	T-Mobile USA Inc-FIRST LIEN		01/11/2024	IFN		2,156,330	2,200,000	2,137,784	2,157,205	0	1,334	0	1,334	0	2,158,539	0	(2,209)	(2,209)	19,464	04/15/2025
05351K-AB-5	Avant Credit Card Master-AVOC2 2021-1A B		09/15/2024	PAYDOWN		2,250,000	2,250,000	2,206,582	2,237,143	0	12,857	0	12,857	0	2,250,000	0	0	0	27,338	04/15/2027
28416L-AB-8	Elara HGV Timeshare Issu-EHGV2 2021-A B		12/25/2024	PAYDOWN		499,563	499,563	491,172	492,815	0	6,747	0	6,747	0	499,563	0	0	0	4,349	08/27/2035
30225V-AG-2	Extra Space Storage LP-SENIOR UNSECURED		08/08/2024	VARIOUS		18,472,200	21,158,000	20,011,041	20,199,913	0	61,821	0	61,821	0	20,261,734	0	(1,789,535)	(1,789,535)	441,933	03/15/2032
38141G-ZM-9	Goldman Sachs Group Inc-SENIOR UNSECURE		08/23/2024	CITIGROUP GLOBAL MAR		27,024,992	30,400,000	29,665,821	29,761,964	0	38,327	0	38,327	0	29,800,291	0	(2,775,299)	(2,775,299)	948,247	02/24/2033
25273C-AB-6	Diamond Resorts Owner Tr-DROT 2021-1A B		12/20/2024	PAYDOWN		344,942	344,942	342,840	343,592	0	1,350	0	1,350	0	344,942	0	0	0	3,698	11/21/2033
17030J-AA-4	CHNGE Mortgage Trust 202-CHNGE 2022-1 A1		12/01/2024	PAYDOWN		1,080,980	1,080,980	1,080,972	1,080,980	0	0	0	0	0	1,080,980	0	0	0	16,251	01/01/2067
33938M-AC-3	Flexential Issuer 2021-1-FLX 2021-1A C		12/20/2024	MRB002A		23,912,023	25,000,000	24,705,469	24,800,904	0	61,283	0	61,283	0	24,862,187	0	(950,164)	(950,164)	1,708,438	11/27/2051
126416-AB-2	CSMC 2022-NQM1-CSMC 2022-NQM1 A2		12/01/2024	PAYDOWN		1,072,817	1,072,817	1,072,800	1,072,803	0	14	0	14	0	1,072,817	0	0	0	16,088	11/01/2066
126416-AC-0	CSMC 2022-NQM1-CSMC 2022-NQM1 A3		12/01/2024	PAYDOWN		2,627,225	2,627,225	2,627,215	2,627,218	0	7	0	7	0	2,627,225	0	0	0	40,976	11/01/2066
19688H-AA-9	COLT 2022-1 Mortgage Loa-COLT 2022-1 A1		12/01/2024	VARIOUS		17,766,075	17,766,148	17,765,972	17,766,047	0	28	0	28	0	17,766,075	0	0	0	255,820	12/01/2066
85573T-AA-2	Starwood Mortgage Reside-STARWOOD MORTGA		12/01/2024	PAYDOWN		5,141,900	5,141,900	5,141,815	5,141,861	0	39	0	39	0	5,141,900	0	0	0	74,833	12/01/2066
04686A-2Y-6	Athene Global Funding-SECURED		10/02/2024	BOFAMLSEC		8,488,405	9,815,000	9,116,736	9,237,386	0	51,854	0	51,854	0	9,289,240	0	(800,835)	(800,835)	215,714	06/07/2031

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
CUSIP Identi- fication	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
466365-AD-5	Jack in the Box Funding -JACK 2022-1A A2		11/25/2024	PAYDOWN		140,000	140,000	140,000	140,000	0	0	0	0	0	140,000	0	0	0	3,014	02/26/2052
92258X-AA-1	Velocity Commercial Capi-VCC 2022-1 A		12/01/2024	PAYDOWN		163,235	163,235	162,118	162,388	0	847	0	847	0	163,235	0	0	0	3,230	02/01/2052
92258X-AB-9	Velocity Commercial Capi-VCC 2022-1 M1		12/01/2024	PAYDOWN		858,592	858,592	851,346	852,926	0	5,667	0	5,667	0	858,592	0	0	0	17,776	02/01/2052
03464B-AC-2	Angel Oak Mortgage Trust-AOMT 2022-1 A3		12/01/2024	PAYDOWN		1,636,605	1,636,605	1,636,578	1,636,580	0	25	0	25	0	1,636,605	0	0	0	29,312	12/01/2066
38179J-AJ-2	Golub Capital Partners C-GOCAP 2016-30A	C	12/20/2024	MRB002A		20,003,880	20,000,000	20,000,000	20,000,000	0	0	0	0	0	20,000,000	0	3,880	3,880	2,156,108	04/20/2034
69145B-AA-4	OXFORD FINANCE FUNDING T-OXFIN 2022-1A A		12/15/2024	PAYDOWN		2,629,000	2,629,000	2,629,000	2,629,000	0	0	0	0	0	2,629,000	0	0	0	57,609	02/15/2030
03329W-AJ-6	Anchorage Capital CLO 25-ANCHC 2022-25A	D	01/18/2024	VARIOUS		14,718,750	15,000,000	15,000,000	15,000,000	0	0	0	0	0	15,000,000	0	(281,250)	(281,250)	349,203	04/20/2035
03464B-AA-6	Angel Oak Mortgage Trust-AOMT 2022-1 A1		07/30/2024	VARIOUS		5,673,147	5,673,147	5,673,060	5,673,147	0	0	0	0	0	5,673,147	0	0	0	105,517	12/01/2066
488401-AD-2	Kemper Corp-SENIOR UNSECURED		09/18/2024	MRB002A		9,075,534	10,000,000	9,610,600	9,668,492	0	24,933	0	24,933	0	9,693,425	0	(617,892)	(617,892)	407,444	02/23/2032
03464B-AB-4	Angel Oak Mortgage Trust-AOMT 2022-1 A2		12/01/2024	PAYDOWN		1,636,605	1,636,605	1,636,589	1,636,591	0	14	0	14	0	1,636,605	0	0	0	27,948	12/01/2066
09630Q-AS-0	BlueMountain CLO XXX Ltd-BLUEM 2020-30A	D	05/23/2024	DEUTSCHE BANK SECURI		6,686,550	6,750,000	6,750,000	6,750,000	0	0	0	0	0	6,750,000	0	(63,450)	(63,450)	364,898	04/15/2035
08163N-AN-5	Benchmark 2022-B32 Mortg-2022-B32		11/26/2024	PERFTRUSTCP		5,434,425	10,476,000	7,479,312	7,924,607	0	233,023	0	233,023	0	8,157,630	0	(2,723,205)	(2,723,205)	207,192	01/01/2055
12660B-AB-7	Credit Suisse Mortgage C-CSMC 2022-ATH1		12/01/2024	PAYDOWN		1,372,545	1,372,545	1,372,525	1,372,530	0	15	0	15	0	1,372,545	0	0	0	29,549	01/01/2067
12660B-AC-5	Credit Suisse Mortgage C-CSMC 2022-ATH1		12/01/2024	PAYDOWN		2,040,310	2,040,310	2,040,292	2,040,297	0	13	0	13	0	2,040,310	0	0	0	45,911	01/01/2067
03690A-AF-3	Antero Midstream Partner-SENIOR UNSECURE		12/06/2024	HSBC SECURITIES INC		3,000,000	3,000,000	3,031,689	3,017,441	0	(7,935)	0	(7,935)	0	3,009,506	0	(9,506)	(9,506)	241,500	01/15/2028
41755B-AA-1	Harvest Midstream I LP-SENIOR UNSECURED		06/05/2024	WELLS FARGO		3,052,500	3,000,000	3,036,400	3,022,475	0	(3,468)	0	(3,468)	0	3,019,008	0	33,492	33,492	171,875	09/01/2028
81761T-AA-3	ServiceMaster Funding LL-SERV 2020-1 A2I		04/30/2024	PAYDOWN		15,000	15,000	14,183	14,640	0	360	0	360	0	15,000	0	0	0	107	01/30/2051
13876R-AJ-3	Canyon CLO 2020-3 Ltd-CANYC 2020-3A D	D	08/22/2024	PAYDOWN		4,000,000	4,000,000	4,000,800	3,999,200	0	800	0	800	0	4,000,000	0	0	0	321,434	01/15/2034
12546Y-AA-9	CHNGE Mortgage Trust-CHNGE 2022-2 A1		12/01/2024	PAYDOWN		5,974,967	5,974,967	5,974,915	5,974,967	0	0	0	0	0	5,974,967	0	0	0	133,902	03/01/2067
38178D-AJ-6	Golub Capital Partners C-GCPSL 2020-50A	D	01/18/2024	BAIRD		9,875,500	10,000,000	10,000,000	10,000,000	0	0	0	0	0	10,000,000	0	(124,500)	(124,500)	231,496	04/20/2035
64073K-AA-1	Neptune Energy Bondco PL-SENIOR UNSECURE	D	04/03/2024	CALL 100		2,200,000	2,200,000	2,174,950	2,185,930	0	2,475	0	2,475	0	2,188,405	0	11,595	11,595	55,871	05/15/2025
87407R-AC-0	TAL Advantage VII LLC-TAL 2020-1A B		12/20/2024	PAYDOWN		446,250	446,250	441,683	442,814	0	3,436	0	3,436	0	446,250	0	0	0	9,192	09/20/2045
67092T-AG-9	OPC CLO 2016-12 Ltd-OPC 2016-12A ER2	D	10/18/2024	PAYDOWN		15,000,000	15,000,000	14,700,000	14,674,714	0	325,286	0	325,286	0	15,000,000	0	0	0	1,902,414	04/18/2033
46647P-CU-8	JPMorgan Chase & Co-SENIOR UNSECURED		08/23/2024	CITIGROUP GLOBAL MAR		13,786,475	15,500,000	14,807,150	14,904,697	0	36,886	0	36,886	0	14,941,583	0	(1,155,108)	(1,155,108)	498,813	01/25/2033
67092R-AS-7	OPC CLO 2016-12 Ltd-OPC 2016-12A DR2	D	10/18/2024	PAYDOWN		3,000,000	3,000,000	2,970,000	2,959,748	0	40,252	0	40,252	0	3,000,000	0	0	0	264,278	04/18/2033
61747Y-EL-5	Morgan Stanley-SENIOR UNSECURED		08/23/2024	SUNTRUST CAPITAL MAR		3,542,120	4,000,000	3,788,680	3,818,362	0	11,222	0	11,222	0	3,829,584	0	(287,464)	(287,464)	129,165	01/21/2033
05684A-AW-9	Bain Capital Credit Clo -BCC 2019-4A DR	D	01/18/2024	BOFAMILEC		4,982,800	5,000,000	4,950,000	4,824,576	0	60,843	0	60,843	0	4,885,418	0	97,382	97,382	110,117	04/23/2035
06541L-AL-0	Bank-SERIES 22-BNK40 CLASS E		05/21/2024	BOFAMILEC		3,219,278	5,156,000	3,771,361	3,964,280	0	44,969	0	44,969	0	4,009,249	0	(789,972)	(789,972)	61,586	03/01/2064
00751Y-AG-1	Advance Auto Parts Inc-SENIOR UNSECURED		03/04/2024	MORGAN		13,020,000	15,500,000	14,920,415	15,007,107	0	9,733	0	9,733	0	15,016,840	0	(1,996,840)	(1,996,840)	257,688	03/15/2032
55275B-AA-2	MFRA Trust-MFRA 2022-CHM1 A1		12/01/2024	PAYDOWN		2,349,327	2,349,327	2,349,323	2,349,327	0	0	0	0	0	2,349,327	0	0	0	48,545	09/01/2056
36264E-BD-5	GS Mortgage-Backed Secur-GSMB5 2022-NQM1		12/01/2024	PAYDOWN		491,390	491,390	506,591	503,565	0	(11,931)	0	(11,931)	0	491,390	0	0	0	10,867	05/01/2062
05874W-AJ-0	Ballyrock CLO 19 Ltd-BALLY 2022-19A C		01/18/2024	BARCLAYS CAPITAL INC		2,495,550	2,500,000	2,500,000	2,500,000	0	0	0	0	0	2,500,000	0	(4,450)	(4,450)	58,200	04/20/2035
53950X-AB-2	Loan Asset Issuer LLC - Series 2022 NG-1		10/25/2024	CA_CASH_CLOSE		116,954	116,954	116,954	116,954	0	0	0	0	0	116,954	0	0	0	4,906	02/25/2047
53950X-AA-4	Loan Asset Issuer LLC - Series 2022 NG-1		12/25/2024	CA_CASH_CLOSE		3,959,321	3,959,321	3,959,321	3,959,321	0	0	0	0	0	3,959,321	0	0	0	81,069	02/25/2047
914886-AF-3	University of Southern C-SENIOR UNSECURE		01/30/2024	SUNTRUST CAPITAL MAR		12,457,375	17,500,000	15,481,350	15,552,295	0	3,490	0	3,490	0	15,555,785	0	(3,098,410)	(3,098,410)	171,792	10/01/2051
78450F-AD-9	SMB Private Education Lo-SMB 2022-A B		12/15/2024	PAYDOWN		1,596,687	1,596,687	1,577,260	1,582,979	0	13,708	0	13,708	0	1,596,687	0	0	0	16,538	11/16/2054
78450F-AE-7	SMB Private Education Lo-SMB 2022-A C		12/15/2024	PAYDOWN		1,126,446	1,126,446	1,125,971	1,126,089	0	357	0	357	0	1,126,446	0	0	0	28,219	11/16/2054
67190A-AD-8	Oak Street Investment Gr-OAKIG 2021-1A A		12/20/2024	PAYDOWN		41,869	41,869	40,951	41,082	0	786	0	786	0	41,869	0	0	0	796	01/20/2051
12510H-AQ-3	Capital Automotive REIT-CAUTO 2022-1A A2		12/15/2024	PAYDOWN		257,500	257,500	256,010	256,197	0	1,303	0	1,303	0	257,500	0	0	0	5,168	03/15/2052
03464P-AC-1	Angel Oak Mortgage Trust-AOMT 2022-2 A3		12/01/2024	PAYDOWN		1,127,390	1,127,390	1,124,555	1,124,574	0	2,816	0	2,816	0	1,127,390	0	0	0	22,708	01/01/2067
03464P-AB-3	Angel Oak Mortgage Trust-AOMT 2022-2 A2		12/01/2024	PAYDOWN		1,127,390	1,127,													

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identi- fication	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
488401-AC-4	Kemper Corp-SENIOR UNSECURED		.09/18/2024	MRB002A		16,009,025	18,421,000	16,258,375	16,650,126	0	166,592	0	166,592	0	16,816,718	0	(807,692)	(807,692)	428,595	.09/30/2030
12659Y-AC-8	COLT 2022-3 Mortgage Loa-COLT 2022-3 A3		.12/01/2024	PAYDOWN		1,130,104	1,130,104	1,129,515	1,129,728	0	376	0	376	0	1,130,104	0	0	0	25,130	.06/01/2028
12659Y-AB-0	COLT 2022-3 Mortgage Loa-COLT 2022-3 A2		.12/01/2024	PAYDOWN		1,412,630	1,412,630	1,412,610	1,412,616	0	14	0	14	0	1,412,630	0	0	0	30,856	.06/01/2028
67402L-AL-0	Oaktree CLO Ltd-OKCL 2022-1A D	D	.01/18/2024	BOFAMLS		10,013,600	10,000,000	9,900,000	10,100,000	0	(100,000)	0	(100,000)	0	10,000,000	0	13,600	13,600	176,606	.05/15/2033
675930-AJ-0	Octagon 59 Ltd-OCT59 2022-1A D	D	.01/18/2024	BOFAMLS		4,994,450	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	(5,550)	(5,550)	85,753	.05/15/2035
09631J-AJ-5	BlueMountain CLO Ltd-BLUEM 2022-3A4 D	D	.01/18/2024	BNP PARIBAS		7,894,400	8,000,000	8,000,000	8,000,000	0	0	0	0	0	8,000,000	0	(105,600)	(105,600)	191,464	.04/20/2035
05552F-AE-7	BBCMS Trust-BBCMS 2022-C15 D		.08/13/2024	PERFTRUSTCP		2,190,000	4,000,000	3,093,768	3,218,203	0	47,836	0	47,836	0	3,266,040	0	(1,076,040)	(1,076,040)	70,278	.04/01/2055
24380X-AA-5	Deephaven Residential Mo-DRMT 2022-2 A1		.12/01/2024	PAYDOWN		368,266	368,266	347,091	347,371	0	20,895	0	20,895	0	368,266	0	0	0	8,453	.03/01/2067
42806M-BL-2	Hertz Vehicle Financing -HERTZ 2022-5A B		.12/03/2024	SG COWEN SECURITIES		4,837,500	5,000,000	4,998,000	4,998,607	0	343	0	343	0	4,998,949	0	(161,449)	(161,449)	202,767	.09/25/2028
38411H-AA-3	GRACIE POINT INTERNATIONAL-GPIF 2022-1A A	D	.12/31/2024	PAYDOWN		0	0	0	0	0	0	0	0	0	0	0	0	0	340,602	.04/01/2024
42806M-BN-8	Hertz Vehicle Financing -HERTZ 2022-5A C		.12/02/2024	BAIRD		4,157,563	4,300,000	4,301,303	4,300,907	0	(225)	0	(225)	0	4,300,682	0	(143,119)	(143,119)	195,669	.09/25/2028
69354N-AC-0	PRA Group Inc-SENIOR UNSECURED		.09/03/2024	CALL 100		3,990,000	3,990,000	4,169,550	4,041,433	0	1,588	0	1,588	0	4,043,021	0	(53,021)	(53,021)	294,263	.09/01/2025
48254U-AD-7	KKR CLO 40 Ltd-KKR 40A D	D	.01/18/2024	GOLDMAN		1,243,750	1,250,000	1,250,000	1,250,000	0	0	0	0	0	1,250,000	0	(6,250)	(6,250)	30,406	.10/20/2034
92346L-AE-3	Veritas US Inc / Veritas-SECURED		.12/09/2024	CALL 68.994		1,379,880	2,000,000	1,862,500	1,927,027	0	39,391	0	39,391	0	1,966,418	0	(586,538)	(586,538)	190,833	.09/01/2025
86669P-AA-3	Sun Country Pass Through Series 2022-1A		.09/15/2024	SINKING PAYMENT		2,572,376	2,572,376	2,572,376	2,572,376	0	0	0	0	0	2,572,376	0	0	0	93,377	.03/15/2031
86669Q-AA-1	Sun Country Pass Through Series 2022-1B		.09/15/2024	SINKING PAYMENT		854,395	854,395	854,395	854,395	0	0	0	0	0	854,395	0	0	0	36,846	.03/15/2029
582838-AA-4	Mexico Generadora de Ene-SECURED	D	.12/06/2024	SINKING PAYMENT		55,375	55,375	56,172	56,072	0	(697)	0	(697)	0	55,375	0	0	0	2,074	.12/06/2032
466365-AE-3	Jack in the Box Funding -JACK 2022-1A A2		.11/25/2024	PAYDOWN		102,900	102,900	91,742	95,406	0	7,494	0	7,494	0	102,900	0	0	0	2,660	.02/26/2052
61033M-AB-0	Monroe Capital Income PI-MCIP 2022-1A A		.10/22/2024	PAYDOWN		167,517	167,517	164,800	165,796	0	1,721	0	1,721	0	167,517	0	0	0	7,008	.04/30/2032
26929H-AB-1	EWIC Master Issuer LLC-WAX 2022-1A A2		.12/15/2024	PAYDOWN		75,000	75,000	72,061	72,517	0	2,483	0	2,483	0	75,000	0	0	0	2,578	.03/15/2052
79588T-AE-0	Sammons Financial Group -SENIOR UNSECURE		.09/18/2024	MRB002A		7,070,972	7,500,000	7,492,875	7,493,360	0	763	0	763	0	7,494,124	0	(423,152)	(423,152)	337,448	.04/08/2032
92259U-AB-4	Velocity Commercial Capi-VCC 2022-2 M1		.12/01/2024	PAYDOWN		447,200	447,200	447,100	447,122	0	78	0	78	0	447,200	0	0	0	13,532	.04/01/2052
92259U-AA-6	Velocity Commercial Capi-VCC 2022-2 A		.12/01/2024	PAYDOWN		375,367	375,367	375,301	375,316	0	52	0	52	0	375,367	0	0	0	9,333	.04/01/2052
92259U-AF-5	Velocity Commercial Capi-VCC 2022-2 M5		.12/01/2024	PAYDOWN		441,306	441,306	394,222	406,556	0	34,326	0	34,326	0	441,306	0	0	0	17,084	.04/01/2052
92259U-AG-3	Velocity Commercial Capi-VCC 2022-2 M6		.01/31/2024	VARIOUS		0	5,357,325	4,637,590	4,457,669	0	12,997	0	12,997	0	0	0	0	0	78,246	.04/01/2052
92259U-AE-8	Velocity Commercial Capi-VCC 2022-2 M4		.12/01/2024	PAYDOWN		1,490,520	1,490,520	1,398,172	1,423,020	0	66,642	0	66,642	0	1,490,520	0	0	0	57,461	.04/01/2052
92259U-AC-2	Velocity Commercial Capi-VCC 2022-2 M2		.12/01/2024	PAYDOWN		361,206	361,206	361,185	361,192	0	14	0	14	0	361,206	0	0	0	12,838	.04/01/2052
78518#-AA-5	Saber Midstream LLC Senior Secured Notes		.12/31/2024	SINKING PAYMENT		3,217,178	3,217,178	3,209,136	3,210,915	0	5,755	0	5,755	0	3,217,178	0	0	0	163,729	.03/31/2029
20848V-AB-1	Consensus Cloud Solution-SENIOR UNSECURE		.05/14/2024	JP MORGAN SECURITIES		1,797,500	2,000,000	1,960,000	1,968,682	0	2,197	0	2,197	0	1,970,878	0	(173,378)	(173,378)	76,194	.10/15/2028
874054-AF-6	Take-Two Interactive Sof-SENIOR UNSECURE		.01/11/2024	TORONTO DOMINION SEC		4,898,050	5,000,000	4,856,450	4,901,305	0	3,083	0	3,083	0	4,904,388	0	(6,338)	(6,338)	45,361	.04/14/2025
11750*-AA-7	Bryan Health (Kearney NE Senior Secured		.12/15/2024	SINKING PAYMENT		284,212	284,212	284,212	284,212	0	0	0	0	0	284,212	0	0	0	6,854	.12/15/2046
143113-AA-6	Carlyle Global Market St-CGMS 2022-2A D	D	.11/20/2024	PAYDOWN		2,000,000	2,000,000	2,000,000	2,000,000	0	0	0	0	0	2,000,000	0	0	0	259,667	.04/20/2035
12527Q-AD-3	CFMT 2022-EB02 LLC-CFMT 2022-EB02 M2		.10/25/2024	PAYDOWN		12,601,000	12,601,000	12,600,990	12,601,000	0	0	0	0	0	12,601,000	0	0	0	477,137	.07/25/2054
31572Y-AC-2	Ellington Financial Mort-EFITM 2022-2 A3		.12/01/2024	PAYDOWN		1,367,460	1,367,460	1,342,255	1,347,166	0	19,810	0	19,810	0	1,367,460	0	0	0	29,930	.04/01/2067
19685G-AC-0	COLT Funding LLC-COLT 2022-4 A3		.12/01/2024	PAYDOWN		771,203	771,203	764,646	765,882	0	5,321	0	5,321	0	771,203	0	0	0	23,914	.03/01/2067
19685G-AA-4	COLT Funding LLC-COLT 2022-4 A1		.12/01/2024	PAYDOWN		576,906	576,906	564,647	569,179	0	7,727	0	7,727	0	576,906	0	0	0	17,101	.03/01/2067
31572Y-AB-4	Ellington Financial Mort-EFITM 2022-2 A2		.12/01/2024	PAYDOWN		358,876	358,876	353,432	354,491	0	4,280	0	4,280	0	358,876	0	0	0	7,855	.04/01/2067
03768Q-AQ-1	Apidos CLO XXXII-APIID 2019-32A E	D	.06/25/2024	PAYDOWN		2,250,000	2,250,000	2,222,550	2,188,823	0	61,177	0	61,177	0	2,250,000	0	0	0	192,479	.01/20/2033
45082E-AA-3	Iberia, Lineas Aereas De Senior Secured	D	.10/15/2024	SINKING PAYMENT		510,020	510,020	510,020	510,020	0	0	0	0	0	510,020	0	0	0	19,049	.04/15/2034
45082D-AA-5	Iberia, Lineas Aereas De Senior Secured		.10/15/2024	SINKING PAYMENT		677,371	677,371	677,371	677,371	0	0	0	0	0	677,371	0	0	0	20,667	.10/15/2037
81761T-AE-5	ServiceMaster Funding LL-SERV 2021-1 A2I		.04/30/2024	PAYDOWN		75,000	75,000	63,496	66,353	0	8,647	0	8,647	0	75,000	0	0	0	806	.07/30/2051
89656R-AA-8	Trinity Rail Leasing 202-TRL 2022-1 A		.12/21/2024	PAYDOWN		411,528	411,528	403,147	403,554	0	7,974	0	7,974	0	411,528	0	0	0	9,784	.05/20/2052
03665T-AU-0	Antares CLO 2018-2 Ltd-ANTR 2018-2A DR	D	.12/20/2024	MRB002A		5,266,469	5,250,000	5,250,000	5,250,000	0	0	0	0	0	5,250,000	0	16,469	16,469	596,852	.04/20/2034
04685A-2Z-3	Athene Global Funding-SECURED		.10/07/2024	INTLFCSTONE		12,725,563	13,446,000	12,134,477	12,634,986	0	241,036	0	241,036	0	12,876,021	0	(150,458)	(150,458)	275,670	.06/29/2026
04016P-AL-2	Ares XLIII CLO LTD-ARES 2017-43A BR	D	.12/12/2024	PAYDOWN		4,000,000	4,000,000	3,967,200	3,903,043	0	96,957	0	96,957	0	4,000,000	0	0	0	295,901	.07/15/2034
78016E-ZS-9	Royal Bank of Canada-SENIOR UNSECURED	A	.01/11/2024	WELLS FARGO		9,794,600	10,000,000	9,936,000	9,971,071	0	897	0	897	0	9,971,968	0	(177,368)	(177,368)	86,250	.04/14/2025
05682Q-AL-0	Bain Capital Credit CLO -BOC 2017-1A C2	D	.05/10/2024	PAYDOWN		9,001,250	9,001,250	8,989,998	9,012,502	0	(11,252)	0	(11,252)	0	9,001,250	0	0	0	412,421	.07/20/2030
86772R-AA-3	Sunrun Jupiter Issuer 20-SUNRN 2022-1A A		.10/30/2024	PAYDOWN		290,813	290,813	288,447	288,803	0	2,010	0	2,010	0	290,813	0	0	0	8,660	.07/30/2057
64831Q-AA-1	New Residential Mortgage-NRZT 2022-NQM3		.12/01/2024	PAYDOWN		3,003,572	3,003,572	2,959,364	2,970,507	0	33,065	0	33,065	0	3,003,572	0	0	0	66,598	.04/01/2062
64831Q-AB-9	New Residential Mortgage-NRZT 2022-NQM3		.12/01/2024	PAYDOWN		751,750	751,750	735,775	742,485	0	8,789	0	8,789	0	751,750	0	0	0	19,605	.04/01/2062
00834W-AA-9	Affirm Asset Securitizat-AFFRM 2022-A A		.05/15/2024	PAYDOWN		21,000,000	21,000,000	20,968,698	20,990,198	0	9,802	0	9,802	0	21,000,000	0	0	0	376,250	.05/17/2027

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	
CUSIP Identifi- cation	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	11	12	13	14	15	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date	
										Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value							
00834W-AC-5	Affirm Asset Securitizat-AFFRM 2022-A C		.05/15/2024	PAYDOWN		8,000,000	8,000,000	7,998,268	7,999,394	0	606	0	606	0	8,000,000	0	0	0	163,000	.05/17/2027	
36169K-AA-4	GCAT 2022-NQM2 Trust-GCAT 2022-NQM2 A1		.12/01/2024	PAYDOWN		321,739	321,739	320,242	321,020	0	719	0	719	0	321,739	0	0	0	7,359	.02/01/2067	
36169K-AB-2	GCAT 2022-NQM2 Trust-GCAT 2022-NQM2 A2		.12/01/2024	PAYDOWN		1,179,719	1,179,719	1,156,519	1,160,318	0	19,401	0	19,401	0	1,179,719	0	0	0	26,978	.02/01/2067	
48254G-AC-0	KKR CLO 29 Ltd-KKR 29A B	D	.05/14/2024	PAYDOWN		4,460,000	4,460,000	4,384,180	4,373,561	0	86,439	0	86,439	0	4,460,000	0	0	0	185,923	.01/15/2032	
67707A-AA-0	OHA Credit Partners XV L-OAKC 2017-15A E	D	.03/28/2024	PAYDOWN		4,375,000	4,375,000	4,081,063	4,094,736	0	280,264	0	280,264	0	4,375,000	0	0	0	212,664	.01/20/2030	
26248E-AA-4	Dryden Senior Loan Fund-DROLSF 2022-94A E	D	.09/05/2024	PAYDOWN		4,000,000	4,000,000	4,000,000	4,000,000	0	0	0	0	0	4,000,000	0	0	0	449,174	.07/15/2037	
67190A-AC-0	Oak Street Investment Gr-OAKIG 2021-1A A		.12/20/2024	PAYDOWN		40,333	40,333	37,550	37,886	0	2,448	0	2,448	0	40,333	0	0	0	659	.01/20/2051	
85571R-AC-4	Starwood Mortgage Reside-STAR 2022-3 A3		.12/01/2024	PAYDOWN		1,123,426	1,123,426	1,094,609	1,100,260	0	23,167	0	23,167	0	1,123,426	0	0	0	24,993	.03/01/2067	
85571R-AA-8	Starwood Mortgage Reside-STAR 2022-3 A1		.12/01/2024	PAYDOWN		460,723	460,723	457,638	460,674	0	49	0	49	0	460,723	0	0	0	10,331	.03/01/2067	
85571R-AB-6	Starwood Mortgage Reside-STAR 2022-3 A2		.12/01/2024	PAYDOWN		1,202,947	1,202,947	1,175,463	1,180,859	0	22,088	0	22,088	0	1,202,947	0	0	0	26,762	.03/01/2067	
01749W-AG-8	Allegro CLO Ltd-ALLEG 2022-1A D	D	.05/23/2024	DEUTSCHE BANK SECURI		4,507,200	4,500,000	4,500,000	4,500,000	0	0	0	0	0	4,500,000	0	7,200	7,200	248,918	.07/20/2035	
09261H-AF-4	Blackstone Private Credi Senior Unsecure		.03/21/2024	DIRECT		19,713,050	21,000,000	21,000,000	21,000,000	0	0	0	0	0	21,000,000	0	(1,286,950)	(1,286,950)	1,040,655	.05/03/2027	
04017W-AE-2	Ares LIV CLO Ltd-ARES 2019-54A B	D	.05/03/2024	PAYDOWN		6,900,000	6,900,000	6,841,350	6,780,469	0	119,531	0	119,531	0	6,900,000	0	0	0	286,107	.10/15/2032	
82670Q-AE-9	Signal Peak CLO 9 Ltd-SPEAK 2021-9A B	D	.12/12/2024	PAYDOWN		4,000,000	4,000,000	3,934,000	3,895,986	0	104,014	0	104,014	0	4,000,000	0	0	0	333,082	.07/21/2034	
64831T-AA-5	New Residential Mortgage-NRZT 2021-NQM3		.12/01/2024	PAYDOWN		1,167,720	1,167,720	1,085,986	1,098,458	0	69,262	0	69,262	0	1,167,720	0	0	0	(12,708)	.11/01/2056	
85573J-AA-4	Starwood Mortgage Reside-STAR 2021-3 A1		.12/01/2024	PAYDOWN		885,690	885,690	820,370	828,976	0	56,714	0	56,714	0	885,690	0	0	0	6,618	.06/01/2056	
64135J-AC-6	Neuberger Berman Loan Ad-NEUB 2022-49A B		.07/25/2024	PAYDOWN		6,800,000	6,800,000	6,800,000	6,800,000	0	0	0	0	0	6,800,000	0	0	0	380,004	.07/25/2034	
64135K-AA-7	Neuberger Berman Loan Ad-NEUB 2022-49A E	D	.07/25/2024	PAYDOWN		5,500,000	5,500,000	5,500,000	5,500,000	0	0	0	0	0	5,500,000	0	0	0	516,661	.07/25/2034	
19688L-AB-8	COLT 2022-5 Mortgage Loa-COLT 2022-5 A2		.12/01/2024	PAYDOWN		1,188,715	1,188,715	1,171,398	1,177,181	0	11,534	0	11,534	0	1,188,715	0	0	0	31,192	.03/01/2067	
19688L-AA-0	COLT 2022-5 Mortgage Loa-COLT 2022-5 A1		.12/01/2024	PAYDOWN		712,930	712,930	712,709	712,930	0	0	0	0	0	712,930	0	0	0	18,707	.04/01/2067	
69546V-AA-5	PAGAYA AI Debt Trust 202-PAID 2022-2 A		.11/15/2024	PAYDOWN		3,039,263	3,039,263	3,039,263	3,039,263	0	0	0	0	0	3,039,263	0	0	0	70,040	.01/15/2030	
08163R-BU-9	Benchmark 2022-B35 Mortg-BMARK 2022-B35		.12/10/2024	MRB003A		6,266,138	7,500,000	7,257,748	7,291,734	0	21,465	0	21,465	0	7,313,199	(1,047,061)	(1,047,061)	362,002	.05/01/2055		
08163R-BT-2	Benchmark 2022-B35 Mortg-BMARK 2022-B35		.12/10/2024	MRB003A		9,187,364	10,000,000	9,908,299	9,923,215	0	9,944	0	9,944	0	9,933,160	(745,796)	(745,796)	463,281	.05/01/2055		
97988R-AN-2	WDMNT 2022-9A D-WDMNT 2022-9A D		.09/05/2024	PAYDOWN		8,500,000	8,500,000	8,500,000	8,500,000	0	0	0	0	0	8,500,000	0	0	0	730,041	.04/25/2034	
03464T-AB-5	Angel Oak Mortgage Trust-AOMT 2022-3 A2		.12/01/2024	PAYDOWN		552,036	552,036	540,258	542,411	0	9,565	0	9,565	0	552,036	0	0	0	11,968	.01/01/2067	
03464T-AA-7	Angel Oak Mortgage Trust-AOMT 2022-3 A1		.12/01/2024	PAYDOWN		828,039	828,039	819,175	821,500	0	6,539	0	6,539	0	828,039	0	0	0	17,605	.01/01/2067	
97988R-AQ-5	WDMNT 2022-9A E-WDMNT 2022-9A E		.09/05/2024	PAYDOWN		8,000,000	8,000,000	7,840,000	7,713,293	0	286,707	0	286,707	0	8,000,000	0	0	0	998,182	.04/25/2034	
12327A-AA-6	Business Jet Securities -BUETS 2022-1A A		.12/15/2024	PAYDOWN		1,804,077	1,804,077	1,750,237	1,762,720	0	41,357	0	41,357	0	1,804,077	0	0	0	40,393	.06/15/2037	
09631R-AC-2	BlueMountain CLO XXXV Lt-BLUEM 2022-35A	D	.10/16/2024	PAYDOWN		8,300,000	8,300,000	8,300,000	8,300,000	0	0	0	0	0	8,300,000	0	0	0	615,375	.07/22/2035	
29001X-AC-9	ELM17 2022-4A B-ELM17 2022-4A B	D	.07/17/2024	PAYDOWN		9,000,000	9,000,000	9,000,000	9,000,000	0	0	0	0	0	9,000,000	0	0	0	506,604	.07/17/2035	
92538Q-AA-8	Verus Securitization Tru-VERUS 2021-7 A1		.12/01/2024	PAYDOWN		702,356	702,356	649,021	661,787	0	40,569	0	40,569	0	702,356	0	0	0	7,089	.10/01/2066	
23345A-AE-3	DT Auto Owner Trust 2022-DTAOT 2022-2A C		.12/15/2024	PAYDOWN		2,898,672	2,898,672	2,898,576	2,898,619	0	54	0	54	0	2,898,672	0	0	0	125,709	.03/15/2028	
92537M-AA-8	Verus Securitization Tru-VERUS 2019-INV3		.12/01/2024	PAYDOWN		2,382,260	2,382,260	2,355,459	2,380,397	0	1,862	0	1,862	0	2,382,260	0	0	0	48,091	.11/01/2059	
55400U-AB-9	MVW 2022-1 LLC-MVWOT 2022-1A B		.12/20/2024	PAYDOWN		2,161,318	2,161,318	2,161,077	2,161,089	0	228	0	228	0	2,161,318	0	0	0	45,519	.11/21/2039	
94950U-AA-4	Wellfleet CLO 2022-1 Ltd-WELF 2022-1A E	D	.08/22/2024	PAYDOWN		3,500,000	3,500,000	3,429,300	3,363,349	0	136,651	0	136,651	0	3,500,000	0	0	0	399,127	.04/15/2034	
38217U-AC-6	Goodgreen 2021-1 Trust-GOODG 2021-1A C		.12/15/2024	PAYDOWN		206,148	206,148	188,110	189,225	0	13,704	0	13,704	0	206,148	0	0	0	18,458	.10/15/2056	
06744Y-AA-1	Barclays Mortgage Loan T-BARC 2022-INV1		.12/01/2024	PAYDOWN		1,440,665	1,440,665	1,440,645	1,440,665	0	0	0	0	0	1,440,665	0	0	0	34,633	.02/01/2062	
06539W-AA-4	BANK 2020-BNK25-BANK 2020-BN25 D		.03/13/2024	BOFAMLSEC		3,049,481	4,590,000	3,412,378	3,608,612	0	27,381	0	27,381	0	3,635,993	(586,511)	(586,511)	33,150	.01/01/2063		
48661C-AA-0	Rad CLO 7 Ltd-RAD 2020-7A A1	D	.12/31/2024	MITSUBISHI UFJ SEC I		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04/17/2033
05685C-AA-2	Bain Capital Credit CLO -BOC 2022-4A E	D	.10/16/2024	PAYDOWN		3,000,000	3,000,000	2,940,000	2,901,558	0	98,442	0	98,442	0	3,000,000	0	0	0	396,819	.07/16/2035	
78433X-AC-4	Stonepeak 2021-1 ABS-SALTT 2021-1A B		.12/15/2024	PAYDOWN		324,568	324,56														

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identifi- cation	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
10568K-AB-4	BRAVO Residential Fundin-BRAVO 2022-NQM2		12/01/2024	PAYDOWN		333,845	333,845	333,840	333,841	0	5	0	5	0	333,845	0	0	0	10,224	11/01/2061
43103Q-AA-6	Highlands Holdings Bond -AHL 7 5/8 10/15		10/16/2024	CALL 100		3,483,000	3,483,000	3,465,585	3,472,860	0	1,173	0	1,173	0	3,474,033	0	8,967	8,967	399,106	10/15/2025
12510H-AM-2	CARS-DB5 LP-CAUTO 2021-1A A3		12/15/2024	PAYDOWN		14,010	14,010	12,471	10,465	0	1,349	0	1,349	0	14,010	0	0	0	138	08/15/2051
69144A-AA-7	Oxford Finance Funding 2-OXFIN 2020-1A A		12/15/2024	PAYDOWN		203,972	203,972	203,096	203,355	0	617	0	617	0	203,972	0	0	0	3,006	02/15/2028
36257U-AA-5	GS Mortgage Securities T-GSMS 2019-GC42		01/29/2024	BOFAMLSEC		1,300,000	2,000,000	1,547,813	1,628,420	0	4,500	0	4,500	0	1,632,920	0	(332,920)	(332,920)	9,333	09/01/2052
74166Y-AC-4	Primrose Schools 22-1A A2		07/30/2024	PAYDOWN		13,500	13,500	13,500	13,500	0	0	0	0	0	13,500	0	0	0	482	04/30/2052
481940-AA-2	KKR Financial CLO Ltd-KKR 49A E	D	10/21/2024	PAYDOWN		6,000,000	6,000,000	5,760,000	5,762,828	0	237,172	0	237,172	0	6,000,000	0	0	0	815,701	07/20/2035
06539L-AJ-9	BANK 2018-BNK13-BANK 2018-BN13 D		02/15/2024	PERFTRUSTOP		8,310,000	13,850,000	10,313,045	11,056,771	0	69,282	0	69,282	0	11,126,053	0	(2,816,053)	(2,816,053)	91,179	08/01/2061
97315M-AA-5	WIND RIVER CLO LTD-WINDR 2022-2A E	D	02/06/2024	NOMURA SECURITIES IN		3,044,960	3,200,000	3,120,000	3,112,793	0	(3,288)	0	(3,288)	0	3,109,505	0	(64,545)	(64,545)	137,845	07/20/2035
Y5008*-AA-2	Knausen Holding LLC Senior Secured Notes	D	10/15/2024	SINKING PAYMENT		3,009,600	3,009,600	3,009,600	3,009,600	0	0	0	0	0	3,009,600	0	0	0	183,545	07/15/2027
51236J-AB-3	Lakeview Trust 2022-EB03-BVEB0 2022-3 M1		12/31/2024	PAYDOWN		0	0	0	0	0	0	0	0	0	0	0	0	0	13,651	05/29/2052
38143U-BH-7	GOLDMAN SACHS GROUP INC-SENIOR UNSECURED		06/11/2024	BARINGSLLC		6,813,597	7,000,000	6,983,830	6,996,034	0	703	0	703	0	6,996,737	0	(183,140)	(183,140)	208,542	02/25/2026
05552Y-AX-4	BBCMS Mortgage Trust 202-BBCMS 2022-C16		06/26/2024	BOFAMLSEC		11,220,740	19,472,000	12,988,350	13,701,753	0	248,305	0	248,305	0	13,950,057	0	(2,729,317)	(2,729,317)	278,558	06/01/2055
92257B-AA-0	Velocity Commercial Capi-VCC 2022-3 A		12/01/2024	PAYDOWN		1,150,561	1,150,561	1,148,337	1,148,723	0	1,838	0	1,838	0	1,150,561	0	0	0	34,326	06/01/2052
48661K-AA-2	Rad CLO 6 Ltd-RAD 2019-6A E	D	10/21/2024	PAYDOWN		7,500,000	7,500,000	7,407,330	7,257,281	0	242,719	0	242,719	0	7,500,000	0	0	0	1,003,693	01/20/2033
92257B-AE-2	Velocity Commercial Capi-VCC 2022-3 M4		11/01/2024	PAYDOWN		1,785,589	1,785,589	1,631,705	1,671,302	0	114,287	0	114,287	0	1,785,589	0	0	0	66,842	06/01/2052
92257B-AF-9	Velocity Commercial Capi-VCC 2022-3 M5		11/01/2024	PAYDOWN		26,183	26,183	22,840	23,665	0	2,518	0	2,518	0	26,183	0	0	0	1,609	06/01/2052
423452-AG-6	Helmerich & Payne Inc-SENIOR UNSECURED		07/30/2024	MRB0010		7,798,815	8,000,000	7,773,651	7,807,331	0	12,845	0	12,845	0	7,820,176	0	(21,361)	(21,361)	193,978	09/29/2031
78110T-AG-4	RR 21 Ltd-RRAM 2022-21A B1	D	07/15/2024	PAYDOWN		5,000,000	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	0	0	325,923	07/15/2035
28628C-AB-2	ELFI Graduate Loan Progr-ELFI 2022-A B		12/25/2024	PAYDOWN		1,777,287	1,777,287	1,436,276	1,500,205	0	277,081	0	277,081	0	1,777,287	0	0	0	0	08/26/2047
12556C-AA-4	CIFC Funding 2019-VI Ltd-CIFC 2019-6A E	D	06/11/2024	PAYDOWN		2,925,000	2,925,000	2,853,338	2,830,146	0	94,854	0	94,854	0	2,925,000	0	0	0	252,629	01/16/2033
125726-AE-7	CIFC Funding Ltd-CIFC 2022-5A C	D	02/09/2024	PAYDOWN		5,000,000	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	0	0	138,996	07/16/2033
38137V-AA-5	Goldentree Loan Manageme-GLM 2022-14A E		07/22/2024	PAYDOWN		4,400,000	4,400,000	4,356,000	4,304,762	0	95,238	0	95,238	0	4,400,000	0	0	0	441,347	07/20/2035
20752T-AA-2	Connect Finco SARL / Con-FIRST LIEN	D	10/01/2024	CALL 100		3,000,000	3,000,000	2,805,000	2,866,856	0	33,714	0	33,714	0	2,900,569	0	99,431	99,431	202,500	10/01/2026
78449Y-AA-8	SMB Private Education Lo-SMB 2021-B A		12/15/2024	PAYDOWN		1,817,110	1,817,110	1,656,977	1,696,090	0	121,020	0	121,020	0	1,817,110	0	0	0	12,560	07/17/2051
92539A-AB-0	Verus Securitization Tru-VERUS 2022-6 A2		12/01/2024	PAYDOWN		596,989	596,989	583,088	586,035	0	10,953	0	10,953	0	596,989	0	0	0	15,738	06/01/2067
92539A-AA-2	Verus Securitization Tru-VERUS 2022-6 A1		12/01/2024	PAYDOWN		586,571	586,571	581,154	582,670	0	3,902	0	3,902	0	586,571	0	0	0	15,464	06/01/2067
36319T-AJ-5	Galaxy XXIII CLO Ltd-GALXY 2017-23A B2	D	02/23/2024	PAYDOWN		2,250,000	2,250,000	1,982,663	2,159,237	0	90,763	0	90,763	0	2,250,000	0	0	0	54,903	04/24/2029
36319T-AL-0	Galaxy XXIII CLO Ltd-GALXY 2017-23A C2	D	02/23/2024	PAYDOWN		11,250,000	11,250,000	9,913,298	10,608,543	0	641,457	0	641,457	0	11,250,000	0	0	0	302,729	04/24/2029
12598R-AA-1	COLT 2021-5 Mortgage Loa-COLT 2021-5 A1		12/01/2024	PAYDOWN		798,063	798,063	723,245	735,307	0	62,756	0	62,756	0	798,063	0	0	0	7,650	11/01/2066
87267C-AA-6	TRP 2021 LLC-TRP 2021-1 A		12/17/2024	PAYDOWN		1,998,580	1,998,580	1,744,387	1,577,355	0	200,639	0	200,639	0	1,998,580	0	0	0	21,243	06/19/2051
36167K-AA-6	GCAT 2021-NQM6 Trust-GCAT 2021-NQM6 A1		12/01/2024	PAYDOWN		473,687	473,687	425,726	436,971	0	36,716	0	36,716	0	473,687	0	0	0	4,571	08/01/2066
918628-AA-2	Viva Capital 3 LS 2021 L Viva Term Note		11/15/2024	CA_CASH_CLOSE		22,702,696	22,702,696	21,538,492	21,960,235	0	103,863	0	103,863	0	22,064,098	0	638,599	638,599	278,814	10/15/2031
12510H-AG-5	CARS-DB4 LP-CAUTO 2020-1A B1		06/15/2024	PAYDOWN		1,480,000	1,480,000	1,365,378	1,376,091	0	103,909	0	103,909	0	1,480,000	0	0	0	30,344	02/15/2050
00091R-AA-8	AGL CLO 20 Ltd-AGL 2022-20A E	D	10/04/2024	PAYDOWN		2,500,000	2,500,000	2,406,250	2,371,450	0	128,550	0	128,550	0	2,500,000	0	0	0	332,945	07/20/2035
42806M-AM-1	Hertz Vehicle Financing -HERTZ 2022-1A D		06/06/2024	BARCLAYS CAPITAL INC		9,626,563	10,000,000	8,944,066	9,478,830	0	170,453	0	170,453	0	9,649,283	0	(22,721)	(22,721)	218,250	06/25/2026
78433X-AA-8	Stonepeak 2021-1 ABS-SALTT 2021-1A AA		12/15/2024	PAYDOWN		270,802	270,802	252,480	255,678	0	15,123	0	15,123	0	270,802	0	0	0	2,779	02/28/2033
19688E-AA-6	COLT 2021-1 Mortgage Loa-COLT 2021-1 A1		12/01/2024	PAYDOWN		1,485,286	1,485,286	1,307,052	1,357,927	0	127,359	0	127,359	0	1,485,286	0	0	0	7,313	06/01/2066
13876T-AA-8	Canyon CLO 2020-3 Ltd-CANVC 2020-3A E	D	08/22/2024	PAYDOWN		1,000,000	1,000,000	899,500	899,478	0	100,522	0	100,522	0	1,000,000	0	0	0	111,027	01/15/2034
12665E-AD-2	CSMC 2022-NQM4 Trust-CSMC 2022-NQM4 A2		12/01/2024	PAYDOWN		369,950	369,950	360,008	362,912	0	7,038	0	7,038	0	369,950	0				

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Iden-tification	Description	For-ign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con-sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor-tization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con-tractual Maturity Date
31573E-AC-5	Ellington Financial Mort-ERMT 2022-3 A3		12/01/2024	PAYDOWN		367,256	367,256	351,185	354,234	0	13,023	0	13,023	0	367,256	0	0	0	9,867	08/01/2067
U2214W-AB-0	Ardagh Packaging Finance-FIRST LIEN		05/23/2024	DEUTSCHE BANK AG		530,548	650,580	517,995	593,592	0	9,876	0	9,876	0	559,993	31,639	(61,085)	(29,446)	7,392	08/15/2026
F71369-AC-0	Paris Europe SA-SECURED	B	02/06/2024	CALL 100	215,020	215,020	215,020	196,454	214,645	0	0	0	(1,628)	(16,066)	196,952	10,014	8,055	18,069	5,189	07/20/2027
84861T-AH-1	Spirit Realty LP-SENIOR UNSECURED		01/23/2024	EXCHANGE OFFER		4,426,530	5,000,000	4,248,650	4,418,933	0	7,597	0	7,597	0	4,426,530	0	0	0	37,333	03/15/2028
78111F-AA-6	RR 23 Ltd-RRAM 2022-23A D	D	12/31/2024	PAYDOWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128,885	10/15/2035
466365-AC-7	Jack in the Box Funding -JACK 2019-1A A2		11/25/2024	PAYDOWN		320,951	320,951	302,460	308,918	0	12,033	0	12,033	0	320,951	0	0	0	9,970	08/25/2049
19424K-AD-5	College Ave Student Loan-CASL 2021-A C		11/25/2024	PAYDOWN		433,333	433,333	398,666	404,235	0	29,098	0	29,098	0	433,333	0	0	0	6,203	07/25/2051
12663G-AB-3	COLT 2022-7 Mortgage Loa-COLT 2022-7 A2		12/01/2024	PAYDOWN		510,682	510,682	510,681	510,682	0	0	0	0	0	510,682	0	0	0	17,153	04/01/2067
12663G-AA-5	COLT 2022-7 Mortgage Loa-COLT 2022-7 A1		12/01/2024	PAYDOWN		537,630	537,630	537,625	537,630	0	0	0	0	0	537,630	0	0	0	15,468	04/01/2067
12663G-AC-1	COLT 2022-7 Mortgage Loa-COLT 2022-7 A3		12/01/2024	PAYDOWN		268,780	268,780	266,950	267,828	0	951	0	951	0	268,780	0	0	0	9,362	04/01/2067
35564K-B2-4	Freddie Mac Structured A-STACR 2022-HQA2		12/26/2024	PAYDOWN		2,195,342	2,195,342	2,197,119	2,193,565	0	2,034	0	2,034	0	2,195,342	0	0	0	99,240	07/25/2042
R0000V-AB-8	Adevinta ASA-SECURED	B	05/29/2024	CALL 100.65625		217,740	216,320	194,199	1,350	0	1,350	0	1,350	(16,204)	199,954	11,388	6,397	17,785	3,075	11/15/2025
92539N-AB-2	Verus Securitization Tru-VERUS 2022-7 A2		12/01/2024	PAYDOWN		546,531	546,531	539,673	541,273	0	5,258	0	5,258	0	546,531	0	0	0	17,280	07/01/2067
92539N-AA-4	Verus Securitization Tru-VERUS 2022-7 A1		12/01/2024	PAYDOWN		475,244	475,244	475,239	475,244	0	0	0	0	0	475,244	0	0	0	14,471	07/01/2067
20755D-AA-4	Connecticut Avenue Secur-CAS 2022-R08 1M		12/26/2024	PAYDOWN		2,680,384	2,680,384	2,694,476	2,669,426	0	13,313	0	13,313	0	2,680,384	0	0	0	119,484	07/25/2042
43283G-AD-4	Hilton Grand Vacations T-HGVT 2022-2A D		12/25/2024	PAYDOWN		1,463,230	1,463,230	1,463,032	1,463,070	0	160	0	160	0	1,463,230	0	0	0	63,694	01/25/2037
12574H-AC-7	CIFC Funding 2022-VI Ltd-CIFC 2022-6A B1	D	10/03/2024	PAYDOWN	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	0	0	0	0	0	10,000,000	0	0	0	826,814	07/16/2035
12569B-AA-1	CIFC Funding 2022-VI Ltd-CIFC 2022-6A E	D	10/03/2024	PAYDOWN	8,500,000	8,500,000	8,160,000	8,057,702	8,057,702	0	442,298	0	442,298	0	8,500,000	0	0	0	1,157,867	07/16/2035
89680H-AB-8	Triton Container Finance-TCF 2020-1A B		12/20/2024	PAYDOWN		272,000	272,000	250,240	253,821	0	18,179	0	18,179	0	272,000	0	0	0	7,181	09/20/2045
45276Q-AC-8	Imperial Fund Mortgage T-IMPRL 2022-NQM5		12/01/2024	PAYDOWN		393,718	393,718	390,381	393,718	0	0	0	0	0	393,718	0	0	0	13,569	08/01/2067
45276Q-AB-0	Imperial Fund Mortgage T-IMPRL 2022-NQM5		12/01/2024	PAYDOWN		1,430,322	1,430,322	1,430,303	1,430,322	0	0	0	0	0	1,430,322	0	0	0	48,336	08/01/2067
45276Q-AA-2	Imperial Fund Mortgage T-IMPRL 2022-NQM5		12/01/2024	PAYDOWN		530,260	530,260	530,253	530,260	0	0	0	0	0	530,260	0	0	0	15,777	08/01/2067
78449C-AC-2	SMB Private Education Lo-SMB 2022-C B		09/17/2024	BARCLAYS CAPITAL INC	15,263,543	15,300,000	15,292,994	15,294,078	15,294,078	0	491	0	491	0	15,294,569	0	(31,026)	(31,026)	590,567	05/16/2050
05606D-AC-2	BX TRUST - BX 2022-PSB B-BX 2022-PSB B		12/15/2024	PAYDOWN		928,842	928,842	922,661	918,498	0	10,344	0	10,344	0	928,842	0	0	0	54,210	08/15/2039
75009L-AA-4	Rad CLO 16 Ltd-RAD 2022-16A A1	D	05/21/2024	PAYDOWN	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	0	0	0	0	0	25,500,000	0	0	0	1,173,583	10/15/2034
87161C-AN-5	Synovus Financial Corp-SENIOR UNSECURED		12/11/2024	INTLFCSTONE	3,161,051	3,162,000	3,158,522	3,159,881	3,159,881	0	1,068	0	1,068	0	3,160,949	0	103	103	219,689	08/11/2025
05552Y-AL-0	BBOMS Mortgage Trust 202-BBOMS 2022-C16		08/01/2024	BOFAMLSEC	6,075,000	7,500,000	6,903,516	6,969,821	6,969,821	0	29,458	0	29,458	0	6,999,279	0	(924,279)	(924,279)	230,958	06/01/2055
61946U-AB-8	Mosaic Solar Loan Trust -MSAIC 2022-2A B		12/20/2024	PAYDOWN		503,819	503,819	498,609	498,855	0	4,964	0	4,964	0	503,819	0	0	0	14,202	01/21/2053
92259K-AG-5	Velocity Commercial Capi-VCC 2022-4 M2		12/01/2024	PAYDOWN		298,889	298,889	298,842	298,855	0	34	0	34	0	298,889	0	0	0	18,901	08/01/2052
92259K-AD-2	Velocity Commercial Capi-VCC 2022-4 M1		12/01/2024	PAYDOWN		425,824	425,824	425,822	425,823	0	0	0	0	0	425,824	0	0	0	16,173	08/01/2052
35564K-E3-9	Freddie Mac STACR REMIC -STACR 2022-HQA3		12/26/2024	PAYDOWN		1,276,630	1,276,630	1,276,630	1,276,630	0	0	0	0	0	1,276,630	0	0	0	54,946	08/25/2042
94949K-AA-0	Wellfleet CLO Ltd-WELF 2022-2A E	D	06/11/2024	CITIGROUP GLOBAL MAR	2,550,525	2,500,000	2,400,000	2,347,527	2,347,527	0	15,612	0	15,612	0	2,363,139	0	187,386	187,386	229,772	10/18/2035
380241-AA-7	Goddard Funding LLC-GDRD 2022-1 A2		10/30/2024	PAYDOWN		126,750	126,750	126,787	126,951	0	(201)	0	(201)	0	126,750	0	0	0	6,525	10/30/2052
86744V-AA-9	Helios Issuer LLC-SNVA 2022-B A		12/20/2024	PAYDOWN		364,262	364,262	361,738	362,218	0	2,043	0	2,043	0	364,262	0	0	0	9,634	08/20/2049
86744V-AB-7	Helios Issuer LLC-SNVA 2022-B B		12/20/2024	PAYDOWN		444,222	444,222	421,548	425,693	0	18,528	0	18,528	0	444,222	0	0	0	14,099	08/20/2049
09261H-AH-0	Blackstone Private Credi-SENIOR UNSECURE		11/22/2024	MATURITY	7,500,000	7,500,000	7,459,267	7,483,748	7,483,748	0	16,252	0	16,252	0	7,500,000	0	0	0	176,250	11/22/2024
09261H-AB-3	Blackstone Private Credi-SENIOR UNSECURE		09/15/2024	MATURITY	9,129,000	9,129,000	8,965,371	9,072,994	9,072,994	0	56,006	0	56,006	0	9,129,000	0	0	0	159,758	09/15/2024
67117D-AA-8	Onslow Bay Mortgage Loan-OBX 2022-NQM7 A		12/01/2024	PAYDOWN		349,383	349,383	349,383	349,383	0	0	0	0	0	349,383	0	0	0	10,602	08/01/2062
67117D-AB-6	Onslow Bay Mortgage Loan-OBX 2022-NQM7 A		12/01/2024	PAYDOWN		164,919	164,919	164,542	164,919	0	0	0	0	0	164,919	0	0	0	5,577	08/01/2062
67117D-AC-4	Onslow Bay Mortgage Loan-OBX 2022-NQM7 A		12/01/2024	PAYDOWN		229,208	229,208	227,383	166,015	0	352	0	352	0	229,208	0	0	0	7,383	08/01/2062
92838*-AA-3	Vista Malta Finance P.L. Pass Through Ce	D	10/05/2024	SINKING PAYMENT	5,125,387	5,125,387	5,125,387	5,125,387	5,125,387	0	0	0	0	0	5,125,387	0	0	0	263,317	04/05/2032
92842B-AA-5	Vista Malta Finance P.L. Pass Through Ce	D	10/05/2024	SINKING PAYMENT	1,109,676	1,109,676	1,109,676	1,109,676	1,109,676	0	0	0	0	0	1,109,676	0	0	0	79,064	04/05/2031
87168V-AA-4	SYMPHONY CLO LTD-SYMP 2022-36A E	D	09/27/2024	PAYDOWN	2,000,000	2,000,000	1,980,000	1,955,335	1,955,335	0	44,665	0	44,665	0	2,000,000	0	0	0	257,163	10/24/2035
89683L-AA-8	TRP - TRIP Rail Master F-TRP 2021-2 A		12/17/2024	PAYDOWN		1,786,334	1,786,334	1,566,596	1,327,346	0	192,044	0	192,044	0	1,786,334	0	0	0	19,725	06/19/2051
92918Y-AA-1	Voya CLO 2021-2 Ltd-VOYA 2021-2A E	D	06/11/2024	PERFTRUSTOP	5,012,500	5,000,000	4,700,000	4,638,250	4,638,250	0	14,794	0	14,794	0	4,651,044	0	361,456	361,456	400,542	10/20/2034
64016N-AA-5	Neighborly Issuer LLC-NBLV 2021-1A A2		10/30/2024	PAYDOWN		16,000	16,000	14,011	14,886	0	1,114	0	1,114	0	16,000	0	0	0	251	04/30/2051
92539J-AA-3	Verus Securitization Tru-VERUS 2022-INV1		12/01/2024	PAYDOWN		516,109	516,109	516,099	516,109	0	0	0	0	0	516,109	0	0	0	12,862	08/01/2067
92539J-AB-1	Verus Securitization Tru-VERUS 2022-INV1		12/01/2024	PAYDOWN		464,461	464,461	464,458	464,461	0	0	0	0	0	464,461	0	0	0	13,322	08/01/2067
92539J-AC-9	Verus Securitization Tru-VERUS 2022-INV1		12/01/2024	PAYDOWN		516,068	516,068	510,720	513,405	0	2,663	0	2,663	0	516,068	0	0	0	14,850	08/01/2067
12553B-AA-9	CIFC Funding 2019-I Ltd-CIFC 2019-1A E	D	06/11/2024	BROWNSTONE	5,303,066	5,265,000	5,001,750	4,963,183	4,963,183	0	8,526	0	8,526	0	4,971,709	0	331,357	331,357	429,709	04/20/2032
12569C-AC-5	CHNGE Mortgage Trust 202-CHNGE 2022-NQM1		12/01/2024	PAYDOWN		1,367,366	1,367,366	1,347,919	1,355,344	0	11,719	0	11,719	0	1,367,366	0	0	0	42,856	06/01/2067

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Iden-tification	Description	For-ign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con-sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor-tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con-tractual Maturity Date
12569C-AB-7	CHNGE Mortgage Trust 202-CHNGE 2022-NQM1		12/01/2024	PAYDOWN		656,336	656,336	654,841	656,336	0	(61)	0	(61)	0	656,336	0	0	0	20,517	06/01/2067
541056-AA-5	GoTo Group Inc-SECURED		02/05/2024	EXCHANGE OFFER		1,014,212	1,250,000	943,750	1,009,131	0	5,081	0	5,081	0	1,014,212	0	0	0	29,410	09/01/2027
12664A-AF-6	CSMC 2022-ATH3-CSMC 2022-ATH3 A3		12/01/2024	PAYDOWN		909,333	909,333	909,330	909,333	0	0	0	0	0	909,333	0	0	0	33,317	08/01/2067
12664A-AE-9	CSMC 2022-ATH3-CSMC 2022-ATH3 A2		12/01/2024	PAYDOWN		872,494	872,494	872,486	872,494	0	(1)	0	(1)	0	872,494	0	0	0	29,125	08/01/2067
69702N-AA-3	Palmer Square CLO 2022-5-PLMRS 2022-5A E	D	10/03/2024	PAYDOWN		13,250,000	13,250,000	13,250,000	13,250,000	0	0	0	0	0	13,250,000	0	0	0	1,713,346	10/20/2035
05608W-AG-9	BX Commercial Mortgage T-BX 2021-SOAR B		05/15/2024	PAYDOWN		143,479	143,479	136,664	147,629	0	(4,150)	0	(4,150)	0	143,479	0	0	0	1,828	06/15/2038
149898-AA-2	CEAMER FINANCE II LLC Senior Secured Not		05/15/2024	VARIOUS		2,484,967	2,484,967	2,484,967	2,484,967	0	0	0	0	0	2,484,967	0	0	0	135,839	11/15/2037
06744D-AC-3	Barclays Mortgage Loan T-BARC 2022-NQM1		12/01/2024	PAYDOWN		506,538	506,538	480,829	485,321	0	21,155	0	21,155	0	506,538	0	0	0	15,149	07/01/2052
06744D-AB-5	Barclays Mortgage Loan T-BARC 2022-NQM1		12/01/2024	PAYDOWN		180,134	180,134	173,302	174,508	0	5,609	0	5,609	0	180,134	0	0	0	4,755	07/01/2052
06744D-AA-7	Barclays Mortgage Loan T-BARC 2022-NQM1		12/01/2024	PAYDOWN		180,134	180,134	176,772	177,533	0	2,591	0	2,591	0	180,134	0	0	0	4,803	07/01/2052
10569J-AB-6	BRAVO Residential Fundin-BRAVO 2022-NQM3		12/01/2024	PAYDOWN		113,585	113,585	113,136	113,469	0	116	0	116	0	113,585	0	0	0	3,503	07/01/2062
38179E-AE-4	Golub Capital Partners A-GCPAF 2022-1A B		12/22/2024	PAYDOWN		2,000,000	2,000,000	2,000,000	2,000,000	0	0	0	0	0	2,000,000	0	0	0	156,600	07/22/2030
38179E-AC-8	Golub Capital Partners A-GCPAF 2022-1A A		12/22/2024	PAYDOWN		8,000,000	8,000,000	8,000,000	8,000,000	0	0	0	0	0	8,000,000	0	0	0	526,400	07/22/2030
20753Y-CH-3	Connecticut Avenue Secur-CAS 2022-R04 1M		11/25/2024	PAYDOWN		1,117,391	1,117,391	1,116,867	1,117,914	0	(613)	0	(613)	0	1,117,391	0	0	0	43,750	03/25/2042
12807C-AA-1	CAL Funding IV Ltd-CAI 2020-1A A	D	12/25/2024	PAYDOWN		698,186	698,186	623,649	635,046	0	63,140	0	63,140	0	698,186	0	0	0	8,451	09/25/2045
46146W-AA-5	Invesco CLO 2022-3 Ltd-INVCO 2022-3A E	D	10/22/2024	PAYDOWN		8,000,000	8,000,000	8,000,000	8,000,000	0	0	0	0	0	8,000,000	0	0	0	1,101,808	10/22/2035
64132E-AL-0	Neuberger Berman Loan Ad-NEUB 2019-32A E	D	06/11/2024	GOLDMAN		2,011,280	2,000,000	1,834,250	1,838,847	0	(247)	0	(247)	0	1,838,600	0	172,680	172,680	154,167	01/20/2032
00834W-AF-8	Affirm Asset Securitizat-AFFRM 2022-A 1A		05/15/2024	PAYDOWN		5,000,000	5,000,000	4,884,010	4,960,815	0	39,185	0	39,185	0	5,000,000	0	0	0	89,583	05/17/2027
617925-AA-0	Morgan Stanley Eaton Van-MSEV 2022-18A E	D	11/20/2024	PAYDOWN		7,000,000	7,000,000	6,860,000	6,696,199	0	303,801	0	303,801	0	7,000,000	0	0	0	987,332	10/20/2035
57109N-AD-1	Marlette Funding Trust 2-MFT 2022-3A D		01/17/2024	BARCLAYS CAPITAL INC		5,349,688	5,300,000	5,298,544	5,299,099	0	31	0	31	0	5,299,130	0	50,557	50,557	39,043	11/15/2032
57109N-AB-5	Marlette Funding Trust 2-MFT 2022-3A B		12/15/2024	PAYDOWN		1,786,327	1,786,327	1,773,657	1,781,238	0	5,088	0	5,088	0	1,786,327	0	0	0	83,688	11/15/2032
08860D-AD-5	BHG Securitization Trust-BHG 2022-C D		02/06/2024	SUNTRUST CAPITAL MAR		3,667,420	3,728,000	3,727,028	3,727,139	0	16	0	16	0	3,727,155	0	(59,735)	(59,735)	41,458	10/17/2035
75009K-AA-6	Rad CLO 17 Ltd-RAD 2022-17A E	D	11/21/2024	PAYDOWN		9,000,000	9,000,000	8,820,000	8,582,419	0	417,581	0	417,581	0	9,000,000	0	0	0	1,251,076	10/20/2035
55286E-AC-2	MFA 2022-NQM3 Trust-MFRA 2022-NQM3 A3		12/01/2024	PAYDOWN		955,175	955,175	930,561	938,176	0	16,999	0	16,999	0	955,175	0	0	0	30,112	09/01/2067
05351K-B*-9	Avant Credit Card Master AVCMNT Series 2		09/17/2024	VARIOUS		15,380,000	15,380,000	15,300,616	15,320,598	0	11,748	0	11,748	0	15,332,346	0	47,655	47,655	1,240,380	04/15/2027
05351K-BF-5	Avant Credit Card Master AVCMNT Series 2		09/17/2024	VARIOUS		10,420,000	10,420,000	10,272,918	10,307,732	0	21,200	0	21,200	0	10,328,932	0	91,068	91,068	1,004,372	04/15/2027
05351K-B8-7	Avant Credit Card Master AVCMNT Series 2		09/17/2024	VARIOUS		8,200,000	8,200,000	8,167,382	8,175,494	0	4,778	0	4,778	0	8,180,273	0	19,727	19,727	588,475	04/15/2027
62283J-AH-6	Colombo BidCo Limited Senior Secured Not	B	12/31/2024	ROYAL BANK OF SCOTLA		0	0	0	0	0	0	0	0	(689,500)	0	0	0	0	0	09/20/2029
12551S-AA-4	CHNGE Mortgage Trust 202-CHNGE 2022-A A1		12/01/2024	PAYDOWN		2,741,553	2,741,553	2,686,475	2,707,061	0	34,492	0	34,492	0	2,741,553	0	0	0	87,070	10/01/2057
53946H-AA-6	Loan Asset Issuer LLC - Series 2022 NG-2		12/25/2024	CA CASH_CLOSE		5,960,558	5,960,558	5,960,558	5,960,558	0	0	0	0	0	5,960,558	0	0	0	153,554	11/25/2047
12762*-AA-1	CDI Tuscany Intermediate Senior Secured		12/31/2024	SINKING PAYMENT		189,977	189,977	189,977	189,977	0	0	0	0	0	189,977	0	0	0	9,762	06/30/2040
46817M-AL-1	Jackson Financial Inc-SENIOR UNSECURED		09/24/2024	VARIOUS		34,839,850	40,500,000	39,729,172	39,822,697	0	45,083	0	45,083	0	39,867,780	0	(5,027,930)	(5,027,930)	846,224	11/23/2031
46817M-AN-7	Jackson Financial Inc-SENIOR UNSECURED		03/07/2024	VARIOUS		3,554,916	5,000,000	4,261,767	4,276,780	0	2,255	0	2,255	0	4,279,035	0	(724,119)	(724,119)	59,667	11/23/2051
05874R-AA-0	Ballyrock CLO 21 Ltd-BALLY 2022-21A D	D	10/21/2024	PAYDOWN		3,250,000	3,250,000	3,120,000	3,056,517	0	193,483	0	193,483	0	3,250,000	0	0	0	467,018	10/20/2035
26209X-AF-8	DRIVEN BRANDS FUNDING LL-HONK 2022-1A A2		10/20/2024	PAYDOWN		1,177,699	1,177,699	1,177,699	1,177,699	0	0	0	0	0	1,177,699	0	0	0	77,888	10/20/2052
12653V-AG-1	Credit Suisse Mortgage C-CSMC 2019-ICE4		04/15/2024	PAYDOWN		9,975,183	9,975,183	9,616,700	10,333,666	0	(358,483)	0	(358,483)	0	9,975,183	0	0	0	236,035	05/15/2036
19688M-AB-6	COLT 2022-8 Mortgage Loa-COLT 2022-8 A2		12/01/2024	PAYDOWN		521,166	521,166	516,807	517,589	0	3,577	0	3,577	0	521,166	0	0	0	19,255	08/01/2067
19688M-AC-4	COLT 2022-8 Mortgage Loa-COLT 2022-8 A3		12/01/2024	PAYDOWN		539,704	539,704	531,387	532,803	0	6,901	0	6,901	0	539,704	0	0	0	19,952	08/01/2067
92527P-AC-5	Velocity Commercial Capi-VCC 2022-5 M3		12/01/2024	PAYDOWN		1,915,107	1,915,107	1,882,662	1,891,673	0	23,435	0	23,435	0	1,915,107	0	0	0	139,520	10/01/2052
92257P-BA-8	Velocity Commercial Capi-VCC 2022-5 M2		12/01/2024	PAYDOWN		234,630	234,630	229,766	231,043	0	3,587	0	3,587	0	234,630	0	0	0	14,822	10/01/2052
55822E-AA-7	Madison Park Funding LIX-MDPK 2021-59A A	D	05/30/2024	PAYDOWN		9,750,000	9,750,000	9,603,875	9,532,304	0	217,696	0	217,696	0	9,750,000	0	0	0	411,002	01/18/2034
64831V-AB-8	New Residential Mortgage-NRZT 2022-NQM5		12/01/2024	PAYDOWN		517,450	517,450	510,699	513,177	0	4,145	0	4,145	0	517,450	0	0	0	17,793	11/01/2052
64831V-AC-6	New Residential Mortgage-NRZT 2022-NQM5		12/01/2024	PAYDOWN		724,430	724,430	708,377	713,098	0	11,090	0	11,090	0	724,430	0	0	0	24,911	11/01/2052
67113G-AC-1	OHA Credit Funding 5 Ltd-OKC 2020-5A A1	D	10/18/2024	PAYDOWN		3,000,000	3,000,000	2,918,250	2,914,657	0	85,343	0	85,343	0	3,000,000	0	0	0	206,072	04/18/2033
64132J-AN-5	Neuberger Berman Loan Ad-NEUB 2019-31A A	D	10/21/2024	PAYDOWN		77,247	77,247	75,239	75,530	0	1,717	0	1,717	0	77,247	0	0	0	4,567	04/20/2031
38138T-AC-5	Goldentree Loan Manageme-GLM 2021-10A A	D	09/26/2024	PAYDOWN		4,000,000	4,000,000	3,846,000	3,834,230	0	165,770	0	165,770	0	4,000,000	0	0	0	254,647	07/20/2034
60457J-AR-0	Ardagh Packaging Finance-FIRST LIEN	B	05/23/2024	DEUTSCHE BANK AG		132,637	162,645	114,754	139,843	0	3,580	0	3,580	(15,032)	128,391	12,247	(8,001)	4,246	1,848	08/15/2026
826934-AC-5	Sierra Timeshare 2022-3 -SFFC 2022-3A C		12/20/2024	PAYDOWN		765,454	765,454	765,276	765,254	0	200	0	200	0	765,454	0	0	0	29,567	07/20/2039
05682L-AJ-6	Bain Capital Credit CLO -BCC 2019-2A AR	D	07/17/2024	PAYDOWN		2,600,000	2,600,000	2,529,800	2,532,132	0	67,868	0	67,868	0	2,600,000	0	0	0	132,730	10/17/2032
12563E-AA-1	CIFC Funding 2021-I Ltd-CIFC 2021-1A A1	D	06/21/2024	PAYDOWN		12,000,000	12,000,000	11,802,400	11,789,110	0	210,890	0	210,890	0	12,000,000	0	0	0	537,323	04/25/2033
29002V-AA-6	Elmwood CLO X Ltd-ELM10 2021-3A A	D	04/22/2024	PAYDOWN		9,000,000	9,000,000	8,698,750	8,743,688	0	256,312	0	256,312	0	9,000,000	0	0	0	308,451	10/20/2034

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
87248K-AJ-3	TICP CLO V 2016-1 Ltd-TICP 2016-5A A1R	D	07/17/2024	PAYDOWN		4,657,648	4,657,648	4,536,549	4,575,415	0	82,232	0	82,232	0	4,657,648	0	0	0	206,639	07/17/2031
42806M-AE-9	Hertz Vehicle Financing -HERTZ 2021-2A A		11/26/2024	DEUTSCHE BANK SECURI		12,742,405	13,618,000	11,745,364	12,115,806	0	463,142	0	463,142	0	12,578,948	0	163,457	163,457	210,988	12/27/2027
38411D-AD-6	GRACIE POINT INTERNATIONAL-GPIF 2022-3A B	C	02/22/2024	PAYDOWN		9,830,000	9,830,000	9,830,000	9,830,000	0	0	0	0	0	9,830,000	0	0	0	300,630	11/01/2024
42806M-AK-5	Hertz Vehicle Financing -HERTZ 2022-1A B		12/03/2024	MITSUBISHI UFJ SEC I		2,670,891	2,700,000	2,404,582	2,533,907	0	119,031	0	119,031	0	2,652,939	0	17,952	17,952	55,681	06/25/2026
86744W-AA-7	Sunnova Helios X Issuer -SNVA 2022-C A		12/20/2024	PAYDOWN		603,986	603,986	571,472	578,339	0	25,647	0	25,647	0	603,986	0	0	0	14,856	11/22/2049
540543-AA-3	Logan CLO I Ltd-LOGNI 2021-1A A	D	05/08/2024	PAYDOWN		6,080,000	6,080,000	5,870,848	5,818,823	0	261,177	0	261,177	0	6,080,000	0	0	0	230,355	07/20/2034
38136N-AQ-9	Goldentree Loan Manageme-GLM 2020-8A AR	D	10/31/2024	PAYDOWN		12,000,000	12,000,000	11,553,000	11,501,114	0	498,886	0	498,886	0	12,000,000	0	0	0	845,519	10/20/2034
78397W-AC-0	SCF Equipment Leasing 20-SCFET 2022-2A A		12/20/2024	PAYDOWN		696,171	696,171	693,949	694,822	0	1,349	0	1,349	0	696,171	0	0	0	38,987	10/21/2030
84859B-AB-7	Spirit Loyalty Cayman Lt-FIRST LIEN	D	04/01/2024	SMBC NIKKO SECURITIE		1,702,663	2,233,000	2,203,058	2,213,933	0	2,627	0	2,627	0	2,216,560	0	(513,898)	(513,898)	80,884	09/20/2025
04685A-2V-2	Athene Global Funding-SECURED		10/02/2024	BMO CAPITAL MARKETS		4,656,800	5,000,000	4,232,550	4,374,258	0	100,945	0	100,945	0	4,475,203	0	181,597	181,597	128,125	03/24/2028
87249Q-AC-4	TICP CLO XI Ltd-TICP 2018-11A B	D	04/10/2024	PAYDOWN		8,500,000	8,500,000	8,230,750	8,204,189	0	295,811	0	295,811	0	8,500,000	0	0	0	300,745	10/20/2031
82652R-AB-5	Sierra Timeshare 2021-2 -SRFC 2021-2A B		12/20/2024	PAYDOWN		171,244	171,244	157,759	159,683	0	11,562	0	11,562	0	171,244	0	0	0	1,813	09/20/2038
14855J-AB-1	Castlelake Aircraft Secu-CLAST 2016-1 A		12/31/2024	PAYDOWN		1,602,405	1,602,405	1,606,573	0	0	(4,168)	0	(4,168)	0	1,602,405	0	0	0	74,156	08/15/2041
48255U-AA-2	KKR CLO 43 Ltd-KKR 2022-43A A1	D	12/31/2024	PAYDOWN		0	0	0	0	0	0	0	0	0	0	0	0	0	141,971	07/15/2034
143122-AA-7	CARLYLE US CLO 2021-11 L-CGMS 2021-11A A	D	07/10/2024	PAYDOWN		4,500,000	4,500,000	4,387,950	4,370,762	0	129,238	0	129,238	0	4,500,000	0	0	0	216,912	01/25/2033
14913R-2Y-2	Caterpillar Financial Se-SENIOR UNSECURE		01/11/2024	LLOYDSEC		7,797,504	7,800,000	7,790,016	7,794,603	0	380	0	380	0	7,794,983	0	2,521	2,521	190,038	01/17/2025
244199-BH-7	Deere & Co-SENIOR UNSECURED		01/11/2024	BARCLAYS CAPITAL INC		2,678,281	2,744,000	2,630,261	2,681,038	0	1,972	0	1,972	0	2,683,010	0	(4,729)	(4,729)	19,075	04/15/2025
92538K-AB-9	Verus Securitization Tru-VERUS 2021-5 A2		12/01/2024	PAYDOWN		537,592	537,592	450,569	457,680	0	79,912	0	79,912	0	537,592	0	0	0	3,612	09/01/2066
89115A-2A-9	Toronto-Dominion Bank/Th-SENIOR UNSECURE	A	01/11/2024	TORONTO DOMINION SEC		5,897,700	6,000,000	5,823,840	5,897,588	0	2,802	0	2,802	0	5,900,391	0	(2,691)	(2,691)	25,107	06/06/2025
438127-AA-0	Honda Motor Co Ltd-SENIOR UNSECURED	D	01/11/2024	JP MORGAN SECURITIES		4,848,700	5,000,000	4,738,350	4,859,415	0	4,797	0	4,797	0	4,864,212	0	(15,512)	(15,512)	39,743	03/10/2025
70016W-AA-2	Park Blue CLO 2022-1 Ltd-PKBLU 2022-1A A	D	10/21/2024	PAYDOWN		5,000,000	5,000,000	4,970,000	4,930,523	0	69,477	0	69,477	0	5,000,000	0	0	0	307,257	10/20/2034
63942A-AB-2	Navient Private Educatio-NAVSL 2020-1A A		12/16/2024	PAYDOWN		860,121	860,121	836,467	835,589	0	24,616	0	24,616	0	860,121	0	0	0	28,885	04/15/2069
38237G-AA-7	GoodLeap Sustainable Hom-GOOD 2021-4GS A		12/20/2024	PAYDOWN		944,972	944,972	721,723	0	0	223,250	0	223,250	0	944,972	0	0	0	9,929	07/20/2048
64033N-AA-4	Nelnet Student Loan Trus-NSLT 2014-5A A		12/26/2024	PAYDOWN		3,104,462	3,104,462	2,991,925	3,005,174	0	98,616	0	98,616	0	3,104,462	0	0	0	86,572	07/25/2046
29003B-AL-5	Elmwood CLO V Ltd-ELMW5 2020-2A AR	D	09/18/2024	PAYDOWN		20,000,000	20,000,000	19,470,000	19,199,420	0	800,580	0	800,580	0	20,000,000	0	0	0	1,252,987	10/20/2034
138877-AJ-6	Canyon Capital CLO 2019-CANYC 2019-1A A	D	07/15/2024	PAYDOWN		4,200,000	4,200,000	4,118,520	4,121,449	0	78,551	0	78,551	0	4,200,000	0	0	0	213,630	04/15/2032
12565K-AA-5	CLi Funding VIII LLC-CLIF 2021-1A A		12/18/2024	PAYDOWN		613,143	613,143	525,055	534,733	0	78,410	0	78,410	0	5,535	0	5,535	0	5,535	02/18/2046
58801A-AA-2	MidOcean Credit CLO XI L-MIDO 2022-11A A	D	12/31/2024	PAYDOWN		0	0	0	0	0	0	0	0	0	0	0	0	0	178,905	10/18/2033
61946K-AA-2	Mosaic Solar Loan Trust -MSAIC 2022-3A A		12/20/2024	PAYDOWN		510,821	510,821	510,799	510,800	0	20	0	20	0	510,821	0	0	0	15,167	06/20/2053
71367E-AB-2	PERENfra Laguna LLC Senior Secured Notes		10/15/2024	SINKING PAYMENT		261,578	261,578	261,578	261,578	0	0	0	0	0	261,578	0	0	0	16,270	10/15/2050
70018C-AA-4	Park Blue CLO 2022-II Lt-PKBLU 2022-2A A	D	07/22/2024	PAYDOWN		10,000,000	10,000,000	9,950,000	9,749,442	0	250,558	0	250,558	0	10,000,000	0	0	0	605,929	01/20/2035
64033Q-AB-5	Nelnet Student Loan Trus-NSLT 2015-2A A2		12/26/2024	PAYDOWN		1,558,775	1,558,775	1,506,166	1,495,343	0	63,432	0	63,432	0	1,558,775	0	0	0	43,652	09/25/2042
482598-AN-9	KNDL 2019-KNSQ Mortgage -KNDL 2019-KNSQ		02/15/2024	PAYDOWN		1,680,000	1,680,000	1,639,050	1,720,950	0	(40,950)	0	(40,950)	0	1,680,000	0	0	0	21,247	05/15/2036
42806M-AP-4	Hertz Vehicle Financing -HERTZ 2022-2A B		12/03/2024	SG COWEN SECURITIES		3,971,094	4,250,000	3,776,357	3,872,419	0	99,725	0	99,725	0	3,972,144	0	(1,050)	(1,050)	106,055	06/26/2028
290015-AJ-5	Elmwood CLO I Ltd-ELMW1 2019-1A AR	D	02/15/2024	PAYDOWN		4,500,000	4,500,000	4,459,050	4,384,646	0	115,354	0	115,354	0	4,500,000	0	0	0	104,836	10/20/2033
48661N-AA-6	Rad CLO 6 Ltd-RAD 2019-6A A1	D	10/21/2024	PAYDOWN		6,490,000	6,490,000	6,405,630	6,345,653	0	144,347	0	144,347	0	6,490,000	0	0	0	461,633	01/20/2033
92259V-AA-4	Velocity Commercial Capi-VCC 2023-1 A		12/01/2024	PAYDOWN		1,763,918	1,763,918	1,763,509	1,763,538	0	381	0	381	0	1,763,918	0	0	0	63,331	01/01/2053
28416L-AA-0	Elara HGV Timeshare Issu-EHGV 2021-A A		12/25/2024	PAYDOWN		653,274	653,274	585,701	590,995	0	62,280	0	62,280	0	653,274	0	0	0	4,445	08/27/2035
92539B-AB-8	Verus Securitization Tru-VERUS 2023-1 A2		12/01/2024	PAYDOWN		508,360	508,360	508,352	508,360	0	0	0	0	0	508,360	0	0	0	17,789	12/01/2067
758750-AD-5	Regal Rexnord Corp-SENIOR UNSECURED		05/02/2024	EXCHANGE OFFER		25,253,556	25,000,000	25,328,850	25,271,320	0	(17,764)	0	(17,764)	0	25,253,556	0	0	0	827,674	04/15/2028
482606-AJ-9	KIND Trust 2021-KIND-KNDR 2021-KIND B		01/15/2024	PAYDOWN		5,712	5,712	5,398	5,719	0	(7)	0	(7)							

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
CUSIP Identi- fication	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	11	12	13	14	15	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
										Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value						
05606F-AN-3	BX Trust 2019-0C11-BX 2019-0C11 E		12/31/2024	PERFORM		0	0	0	0	0	(29,148)	0	(29,148)	0	0	0	0	0	0	12/01/2041
12565K-AE-7	CLI Funding VIII LLC-CLIF 2022-1A A		12/18/2024	PAYDOWN		800,000	800,000	680,969	682,723	0	117,277	0	117,277	0	800,000	0	0	0	11,787	01/18/2047
552081-AK-7	LyondellBasell Industrie-SENIOR UNSECURE	D	01/11/2024	WELLS FARGO		8,741,476	8,749,000	8,763,873	8,749,812	0	(812)	0	(812)	0	8,749,000	0	(7,524)	(7,524)	127,164	04/15/2024
63942M-AA-8	Navient Private Educatio-NAVSL 2022-A A		12/15/2024	PAYDOWN		426,909	426,909	369,493	372,205	0	54,703	0	54,703	0	426,909	0	0	0	5,117	07/15/2070
64133G-AR-1	Neuberger Berman Loan Ad-NEUB 2020-37A A	D	10/25/2024	PAYDOWN		5,500,000	5,500,000	5,421,000	5,422,203	0	77,797	0	77,797	0	5,500,000	0	0	0	355,818	07/20/2031
55817A-AS-3	Madison Park Funding XXX-MDPK 2018-32A B	D	08/09/2024	PAYDOWN		4,750,000	4,750,000	4,578,430	4,562,528	0	187,472	0	187,472	0	4,750,000	0	0	0	269,107	01/22/2031
03330N-AJ-3	Anchorage Capital Clo 11-ANCHC 2019-11A	D	06/24/2024	PAYDOWN		3,000,000	3,000,000	2,940,000	2,930,773	0	69,227	0	69,227	0	3,000,000	0	0	0	137,937	07/22/2032
14855W-AA-4	Castlelake Secured Aviat Notes Class A		12/15/2024	SINKING PAYMENT		2,696,729	2,696,729	2,628,243	2,638,434	0	53,700	0	53,700	0	2,696,729	0	0	0	180,078	07/31/2036
14855W-AB-2	Castlelake Secured Aviat Notes Class B		12/15/2024	SINKING PAYMENT		641,035	641,035	572,242	582,102	0	56,483	0	56,483	0	641,035	0	0	0	31,898	07/31/2036
48281*-AA-7	KLCC FEEDER FUND I LP -Senior Class Tran		12/31/2024	DIRECT		0	0	0	0	0	0	0	0	0	0	0	0	0	(78,125)	03/31/2033
48281*-AB-5	KLCC FEEDER FUND I LP -Junior Class Tran		12/31/2024	DIRECT		0	0	0	0	0	0	0	0	0	0	0	0	0	(45,313)	03/31/2033
55819M-AN-6	Madison Park Funding XXX-MDPK 2019-35A A	D	10/21/2024	PAYDOWN		110,270	110,270	108,660	108,395	0	1,875	0	1,875	0	110,270	0	0	0	7,208	04/20/2032
12665W-AD-2	CSMC 2022-ATH2-CSMC 2022-ATH2 A2		12/01/2024	PAYDOWN		1,009,065	1,009,065	980,054	983,408	0	25,657	0	25,657	0	1,009,065	0	0	0	20,986	05/01/2067
92539G-AB-7	Verus Securitization Tru-VERUS 2023-3 A2		12/01/2024	PAYDOWN		962,244	962,244	962,232	962,236	0	9	0	9	0	962,244	0	0	0	34,417	03/01/2068
638961-AA-0	Navient Private Educatio-NAVSL 2023-A A		12/15/2024	PAYDOWN		844,641	844,641	843,418	843,543	0	1,098	0	1,098	0	844,641	0	0	0	25,402	10/15/2071
55817E-AQ-9	Madison Park Funding XXX-MDPK 2019-37A B	D	04/25/2024	PAYDOWN		10,000,000	10,000,000	9,778,000	9,660,800	0	339,200	0	339,200	0	10,000,000	0	0	0	387,447	07/15/2033
86745X-AA-4	Sumnova Sol V Issuer LLC-SNVA 2023-1A A		10/30/2024	PAYDOWN		367,732	367,732	348,444	350,268	0	17,464	0	17,464	0	367,732	0	0	0	12,301	04/30/2058
88339Q-AA-8	Theorem Funding Trust 20-THRM 2023-1A A		12/15/2024	PAYDOWN		11,401,771	11,401,771	11,401,668	11,401,595	0	176	0	176	0	11,401,771	0	0	0	439,402	04/15/2029
20268B-AB-6	Commonbond Student Loan -GBSLT 2020-1 B		12/25/2024	PAYDOWN		413,376	413,376	351,369	353,799	0	59,577	0	59,577	0	413,376	0	0	0	7,102	10/25/2051
14316M-AC-5	CARLYLE US CLO 2021-1 LT-CGMS 2021-1A A2	D	11/06/2024	PAYDOWN		2,500,000	2,500,000	2,400,000	2,373,937	0	126,063	0	126,063	0	2,500,000	0	0	0	178,601	04/15/2034
02665W-CZ-2	American Honda Finance C-SENIOR UNSECURE		01/11/2024	JP MORGAN SECURITIES		4,931,050	5,000,000	4,866,550	4,943,101	0	4,746	0	4,746	0	4,947,846	0	(16,796)	(16,796)	6,333	06/27/2024
05609K-AC-3	BX Commercial Mortgage T-BX 2021-XL2 B		09/15/2024	PAYDOWN		409,651	409,651	393,457	395,493	0	14,157	0	14,157	0	409,651	0	0	0	11,107	10/15/2038
48206K-AE-6	Juniper Valley Park CLO -JNPPK 2023-1A B	D	07/22/2024	PAYDOWN		10,000,000	10,000,000	10,000,000	10,000,000	0	0	0	0	0	10,000,000	0	0	0	892,732	07/20/2035
L3009F-AA-6	Ergea Group S.A r.L. Guaranteed Secured	B	12/31/2024	DIRECT		0	0	0	0	0	0	0	0	(226,500)	0	0	0	0	0	05/12/2030
193938-AB-3	College Ave Student Loan-CASL 2023-A A2		12/25/2024	PAYDOWN		314,417	314,417	314,355	314,369	0	48	0	48	0	314,417	0	0	0	9,697	05/25/2055
X2004B-AA-2	Ciconia Investments Limi Senior Secured	B	12/31/2024	DIRECT		0	0	0	0	0	0	0	0	(471,500)	0	0	0	0	0	05/16/2033
233853-AN-0	Daimler Truck Finance No-SENIOR UNSECURE		01/11/2024	TORONTO DOMINION SEC		4,326,406	4,330,000	4,339,872	4,336,369	0	(146)	0	(146)	0	4,336,223	0	(9,817)	(9,817)	111,955	01/17/2025
69047Q-AA-0	Ovintiv Inc-SENIOR UNSECURED		01/11/2024	JEFFERIESLLC		10,034,300	10,000,000	10,010,800	10,006,741	0	(351)	0	(351)	0	10,006,390	0	27,910	27,910	95,736	05/15/2025
14913R-3C-9	Caterpillar Financial Se-SENIOR UNSECURE		01/11/2024	IFN		5,027,082	4,997,000	5,064,809	5,042,189	0	(1,511)	0	(1,511)	0	5,040,678	0	(13,596)	(13,596)	94,443	03/10/2025
02665W-EF-4	American Honda Finance C-SENIOR UNSECURE		01/11/2024	BOFAMLSEC		6,967,800	7,000,000	6,994,120	6,995,699	0	106	0	106	0	6,995,805	0	(28,005)	(28,005)	79,606	04/17/2025
78448R-AE-6	SMB Private Education Lo-SMB 2015-C B		12/15/2024	PAYDOWN		1,951,119	1,951,119	1,868,806	1,889,720	0	61,399	0	61,399	0	1,951,119	0	0	0	34,951	09/15/2043
169926-AA-0	CHNGE Mortgage Trust 202-CHNGE 2023-2 A1		12/01/2024	PAYDOWN		1,351,594	1,351,594	1,329,631	1,331,876	0	19,718	0	19,718	0	1,351,594	0	0	0	26,427	06/01/2058
92868K-AC-7	Volkswagen Auto Loan Enh-VALET 2021-1 A3		01/12/2024	BOFAMLSEC		6,473,898	6,641,492	6,370,125	6,473,411	0	13,195	0	13,195	0	6,486,606	0	(12,707)	(12,707)	5,081	06/22/2026
98163T-AD-5	World Omni Auto Receivab-WOART 2022-C A3		01/12/2024	MITSUBISHI UFJ SEC I		19,682,031	20,000,000	19,494,141	19,652,153	0	12,091	0	12,091	0	19,664,244	0	17,788	17,788	65,067	10/15/2027
891941-AB-2	Toyota Auto Receivables -TAOT 2023-B A2A		01/15/2024	VARIOUS		3,775,319	3,778,624	3,770,801	3,775,015	0	548	0	548	0	3,775,563	0	(244)	(244)	17,660	05/15/2026
362585-AC-5	GM Financial Consumer Au-GMCAR 2022-2 A3		01/12/2024	MIZUHO SECURITIES		9,812,500	10,000,000	9,689,844	9,813,449	0	9,368	0	9,368	0	9,822,818	0	(10,318)	(10,318)	26,694	02/16/2027
618933-AA-3	Mosaic Solar Loan Trust -MSAIC 2023-3A A		12/20/2024	PAYDOWN		2,213,249	2,213,249	2,174,442	2,173,411	0	39,838	0	39,838	0	2,213,249	0	0	0	69,730	11/20/2053
21871X-AB-5	Corebridge Financial Inc-SENIOR UNSECURE		01/11/2024	RBC CAPITAL MARKETS		9,751,800	10,000,000	9,956,308	9,969,704	0	974	0	974	0	9,970,678	0	(218,878)	(218,878)	99,167	04/04/2025
53950U-AA-0	Loan Asset Issuer LLC - Series 2023 NG-1		12/25/2024	CA_CASH_CLOSE		12,502,628	12,502,628	12,502,628	12,502,628	0	0	0	0	0	12,502,628	0	0	0	340,926	08/25/2048
53950U-AB-8	Loan Asset Issuer LLC - Series 2023 NG-1		12/25/2024	CA_CASH_CLOSE		1,862,776	1,862,776	1,862,776	1,862,776	0	0	0	0	0	1,862,776	0	0	0	166,984	09/22/2048
G5264F-AJ-7	Kingspan Securities Limi Senior Unsecure	B	12/31/2024	BNP PARIBAS		0	0	0	0	0	0	0	0	(752,000)	0	0	0	0	0	06/07/2029
58768P-AC-8	Mercedes-Benz Auto Recei-MBART 2022-1 A3		12/15/2024	PAYDOWN		8,545,839	8,545,839	8,559,801	8,555,778	0	(9,939)	0	(9,939)	0	8,545,839	0	0	0	360,742	08/16/2027
34535A-AD-2	Ford Credit Auto Owner T-FORDO 2022-C A3		01/12/2024	BOFAMLSEC		51,458,756	46,891,000	46,297,536	46,533,379	0	19,066	0	19,066	0	51,356,487	0	102,269	102,269		

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	
CUSIP Identifi- cation	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	11	12	13	14	15	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date	
										Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value							
17030A-AA-3	CHNGE Mortgage Trust 202-CHNGE 2023-3 A1		12/01/2024	VARIOUS		1,535,458	1,535,458	1,525,382	(213,348)	0	6,358	0	6,358	0	1,535,458	0	0	0	(85,793)	07/01/2058	
693696-AA-4	Pvone 2023-1 LLC-PVONE 2023-1A A		12/15/2024	PAYDOWN		6,767,992	6,767,992	6,764,148	6,754,017	0	13,974	0	13,974	0	6,767,992	0	0	0	238,026	07/16/2035	
G3301*-AK-9	FIL Ltd/Bermuda Senior Note Series A	B	12/31/2024	BOFAMLSEC		0	0	0	0	0	0	0	0	(230,000)	0	0	0	0	0	06/29/2030	
76029#-AA-1	Republic Airways Holding Senoir Secured		12/15/2024	SINKING PAYMENT		1,125,000	1,125,000	1,125,000	1,125,000	0	0	0	0	0	1,125,000	0	0	0	84,736	12/15/2028	
12555X-AA-9	CIFC Funding 2019-VI Ltd-CIFC 2019-6A A1	D	06/11/2024	PAYDOWN		6,000,000	6,000,000	5,967,000	5,949,360	0	50,640	0	50,640	0	6,000,000	0	0	0	276,425	01/16/2033	
09077C-AA-0	Birch Grove CLO 4 Ltd-BGLO 2022-4A A1	D	06/21/2024	PAYDOWN		10,000,000	10,000,000	9,845,000	9,803,015	0	196,985	0	196,985	0	10,000,000	0	0	0	472,922	04/15/2034	
741011-AA-8	Presidio Petroleum LLC Presidio Finance		10/25/2024	CALL 100		4,485,916	4,485,916	4,485,916	4,485,916	0	0	0	0	0	4,485,916	0	0	0	151,610	12/25/2038	
44989M-AA-2	JP Lending X LTD-IPL 2023-10A SNR	D	10/02/2024	DTCYID		3,600,000	3,600,000	3,600,000	3,600,000	0	0	0	0	0	3,600,000	0	0	0	229,815	07/02/2029	
88315L-AS-7	Textainer Marine Contain-TMCL 2021-3A A	C	12/20/2024	PAYDOWN		236,000	236,000	193,548	195,597	0	40,403	0	40,403	0	236,000	0	0	0	2,480	08/20/2046	
92257P-AA-9	Velocity Commercial Capi-VCC 2022-5 A		12/01/2024	PAYDOWN		1,131,156	1,131,156	1,138,756	1,138,676	0	(7,520)	0	(7,520)	0	1,131,156	0	0	0	37,421	10/01/2052	
75973H-AA-5	Renew 2023-1-RENEW 2023-1A A	C	12/20/2024	PAYDOWN		1,034,572	1,034,572	972,706	981,443	0	53,129	0	53,129	0	1,034,572	0	0	0	52,936	11/20/2058	
432917-AB-8	Hilton Grand Vacations T-HGVT 2023-1A B		12/25/2024	PAYDOWN		6,071,592	6,071,592	6,071,698	5,775,460	0	(325)	0	(325)	0	6,071,592	0	0	0	192,048	01/25/2038	
43283B-AB-9	Hilton Grand Vacations T-HGVT 2022-1D B		12/20/2024	PAYDOWN		788,142	788,142	747,996	751,340	0	36,802	0	36,802	0	788,142	0	0	0	16,845	06/20/2034	
826525-AB-3	Sierra Timeshare 2020-2 -SRFC 2020-2A B		12/20/2024	PAYDOWN		2,019,619	2,019,619	1,909,171	1,933,836	0	85,782	0	85,782	0	2,019,619	0	0	0	23,580	07/20/2037	
G9020*-AE-0	Travis Perkins PLC Senior Note Series C	B	12/31/2024	RBS SECURITIES INC		0	0	0	0	0	0	0	0	(25,200)	0	0	0	0	0	08/25/2031	
G9020*-AC-4	Travis Perkins PLC Senior Note Series A	B	12/31/2024	RBS SECURITIES INC		0	0	0	0	0	0	0	0	(39,200)	0	0	0	0	0	08/23/2029	
42806M-CE-7	Hertz Vehicle Financing -HERTZ 2023-4A A		12/03/2024	BARCLAYS CAPITAL INC		3,009,203	2,900,000	2,899,526	2,899,548	0	70	0	70	0	2,899,618	0	109,585	109,585	167,946	03/25/2030	
42806M-CF-4	Hertz Vehicle Financing -HERTZ 2023-4A B		12/03/2024	DEUTSCHE BANK SECURI		7,222,578	7,000,000	6,997,567	6,997,687	0	361	0	361	0	6,998,048	0	224,530	224,530	443,619	03/25/2030	
12569Q-AA-8	CHNGE Mortgage Trust 202-CHNGE 2023-4 A1		12/01/2024	PAYDOWN		1,667,943	1,667,943	1,671,331	1,670,982	0	(3,040)	0	(3,040)	0	1,667,943	0	0	0	68,485	09/01/2058	
86745Y-AA-2	Sunnova Helios XII Issue-SNVA 2023-B A		12/20/2024	PAYDOWN		845,475	845,475	809,706	812,090	0	33,385	0	33,385	0	845,475	0	0	0	28,335	08/22/2050	
43815P-AC-3	Honda Auto Receivables 2-HAROT 2022-2 A3		01/12/2024	BOFAMLSEC		30,847,168	31,250,000	30,465,088	30,701,964	0	30,254	0	30,254	0	30,732,218	0	114,950	114,950	93,898	07/20/2026	
83207D-AA-6	SMB Private Education Lo-SMB 2023-C A1A		12/15/2024	PAYDOWN		1,520,612	1,520,612	1,507,009	1,507,635	0	12,977	0	12,977	0	1,520,612	0	0	0	46,600	11/15/2052	
69398A-AB-2	PRKCM 2023-AFC3 Trust-PRKCM 2023-AFC3 A2		12/01/2024	PAYDOWN		2,191,940	2,191,940	2,191,922	2,191,930	0	9	0	9	0	2,191,940	0	0	0	98,155	09/01/2058	
78518#-AB-3	Saber Midstream LLC Senior Secured Notes		12/31/2024	SINKING PAYMENT		1,034,498	1,034,498	1,034,498	1,034,498	0	0	0	0	0	1,034,498	0	0	0	64,168	03/31/2030	
92539X-AB-0	Verus Securitization Tru-VERUS 2023-6 A2		12/01/2024	PAYDOWN		689,087	689,087	689,084	689,087	0	0	0	0	0	689,087	0	0	0	28,810	09/01/2068	
693699-AA-8	PVONE 2023-1 LLC-PVONE 2023-2A A		12/15/2024	PAYDOWN		20,139,335	20,139,335	20,139,308	20,139,152	0	182	0	182	0	20,139,335	0	0	0	940,729	09/17/2035	
863931-AA-9	Structured Carbon Level -SCLM3 2023-1 A		11/20/2024	PAYDOWN		11,272,831	11,272,831	11,045,571	11,050,740	0	221,373	0	221,373	0	11,272,831	0	0	0	489,057	09/20/2050	
581557-BS-3	McKesson Corp-SENIOR UNSECURED		09/16/2024	CALL 100		6,225,000	6,225,000	6,162,750	6,168,327	0	18,131	0	18,131	0	6,186,458	0	38,542	38,542	354,955	02/15/2026	
088929-AB-0	BGC Group Inc-SENIOR UNSECURED		01/29/2024	EXCHANGE OFFER		4,397,190	4,400,000	4,396,718	4,397,195	0	(5)	0	(5)	0	4,397,190	0	0	0	23,528	12/15/2025	
63942T-AA-3	Navient Student Loan Trust - NAVSL 2023-		12/15/2024	PAYDOWN		776,383	776,383	776,382	776,383	0	0	0	0	0	776,383	0	0	0	27,802	03/15/2072	
19425M-AC-2	College Avenue Student L-CASL 2023-B B		12/25/2024	PAYDOWN		141,690	141,690	140,876	141,690	0	0	0	0	0	141,690	0	0	0	5,851	06/25/2054	
86746B-AA-1	Helios Issuer LLC-SNVA 2023-GRID1 1A		12/20/2024	PAYDOWN		1,157,789	1,157,789	1,140,842	889,181	0	16,643	0	16,643	0	1,157,789	0	0	0	39,780	12/20/2050	
38013J-AD-5	GM Financial Consumer Au-GMCAR 2023-1 A3		01/12/2024	BOFAMLSEC		9,926,103	9,958,000	9,736,668	9,763,457	0	6,106	0	6,106	0	9,769,563	0	156,540	156,540	39,959	02/16/2028	
38014Q-AD-5	GM Financial Consumer Au-GMCAR 2021-3 A4		01/12/2024	BMO CAPITAL MARKETS		18,768,750	20,000,000	18,285,938	18,536,255	0	56,945	0	56,945	0	18,593,200	0	175,550	175,550	12,572	08/16/2027	
31684E-AA-#	Figure Lending LLC FIGRE Trust 2023-HE1a		12/31/2024	DIRECT		0	0	0	0	0	6,558	0	6,558	0	0	0	0	0	0	0	11/25/2053
64133C-AA-7	Neuberger Berman Loan Ad-NEUB 2019-35A A	D	03/01/2024	PAYDOWN		8,550,000	8,550,000	8,534,610	8,515,263	0	34,737	0	34,737	0	8,550,000	0	0	0	221,855	01/19/2033	
78450P-AB-1	SMB Private Education Lo-SMB 2023-D A1B		12/16/2024	PAYDOWN		1,330,208	1,330,208	1,330,208	1,330,208	0	0	0	0	0	1,330,208	0	0	0	63,038	09/15/2053	
81378E-AA-1	SECURITIZED ASSET BACKED-SERIES 2007-BR4		12/26/2024	PAYDOWN		312,663	312,663	136,883	124,320	0	189,033	0	189,033	0	312,663	0	0	0	4,016	05/25/2037	
08862G-AA-2	BHG Securitization Trust-BHG 2023-B A		12/17/2024	PAYDOWN		2,283,714	2,283,714	2,283,410	2,283,430	0	284	0	284	0	2,283,714	0	0	0	90,882	12/17/2036	
36152B-AC-6	GBX Leasing 2023-1 LLC-GBXL 2023-1A A		12/20/2024	PAYDOWN		37,970	37,970	37,951	37,951	0	19	0	19	0	37,970	0	0	0	1,331	11/20/2053	
224092-AA-4	CP EF Asset Securitizati-CPEF 2023-1A A		12/15/2024	PAYDOWN		5,799,008	5,799,008	5,770,250	5,771,044	0	27,963	0	27,963	0	5,799,008	0	0	0	239,308	03/15/2032	
761923-AB-7	REVL 2023-2 Ltd-REVL 2023-2A A2	C	12/01/2024	PAYDOWN		5,023,912	5,023,912	5,023,912	5,023,912	0	0	0	0	0	5,023,912	0	0	0	269,646	02/01/2049	
761923-AA-9	REVL 2023-2 Ltd-REVL 2023-2A A1	C	11/01/2024	PAYDOWN		2,043,910	2,043,910	2,043,910	2,043,910	0											

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identi- fication	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
20268A-AB-8	Commonbond Student Loan -GBSLT 2021-BGS		10/25/2024	PAYDOWN		390,928	390,928	322,516	0	0	68,412	0	68,412	0	390,928	0	0	0	2,952	09/25/2051
20268W-AB-0	Commonbond Student Loan -GBSLT 2021-AGS		12/25/2024	PAYDOWN		142,038	142,038	107,949	0	0	34,089	0	34,089	0	142,038	0	0	0	1,057	03/25/2052
86745Q-AA-9	Sunnova Sol III Issuer L-SNVA 2021-1 A		10/30/2024	PAYDOWN		868,368	868,368	730,718	0	0	137,650	0	137,650	0	868,368	0	0	0	13,623	04/28/2056
75973V-AA-4	Renew 2024-1-RENEW 2024-1A A		12/20/2024	PAYDOWN		769,171	769,171	770,283	0	0	(1,112)	0	(1,112)	0	769,171	0	0	0	25,126	11/20/2059
12510H-AL-4	CARS-DBS LP-CAUTO 2021-1A A2		12/15/2024	PAYDOWN		4,616	4,616	3,601	0	0	1,016	0	1,016	0	4,616	0	0	0	52	08/15/2051
36831B-CF-9	GCAT 2024-INV1 Trust-GCAT 2024-INV1 B2		12/01/2024	PAYDOWN		61,739	61,739	64,410	0	0	(2,671)	0	(2,671)	0	61,739	0	0	0	2,260	01/01/2054
36831B-CC-6	GCAT 2024-INV1 Trust-GCAT 2024-INV1 B1		12/01/2024	PAYDOWN		83,790	83,790	88,818	0	0	(5,027)	0	(5,027)	0	83,790	0	0	0	3,068	01/01/2054
67118H-AC-4	OBX 2024-NQM2 Trust-OBX 2024-NQM2 A2		12/01/2024	PAYDOWN		886,001	886,001	885,988	0	0	13	0	13	0	886,001	0	0	0	30,602	12/01/2063
630028-AA-2	NM Cabin Intermediate # Senior Secured		07/31/2024	SINKING PAYMENT		633,817	633,817	652,571	0	0	0	0	0	0	652,571	(18,754)	0	(18,754)	16,485	07/31/2033
86744Y-AA-3	Sunnova SOL VI Issuer LL-SNVA 2024-1A A		10/30/2024	PAYDOWN		153,860	153,860	148,299	0	0	5,561	0	5,561	0	153,860	0	0	0	2,709	01/30/2059
29280M-AA-9	Energy Asset Issuer Trus Senior Secured		12/25/2024	SINKING PAYMENT		6,588,400	6,588,400	6,588,400	0	0	0	0	0	0	6,588,400	0	0	0	184,441	03/25/2049
86745C-AA-0	Sunnova Helios XIII Issu-SNVA 2024-A A		12/20/2024	PAYDOWN		640,321	640,321	627,014	0	0	13,307	0	13,307	0	640,321	0	0	0	12,625	02/20/2051
29977F-AA-2	EverBright Solar Trust 2-EVBRT 2024-A A		12/20/2024	PAYDOWN		441,792	441,792	437,905	0	0	3,888	0	3,888	0	441,792	0	0	0	10,076	06/22/2059
86212X-AM-2	Store Master Funding I-V-STR 2024-1A A2		12/20/2024	PAYDOWN		33,333	33,333	33,332	0	0	2	0	2	0	33,333	0	0	0	723	05/20/2054
79582M-AA-9	Saluda Grade Alternative-GRADE 2024-FIG5		12/01/2024	PAYDOWN		1,310,265	1,310,265	1,310,263	0	0	2	0	2	0	1,310,265	0	0	0	30,146	04/01/2054
43283Y-AB-9	Hilton Grand Vacations T-HGVT 2024-1B B		12/15/2024	PAYDOWN		517,929	517,929	517,833	0	0	96	0	96	0	517,929	0	0	0	11,584	09/15/2039
83206N-AC-1	SMB Private Education Lo-SMB 2022-B B		12/15/2024	PAYDOWN		140,372	140,372	132,751	0	0	7,622	0	7,622	0	140,372	0	0	0	2,689	02/16/2055
07336P-AA-2	Bayview Opportunity Mast-BVCLN 2024-EDU1		12/26/2024	PAYDOWN		1,987,208	1,987,208	1,987,208	0	0	0	0	0	0	1,987,208	0	0	0	44,382	06/25/2047
07336P-AC-8	Bayview Opportunity Mast-BVCLN 2024-EDU1		12/26/2024	PAYDOWN		368,001	368,001	368,001	0	0	0	0	0	0	368,001	0	0	0	8,646	06/25/2047
04362V-AA-3	Ascent Education Funding-ASCNT 2024-A A		12/25/2024	PAYDOWN		191,896	191,896	195,014	0	0	(3,118)	0	(3,118)	0	191,896	0	0	0	982	10/25/2050
559080-AG-1	MAGELLAN MIDSTREAM PARTN-SENIOR UNSECURE		02/27/2024	EXCHANGE OFFER		8,738,278	6,932,000	8,904,778	8,748,744	0	(10,466)	0	(10,466)	0	8,738,278	0	0	0	130,899	10/15/2043
744448-CG-4	PUBLIC SERVICE COLORADO-SECURED		03/04/2024	BARCLAYS CAPITAL INC		3,229,216	4,298,000	4,764,677	4,721,197	0	(3,094)	0	(3,094)	0	4,718,104	0	(1,488,887)	(1,488,887)	73,496	09/15/2042
172967-CC-3	CITIGROUP INC-SUBORDINATED		03/14/2024	BARCLAYS CAPITAL INC		10,251,300	10,000,000	12,518,700	12,167,872	0	(39,848)	0	(39,848)	0	12,128,025	0	(1,876,725)	(1,876,725)	230,000	10/31/2033
67119F-AB-9	OBX 2024-NQM7 Trust-OBX 2024-NQM7 A2		12/01/2024	PAYDOWN		725,025	725,025	725,025	0	0	0	0	0	0	725,025	0	0	0	18,311	03/01/2064
67119F-AA-1	OBX 2024-NQM7 Trust-OBX 2024-NQM7 A1		12/01/2024	PAYDOWN		725,025	725,025	725,023	0	0	3	0	3	0	725,025	0	0	0	21,528	03/01/2064
55400W-AA-7	MVN 2023-2 LLC-MVWOT 2023-2A A		12/20/2024	PAYDOWN		1,322,603	1,322,603	1,346,368	0	0	(23,766)	0	(23,766)	0	1,322,603	0	0	0	31,296	11/20/2040
83206E-AA-5	SMB Private Education Lo-SMB 2024-C A1A		12/15/2024	PAYDOWN		659,011	659,011	658,892	0	0	119	0	119	0	659,011	0	0	0	11,680	06/17/2052
81743C-AE-5	Sequoia Mortgage Trust 2-SEMT 2024-5 A5		12/01/2024	PAYDOWN		1,173,097	1,173,097	1,166,498	0	0	6,599	0	6,599	0	1,173,097	0	0	0	26,623	06/01/2054
92839H-AA-4	Vista Point Securitizati-VSTA 2024-CES1		12/01/2024	PAYDOWN		1,287,922	1,287,922	1,287,909	0	0	13	0	13	0	1,287,922	0	0	0	29,317	05/01/2054
82667C-AC-9	Signal Rail I LLC-SRL 2024-1A A		12/17/2024	PAYDOWN		36,774	36,774	36,754	0	0	19	0	19	0	36,774	0	0	0	603	05/17/2054
86746F-AA-2	Sunnova Hestia II Issuer-SNVA 2024-GRID1		12/20/2024	PAYDOWN		370,850	370,850	370,837	0	0	13	0	13	0	370,850	0	0	0	5,247	07/20/2051
65345X-AA-2	GENESIS AIRCRAFT SERVICE Class A Certifi	C	12/15/2024	SINKING PAYMENT		1,297,667	1,297,667	1,297,634	0	0	33	0	33	0	1,297,667	0	0	0	14,748	12/17/2030
65345X-AB-0	GENESIS AIRCRAFT SERVICE Class B Certifi	C	12/15/2024	SINKING PAYMENT		146,234	146,234	144,627	0	0	1,607	0	1,607	0	146,234	0	0	0	2,957	12/17/2030
36164Q-NA-2	GE CAPITAL INTL FUNDING-SENIOR UNSECURED		03/14/2024	BARCLAYS CAPITAL INC		19,567,758	21,018,000	24,008,333	23,655,795	0	(39,609)	0	(39,609)	0	23,616,185	0	(4,048,427)	(4,048,427)	317,263	11/15/2035
000000-00-0	Merrion Square Residenti-MERRI 2024-1A A	B	12/24/2024	PAYDOWN		1,113,402	1,113,402	1,108,828	0	0	6,570	0	6,570	0	1,115,399	(1,996)	0	(1,996)	9,782	03/24/2081
872480-AE-8	TIF Funding II LLC-TIF 2021-1A A		12/20/2024	PAYDOWN		240,625	240,625	210,286	0	0	30,339	0	30,339	0	240,625	0	0	0	993	02/20/2046
33972P-AA-7	FLNG LIQUEFACTION 2 LLC-FIRST LIEN		09/30/2024	SINKING PAYMENT		214,000	214,000	214,000	213,982	0	18	0	18	0	214,000	0	0	0	6,683	03/31/2038
61776Q-AC-0	Morgan Stanley Residenti-MSRM 2024-3 A2		12/01/2024	PAYDOWN		1,605,750	1,605,750	1,605,148	0	0	603	0	603	0	1,605,750	0	0	0	17,834	07/01/2054
39571M-AD-0	GreenSky Home Improvemen-GSKY 2024-1 A4		12/25/2024	PAYDOWN		1,439,090	1,439,090	1,439,028	0	0	62	0	62	0	1,439,090	0	0	0	25,168	06/25/2059
22757H-AB-7	Cross 2024-H5 Mortgage T-CROSS 2024-H5 A		12/01/2024	PAYDOWN		439,790	439,790	439,786	0	0	4	0	4	0	439,790	0	0	0	4,968	08/01/2069
22757H-AA-9	Cross 2024-H5 Mortgage T-CROSS 2024-H5 A		12/01/2024	PAYDOWN		293,190	293,193	293,191	0	0	3	0	3	0	293,190	0	0	0	3,193	08/01/2069
105925-AB-7	BRAVO Residential Fundin-BRAVO 2024-NQMS		12/01/2024	PAYDOWN		355,412	355,412	355,405	0	0	6	0	6	0	355,412	0	0	0	4,781	06/01/2064
36830F-AF-3	GCAT 2024-INV3 Trust-GCAT 2024-INV3 A6		12/01/2024	PAYDOWN		759,767	759,767	761,813	0	0	(2,046)	0	(2,046)	0	759,767	0	0	0	8,316	09/01/2054
69831J-AA-0	PPPM 2024-RCF5 LLC-PPPM 2024-RCF5 A1		11/25/2024	PAYDOWN		1,038,598	1,038,598	1,012,870	0	0	25,727	0	25,727	0	1,038,598	0	0	0	5,334	08/25/2054
36830F-AN-6	GCAT 2024-INV3 Trust- 36830FAN6		12/01/2024	PAYDOWN		220,578	220,578	220,922	(345)	0	(345)	0	(345)	0	220,578	0	0	0	2,637	09/01/2054
795924-AA-7	Saluda Grade Alternative-GRADE 2024-INV1		12/01/2024	PAYDOWN		618,960	618,960	618,948	0	0	12	0	12	0	618,960	0	0	0	7,259	08/01/2059
92259W-AA-2	Velocity Commercial Capi-VCC 2024-4 A		12/01/2024	PAYDOWN		556,095	556,095	556,076	0	0	19	0	19	0	556,095	0	0	0	7,748	08/01/2054
78450X-AA-6	SMB Private Education Lo-SMB 2024-E A1A		12/15/2024	PAYDOWN		542,039	542,039	541,826	0	0	213	0	213	0	542,039	0	0	0	6,393	10/16/2056
31425B-AA-5	FCI Funding 2024-1 LLC-FCITL 2024-1A A		10/15/2024	PAYDOWN		716,408	716,408	716,383	0	0	26	0	26	0	716,408	0	0	0	3,362	08/15/2036

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
20268K-AA-8	Commonbond Student Loan -GBSLT 2017-BGS		12/25/2024	PAYDOWN		307,310	307,310	281,957	0	0	25,353	0	25,353	0	307,310	0	0	0	2,068	09/25/2042
20269D-AA-3	Commonbond Student Loan -GBSLT 2018-AGS		12/25/2024	PAYDOWN		292,907	292,907	272,221	0	0	20,687	0	20,687	0	292,907	0	0	0	2,401	02/25/2044
81749N-AB-1	Sequoia Mortgage Trust 2-SEMT 2024-8 A2		12/01/2024	PAYDOWN		2,052,312	2,052,315	2,034,357	0	0	17,958	0	17,958	0	2,052,312	0	0	0	25,084	09/01/2054
81749N-AV-7	Sequoia Mortgage Trust 2-SEMT 2024-8 A20		12/01/2024	PAYDOWN		1,876,346	1,876,346	1,848,200	0	0	28,145	0	28,145	0	1,876,346	0	0	0	22,934	09/01/2054
196919-AB-0	COLT 2024-INV3 Mortgage -COLT 2024-INV3		12/01/2024	PAYDOWN		391,736	391,736	391,729	0	0	7	0	7	0	391,736	0	0	0	4,646	09/01/2069
196919-AA-2	COLT 2024-INV3 Mortgage -COLT 2024-INV3		12/01/2024	PAYDOWN		706,483	706,483	706,483	0	0	1	0	1	0	706,483	0	0	0	8,008	09/01/2069
62847R-AA-5	MVI 2024-1 LLC-MVIOT 2024-1A A		12/20/2024	PAYDOWN		622,748	622,748	631,603	0	0	(8,855)	0	(8,855)	0	622,748	0	0	0	8,152	02/20/2043
92540N-AB-9	Verus Securitization Tru-VERUS 2024-INV2		12/01/2024	PAYDOWN		133,745	133,745	133,743	0	0	1	0	1	0	133,745	0	0	0	1,695	08/01/2069
92538N-AC-1	Verus Securitization Tru-VERUS 2022-4 A3		12/01/2024	PAYDOWN		73,403	73,403	71,728	0	0	1,675	0	1,675	0	73,403	0	0	0	793	04/01/2067
07446A-AA-7	Spectre Retail Warehouse-SPERE 2024-IH1	B	12/17/2024	ANGLE		2,039,040	2,039,040	2,145,920	0	0	0	0	0	0	2,145,920	(106,880)	0	(106,880)	0	07/31/2033
46658G-AT-9	JP Morgan Mortgage Trust-JPMIT 2024-8 A9		12/01/2024	PAYDOWN		270,897	270,897	271,024	0	0	(127)	0	(127)	0	270,897	0	0	0	3,701	01/01/2055
002939-AE-6	A&D Mortgage Trust 2024-ADMT 2024-NQM4		11/01/2024	PAYDOWN		139,703	139,703	139,701	0	0	2	0	2	0	139,703	0	0	0	1,426	08/01/2069
002939-AD-8	A&D Mortgage Trust 2024-ADMT 2024-NQM4		11/01/2024	PAYDOWN		69,851	69,851	69,851	0	0	1	0	1	0	69,851	0	0	0	688	08/01/2069
924925-AD-2	Verus Securitization Tru-VERUS 2024-7 A2		12/01/2024	PAYDOWN		342,883	342,885	342,881	0	0	4	0	4	0	342,883	0	0	0	2,985	09/01/2069
885170-AB-9	Thor 2024-A LLC-THOR 2024-A B		12/15/2024	PAYDOWN		725,638	725,638	725,523	0	0	115	0	115	0	725,638	0	0	0	5,211	08/15/2041
16159X-AV-4	Chase Home Lending Mortg-CHASE 2024-8 A9		12/01/2024	PAYDOWN		855,257	855,257	851,516	0	0	3,742	0	3,742	0	855,257	0	0	0	7,539	08/01/2055
43283Y-AA-1	Hilton Grand Vacations T-HGVT 2024-1B A		12/15/2024	PAYDOWN		524,185	524,185	534,177	0	0	(9,992)	0	(9,992)	0	524,185	0	0	0	4,915	09/15/2039
361528-AD-4	GBX Leasing 2023-1 LLC-GBXL 2023-1A B		12/20/2024	PAYDOWN		15,306	15,306	15,765	0	0	(459)	0	(459)	0	15,306	0	0	0	186	11/20/2053
55389Q-AB-3	MVI 2024-2 LLC-MVIOT 2024-2A B		12/20/2024	PAYDOWN		242,684	242,684	242,674	0	0	10	0	10	0	242,684	0	0	0	1,954	03/20/2042
55389Q-AC-1	MVI 2024-2 LLC-MVIOT 2024-2A C		12/20/2024	PAYDOWN		161,789	161,789	161,766	0	0	23	0	23	0	161,789	0	0	0	1,382	03/20/2042
20268A-AA-0	Commonbond Student Loan -GBSLT 2021-BGS		11/25/2024	PAYDOWN		121,587	121,587	102,513	0	0	19,074	0	19,074	0	121,587	0	0	0	179	09/25/2051
26844L-AC-2	EFMT 2024-INV2-EFMT 2024-INV2 A3		12/01/2024	PAYDOWN		41,038	41,038	41,038	0	0	0	0	0	0	41,038	0	0	0	237	10/01/2069
26844L-AB-4	EFMT 2024-INV2-EFMT 2024-INV2 A2		12/01/2024	PAYDOWN		27,215	27,215	27,215	0	0	0	0	0	0	27,215	0	0	0	153	10/01/2069
58004J-AB-8	MFA 2024-NQM2 Trust-MFRA 2024-NQM2 A2		12/01/2024	PAYDOWN		154,943	154,943	155,354	0	0	(412)	0	(412)	0	154,943	0	0	0	902	08/01/2069
92261A-BA-5	Velocity Commercial Capi-VCC 2024-5 A		11/01/2024	PAYDOWN		19,601	19,601	19,600	0	0	1	0	1	0	19,601	0	0	0	62	10/01/2054
00112D-AA-4	ACHM Trust 2024-HE2-ACHM 2024-HE2 A		12/25/2024	PAYDOWN		272,246	272,249	270,668	0	0	1,581	0	1,581	0	272,246	0	0	0	2,270	10/25/2039
92540P-AB-4	VERUS 2024-8-VERUS 2024-8 A2		12/01/2024	PAYDOWN		161,439	161,439	161,437	2	0	2	0	2	0	161,439	0	0	0	990	10/01/2069
31684E-AA-5	FIGRE Trust 2023-HE1a2-FIGRE 2023-HE1a2		11/25/2024	PAYDOWN		7,396,681	7,396,681	7,322,596	0	0	74,085	0	74,085	0	7,396,681	0	0	0	310,520	11/25/2053
31684F-AA-2	FIGRE Trust 2024-HE5-FIGRE 2024-HE5 A		12/25/2024	PAYDOWN		1,052,971	1,052,971	1,051,532	0	0	1,439	0	1,439	0	1,052,971	0	0	0	7,205	10/25/2054
19688X-AA-4	COLT 2024-6 Mortgage Loa-COLT 2024-6 A1		12/01/2024	PAYDOWN		40,288	40,288	40,288	0	0	1	0	1	0	40,288	0	0	0	315	11/01/2069
88035K-AA-7	TENET 2024-1A A1-TENET 2024-1A A1		12/20/2024	PAYDOWN		1,981	1,982	1,980	0	0	1	0	1	0	1,981	0	0	0	11	10/20/2054
12510H-AT-7	CARS-DB7 LP-CAUTO 2023-1A A2		12/15/2024	PAYDOWN		4,167	4,167	4,249	0	0	(82)	0	(82)	0	4,167	0	0	0	34	09/15/2053
924926-AE-8	Verus Securitization Tru-VERUS 2024-R1 A		12/01/2024	PAYDOWN		143,729	143,729	143,727	0	0	2	0	2	0	143,729	0	0	0	1,025	09/01/2069
924926-AD-0	Verus Securitization Tru-VERUS 2024-R1 A		12/01/2024	PAYDOWN		99,697	99,697	99,695	0	0	2	0	2	0	99,697	0	0	0	692	09/01/2069
381935-AA-3	GoodLeap Home Improvemen-GDLP 2024-1A A		12/20/2024	PAYDOWN		614,542	614,542	613,506	0	0	1,036	0	1,036	0	614,542	0	0	0	2,942	10/20/2046
86324E-AA-5	Stream Innovations 2024-STRE 2024-2A A		12/15/2024	PAYDOWN		912,023	912,023	911,801	0	0	222	0	222	0	912,023	0	0	0	6,072	02/15/2045
82667C-AD-7	Signal Rail I LLC-SRL 2024-1A B		12/17/2024	PAYDOWN		5,988	5,988	6,065	0	0	(77)	0	(77)	0	5,988	0	0	0	46	05/17/2054
67120G-AE-8	OBX 2024-NQM16 Trust-OBX 2024-NQM16 A3		12/01/2024	PAYDOWN		76,122	76,122	76,122	0	0	0	0	0	0	76,122	0	0	0	0	10/01/2064
67120G-AD-0	OBX 2024-NQM16 Trust-OBX 2024-NQM16 A2		12/01/2024	PAYDOWN		114,180	114,183	114,181	0	0	2	0	2	0	114,180	0	0	0	0	10/01/2064
31684J-AA-4	FIGRE Trust 2024-SL1-FIGRE 2024-SL1 A1		12/01/2024	PAYDOWN		517,444	517,444	517,388	0	0	56	0	56	0	517,444	0	0	0	0	07/01/2053
19688Q-AB-7	COLT 2024-INV4 Mortgage -COLT 2024-INV4		12/01/2024	PAYDOWN		71,016	71,016	71,016	0	0	0	0	0	0	71,016	0	0	0	350	05/01/2069
891947-AA-1	TOWD POINT MORTGAGE TRUS-TPMT 2024-CES6		12/01/2024	PAYDOWN		47,716	47,716	47,715	0	0	0	0	0	0	47,716	0	0	0	228	11/01/2064
673911-AD-5	ONSLow BAY FINANCIAL LLC-OBX 2024-NQM17		12/01/2024	PAYDOWN		34,809	34,809	34,809	0	0	0	0	0	0	34,809	0	0	0	170	11/01/2064
82653B-AC-7	Sierra Timeshare 2024-3 -SPFC 2024-3A C		12/20/2024	PAYDOWN		120,356	120,356	120,229	0	0	127	0	127	0	120,356	0	0	0	534	08/20/2041
37045X-BW-5	General Motors Financial Co Inc Pinebridge Private Credit Rated Feeder, L.P.		02/29/2024	VARIOUS		2,589,158	0	0	0	0	0	0	0	0	2,589,486	0	(328)	(328)	0	03/31/2031
72303#-AA-7			03/15/2024	VARIOUS		6,353,366	0	0	0	0	0	0	0	0	6,353,366	0	0	0	0	03/31/2031
83416W-AA-1	Solar Star Funding LLC		06/30/2024	SINKING PAYMENT		75,226	0	0	0	0	0	0	0	0	75,226	0	0	0	0	06/30/2035
BO6548-71-5	IWEC Holdings II Corp		03/15/2024	SINKING PAYMENT		2,912	0	0	0	0	0	0	0	0	2,912	0	0	0	0	03/31/2031

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
B6S2XT-P6-0	Concentrix Corporation --TERM LOAN		12/04/2024	VARIOUS		0	0	0	0	0	0	0	0	(151,193)	0	0	0	0	0	09/25/2025
1109999999. Subtotal - Bonds - Industrial and Miscellaneous (Unaffiliated)						5,363,199,873	5,516,060,358	5,423,239,139	5,371,371,271	8,726,440	31,486,442	2,150,216	38,062,666	(3,712,487)	5,509,153,310	22,935	(145,976,387)	(145,953,453)	200,946,266	XXX
65557C-AN-3	NORDEA BANK AB-NDAS 6 1/8 PERP	D	09/23/2024	CALL 100		8,000,000	8,000,000	7,931,250	7,930,416	0	2,268	0	2,268	0	7,932,685	0	67,315	67,315	490,000	01/01/9999
03765H-AE-1	Apollo Management Holdin-SUBORDINATED		12/17/2024	CALL 100		2,983,000	2,983,000	2,536,995	2,544,495	0	6,993	0	6,993	0	2,551,487	0	431,513	431,513	147,659	01/14/2050
25746U-BY-4	Dominion Energy Inc-JR SUBORDINATED		10/08/2024	CALL 100		11,000,000	11,000,000	10,436,250	10,436,762	0	5,771	0	5,771	0	10,442,533	0	557,467	557,467	649,423	10/01/2054
808513-BJ-3	Charles Schwab Corp/The-JR SUBORDINATED		09/16/2024	BNP PARIBAS		5,072,828	5,781,000	4,906,624	4,906,653	0	56	0	56	0	4,906,709	0	166,118	166,118	183,707	01/01/9999
78486Q-AG-6	SVB Financial Group-SVB FINANCIAL GR		11/08/2024	EXCHANGE OFFER		6,070	5,000,000	6,070	50,000	2,085	0	46,014	(43,929)	0	6,070	0	0	0	0	01/01/9999
23380Y-AD-9	Dai-ichi Life Insurance -DAIL 4 PERP	D	12/12/2024	DAIWA SECURITIES AME		9,800,000	10,000,000	10,000,000	10,000,213	0	(213)	0	(213)	0	10,000,000	0	(200,000)	(200,000)	554,444	01/01/9999
55261F-AH-7	M&T Bank Corp-MTB 5 1/8 PERP		01/19/2024	BNP PARIBAS		1,765,140	2,000,000	2,113,018	2,045,131	0	(934)	0	(934)	0	2,044,197	0	(279,057)	(279,057)	23,347	01/01/9999
743315-AU-7	Progressive Corp/The-PGR 3 3/8 PERP		02/22/2024	CALL 100		7,500,000	7,500,000	7,500,000	7,500,055	0	(55)	0	(55)	0	7,500,000	0	0	0	273,312	01/01/9999
857477-BA-0	State Street Corp-STT 5 5/8 PERP		09/16/2024	VARIOUS		3,000,000	3,000,000	2,340,000	2,351,903	0	(838)	0	(838)	0	2,351,064	0	648,936	648,936	188,160	01/01/9999
89832Q-AF-6	Truist Financial Corp-TFC 5.1 PERP		09/16/2024	SEAPORT GROUP		28,762,500	29,500,000	29,500,000	29,500,000	0	0	0	0	0	29,500,000	0	(737,500)	(737,500)	1,571,367	01/01/9999
808513-CB-9	Charles Schwab Corp/The-CHARLES SCHWAB		12/13/2024	MORGAN		7,324,281	7,500,000	7,500,000	7,500,000	0	0	0	0	0	7,500,000	0	(175,719)	(175,719)	389,840	01/01/9999
62582P-AA-8	Muenchener Rueckversiche-SUBORDINATED	D	09/17/2024	VARIOUS		5,407,463	5,195,000	5,195,000	5,195,000	0	0	0	0	0	5,195,000	0	212,463	212,463	246,249	05/23/2042
25746U-DD-8	Dominion Energy Inc-D 4.65 PERP		06/06/2024	CA CASH_CLOSE		2,992,500	3,000,000	2,775,000	2,774,951	0	32	0	32	0	2,774,982	0	217,518	217,518	66,263	01/01/9999
29250N-BC-8	Enbridge Inc-SUBORDINATED	A	08/23/2024	BARCLAYS CAPITAL INC		4,775,000	5,000,000	4,775,000	4,775,911	0	98	0	98	0	4,776,010	0	(1,010)	(1,010)	320,243	07/15/2080
29250N-BP-9	Enbridge Inc-ENBON 7 5/8 01/15/2083	A	08/23/2024	JEFFERIESLLC		6,270,000	6,000,000	6,000,000	6,000,000	0	0	0	0	0	6,000,000	0	270,000	270,000	509,604	01/15/2083
654579-AD-3	NIPPON LIFE INSURANCE-SUBORDINATED	D	10/16/2024	CALL 100		5,000,000	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	0	0	255,000	10/16/2044
1309999999. Subtotal - Bonds - Hybrid Securities						109,658,782	116,459,000	108,515,207	108,511,490	2,085	13,178	46,014	(30,751)	0	108,480,737	0	1,178,044	1,178,044	5,868,618	XXX
06760Q-AS-8	Barings Middle Market CL-BMM 2017-1A BR	D	03/11/2024	BOFAMILSEC		11,942,160	12,000,000	12,000,000	12,000,000	0	0	0	0	0	12,000,000	0	(57,840)	(57,840)	398,410	01/20/2034
06760Q-AU-3	Barings Middle Market CL-BMM 2017-1A CR	D	12/20/2024	MRB002A		5,502,893	5,500,000	5,500,000	5,500,000	0	0	0	0	0	5,500,000	0	2,893	2,893	606,460	01/20/2034
06760Q-AN-9	Barings Middle Market CL-BMM 2017-1A A1R	D	10/21/2024	PAYDOWN		355,744	355,744	355,744	355,744	0	0	0	0	0	355,744	0	0	0	25,739	01/20/2034
06763B-AE-9	Babson CLO Ltd/Cayman Is-BABSN LP-2A C	D	05/23/2024	VARIOUS		30,044,700	30,000,000	30,000,000	30,000,000	0	0	0	0	0	30,000,000	0	44,700	44,700	1,274,917	01/20/2034
06763C-AE-7	Babson CLO Ltd/Cayman Is-BABSN LP-2A D	D	10/20/2024	PAYDOWN		11,782,437	11,782,437	11,782,437	11,782,437	0	0	0	0	0	11,782,437	0	0	0	166,109	01/20/2034
06759U-AG-8	Barings CLO Ltd 2022-II-BABSN 2022-2A D	D	07/15/2024	PAYDOWN		5,000,000	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	0	0	363,839	07/15/2035
06759U-AE-3	Barings CLO Ltd 2022-II-BABSN 2022-2A C	D	07/15/2024	PAYDOWN		5,000,000	5,000,000	5,000,000	5,000,000	0	0	0	0	0	5,000,000	0	0	0	322,131	07/15/2035
06759U-AA-1	Barings CLO Ltd 2022-II-BABSN 2022-2A A	D	07/15/2024	PAYDOWN		5,000,000	5,000,000	4,895,000	4,881,478	0	118,522	0	118,522	0	5,000,000	0	0	0	270,944	07/15/2035
06759U-AC-7	Barings CLO Ltd 2022-II-BABSN 2022-2A B1	D	07/15/2024	PAYDOWN		10,000,000	10,000,000	10,000,000	10,000,000	0	0	0	0	0	10,000,000	0	0	0	594,971	07/15/2035
06762Q-AA-5	Babson CLO Ltd/Cayman Is-BABSN LP-3A A	D	01/22/2024	PAYDOWN		9,000,000	9,000,000	8,955,000	9,045,000	0	0	0	0	0	9,000,000	0	0	0	177,092	07/20/2033
06762Q-AC-1	Babson CLO Ltd/Cayman Is-BABSN LP-3A B	D	01/22/2024	PAYDOWN		4,500,000	4,500,000	4,500,000	4,500,000	0	0	0	0	0	4,500,000	0	0	0	99,473	07/20/2033
06762V-AC-0	Barings Loan Partners CL-BABSN 2022-3A B	D	10/15/2024	PAYDOWN		10,000,000	10,000,000	10,000,000	10,000,000	0	0	0	0	0	10,000,000	0	0	0	815,920	10/20/2035
06761K-AL-5	Barings CLO Ltd 2019-III-BABSN 2019-3A A	D	12/23/2024	PAYDOWN		5,000,000	5,000,000	4,926,500	4,913,095	0	79,498	0	79,498	0	5,000,000	0	0	0	338,488	04/20/2031
000000-00-0	Barings Euro CLO 2022-1 -BABSE 2022-1A B	B	02/08/2024	PAYDOWN		5,386,500	5,386,497	4,812,113	5,422,888	0	106,269	0	106,269	(582,281)	4,946,876	439,624	0	439,624	109,132	10/28/2034
000000-00-0	Barings Euro CLO 2022-1 -BABSE 2022-1A B	B	02/08/2024	PAYDOWN		5,386,500	5,386,497	4,812,113	5,426,023	0	103,177	0	103,177	(582,448)	4,946,752	439,748	0	439,748	124,133	10/28/2034
000000-00-0	Barings Euro CLO 2022-1 -BABSE 2022-1A A	B	02/08/2024	PAYDOWN		16,193,679	16,193,674	14,732,468	16,547,086	0	47,754	0	47,754	(1,781,369)	14,813,471	1,380,209	0	1,380,209	213,841	10/28/2034
06761C-AL-3	Barings CLO Ltd 2016-II-BABSN 2016-2A AR	D	10/21/2024	PAYDOWN		20,000,000	20,000,000	19,570,000	19,607,293	0	392,707	0	392,707	0	20,000,000	0	0	0	1,295,058	01/20/2032
22228#-AA-4	CounterpointeSRE CPAGE 706 Mission Stree		12/20/2024	CA_CASH_CLOSE		201,094	201,094	201,094	201,094	0	0	0	0	0	201,094	0	0	0	12,438	09/02/2048
22228#-AB-2	CounterpointeSRE CPAGE 706 Mission Stree		12/20/2024	CA_CASH_CLOSE		27,422	27,422	27,422	27,422	0	0	0	0	0	27,422	0	0	0	1,562	09/02/2048
22228#-AC-0	CounterpointeSRE CPAGE 706 Mission Stree		12/20/2024	CA_CASH_CLOSE		5,393	5,393	5,393	5,393	0	0	0	0	0	5,393	0	0	0	318	09/02/2048
06793Q-AC-1	Barings Private Credit C-BPCC 2023-1A A2	D	09/17/2024	PAYDOWN		8,000,000	8,000,000	8,000,000	8,000,000	0	0	0	0	0	8,000,000	0	0	0	755,952	07/15/2031
06793Q-AA-5	Barings Private Credit C-BPCC 2023-1A A1	D	09/17/2024	PAYDOWN		25,000,000	25,000,000	25,000,000	25,000,000	0	0	0	0	0	25,000,000	0	0	0	1,838,315	07/15/2031
1509999999. Subtotal - Bonds - Parent, Subsidiaries and Affiliates						193,328,522	193,338,758	190,075,284	193,214,953	0	847,927	0	847,927	(2,946,098)	191,079,189	2,259,581	(10,247)	2,249,334	9,805,242	XXX
45249#-AA-0	Image Intl Holdco Initial Term Ln		05/06/2024	CA_CASH_CLOSE		7,320	7,320	7,283	0	0	0	0	0	0	7,283	0	37	37	179	07/10/2024
69398#-AD-7	PDI TA Holdings Inc. - 2019 1st Lien Ter		02/01/2024	CA_CASH_CLOSE		5,361,925	5,361,925	5,355,981	5,358,933	0	0	0	0	0	5,358,933	0	2,992	2,992	995,485	10/24/2024
64701#-AA-1	IFM USIDF (INTERMEDIATE) B, L.P. - Secur	C	06/20/2024	CA_CASH_CLOSE		4,166,667	4,166,667	4,166,667	4,166,667	0	0	0	0	0	4,166,667	0	0	0	211,014	11/01/2035
87300*-AB-0	THG Acquisition LLC - 2019 Term Loan		10/31/2024	CA_CASH_CLOSE		408,054	408,054	408,054	408,054	0	0	0	0	0	408,054	0	0	0	38,409	12/02/2026
87300*-AC-8	THG ACQUISITION LLC Delayed Draw Term Ln		10/31/2024	CA_CASH_CLOSE		115,416	115,416	115,416	115,416	0	0	0	0	0	115,416	0	0	0	11,782	12/02/2026
74140#-AA-0	Project Potter Buyer LLC - Term Loan		09/30/2024	CA_CASH_CLOSE		13,676	13,676	13,676	13,676	0	0	0	0	0	13,676	0	0	0	744	04/23/2027
88167#-AA-8	Tetragon Financial Group (Delaware) LLC		09/12/2024	CA_CASH_CLOSE		10,000,000	10,000,000	10,000,000	10,000,000	0	0	0	0	0	10,000,000	0	0	0	352,593	07/15/2032
66684#-AA-9	OHA Credit Solutions Master Fund I SPV,	C	10/02/2024	CA_CASH_CLOSE		11,358,851	11,358,851	11,358,851	11,358,851	0	0	0	0	0	11,358,851	0	0	0	452,386	12/16/2032
87300*-AD-6	THG Acquisition LLC - 2020 Term Loan		10/31/2024	CA_CASH_CLOSE		339,588	339,588	339,588	339,588	0	0	0	0	0	339,588	0	0	0	35,344	12/02/2026

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
00177#-AA-1	AMF Levered II, LLC - Revolver		11/07/2024	CA_CASH_CLOSE		8,790,659	8,790,659	8,790,659	8,790,659	0	0	0	0	0	8,790,659	0	0	0	282,489	03/26/2031
69341J-AN-0	Veritas US Inc. - 2021 USD Term Loan B		12/09/2024	VARIOUS		1,033,240	1,083,768	1,078,350	1,078,350	0	0	0	0	0	1,078,350	0	(45,110)	(45,110)	156,707	09/01/2025
26888#-AA-0	EPS Nass Parent Inc. - Term Loan		03/28/2024	CA_CASH_CLOSE		2,283	2,283	2,283	2,283	0	0	0	0	0	2,283	0	0	0	44,444	04/19/2028
90385P-AC-4	Ultimus Group Midco LLC-/ULTGRP TL 1L US		03/07/2024	CA_CASH_CLOSE		1,105,616	1,105,616	1,083,504	1,092,444	0	0	0	0	0	1,092,444	0	13,173	13,173	54,549	02/01/2026
23344U-AC-4	DS Admiral Bidco LLC-DSADBI TL 1L USD		06/28/2024	CA_CASH_CLOSE		2,148,750	2,148,750	2,148,750	2,148,750	0	0	0	0	0	2,148,750	0	0	0	346,950	03/16/2028
75046T-AB-0	Radius Aerospace Inc-RADAER TL 1L USD		09/30/2024	CA_CASH_CLOSE		3,863	3,863	3,795	3,826	0	(20)	0	(20)	0	3,826	0	36	36	489	03/29/2025
88233F-AK-6	Vistra Operations Co LLC-VST TL B3 1L US		12/31/2024	CA_CASH_CLOSE		69,093	69,093	68,402	0	0	0	0	0	0	68,402	0	691	691	2,986	12/20/2030
16117L-BW-8	Charter Communications O-QHTR TL B1 1L U		09/30/2024	CA_CASH_CLOSE		28,852	28,852	24,524	25,955	0	0	0	0	0	25,955	0	2,897	2,897	3,239	04/30/2025
92124T-AA-1	Qatar Airways Senior Term Loa		11/15/2024	CA_CASH_CLOSE		2,348,567	2,348,567	2,339,201	2,339,201	0	0	0	0	0	2,339,201	0	9,366	9,366	73,708	05/06/2031
91860#-AA-6	VPC ASSET BACKED OPPORTUNISTIC CREDIT Ho		10/03/2024	CA_CASH_CLOSE		4,372,342	4,372,342	4,372,342	4,372,342	0	0	0	0	0	4,372,342	0	0	0	260,698	06/14/2029
78433#-AB-9	SG Acquisition Inc.(Safe-Guard)-Incremen		04/03/2024	CA_CASH_CLOSE		408,485	408,485	408,485	408,485	0	0	0	0	0	408,485	0	0	0	39,087	01/27/2027
32013#-AA-2	FIRST EAGLE DIRECT LENDING V-B, LLC - Se		10/21/2024	CA_CASH_CLOSE		10,676,365	10,676,365	10,676,365	10,676,365	0	0	0	0	0	10,676,365	0	0	0	734,250	06/16/2029
26745L-AC-2	Dwyer Instruments Inc - Term Loan		11/18/2024	VARIOUS		1,332,347	1,332,347	1,305,700	1,305,700	0	0	0	0	0	1,305,700	0	26,647	26,647	331,146	07/21/2027
92943H-AB-5	W.R. Grace & Co. TL B		09/30/2024	CA_CASH_CLOSE		2,616	2,616	2,610	2,610	0	0	0	0	0	2,610	0	7	7	235	09/22/2028
74273J-AE-3	Pro Mach Inc. First Lien Term		01/19/2024	CA_CASH_CLOSE		2,039,196	2,039,196	2,029,981	2,029,981	0	0	0	0	0	2,029,981	0	9,215	9,215	123,937	08/31/2028
69429#-AA-4	PDQ (PDQ TOPCO LP) First Lien Term		12/31/2024	CA_CASH_CLOSE		44,373	44,373	44,373	44,373	0	0	0	0	0	44,373	0	0	0	7,486	08/27/2027
69429#-AB-2	PDQ (PDQ TOPCO LP) DDTL		12/31/2024	CA_CASH_CLOSE		30,386	30,386	30,386	30,386	0	0	0	0	0	30,386	0	0	0	4,571	08/27/2027
78488C-AH-3	Seallworld Parks & Entertainment Inc. - 2		01/22/2024	CA_CASH_CLOSE		2,932,500	2,932,500	2,903,175	2,904,578	0	0	0	0	0	2,904,578	0	27,922	27,922	153,443	08/25/2028
30319#-AA-1	FSS Buyer LLC Initial Term Loan		12/31/2024	CA_CASH_CLOSE		74,530	74,530	73,040	73,111	0	(18)	0	(18)	0	73,111	0	1,419	1,419	11,385	08/31/2028
55183#-AC-7	Lynx Franchising LLC - 2021-09 Increment		09/30/2024	CA_CASH_CLOSE		29,514	29,514	28,924	28,924	0	0	0	0	0	28,924	0	590	590	3,473	12/23/2026
30301#-AA-1	FS GREIT FINANCE MM-1 LLC - Secured Term		11/13/2024	CA_CASH_CLOSE		25,518,076	25,518,076	25,518,076	25,518,076	0	0	0	0	0	25,518,076	0	0	0	1,881,289	09/20/2029
49375#-AA-0	DistroKid Senior Term Loa		09/30/2024	CA_CASH_CLOSE		69,654	69,654	68,261	68,320	0	0	0	0	0	68,320	0	1,335	1,335	7,777	10/01/2027
66703#-AA-9	Northstar Recycling - Senior Term Loan		04/18/2024	VARIOUS		1,270,186	1,270,186	1,244,782	1,245,849	0	0	0	0	0	1,245,849	0	24,337	24,337	111,594	10/01/2027
07740#-AA-7	SCL XL I FUND L.P. - Senior Secured Revo		12/13/2024	CA_CASH_CLOSE		24,131,579	24,131,579	24,131,579	24,131,579	0	0	0	0	0	24,131,579	0	0	0	1,083,592	10/05/2029
08990#-AA-2	Beyond Risk - Term Loan		04/18/2024	VARIOUS		1,566,775	1,572,250	1,540,805	1,541,986	0	0	0	0	0	1,541,986	0	24,789	24,789	135,819	10/08/2027
10947U-AC-2	BrightSign - Term Loan		12/31/2024	CA_CASH_CLOSE		22,320	22,320	22,097	22,105	0	(2)	0	(2)	0	22,105	0	215	215	4,439	10/14/2027
08655#-AA-6	Syntax Systems Ltd - Senior Term Loan		06/21/2024	CA_CASH_CLOSE		1,318,675	1,318,675	1,305,488	1,305,488	0	0	0	0	0	1,305,488	0	13,187	13,187	152,530	10/29/2028
03233#-AA-1	Amtech Software - Term Loan		06/21/2024	CA_CASH_CLOSE		2,679,545	2,679,545	2,679,545	2,679,545	0	0	0	0	0	2,679,545	0	0	0	269,518	11/02/2027
45686#-AC-8	Infrastripe LLC Delayed Draw		09/30/2024	CA_CASH_CLOSE		54,018	54,018	54,018	54,018	0	0	0	0	0	54,018	0	0	0	7,490	01/07/2025
55343#-AF-5	MUX Venture Mgmt III LLC Senior TL		07/31/2024	CA_CASH_CLOSE		37,500	37,500	37,500	37,500	0	0	0	0	0	37,500	0	0	0	2,229	07/30/2032
29251#-AB-9	Encina Business Credit SPV LLC Revolving		11/07/2024	CA_CASH_CLOSE		10,080,000	10,080,000	10,080,000	9,760,000	0	0	0	0	0	10,080,000	0	0	0	37,754	07/07/2028
78494#-AA-7	SPC RECEIVABLES FDG II TR SECD REV LN FA		08/20/2024	CA_CASH_CLOSE		21,527,768	21,527,768	21,527,768	21,527,768	0	0	0	0	0	21,527,768	0	0	0	2,001,205	10/19/2029
55343#-AG-3	MUX Venture Mgmt III LLC Senior TL		10/15/2024	CA_CASH_CLOSE		723,260	723,260	723,260	723,194	0	0	0	0	0	723,194	0	65	65	57,239	10/15/2031
55343#-AC-2	MUX VENTURE SENIOR TL L+1.682 04/30/2031		10/20/2024	CA_CASH_CLOSE		4,802,800	4,802,800	4,802,800	4,803,303	0	0	0	0	0	4,803,303	0	(504)	(504)	326,714	04/30/2031
45686#-AB-0	Infrastripe LLC		09/30/2024	VARIOUS		1,130,071	1,130,071	1,111,236	1,118,822	0	(42)	0	(42)	0	1,118,822	0	11,249	11,249	92,770	01/15/2025
29643#-AA-0	EShipping LLC - Term Loan		10/02/2024	BANK LOANS BARINGS		1,869,970	1,869,970	1,832,570	1,833,492	0	0	0	0	0	1,833,492	0	36,478	36,478	266,947	11/05/2027
83176#-AA-2	Smartling Inc. - Term Loan		09/18/2024	VARIOUS		2,981,323	2,981,323	2,981,323	2,981,323	0	0	0	0	0	2,981,323	0	0	0	388,096	11/08/2027
67100#-AA-2	OC III LVS XXVI LP - Secured Loan Facili		10/21/2024	CA_CASH_CLOSE		5,797,378	5,797,378	5,797,378	5,797,378	0	0	0	0	0	5,797,378	0	0	0	132,781	11/20/2030
99989#-AF-1	Portfolio Group - Agency 1st Lien Term L		09/30/2024	CA_CASH_CLOSE		10,508	10,508	10,298	10,304	0	(2)	0	(2)	0	10,304	0	204	204	2,631	12/02/2025
75988#-AA-6	RENOVATION ACQUISITION INC TERM LOAN		12/31/2024	CA_CASH_CLOSE		60,680	60,680	59,163	59,193	0	0	0	0	0	59,193	0	1,487	1,487	7,674	11/15/2027
70466#-AA-6	Polymer Solutions Group Holdings LLC - T		12/31/2024	CA_CASH_CLOSE		5,135	5,135	5,135	5,135	0	0	0	0	0	5,135	0	0	0	84	12/31/2024
53186#-AB-1	LIFE EXTENSION INSTITUTE INC RESTATEMENT		04/18/2024	VARIOUS		1,435,081	1,435,081	1,435,081	1,435,081	0	0	0	0	0	1,435,081	0	0	0	147,164	02/19/2026
09173#-AA-8	Bitly - Term Loan B		04/18/2024	BANK LOANS BARINGS		1,789,609	1,795,354	1,768,424	1,768,705	0	0	0	0	0	1,768,705	0	20,905	20,905	163,809	11/22/2026
00910#-AG-0	Air Comm Corporation LLC - 2021 Incremen		10/31/2024	VARIOUS		4,878,548	4,902,875	4,902,875	4,902,875	0	0	0	0	0	4,902,875	0	(24,327)	(24,327)	629,068	07/01/2027
97959#-AA-3	Woodland Foods Inc - Term Loan		09/30/2024	CA_CASH_CLOSE		17,411	17,411	17,063	17,067	0	0	0	0	0	17,067	0	344	344	2,622	12/02/2027
26869#-AA-1	Standard Elevator Systems - Term Loan		09/30/2024	CA_CASH_CLOSE		25,989	25,989	25,470	25,476	0	0	0	0	0	25,476	0	513	513	1,895	12/02/2027
73103#-AA-9	Polara - Term Loan		09/30/2024	CA_CASH_CLOSE		188,955	188,955	185,176	185,195	0	0	0	0	0	185,195	0	3,759	3,759	28,270	12/03/2027
21257#-AC-8	Convey Health Solutions Inc./Term Loan		09/30/2024	CA_CASH_CLOSE		434,193	434,193	434,193	434,193	0	0	0	0	0	434,193	0	0	0	51,931	09/04/2026
26887#-AA-9	EP WEALTH ADVISORS LLC - TERM LOAN		06/13/2024	CA_CASH_CLOSE		492,100	492,100	492,100	492,100	0	0	0	0	0	492,100	0	0	0	44,188	09/04/2026

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
268878-AB-7	EP WEALTH ADVISORS LLC - DELAYED DRAW T		03/28/2024	CA_CASH_CLOSE		1,326	1,326	1,326	1,326	0	0	0	0	0	1,326	0	0	0	432	09/04/2026
15644G-B*-4	CENTRIC BRANDS INC. - REVOLVING LOAN (FI		12/31/2024	CA_CASH_CLOSE		34,872	34,872	34,872	34,872	0	0	0	0	0	34,872	0	0	0	7,587	08/06/2029
28619*-AC-8	ELEMICA PARENT INC. - AMENDMENT NO. 1 T		05/17/2024	CA_CASH_CLOSE		128,820	128,820	128,820	128,820	0	0	0	0	0	128,820	0	0	0	16,199	09/18/2025
419028-AA-9	Sigma Electric Manufacturing Corporation		04/05/2024	CA_CASH_CLOSE		1,744,042	1,744,042	1,709,021	1,732,183	0	0	0	0	0	1,732,183	0	11,859	11,859	308,736	10/31/2024
87326#-AB-6	TA/WEG HOLDINGS LLC - 2021 DELAYED DRAW		10/02/2024	VARIOUS		289,745	289,745	289,745	289,745	0	0	0	0	0	289,745	0	0	0	26,038	10/04/2027
55371*-AU-9	MRI Software LLC/Term Loan 2/20		12/31/2024	CA_CASH_CLOSE		680,159	680,159	680,159	680,159	0	0	0	0	0	680,159	0	0	0	89,611	02/10/2026
92974*-AD-1	WSHP FC ACQUISITION 1A TL L+650 03/30/20		12/31/2024	CA_CASH_CLOSE		1,458	1,458	1,414	1,335	0	0	0	0	0	1,439	0	19	19	201	03/30/2027
762526-AB-9	RIALTO MANAGEMENT GROUP LLC - TERM LOAN		12/05/2024	CA_CASH_CLOSE		646,487	646,487	646,487	646,487	0	0	0	0	0	646,487	0	0	0	70,498	12/31/2024
21079#-AB-4	CONTINENTAL ACQUISITION HOLDINGS INC. -		12/31/2024	CA_CASH_CLOSE		540	540	540	540	0	0	0	0	0	540	0	0	0	54	01/20/2027
28619*-AB-0	Elemica Parent Inc./Term Loan 9/19		05/17/2024	CA_CASH_CLOSE		1,175,068	1,175,068	1,145,691	1,156,855	0	0	0	0	0	1,156,855	0	18,213	18,213	211,013	09/18/2025
23363#-AB-5	DRS Holdings III Inc./Term Loan 11/19		09/30/2024	CA_CASH_CLOSE		21,600	21,600	21,600	21,600	0	0	0	0	0	21,600	0	0	0	3,405	11/01/2025
06683#-AB-5	BANYAN SOFTWARE HOLDINGS LLC - DELAYED		09/30/2024	CA_CASH_CLOSE		1,200	1,200	1,200	1,200	0	0	0	0	0	1,200	0	0	0	484	10/30/2026
42983#-AC-3	HIGH STREET BUYER INC. - DELAYED DRAW T		09/30/2024	CA_CASH_CLOSE		2,757	2,757	2,757	2,757	0	0	0	0	0	2,757	0	0	0	908	04/14/2028
419026-AB-7	Sigma Electric Manufacturing Corporation		04/05/2024	CA_CASH_CLOSE		730,267	730,267	722,964	727,039	0	0	0	0	0	727,039	0	3,228	3,228	74,867	10/31/2024
62757#-AA-8	Datix Bidco Limited/Facility B1 04/18	C	04/30/2024	CA_CASH_CLOSE		904,934	904,934	886,835	896,051	0	0	0	0	0	896,051	0	8,883	8,883	112,795	04/28/2025
57780#-AA-2	MAVERICK ACQUISITION INC. - TERM LOAN		09/30/2024	CA_CASH_CLOSE		2,341	2,341	2,341	2,341	0	0	0	0	0	2,341	0	0	0	576	06/01/2027
82565#-AA-9	SHUR-FC ACQUISITION INC. - TERM LOAN		05/10/2024	CA_CASH_CLOSE		1,645,313	1,645,313	1,645,313	1,645,313	0	0	0	0	0	1,645,313	0	0	0	213,680	06/30/2027
67008*-AA-9	NOVIPAK BUYER LLC INITIAL TERM LN		11/22/2024	CA_CASH_CLOSE		20,318	20,318	20,318	20,318	0	0	0	0	0	20,318	0	0	0	5,862	12/01/2026
59509#-AA-6	Micromeritics Instrument Corp./Term Loan		06/28/2024	CA_CASH_CLOSE		10,274	10,274	10,274	10,274	0	0	0	0	0	10,274	0	0	0	7,259	12/18/2025
50541#-AB-3	Laboratories Bidco LLC/Second Amendment		09/30/2024	CA_CASH_CLOSE		539	539	539	539	0	0	0	0	0	539	0	0	0	65	07/23/2027
87326#-AC-4	TA/WEG HOLDINGS LLC - AUGUST 2021 DELAY		10/02/2024	VARIOUS		186,737	186,737	186,737	186,737	0	0	0	0	0	186,737	0	0	0	113,671	10/04/2027
92974*-AE-9	WSHP FC ACQUISITION 1A DDTL L+625 03/30		09/30/2024	CA_CASH_CLOSE		2,726	2,726	2,726	2,726	0	0	0	0	0	2,726	0	0	0	478	03/30/2028
94979#-AA-6	WELLNESS ACQUISITIONCO INC. - TERM LOAN		09/30/2024	CA_CASH_CLOSE		4,286	4,286	4,286	4,286	0	0	0	0	0	4,286	0	0	0	657	01/20/2027
51206#-AB-7	LAKERS BUYER INC. - INITIAL DELAYED DRA		09/30/2024	CA_CASH_CLOSE		1,835	1,835	1,835	1,835	0	0	0	0	0	1,835	0	0	0	361	03/22/2027
28619*-AA-2	ELEMICA PARENT INC. - DELAYED DRAW TERM		05/17/2024	CA_CASH_CLOSE		229,802	229,802	229,802	229,802	0	0	0	0	0	229,802	0	0	0	28,899	09/18/2025
62757#-AA-0	Datix Bidco Limited/Term Loan B3 5/19	C	04/30/2024	CA_CASH_CLOSE		902,685	902,685	889,144	895,059	0	0	0	0	0	895,059	0	7,626	7,626	117,370	04/28/2025
784326-AB-8	SFE Intermediate HoldCo LLC/Incremental		09/30/2024	CA_CASH_CLOSE		3,636	3,636	3,563	3,603	0	0	0	0	0	3,603	0	33	33	522	07/31/2026
12721#-AB-5	CVP Holdco Inc./Term Loan 10/19		06/28/2024	CA_CASH_CLOSE		557,489	557,489	557,489	557,489	0	0	0	0	0	557,489	0	0	0	81,186	10/31/2025
57780#-AB-0	MAVERICK ACQUISITION INC. - DELAYED DRA		09/30/2024	VARIOUS		531	531	515	515	0	0	0	0	0	515	0	16	16	8,738	06/01/2027
42983#-AB-5	HIGH STREET BUYER INC. - DELAYED DRAW T		09/30/2024	CA_CASH_CLOSE		1,215	1,215	1,215	1,215	0	0	0	0	0	1,215	0	0	0	242	04/14/2028
90380#-AA-7	US SALT INVESTORS LLC - INITIAL TERM LO		09/30/2024	CA_CASH_CLOSE		98,050	98,050	98,050	98,050	0	0	0	0	0	98,050	0	0	0	8,077	07/19/2028
00216C-AF-0	AQ SUNSHINE INC. - TERM LOAN B		12/31/2024	CA_CASH_CLOSE		382,094	382,094	381,103	381,312	0	0	0	0	0	381,312	0	783	783	94,707	04/15/2025
74066*-AA-4	PREMIER SPECIALTIES INC. - TERM LOAN		09/30/2024	CA_CASH_CLOSE		2,944	2,944	2,944	2,944	0	0	0	0	0	2,944	0	0	0	482	08/20/2027
92975#-AA-4	TA/WEG Holdings LLC/Term Loan 9/19		10/02/2024	VARIOUS		1,455,180	1,455,180	1,455,180	1,455,180	0	0	0	0	0	1,455,180	0	0	0	322,612	10/02/2025
35042#-AC-6	FOUNDATION CONSUMER BRANDS LLC - TERM L		12/03/2024	CA_CASH_CLOSE		23,269	23,269	23,269	23,269	0	0	0	0	0	23,269	0	0	0	3,183	10/01/2026
286226-AA-5	ELEVATION SERVICES PARENT HOLDINGS LLC		09/30/2024	CA_CASH_CLOSE		1,801	1,801	1,801	1,801	0	0	0	0	0	1,801	0	0	0	137	12/18/2026
70559#-AA-4	Pegasus Global Enterprise Holdings LLC/		08/29/2024	CA_CASH_CLOSE		1,581,123	1,581,123	1,540,361	1,557,934	0	0	0	0	0	1,557,934	0	23,189	23,189	157,961	05/29/2025
00216C-AH-6	AQ SUNSHINE INC. - TRANCHE C TERM LOAN		12/31/2024	CA_CASH_CLOSE		184,248	184,248	183,993	184,025	0	0	0	0	0	184,025	0	223	223	29,114	04/15/2025
62757#-AB-8	Datix Bidco Limited/Term Loan B4 10/19	C	04/30/2024	CA_CASH_CLOSE		353,244	353,244	353,244	353,244	0	0	0	0	0	353,244	0	0	0	45,930	04/28/2025
87304#-AA-6	TOP HAWKER INTER LLC 2ND INCREMENTAL TER		09/30/2024	CA_CASH_CLOSE		1,505	1,505	1,505	1,505	0	0	0	0	0	1,505	0	0	0	224	08/30/2026
65716#-AA-4	NORTH AMERICAN SCIENCE ASSOCIATES INC.		09/30/2024	CA_CASH_CLOSE		2,889	2,889	2,889	2,889	0	0	0	0	0	2,889	0	0	0	275	09/15/2027
12721#-AC-3	CVP HOLDCO INC. - DELAYED DRAW TERM LOA		06/28/2024	CA_CASH_CLOSE		441,402	441,402	441,402	441,402	0	0	0	0	0	441,402	0	0	0	68,862	10/31/2025
00843#-AC-3	AFFINIPAY MIDCO LLC - 2ND AMENDMENT TL		09/06/2024	VARIOUS		183,281	183,281	183,281	183,281	0	0	0	0	0	183,281	0	0	0	17,191	03/02/2026
45321*-AA-5	Implus Footcare LLC/Spenco Incremental		12/31/2024	CA_CASH_CLOSE		2,059	2,059	2,054	2,064	0	(5)	0	(5)	0	2,059	0	0	0	372	07/31/2025
74140#-AB-8	PROJECT POTTER BUYER LLC - 2020 INCREME		09/30/2024	CA_CASH_CLOSE		3,005	3,005	3,005	3,005	0	0	0	0	0	3,005	0	0	0	273	04/23/2027
92975#-AB-2	TA/WEG Holdings LLC/Initial Delayed Dra		10/02/2024	VARIOUS		913,424	913,424	913,424	913,424	0	0	0	0	0	913,424	0	0	0	94,765	10/02/2025
70559#-AB-2	Pegasus Global Enterprise Holdings LLC/		08/29/2024	CA_CASH_CLOSE		460,979	460,979	460,979	460,979	0	0	0	0	0	460,979	0	0	0	58,503	05/29/2025
85789#-AA-2	STEALTH HOLDING LLC - U.S. INITIAL TERM		10/31/2024	CA_CASH_CLOSE		223,179	223,179	223,179	223,179	0	0	0	0	0	223,179	0	0	0	54,635	03/02/2026
29669#-AA-6	ESSENTIAL SERVICES HOLDING CORPORATION -		06/17/2024	CA_CASH_CLOSE		2,547,930	2,547,930	2,547,930	2,547,930	0	0	0	0	0	2,547,930	0	0	0	346,669	11/16/2026

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
286228-AB-3	ELEVATION SERVICES PARENT HOLDINGS LLC		.09/30/2024	CA_CASH_CLOSE		2,427	2,427	2,427	2,427	0	0	0	0	0	2,427	0	0	0	295	.12/18/2026
794008-AA-6	Saldon Holdings Inc./First Amendment Te		.09/30/2024	CA_CASH_CLOSE		2,625	2,625	2,599	2,610	0	(4)	0	(4)	0	2,610	0	15	15	235	.03/13/2025
46126#-AA-6	IntraPac International LLC/U.S. Term Loa		.09/30/2024	CA_CASH_CLOSE		11,303	11,303	11,049	11,157	0	0	0	0	0	11,157	0	146	146	1,195	.01/11/2026
794008-AC-2	SALDON HOLDINGS INC. - SECOND AMENMENT		.09/30/2024	CA_CASH_CLOSE		1,406	1,406	1,406	1,406	0	0	0	0	0	1,406	0	0	0	109	.03/13/2025
74354#-AA-1	PROJECT ESSENTIAL BIDCO LLC - TERM LOAN		.12/31/2024	CA_CASH_CLOSE		950	950	950	950	0	0	0	0	0	950	0	0	0	135	.04/20/2028
67349#-AA-6	Radius Aerospace Europe Limited/U.K. Ter	C	.12/30/2024	CA_CASH_CLOSE		5,084	5,084	5,084	5,084	0	0	0	0	0	5,084	0	0	0	676	.03/29/2025
794008-AB-4	Saldon Holdings Inc./Term Loan 3/19		.09/30/2024	CA_CASH_CLOSE		16,277	16,277	15,870	16,060	0	(63)	0	(63)	0	16,060	0	217	217	1,562	.03/13/2025
705598-AE-6	PEGASUS GLOBAL ENTERPRISE HOLDINGS LLC		.08/29/2024	CA_CASH_CLOSE		433,395	433,395	433,395	433,395	0	0	0	0	0	433,395	0	0	0	57,582	.05/29/2025
50541#-AC-1	LABORATORIES BIDCO LLC - THIRD AMENDMENT		.09/30/2024	CA_CASH_CLOSE		3,452	3,452	3,452	3,452	0	0	0	0	0	3,452	0	0	0	433	.07/23/2027
705598-AD-8	Pegasus Global Enterprise Holdings LLC		.08/29/2024	CA_CASH_CLOSE		462,678	462,678	462,678	462,678	0	0	0	0	0	462,678	0	0	0	61,473	.05/29/2025
71667#-AA-3	Petroleum Service Group LLC/Delayed Draw		.04/03/2024	CA_CASH_CLOSE		53,456	53,456	53,456	53,456	0	0	0	0	0	53,456	0	0	0	10,116	.07/23/2025
29668#-AB-4	ESSENTIAL SERVICES HOLDING CORPORATION -		.06/17/2024	CA_CASH_CLOSE		1,365,700	1,365,700	1,365,700	1,365,700	0	0	0	0	0	1,365,700	0	0	0	205,932	.11/16/2026
26789#-AA-6	DYNAMIC NC AEROSPACE HOLDINGS LLC - TER		.10/01/2024	CA_CASH_CLOSE		14,332	14,332	14,332	14,332	0	0	0	0	0	14,332	0	0	0	1,720	.12/30/2026
71667#-AB-1	Petroleum Service Group LLC/Term Loan 7/		.04/03/2024	CA_CASH_CLOSE		2,685,625	2,685,625	2,625,808	2,650,095	0	0	0	0	0	2,650,095	0	35,530	35,530	439,702	.07/23/2025
88732#-AA-4	TIMECLOCK PLUS LLC - DELAYED DRAW TERM		.09/30/2024	CA_CASH_CLOSE		2,498	2,498	2,498	2,498	0	0	0	0	0	2,498	0	0	0	311	.08/28/2026
754458-AA-1	RAWLINGS SPORTING GOODS COMPANY INC - T		.09/30/2024	CA_CASH_CLOSE		6,352	6,352	6,352	6,352	0	0	0	0	0	6,352	0	0	0	1,309	.12/31/2026
86662#-AA-2	SUN ACQUIRER CORP		.12/31/2024	CA_CASH_CLOSE		12,420	12,420	12,420	12,420	0	0	0	0	0	12,420	0	0	0	1,423	.09/08/2028
48773#-AD-2	KELLERMAYER BERGENSONS SERVICES LLC - A		.03/18/2024	CA_CASH_CLOSE		2,000,524	2,000,524	1,960,514	1,963,994	0	0	0	0	0	1,963,994	0	36,530	36,530	183,007	.11/07/2026
816307-AB-1	SelectQuote Inc./Term Loan 10/19		.09/30/2024	VARIOUS		175,614	175,614	175,614	175,614	0	0	0	0	0	175,614	0	0	0	22,279	.09/30/2027
40481#-AA-8	HH - STELLA INC. - INITIAL TERM LOAN		.09/30/2024	CA_CASH_CLOSE		3,611	3,611	3,611	3,611	0	0	0	0	0	3,611	0	0	0	950	.04/24/2028
44961#-AB-1	Implus Footcare LLC/Initial Term Loan 0		.12/31/2024	CA_CASH_CLOSE		13,231	13,231	13,231	13,231	0	0	0	0	0	13,231	0	0	0	1,874	.07/31/2025
88732#-AC-0	TimeClock Plus LLC/Term Loan 8/19		.11/21/2024	CA_CASH_CLOSE		770,664	770,664	755,251	760,391	0	0	0	0	0	760,391	0	10,273	10,273	103,685	.08/28/2026
53173#-AA-4	LIDO ADVISORS LLC - INITIAL TERM LOAN		.07/17/2024	CA_CASH_CLOSE		218,855	218,855	218,855	218,855	0	0	0	0	0	218,855	0	0	0	25,457	.06/15/2027
48773#-AA-8	Kellermeyer Bergensons Services LLC/Ter		.12/31/2024	CA_CASH_CLOSE		190,582	190,582	188,676	189,257	0	0	0	0	0	189,257	0	1,325	1,325	42,623	.11/07/2026
74140#-AC-6	PROJECT POTTER BUYER LLC - TERM LOAN		.09/30/2024	CA_CASH_CLOSE		3,416	3,416	3,416	3,416	0	0	0	0	0	3,416	0	0	0	162	.04/23/2027
62931#-AA-2	NMC Skincare Intermediate Holdings II L		.09/30/2024	CA_CASH_CLOSE		4,376	4,376	4,376	4,292	0	0	0	0	0	4,376	0	0	0	50	.11/02/2026
85789#-AB-0	STEALTH HOLDING LLC - DELAYED DRAW TERM		.10/31/2024	VARIOUS		82,630	82,630	82,630	82,630	0	0	0	0	0	82,630	0	0	0	16,357	.03/02/2026
62931#-AC-8	NMC Skincare Intermediate Holdings II L		.09/30/2024	CA_CASH_CLOSE		1,460	1,460	1,460	1,460	0	0	0	0	0	1,460	0	0	0	46	.11/02/2026
50541#-AD-9	LABORATORIES BIDCO LLC - TL		.09/30/2024	CA_CASH_CLOSE		16,329	16,329	16,329	16,329	0	0	0	0	0	16,329	0	0	0	2,076	.07/23/2027
86662#-AB-0	SUN ACQUIRER CORP		.12/31/2024	VARIOUS		8,580	8,580	8,580	8,580	0	0	0	0	0	8,580	0	0	0	11,006	.09/08/2028
40481#-AB-6	HH - STELLA INC. - DELAYED DRAW TERM LO		.09/30/2024	CA_CASH_CLOSE		764	764	764	764	0	0	0	0	0	764	0	0	0	167	.04/24/2028
25403#-AN-6	DILIGENT CORPORATION (FKA DIAMOND MERGER		.04/30/2024	CA_CASH_CLOSE		2,728,350	2,728,350	2,728,350	2,728,350	0	0	0	0	0	2,728,350	0	0	0	402,900	.08/04/2025
64027#-AA-3	NELIPAK HOLDINGS US TL L+425 07/02/2026		.03/26/2024	CA_CASH_CLOSE		1,204,655	1,204,655	1,180,562	1,189,146	0	0	0	0	0	1,189,146	0	15,509	15,509	90,056	.07/02/2026
00216C-AD-5	AQ Sunshine Inc./Term Loan 3/19		.12/31/2024	CA_CASH_CLOSE		1,107,988	1,107,988	1,088,597	1,097,207	0	0	0	0	0	1,097,207	0	10,781	10,781	217,205	.04/15/2025
62900#-AB-7	NCWS INTERMEDIATE INC. - CLOSING DATE T		.05/23/2024	CA_CASH_CLOSE		280,087	280,087	280,087	280,087	0	0	0	0	0	280,087	0	0	0	28,962	.12/29/2026
53173#-AB-2	LIDO ADVISORS LLC - DELAYED DRAW TERM L		.07/17/2024	CA_CASH_CLOSE		277,946	277,946	277,946	277,946	0	0	0	0	0	277,946	0	0	0	24,006	.06/15/2027
48773#-AB-6	Kellermeyer Bergensons Services LLC/202		.12/31/2024	CA_CASH_CLOSE		41,930	41,930	41,930	41,930	0	0	0	0	0	41,930	0	0	0	46,477	.11/07/2026
74140#-AD-4	PROJECT POTTER BUYER LLC - DELAYED DRAW		.09/30/2024	CA_CASH_CLOSE		1,159	1,159	1,159	1,159	0	0	0	0	0	1,159	0	0	0	80	.04/23/2027
65716#-AB-4	NORTH AMERICAN SCIENCE ASSOCIATES INC.		.09/30/2024	CA_CASH_CLOSE		916	916	916	916	0	0	0	0	0	916	0	0	0	108	.09/15/2027
84967#-AA-9	SPRING INSURANCE SOLUTIONS LLC - INITIA		.12/31/2024	CA_CASH_CLOSE		6,648	6,648	6,648	6,648	0	0	0	0	0	6,648	0	0	0	1,062	.11/24/2025
50541#-AE-7	LABORATORIES BIDCO LLC - DELAYED DRAW TE		.09/30/2024	CA_CASH_CLOSE		1,945	1,945	1,945	1,945	0	0	0	0	0	1,945	0	0	0	275	.07/23/2027
29668#-AC-2	ESSENTIAL SERVICES HOLDING CORPORATION -		.06/17/2024	CA_CASH_CLOSE		1,029,700	1,029,700	1,029,700	1,029,700	0	0	0	0	0	1,029,700	0	0	0	134,791	.11/16/2026
243608-AC-6	DECOFAC INC. - TERM B LOAN		.09/24/2024	CA_CASH_CLOSE		848,268	848,268	848,268	848,268	0	0	0	0	0	848,268	0	0	0	178,951	.05/15/2028
64027#-AB-1	NELIPAK HOLDING INC TL L+425 07/02/2026		.03/26/2024	CA_CASH_CLOSE		179,531	179,531	175,941	177,187	0	0	0	0	0	177,187	0	2,344	2,344	17,802	.07/02/2026
62900#-AA-9	NCWS INTERMEDIATE INC. - DELAYED DRAW T		.05/23/2024	CA_CASH_CLOSE		84,229	84,229	84,229	84,229	0	0	0	0	0	84,229	0	0	0	14,075	.12/29/2026
705598-AF-3	PEGASUS GLOBAL ENTERPRISE HOLDINGS LLC		.08/29/2024	CA_CASH_CLOSE		205,662	205,662	205,662	205,662	0	0	0	0	0	205,662	0	0	0	37,237	.05/29/2025
48773#-AC-4	KELLERMAYER BERGENSONS SERVICES LLC - 2		.03/18/2024	CA_CASH_CLOSE		1,418,461	1,418,461	1,418,461	1,418,461	0	0	0	0	0	1,418,461	0	0	0	123,059	.11/07/2026
C9300#-AA-9	UCIT Online Security Inc.-CAD Term Loan		.10/31/2024	CA_CASH_CLOSE		274,151	274,151	271,607	272,012	0	0	0	0	0	272,012	0	2,139	2,139	14,299	.03/02/2026
86738#-AA-6	Sunk Rock Foundry Partners LP/Term Loan		.04/05/2024	CA_CASH_CLOSE		1,132,312	1,132,312	1,109,575	1,124,616	0	0	0	0	0	1,124,616	0	7,696	7,696	149,508	.10/31/2024

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
25403#-AU-0	DILIGENT CORPORATION (FKA DIAMOND MERGER		.04/30/2024	CA_CASH_CLOSE		182,344	182,344	182,344	182,344	0	0	0	0	0	182,344	0	0	0	27,238	.08/04/2025
74309#-AA-7	Production Resource Group, LLC - 2020 De		.03/29/2024	CA_CASH_CLOSE		20,860	20,860	20,860	20,860	0	0	0	0	0	20,860	0	0	0	6,524	.08/21/2029
65659#-AB-0	NORTH HAVEN FALCON BUYER LLC - DELAYED		.03/28/2024	CA_CASH_CLOSE		249	249	249	249	0	0	0	0	0	249	0	0	0	31	.05/19/2027
24823#-AA-1	DENALI HOLDCO LLC		.07/17/2024	CA_CASH_CLOSE		368,438	368,438	368,438	368,438	0	0	0	0	0	368,438	0	0	0	75,324	.09/15/2027
00452#-AA-7	Accommodations Plus Technologies LLC/Ter		.09/30/2024	CA_CASH_CLOSE		19,019	19,019	19,019	19,019	0	0	0	0	0	19,019	0	0	0	437	.05/11/2025
65659#-AA-2	NORTH HAVEN FALCON BUYER LLC - TERM LOA		.12/31/2024	CA_CASH_CLOSE		711	711	711	711	0	0	0	0	0	711	0	0	0	194	.05/19/2027
00797*-AA-5	Aero Operating LLC/Term Loan 1/20		.10/01/2024	CA_CASH_CLOSE		6,457	6,457	6,457	6,457	0	0	0	0	0	6,457	0	0	0	1,312	.02/07/2026
28619*-AD-6	ELEMICA PARENT INC. - AMENDMENT NO. 1 D		.05/17/2024	CA_CASH_CLOSE		333,852	333,852	333,852	333,852	0	0	0	0	0	333,852	0	0	0	61,127	.09/18/2025
74309#-AB-5	PRG 9/20 Last Out		.09/30/2024	VARIOUS		12,410	12,410	12,410	12,410	0	0	0	0	0	12,410	0	0	0	20,181	.08/21/2029
56629#-AA-9	MARCONI YELLOWSTONE BUYER INC. - TERM LO		.09/30/2024	CA_CASH_CLOSE		2,449	2,449	2,400	2,404	0	(1)	0	(1)	0	2,404	0	45	45	603	.06/23/2028
48881#-AB-5	Kene Acquisition Inc./Term Loan 8/19		.02/08/2024	CA_CASH_CLOSE		1,180,013	1,180,013	1,150,257	1,160,420	0	0	0	0	0	1,160,420	0	19,593	19,593	58,880	.08/10/2026
94184#-AA-5	WATERMILL EXPRESS LLC - TERM LOAN FACIL		.01/05/2024	CA_CASH_CLOSE		333,832	333,832	333,832	333,832	0	0	0	0	0	333,832	0	0	0	26,289	.04/20/2027
74309#-AD-1	PRODUCTION RESOURCE GROUP L.L.C. - SECO		.09/30/2024	CA_CASH_CLOSE		10,147	10,147	10,147	10,147	0	0	0	0	0	10,147	0	0	0	981	.08/21/2029
23363#-AC-3	DRS HOLDINGS III INC. - 2021 TERM LOAN		.09/30/2024	CA_CASH_CLOSE		15,482	15,482	15,482	15,482	0	0	0	0	0	15,482	0	0	0	1,984	.11/01/2025
00228*-AA-4	AMERICAN TECHNOLOGIES LLC - TERM LOAN		.09/30/2024	CA_CASH_CLOSE		16,708	16,708	16,708	16,708	0	0	0	0	0	16,708	0	0	0	2,432	.07/31/2026
19076*-AA-7	COBALT BUYER SUB INC. - CLOSING DATE TE		.09/30/2024	CA_CASH_CLOSE		2,813	2,813	2,813	2,813	0	0	0	0	0	2,813	0	0	0	221	.10/02/2028
75734#-AB-9	Reddy Ice Holdings Inc./Term Loan 7/19		.04/22/2024	CA_CASH_CLOSE		4,439,730	4,439,730	4,379,642	4,439,730	0	0	0	0	0	4,439,730	0	84,334	84,334	238,583	.07/01/2025
65716#-AB-2	NORTH AMERICAN SCIENCE ASSOCIATES INC.		.09/30/2024	CA_CASH_CLOSE		558	558	558	558	0	0	0	0	0	558	0	0	0	111	.09/15/2027
00797*-AB-3	Aero Operating LLC/Delayed Draw Term Loa		.10/01/2024	CA_CASH_CLOSE		1,274	1,274	1,274	1,274	0	0	0	0	0	1,274	0	0	0	293	.02/07/2026
60937#-AA-8	MONICA HOLDCO (US) INC. - TERM LOAN		.09/30/2024	CA_CASH_CLOSE		15,822	15,822	15,822	15,822	0	0	0	0	0	15,822	0	0	0	5,485	.01/07/2028
93279#-AA-3	WALNUT PARENT INC. - INITIAL TERM LOAN		.08/30/2024	CA_CASH_CLOSE		3,693	3,693	3,693	3,693	0	0	0	0	0	3,693	0	0	0	289	.11/09/2027
56629#-AB-7	MARCONI YELLOWSTONE BUYER INC. - DELAYED		.09/30/2024	CA_CASH_CLOSE		1,060	1,060	1,060	1,060	0	0	0	0	0	1,060	0	0	0	190	.06/23/2028
75734#-AC-7	Reddy Ice Holdings Inc./Delayed Draw Te		.04/22/2024	CA_CASH_CLOSE		424,545	424,545	424,545	424,545	0	0	0	0	0	424,545	0	0	0	40,103	.07/01/2025
48881#-AC-3	Kene Acquisition Inc./Delayed Draw Term		.02/08/2024	CA_CASH_CLOSE		197,377	197,377	197,377	197,377	0	0	0	0	0	197,377	0	0	0	0	.08/10/2026
94184#-AB-3	WATERMILL EXPRESS LLC - DELAYED DRAW TE		.01/06/2024	VARIOUS		32,313	32,313	32,313	32,313	0	0	0	0	0	32,313	0	0	0	2,450	.04/20/2027
25403#-AT-3	DILIGENT CORPORATION (FKA DIAMOND MERGER		.04/30/2024	CA_CASH_CLOSE		182,813	182,813	180,984	181,319	0	0	0	0	0	181,319	0	1,494	1,494	51,179	.08/04/2025
96811*-AA-5	Wildcat BuyerCo Inc./Term Loan 2/20		.11/15/2024	CA_CASH_CLOSE		236,865	236,865	236,865	236,865	0	0	0	0	0	236,865	0	0	0	39,368	.02/27/2026
25403#-AR-7	DILIGENT CORPORATION		.04/30/2024	CA_CASH_CLOSE		37,714	37,714	37,714	37,714	0	0	0	0	0	37,714	0	0	0	2,647	.08/04/2025
46126#-AB-4	INTRAPAC PARENT INC. - FIRST AMENDMENT T		.09/30/2024	CA_CASH_CLOSE		(90,337)	(90,337)	(90,337)	(90,337)	0	0	0	0	0	(90,337)	0	0	0	4,622	.01/11/2026
19076*-AB-5	COBALT BUYER SUB INC. - DELAYED DRAW TE		.09/30/2024	CA_CASH_CLOSE		698	698	698	698	0	0	0	0	0	698	0	0	0	114	.10/02/2028
00843#-AB-5	AFFINIPAY MIDCO LLC - INCREMENTAL TERM		.09/06/2024	VARIOUS		73,623	73,623	73,623	73,623	0	0	0	0	0	73,623	0	0	0	6,573	.03/02/2026
87326#-AA-8	TA/WEG HOLDINGS LLC - DELAYED DRAW INCR		.10/02/2024	VARIOUS		966,161	966,161	966,161	966,161	0	0	0	0	0	966,161	0	0	0	228,096	.10/04/2027
15644#-A#-1	CENTRIC BRANDS ILEXIT TL L+1000 10/09/20		.02/06/2024	BANK LOANS BARINGS		5,139,346	5,139,346	4,553,325	4,694,697	0	0	0	0	0	4,695,118	0	444,228	444,228	719,554	.10/09/2025
30272*-AA-3	ANAGUA PARENT HOLDINGS INC. - TERM LOAN		.12/31/2024	CA_CASH_CLOSE		1,113	1,113	1,113	1,113	0	0	0	0	0	1,113	0	0	0	233	.04/10/2026
92974*-AA-7	WSHP FC ACQUISITION 2A TL L+625 03/30/20		.12/31/2024	CA_CASH_CLOSE		14,971	14,971	14,971	14,971	0	0	0	0	0	14,971	0	0	0	1,656	.03/30/2027
76252#-AA-1	Rialto Management Group LLC/Term Loan 1		.12/05/2024	CA_CASH_CLOSE		8,319	8,319	8,236	8,278	0	(8)	0	(8)	0	8,278	0	41	41	279,208	.01/15/2025
92974*-AB-5	WSHP FC ACQUISITION LLC - SECOND AMENDME		.12/31/2024	CA_CASH_CLOSE		7,282	7,282	7,282	7,282	0	0	0	0	0	7,282	0	0	0	1,073	.03/30/2027
50541#-AA-5	Laboratories Bidco LLC/Term Loan 9/19		.09/30/2024	CA_CASH_CLOSE		3,399	3,399	3,399	3,399	0	0	0	0	0	3,399	0	0	0	237	.07/23/2027
51206#-AA-9	LAKERS BUYER INC. - TERM LOAN		.09/30/2024	CA_CASH_CLOSE		4,708	4,708	4,708	4,708	0	0	0	0	0	4,708	0	0	0	729	.03/22/2027
97383*-AA-1	WINEBOW HOLDINGS INC. (VINTNER GROUP I		.08/15/2024	VARIOUS		361,760	366,563	366,563	366,563	0	0	0	0	0	366,563	0	(4,802)	(4,802)	42,855	.07/01/2026
92974*-AC-3	WSHP FC Acquisition LLC/Third Amendment		.09/30/2024	CA_CASH_CLOSE		3,237	3,237	3,237	3,237	0	0	0	0	0	3,237	0	0	0	578	.03/30/2027
36457W-AD-3	GALWAY BORROWER LLC - CLOSING DATE TERM		.12/31/2024	CA_CASH_CLOSE		41,149	41,149	41,149	41,149	0	0	0	0	0	41,149	0	0	0	9,051	.09/29/2028
98415D-A#-3	XIFIN Inc./Term Loan 02/20		.12/31/2024	CA_CASH_CLOSE		4,065	4,065	4,065	4,065	0	0	0	0	0	4,065	0	0	0	178	.02/06/2026
21079#-AA-6	CONTINENTAL ACQUISITION HOLDINGS INC. -		.12/31/2024	CA_CASH_CLOSE		0	0	0	0	0	0	0	0	0	0	0	0	0	164	.01/20/2027
76028#-AA-4	REPAIRIFY INC. - INITIAL TERM LOAN		.09/30/2024	CA_CASH_CLOSE		2,813	2,813	2,813	2,813	0	0	0	0	0	2,813	0	0	0	441	.06/14/2027
29427*-AA-2	Goldcup 1730B AB/USD Term Loan 10/18		.10/30/2024	CA_CASH_CLOSE		1,398,937	1,398,937	1,367,461	1,384,116	0	0	0	0	0	1,384,116	0	14,821	14,821	278,032	.04/09/2026
00228*-AB-2	ATI RESTORATION LLC - INITIAL DDTL		.09/30/2024	CA_CASH_CLOSE		10,898	10,898	10,898	10,898	0	0	0	0	0	10,898	0	0	0	1,714	.07/31/2026
03272*-AB-1	ANAGUA PARENT HOLDINGS INC. - DELAYED D		.06/28/2024	CA_CASH_CLOSE		105	105	105	105	0	0	0	0	0	105	0	0	0	31	.04/10/2026
C4800#-AA-5	IntraPac Canada Corporation/Canadian Ter		.09/30/2024	CA_CASH_CLOSE		5,678	5,760	5,630	5,678	0	0	0	0	0	5,678	0	81	81	1,024	.01/11/2026

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
42981#-AA-9	HIGH STREET BUYER INC. - DELAYED DRAW T		.12/31/2024	CA_CASH_CLOSE		4,680	4,680	4,680	4,680	0	0	0	0	0	4,680	0	0	0	1,153	.04/14/2028
26888#-AB-8	EPS Nass Parent Inc. - Delayed Draw Term		.05/23/2024	CA_CASH_CLOSE		25,142	25,142	25,142	25,142	0	0	0	0	0	25,142	0	0	0	1,243	.04/19/2028
74309#-AC-3	PRODUCTION RESOURCE GROUP L.L.C. - DELA		.09/30/2024	VARIOUS		751	751	751	751	0	0	0	0	0	751	0	0	0	2,775	.08/21/2029
78642#-AA-4	SAFE HOME SECURITY INC. - TERM LOAN		.08/04/2024	VARIOUS		558,699	558,699	558,699	558,699	0	0	0	0	0	558,699	0	0	0	64,604	.08/04/2024
84967#-AB-7	SPRING INSURANCE SOLUTIONS LLC - DELAYE		.12/31/2024	CA_CASH_CLOSE		1,130	1,130	1,130	1,130	0	0	0	0	0	1,130	0	0	0	121	.11/24/2025
55371*-AY-1	MRI SOFTWARE LLC - SECOND AMENMENT TERM		.12/31/2024	CA_CASH_CLOSE		126,265	126,265	126,265	126,265	0	0	0	0	0	126,265	0	0	0	1,831	.02/10/2026
96811*-AB-3	Wildcat BuyerCo Inc./Delayed Draw Term		.11/15/2024	CA_CASH_CLOSE		125,303	125,303	125,303	125,303	0	0	0	0	0	125,303	0	0	0	20,722	.02/27/2026
42983#-AA-7	HIGH STREET BUYER INC. - TERM LOAN B		.09/30/2024	CA_CASH_CLOSE		2,799	2,799	2,799	2,799	0	0	0	0	0	2,799	0	0	0	424	.04/14/2028
87304#-AB-4	TOP HAWKER INTERMEDIATE LLC - DELAYED DR		.09/30/2024	CA_CASH_CLOSE		1,672	1,672	1,672	1,672	0	0	0	0	0	1,672	0	0	0	267	.08/28/2026
75000#-AE-8	RSC Acquisition Inc./Term Loan 10/19		.12/31/2024	CA_CASH_CLOSE		619,395	619,395	610,791	613,448	0	0	0	0	0	613,448	0	5,947	5,947	41,676	.10/30/2026
06683#-AA-7	BANYAN SOFTWARE HOLDINGS LLC - TERM LOA		.09/30/2024	CA_CASH_CLOSE		3,149	3,149	3,149	3,149	0	0	0	0	0	3,149	0	0	0	618	.10/30/2026
03979*-AA-9	RTI Surgical	C	.09/30/2024	CA_CASH_CLOSE		30,968	30,968	30,968	30,968	0	0	0	0	0	30,968	0	0	0	2,523	.07/20/2026
10483*-AC-9	BRAGG LIVE FOOD PRODUCTS LLC - TERM LOAN		.09/25/2024	CA_CASH_CLOSE		413,751	413,751	413,751	413,751	0	0	0	0	0	413,751	0	0	0	41,657	.12/29/2025
78642#-AB-2	SAFE HOME SECURITY INC. - DELAYED DRAW T		.08/04/2024	VARIOUS		43,941	43,941	43,941	43,941	0	0	0	0	0	43,941	0	0	0	7,171	.08/04/2024
00843#-AA-7	AffiniPay Midco, LLC/Term Loan 2/20		.09/06/2024	VARIOUS		726,683	726,683	726,683	726,683	0	0	0	0	0	726,683	0	0	0	51,511	.03/02/2026
12721#-AA-7	CVP Holcco, Inc./Delayed Draw Term Loan		.06/28/2024	CA_CASH_CLOSE		514,202	514,202	514,202	514,202	0	0	0	0	0	514,202	0	0	0	47,279	.10/31/2025
05464#-AA-2	Axiom Merger Sub Inc./Facility B Term Lo		.08/26/2024	CA_CASH_CLOSE		1,343,142	1,343,142	1,294,663	1,313,553	0	0	0	0	0	1,313,553	0	29,589	29,589	221,930	.04/10/2026
26869#-AB-9	Standard Elevator Systems - Delayed Draw		.09/30/2024	CA_CASH_CLOSE		7,771	7,771	7,771	7,771	0	0	0	0	0	7,771	0	0	0	1,195	.12/02/2027
38870#-AH-6	GraphPad Software Inc. DDTL		.06/28/2024	CA_CASH_CLOSE		1,739,130	1,739,130	1,739,130	1,739,130	0	0	0	0	0	1,739,130	0	0	0	122,509	.04/27/2027
4225#-AA-7	HEAVY CONSTR SYS SPECIALISTS LLC INITIAL		.09/18/2024	VARIOUS		4,501,281	4,515,789	4,425,474	4,427,247	0	0	0	0	0	4,427,247	0	74,034	74,034	421,991	.11/16/2028
38870#-AG-8	GraphPad Software Inc. ProteinMetrics In		.06/28/2024	CA_CASH_CLOSE		3,203,804	3,203,804	3,171,766	3,172,253	0	0	0	0	0	3,172,253	0	31,551	31,551	353,019	.04/27/2027
12464#-AA-0	CAI Software - Term Loan		.12/31/2024	CA_CASH_CLOSE		39,494	39,494	38,704	38,704	0	0	0	0	0	38,704	0	790	790	4,936	.12/13/2028
89989#-AG-9	TURBO BUYER INC AMEND NO 4 DDTL		.09/30/2024	CA_CASH_CLOSE		7,881	7,881	7,881	7,881	0	0	0	0	0	7,881	0	0	0	1,072	.12/02/2025
51513#-AA-9	Landmark Equity Partners XVI-D, LLC		.11/25/2024	CA_CASH_CLOSE		493,363	493,363	493,363	493,363	0	0	0	0	0	493,363	0	0	0	30,454	.12/15/2029
40506#-AC-7	Hanley Wood LLC - 2021 Incremental Term		.08/19/2024	CA_CASH_CLOSE		40,016	40,016	39,216	39,224	0	0	0	0	0	39,224	0	791	791	4,811	.12/10/2024
80586#-AB-6	Scaled Agile Inc. - 2021 Unitranche Term		.12/31/2024	CA_CASH_CLOSE		34,960	34,960	34,261	34,264	0	(1)	0	(1)	0	34,264	0	696	696	6,301	.12/16/2028
65471*-AA-0	Lepton Fund Ltd. - Term Loan	D	.04/15/2024	CA_CASH_CLOSE		25,000,000	25,000,000	25,153,647	25,152,508	0	0	0	0	0	25,152,508	0	(152,508)	(152,508)	1,833,672	.05/07/2026
67117*-AA-7	OA BUYER INC INITIAL TERM LN		.12/31/2024	CA_CASH_CLOSE		46,807	46,807	45,871	45,871	0	0	0	0	0	45,871	0	936	936	4,841	.12/20/2028
88033#-AA-0	Tencarva Machinery Company - Senior Term		.12/31/2024	CA_CASH_CLOSE		31,189	31,189	30,599	30,602	0	0	0	0	0	30,602	0	587	587	4,375	.12/20/2027
08890#-AB-0	Beyond Risk - Delayed Draw Term Loan		.09/18/2024	VARIOUS		1,233,982	1,258,872	1,195,564	1,195,564	0	0	0	0	0	1,195,564	0	38,418	38,418	197,525	.10/08/2027
45054#-AA-6	ITI Intermodal - Term Loan		.12/31/2024	CA_CASH_CLOSE		12,948	12,948	12,671	12,672	0	0	0	0	0	12,672	0	276	276	1,358	.12/20/2027
03165#-AB-0	CCO I CREDIT BACKED LOANS LTD. - Senior		.10/15/2024	CA_CASH_CLOSE		3,695,693	3,695,693	3,695,693	3,695,693	0	0	0	0	0	3,695,693	0	0	0	240,644	.12/17/2031
12759#-AA-2	CELF SPV LLC - Revolving Senior Secured		.07/19/2024	CA_CASH_CLOSE		31,071,429	31,071,429	31,071,429	31,071,429	0	0	0	0	0	31,071,429	0	0	0	960,791	.12/20/2029
03166*-AA-5	CIP VIII Holdings SPV L.P. - Term Loan	C	.10/21/2024	CA_CASH_CLOSE		4,672,094	4,672,094	4,672,094	4,672,094	0	0	0	0	0	4,672,094	0	0	0	341,124	.12/14/2026
36457W-AC-5	Galway Borrower LLC-1L SR SECD		.12/31/2024	CA_CASH_CLOSE		1,261	1,261	1,303	5,386	0	0	0	0	0	1,303	0	(41)	(41)	67	.09/30/2028
67116#-AA-4	OSP HAMILTON PURCHASER LLC INITIAL TERM	C	.09/18/2024	VARIOUS		4,251,860	4,319,771	4,233,376	4,233,534	0	0	0	0	0	4,233,534	0	18,327	18,327	513,889	.02/28/2029
63086*-AA-3	Narda-MITEQ - Incremental Term Loan		.04/18/2024	VARIOUS		817,851	817,851	803,539	803,565	0	0	0	0	0	803,565	0	14,286	14,286	69,891	.12/06/2027
86822#-AA-1	SUPERJET BUYER LLC INITIAL TERM LN		.09/30/2024	CA_CASH_CLOSE		34,762	34,762	34,067	34,067	0	0	0	0	0	34,067	0	695	695	5,288	.12/30/2027
40506#-AA-1	Hanley Wood LLC - 2021 Delayed Draw Term		.08/19/2024	CA_CASH_CLOSE		6,077	6,077	6,077	6,077	0	0	0	0	0	6,077	0	0	0	1,629	.05/10/2026
40348#-AB-9	Gutter Buyer, Inc. - Term Loan Tranche A		.06/13/2024	CA_CASH_CLOSE		841,950	839,136	1,334,994	1,322,920	0	0	0	0	0	1,325,734	0	(483,784)	(483,784)	493,330	.03/08/2025
88033#-AB-8	Tencarva Machinery Company		.12/31/2024	CA_CASH_CLOSE		5,037	5,037	5,037	5,037	0	0	0	0	0	5,037	0	0	0	597	.12/20/2027
70476X-AJ-4	PetVet Care Centers, LLC - 2020 Incremen		.03/31/2024	CA_CASH_CLOSE		(370,313)	(370,313)	(370,313)	(370,313)	0	0	0	0	0	(370,313)	0	0	0	0	.02/14/2025
52172*-AA-1	LeadsOnline - Term Loan		.09/18/2024	VARIOUS		2,108,915	2,119,431	2,082,341	2,082,341	0	0	0	0	0	2,082,341	0	26,574	26,574	231,940	.02/07/2028
48600*-AA-1	Katla Ventures Trust - Revolver		.12/31/2024	CA_CASH_CLOSE		1,709,475	1,709,475	1,709,475	1,709,475	0	0	0	0	0	1,709,475	0	0	0	30,932	.02/13/2024
98876*-AA-3	ZB Holdco LLC - Term Loan		.04/19/2024	VARIOUS		461,679	471,076	461,655	461,655	0	0	0	0	0	461,655	0	24	24	58,663	.02/09/2028
12756#-AA-7	Cogency Global - Term Loan		.09/18/2024	VARIOUS		4,106,746	4,106,746	4,024,611	4,024,611	0	0	0	0	0	4,024,611	0	82,135	82,135	558,826	.02/14/2028
57233#-AB-1	Marshall Excelsior - Term Loan		.07/19/2024	CA_CASH_CLOSE		449,686	449,686	441,816	441,816	0	0	0	0	0	441,816	0	7,870	7,870	60,205	.02/18/2028
28931#-AB-9	Macon County Georgia School District - B		.06/13/2024	CA_CASH_CLOSE		3,830,000	3,820,000	3,781,800	3,796,848	0	0	0	0	0	3,806,787	0	23,213	23,213	341,352	.03/06/2025
67741*-AA-6	STEPSTONE GROUP EUROPE ALTERNATIVE INVES	D	.04/17/2024	CA_CASH_CLOSE		674,602	674,602	674,602	674,602	0	0	0	0	0	674,602	0	0	0	777,110	.02/28/2034
62879X-AC-9	NB Select Opportunities ISPV 2022 LLC -		.12/31/2024	BANK LOANS BARINGS		0	0	0	0	0	0	0	0	0	0	0	0	0	241	.04/15/2037

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
12758#-AA-3	CMFT RE Lending Sub MM, LLC - Term Loan		12/31/2024	CA_CASH_CLOSE		15,733,370	15,733,370	15,733,370	15,733,370	0	0	0	0	0	15,733,370	0	0	0	90,980	07/16/2027
40487*-AC-2	HV Voyage L.P. - 1st Lien Term Loan (Par		12/20/2024	CA_CASH_CLOSE		682,167	682,167	682,167	682,167	0	0	0	0	0	682,167	0	0	0	51,267	03/15/2028
40487*-AA-6	HV Voyage L.P. - 1st Lien Term Loan (Las		12/31/2024	CA_CASH_CLOSE		3,078,947	3,078,947	3,078,947	3,078,947	0	0	0	0	0	3,078,947	0	0	0	80,336	03/15/2028
67115E-AC-4	Omega Holdings - Senior Term Loan		12/31/2024	CA_CASH_CLOSE		5,075	5,075	4,973	4,973	0	0	0	0	0	4,973	0	102	102	497	03/31/2029
87583F-AN-8	Tank Holding Corp. - 2022 Term Loan		12/31/2024	CA_CASH_CLOSE		59,228	59,228	57,895	57,895	0	0	0	0	0	57,895	0	1,333	1,333	7,279	03/31/2028
00453#-AB-6	Accurus Aerospace Corporation - 2022 A-1		12/31/2024	CA_CASH_CLOSE		49,984	49,984	49,235	49,235	0	0	0	0	0	49,235	0	750	750	6,000	04/05/2028
89989#-AH-7	TURBO BUYER INC AMEND NO 5 - Delayed Dra		09/30/2024	CA_CASH_CLOSE		2,102	2,102	2,102	2,102	0	0	0	0	0	2,102	0	0	0	234	12/02/2025
73103#-AB-7	Polara - 2022 Incremental Term Loan		09/30/2024	CA_CASH_CLOSE		180,458	180,458	176,848	176,848	0	0	0	0	0	176,848	0	3,609	3,609	24,389	12/03/2027
12758#-AD-7	CMFT RE Lending Sub MM, LLC - Term Loan		07/12/2024	CA_CASH_CLOSE		13,412,113	13,412,113	13,412,113	13,412,113	0	0	0	0	0	13,412,113	0	0	0	82,404	09/06/2027
60510M-B*-8	Mission Lane Credit Card Master Trust -		11/06/2024	VARIOUS		1,200,000	1,200,000	1,200,000	1,200,000	0	0	0	0	0	1,200,000	0	0	0	73,011	10/15/2027
60510M-AB-7	Mission Lane Credit Card Master Trust -		11/06/2024	VARIOUS		11,400,000	11,400,000	11,400,000	11,400,000	0	0	0	0	0	11,400,000	0	0	0	46,647	10/15/2027
60510M-A#-5	Mission Lane Credit Card Master Trust -		11/06/2024	VARIOUS		2,400,000	2,400,000	2,400,000	2,400,000	0	0	0	0	0	2,400,000	0	0	0	93,555	10/15/2027
68687#-AA-3	ORO Funding I LLC - Term Loan		12/16/2024	CA_CASH_CLOSE		29,036,985	29,036,985	29,036,985	29,036,985	0	0	0	0	0	29,036,985	0	0	0	1,948,787	05/25/2029
54405#-AB-2	LORDCAP GREEN TR 2022-A SUBI CTF 121 W M		09/30/2024	CA_CASH_CLOSE		32,809	32,809	32,809	32,809	0	0	0	0	0	32,809	0	0	0	1,491	09/29/2045
70216*-AA-1	PARTNERS GROUP PRIVATE EQUITY II, LLC -		10/25/2024	CA_CASH_CLOSE		18,300,000	18,300,000	18,300,000	18,300,000	0	0	0	0	0	18,300,000	0	0	0	1,608,371	06/09/2032
47236*-AA-5	JEFFERIES DIRECT LENDING OFFSHORE FUND I		12/20/2024	CA_CASH_CLOSE		2,088,478	2,088,478	2,088,478	2,088,478	0	0	0	0	0	2,088,478	0	0	0	70,678	06/17/2031
47237#-AA-0	JEFFERIES DIRECT LENDING OFFSHORE FUND I		12/20/2024	CA_CASH_CLOSE		7,382,025	7,382,025	7,382,025	7,309,410	0	0	0	0	0	7,382,025	0	0	0	138,014	06/17/2031
47236#-AA-1	JEFFERIES DIRECT LENDING OFFSHORE FD II		12/20/2024	CA_CASH_CLOSE		8,192,865	8,192,865	8,192,865	8,192,865	0	0	0	0	0	8,192,865	0	0	0	232,491	06/17/2031
47236#-AA-3	JEFFERIES DIRECT LENDING FD II C SPE LLC		11/27/2024	CA_CASH_CLOSE		1,459,394	1,459,394	1,459,394	1,459,394	0	0	0	0	0	1,459,394	0	0	0	33,578	06/17/2031
47235#-AA-2	JEFFERIES DIRECT LENDING FUND II SPE LLC		11/27/2024	CA_CASH_CLOSE		8,416,424	8,416,424	8,416,424	8,416,424	0	0	0	0	0	8,416,424	0	0	0	189,035	06/17/2031
04965#-AA-1	Atreides Funding Trust - Pass-Through In		12/18/2024	CA_CASH_CLOSE		9,180,637	9,180,637	9,180,637	9,180,637	0	0	0	0	0	9,180,637	0	0	0	37,822	11/18/2083
50050#-AC-6	KONA BUYER LLC 2022 INCREMENTAL TERM LN		07/23/2024	CA_CASH_CLOSE		1,468,750	1,468,750	1,439,375	1,439,375	0	0	0	0	0	1,439,375	0	29,375	29,375	207,203	12/11/2027
54405#-AC-0	LORDCAP GREEN TR 2022-A SUBI CTF 225 MAI		11/07/2024	CA_CASH_CLOSE		94,045	94,045	94,045	94,045	0	0	0	0	0	94,045	0	0	0	5,252	08/30/2039
07363*-AD-8	BEACON MOBILITY CORP AMEND NO 4 DOTL		09/30/2024	CA_CASH_CLOSE		52,805	52,805	52,805	52,805	0	0	0	0	0	52,805	0	0	0	6,367	12/31/2025
26745L-AF-5	Diwyer Instruments Inc - 2022 Upsize Dela		11/18/2024	VARIOUS		337,774	337,774	337,774	337,774	0	0	0	0	0	337,774	0	0	0	35,474	07/21/2027
00221*-AB-9	ASC Communications LLC 2022 Term Loan		04/18/2024	VARIOUS		765,010	765,010	752,694	752,694	0	0	0	0	0	752,694	0	12,317	12,317	51,014	07/15/2027
51513#-AA-7	LANDMARK EQUITY PARTNERS XV-D, LLC - Cla		11/20/2024	CA_CASH_CLOSE		3,074,254	3,074,254	3,074,254	3,074,254	0	0	0	0	0	3,074,254	0	0	0	122,446	07/14/2030
40489#-AA-2	HPS Mezzanine Partners 2019, L.P., MP 20		12/31/2024	VARIOUS		(5,499,382)	(5,499,382)	(5,499,382)	(10,338,406)	0	0	0	0	0	(5,499,382)	0	0	0	3,059,127	07/15/2030
18539#-AA-8	Cleaver-Brooks Inc - 2022 Fixed PIK Term		05/15/2024	CA_CASH_CLOSE		705,656	705,656	690,763	690,763	0	0	0	0	0	690,763	0	14,893	14,893	10,781	07/14/2029
18539#-AA-6	Cleaver-Brooks Inc - 2022 Term Loan		05/15/2024	CA_CASH_CLOSE		3,447,238	3,447,238	3,378,293	3,378,293	0	0	0	0	0	3,378,293	0	68,945	68,945	435,190	07/14/2028
L5581#-AA-9	ION Trading Technologies EUR TLB (Mar'21	B	10/02/2024	CA_CASH_CLOSE		25,300	25,300	23,407	23,797	0	0	0	0	(389)	23,407	249	0	1,894	2,917	04/01/2028
64700#-AC-8	IVC Acquisition Ltd GBP TLB3 (Apr'2	B	12/31/2024	BANK LOANS BARINGS		0	0	0	0	0	0	0	0	0	0	0	0	0	100,896	02/13/2026
D0423#-AA-9	APOLLO 5 GMBH EURO FAC B2 LN	B	08/29/2024	CA_CASH_CLOSE		1,111,500	1,111,500	859,455	981,930	0	0	0	(122,475)	859,455	127,001	0	125,044	252,045	131,617	03/06/2026
42328#-AG-3	Helios Software Holdings EUR TLB (Mar'21	B	10/02/2024	CA_CASH_CLOSE		297,684	297,684	244,858	281,554	0	0	0	(36,696)	244,858	31,988	0	20,838	52,826	36,417	03/11/2028
L0421#-AD-6	Auris Luxembourg III S.A EUR TLB1 (Jul'1	B	04/30/2024	BANK LOANS BARINGS		1,064,568	1,067,900	890,035	1,023,420	0	0	0	(133,385)	890,035	97,773	0	76,761	174,534	122,812	02/27/2026
N9000#-AJ-6	UPC Broadband Holding BV EUR TLAY (Apr'2	B	10/31/2024	CA_CASH_CLOSE		619,738	619,738	581,379	591,809	0	0	0	(10,430)	581,379	(374)	0	38,734	38,360	63,703	01/31/2029
40490#-AB-7	HTI Technology & Industries - 2022 Delay		06/10/2024	VARIOUS		3,680	3,680	4,843	(18)	0	0	0	0	4,843	0	0	(1,164)	(1,164)	23,990	07/07/2025
40490#-AA-9	HTI Technology & Industries - 2022 Term		06/10/2024	CA_CASH_CLOSE		17,136	17,136	16,879	16,879	0	0	0	0	0	16,879	0	257	257	0	07/07/2025
54405#-AA-4	LORDCAP GREEN TR 2022-A SUBI CTF 1295 LA		09/09/2024	CA_CASH_CLOSE		41,888	41,888	41,888	41,888	0	0	0	0	0	41,888	0	0	0	3,424	08/30/2042
62907#-AA-0	NEFCO Holding Company, LLC - Term Loan		12/31/2024	CA_CASH_CLOSE		8,552	8,552	8,451	8,451	0	0	0	0	0	8,451	0	102	102	646	08/05/2028
62907#-AD-4	NEFCO Holding Company, LLC - Delayed Dra		09/30/2024	CA_CASH_CLOSE		1,134	1,134	1,134	1,134	0	0	0	0	0	1,134	0	0	0	159	08/05/2028
62907#-AB-8	NEFCO Holding Company, LLC - Delayed Dra		12/31/2024	CA_CASH_CLOSE		1,296	1,296	1,296	1,296	0	0	0	0	0	1,296	0	0	0	765	08/05/2028
62907#-AC-6	NEFCO Holding Company, LLC - Delayed Dra		12/31/2024	CA_CASH_CLOSE		872	872	872	872	0	0	0	0	0	872	0	0	0	170	08/05/2028
75645#-AA-9	Red Cedar Holdings BL.P - Revolver		11/15/2024	CA_CASH_CLOSE		14,893,213	14,893,213	14,893,213	14,893,213	0	0	0	0	0	14,893,213	0	0	0	544,821	08/10/2034
74588B-AB-6	Puma Buyer TL 2029		09/30/2024	CA_CASH_CLOSE		150,000	150,000	139,500	139,500	0	0	0	0	0	139,500	0	10,500	10,500	34,453	07/14/2029
08506*-AD-6	SIMULATION SOFTWARE INVT CO PTY LTD FACI	D	05/09/2024	CA_CASH_CLOSE		957,593	957,593	943,229	943,229	0	0	0	0	0	943,229	0	14,364	14,364	86,822	09/30/2025
00777Y-AD-8	Adviser Investments - 2022 1st Lien Term		09/30/2024	VARIOUS		429,303	433,596	424,924	424,924	0	0	0	0	0	424,924	0	4,380	4,380	66,371	08/31/2028
78013#-AA-5	ROYAL BUYER LLC INITIAL TERM LN		12/31/2024	CA_CASH_CLOSE		18,201	18,201	17,837	17,837	0	0	0	0	0	17,837	0	364	364	3,040	08/31/2028
35042#-AA-2	Foundation Finance Trust - Fixed Class A		12/15/2024	CA_CASH_CLOSE		19,419,254	19,419,254	19,360,804	19,360,804	0	0	0	0	0	19,360,804	0	58,450	58,450	940,797	10/15/2042
65172*-AA-3	NEIPOINT JV SUB MM, LLC, - Term Loan Ser		10/11/2024	CA_CASH_CLOSE		8,565,750	8,565,750	8,565,750	8,565,750	0	0	0	0	0	8,565,750	0	0	0	414,218	01/08/2028

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
46127*-AA-9	Invesco Private Credit Opportunities Hol		.01/03/2024	CA_CASH_CLOSE		800,000	800,000	800,000	800,000	0	0	0	0	0	800,000	0	0	0	16,555	.09/23/2032
14318*-AA-6	CARLYLE SECURED LENDING III SPV, - Senio		.10/08/2024	CA_CASH_CLOSE		5,640,000	5,640,000	5,640,000	5,640,000	0	0	0	0	0	5,640,000	0	0	0	40,658	.09/30/2030
847240-AA-5	Spatial Business Systems - Senior Term L		.12/31/2024	CA_CASH_CLOSE		10,156	10,156	9,902	9,902	0	0	0	0	0	9,902	0	254	254	1,210	.09/30/2028
93000-AA-9	WIEC Holdings II Corp - Term Loan		.09/30/2024	CA_CASH_CLOSE		13,509	13,509	13,172	13,172	0	0	0	0	0	13,172	0	338	338	2,267	.10/30/2028
918670-AA-7	VPC LEGAL FINANCE FUND HOLDINGS - Secure		.07/08/2024	CA_CASH_CLOSE		4,242,857	4,242,857	4,242,857	4,242,857	0	0	0	0	0	4,242,857	0	0	0	276,012	.10/14/2030
042500-AA-9	ARMSTRONG TRANS GROUP LLC / MAXFR8 LLC T		.05/24/2024	CA_CASH_CLOSE		789,757	789,757	771,987	771,987	0	0	0	0	0	771,987	0	17,770	17,770	70,208	.10/31/2024
96524K-AB-6	WHITEHORSE LIQUIDITY PARTNERS V-R LP TER		.11/30/2024	CA_CASH_CLOSE		1,062,129	1,062,129	1,134,885	0	0	0	0	0	0	1,134,885	0	(72,756)	(72,756)	23,646	.12/15/2032
96524K-AD-2	Dawson Rated Fund 5-R1 LP-Term Loan Clas		.09/16/2024	CA_CASH_CLOSE		410,092	410,092	410,092	410,092	0	0	0	0	0	410,092	0	0	0	27,515	.12/15/2032
05631*-AB-2	BREDIF MM LSA LLC - Term Loan Series 202		.04/11/2024	CA_CASH_CLOSE		3,971,975	3,971,975	3,971,975	3,971,975	0	0	0	0	0	3,971,975	0	0	0	103,092	.10/20/2027
05631*-AC-0	BREDIF MM LSA LLC - Term Loan Series 202		.04/11/2024	CA_CASH_CLOSE		6,453,987	6,453,987	6,453,987	6,453,987	0	0	0	0	0	6,453,987	0	0	0	165,768	.10/20/2027
90140*-AA-0	Twin Brook Capital Funding XIV WSPV, LLC		.12/16/2024	CA_CASH_CLOSE		5,351,198	5,351,198	5,351,198	5,351,198	0	0	0	0	0	5,351,198	0	0	0	230,813	.10/18/2028
901390-AA-1	Twin Brook Capital Funding XIII WSPV, LL		.10/29/2024	CA_CASH_CLOSE		8,057,984	8,057,984	8,057,984	8,057,984	0	0	0	0	0	8,057,984	0	0	0	357,063	.10/18/2028
65172*-AB-1	NEWPOINT JV SUB MM, LLC, - Term Loan Ser		.10/11/2024	CA_CASH_CLOSE		7,875,000	7,875,000	7,875,000	7,875,000	0	0	0	0	0	7,875,000	0	0	0	515,923	.02/27/2028
349600-AA-7	Fortis Payment Systems LLC - 2022 Term L		.09/20/2024	VARIOUS		1,216,395	1,237,603	1,193,943	1,193,943	0	0	0	0	0	1,193,943	0	22,453	22,453	167,863	.02/13/2026
605670-AA-4	Arqiva Broadcast Parent Limited - GBP Su	B	.12/31/2024	BANK LOANS BARINGS		0	0	0	0	0	0	0	0	(636,938)	0	0	0	0	234,477	.09/30/2029
75279*-AA-4	RANDYS HLDGS INC INITIAL TERM LN		.09/18/2024	VARIOUS		1,640,193	1,640,193	1,590,987	1,590,987	0	0	0	0	0	1,590,987	0	49,206	49,206	317,844	.11/01/2028
00233-AA-3	ATL II MRO Holdings Inc. - Senior Term L		.12/31/2024	CA_CASH_CLOSE		12,730	12,730	12,412	12,412	0	0	0	0	0	12,412	0	318	318	2,179	.11/01/2028
23345U-AD-1	Disa Holdings Corp. - Term Loan A		.09/12/2024	VARIOUS		415,056	421,966	409,307	409,307	0	0	0	0	0	409,307	0	5,749	5,749	59,447	.09/09/2028
127810-AB-4	CRE II LENDER SUB I, LLC - Term Loan Ser		.06/20/2024	CA_CASH_CLOSE		2,741,120	2,741,120	2,741,120	2,741,120	0	0	0	0	0	2,741,120	0	0	0	126,947	.02/07/2028
34962B-AB-6	Fortis Payment Systems LLC - 2022 Delaye		.12/31/2024	CA_CASH_CLOSE		8,772	8,772	8,772	8,772	0	0	0	0	0	8,772	0	0	0	1,179	.02/13/2026
302100-AA-7	EXOS COLLATERALIZED SPAC HOLDINGS FUND L		.09/30/2024	CA_CASH_CLOSE		23,000,000	23,000,000	23,000,000	23,000,000	0	0	0	0	0	23,000,000	0	0	0	479,167	.11/14/2025
847240-AA-3	Sparus Holdings LLC - 1st Lien Term Loan		.09/10/2024	VARIOUS		1,238,619	1,266,336	1,237,843	1,237,843	0	0	0	0	0	1,237,843	0	775	775	142,119	.03/19/2027
83425*-AA-1	SOLO BUYER LP INITIAL TERM LN		.09/18/2024	VARIOUS		2,235,941	2,249,335	2,193,102	2,193,102	0	0	0	0	0	2,193,102	0	42,839	42,839	393,256	.12/01/2029
127810-AC-2	CRE II LENDER SUB I, LLC - Term Loan Ser		.08/20/2024	CA_CASH_CLOSE		2,596,962	2,596,962	2,596,962	2,596,962	0	0	0	0	0	2,596,962	0	0	0	153,826	.03/02/2028
361520-AA-4	GB EAGLE BUYER INC INITIAL TERM LN		.12/31/2024	CA_CASH_CLOSE		271,702	271,702	263,551	263,551	0	0	0	0	0	263,551	0	8,151	8,151	43,116	.12/01/2028
23345U-AB-5	Disa Holdings Corp. - Delayed Draw Term		.09/12/2024	VARIOUS		69,507	70,660	70,660	70,660	0	0	0	0	0	70,660	0	(1,153)	(1,153)	7,319	.09/09/2028
149790-AA-4	CAZ GP OWNERSHIP CD AGGREGATOR - Secured		.12/31/2024	VARIOUS		9,700,000	9,700,000	9,700,000	9,700,000	0	0	0	0	0	9,700,000	0	0	0	0	.12/07/2040
149790-AA-6	CAZ GP OWNERSHIP EF AGGREGATOR, L.P. - S		.12/31/2024	VARIOUS		9,000,000	9,000,000	9,000,000	9,000,000	0	0	0	0	0	9,000,000	0	0	0	1,221,861	.12/07/2040
87338*-AA-8	TSYL Corp Buyer Inc Initial Term Ln A		.11/29/2024	CA_CASH_CLOSE		346,929	346,929	339,990	339,990	0	0	0	0	0	339,990	0	6,939	6,939	52,693	.12/19/2028
87338*-AB-6	TSYL Corp Buyer Inc Initial Term Ln B		.11/29/2024	CA_CASH_CLOSE		22,931	22,931	22,473	22,473	0	0	0	0	0	22,473	0	459	459	2,402	.12/19/2028
254030-AAI-6	Diligent Corporation - 2022 Delayed Draw		.04/30/2024	CA_CASH_CLOSE		60,434	60,434	60,434	60,434	0	0	0	0	0	60,434	0	0	0	9,404	.08/04/2025
65012C-AB-8	JFK Airport Terminal 6 - Term Loan		.11/05/2024	CA_CASH_CLOSE		10,818,585	10,818,585	10,764,492	10,764,492	0	0	0	0	0	10,764,492	0	54,093	54,093	1,043,426	.11/17/2029
886750-AA-3	TIKEHAU GREEN DIAMOND CFO LLC - Class A		.10/25/2024	CA_CASH_CLOSE		4,833,333	4,833,333	4,833,333	4,833,333	0	0	0	0	0	4,833,333	0	0	0	266,250	.12/21/2030
886750-AB-1	TIKEHAU GREEN DIAMOND CFO LLC - Class B		.10/25/2024	CA_CASH_CLOSE		2,075,000	2,075,000	2,075,000	2,075,000	0	0	0	0	0	2,075,000	0	0	0	157,377	.12/21/2030
723050-AA-7	PINEBRIDGE PRIVATE CREDIT III HOLDINGS L		.10/21/2024	CA_CASH_CLOSE		3,386,517	3,386,517	3,386,517	3,386,517	0	0	0	0	0	3,386,517	0	0	0	162,361	.12/31/2031
127560-AB-5	CGI PARENT LLC 1st AMEND TERM LOAN		.09/30/2024	CA_CASH_CLOSE		3,668	3,668	3,558	3,558	0	0	0	0	0	3,558	0	110	110	456	.02/14/2028
749230-AB-3	RoadOne IntermodalLogistics - Term Loan		.12/31/2024	CA_CASH_CLOSE		12,246	12,246	11,781	11,781	0	0	0	0	0	11,781	0	465	465	2,181	.12/30/2028
98876*-AB-1	ZB Holdco LLC - Delayed Draw Term Loan		.12/31/2024	CA_CASH_CLOSE		2,397	2,397	2,397	2,397	0	0	0	0	0	2,397	0	0	0	241	.02/09/2028
311680-AA-9	Fasanara Apex 3 12/22/25		.12/01/2024	CA_CASH_CLOSE		35,870,416	35,870,416	35,901,223	35,901,223	0	0	0	0	0	35,901,223	0	(30,806)	(30,806)	1,905,889	.12/22/2025
847240-AA-1	Sparus Holdings LLC - Delayed Draw Term		.12/31/2024	CA_CASH_CLOSE		2,966	2,966	2,966	2,966	0	0	0	0	0	2,966	0	0	0	415	.03/19/2027
69451*-AA-7	PPW AERO BUYER INC INITIAL TERM LN		.09/18/2024	VARIOUS		1,513,824	1,513,824	1,453,271	1,453,271	0	0	0	0	0	1,453,271	0	60,553	60,553	220,638	.02/15/2029
404900-AE-1	HTI Technology & Industries - 2023 Incre		.06/10/2024	CA_CASH_CLOSE		7,115	7,115	6,901	6,901	0	0	0	0	0	6,901	0	213	213	941	.07/27/2025
404900-AF-8	HTI Technology & Industries - 2023 Delay		.06/10/2024	CA_CASH_CLOSE		9,560	9,560	9,560	9,560	0	0	0	0	0	9,560	0	0	0	1,150	.07/27/2025
000000-00-0	Kings III - Delayed Draw Term Loan		.09/30/2024	CA_CASH_CLOSE		1,413	1,413	1,413	1,413	0	0	0	0	0	1,413	0	0	0	232	.08/31/2028
L4807*-AA-2	HL SCOPE MASTER SICAV-RAIF SCSp - Senior	C	.01/08/2024	CA_CASH_CLOSE		4,600,000	4,600,000	4,600,000	4,600,000	0	0	0	0	0	4,600,000	0	0	0	18,800	.03/03/2031
05631*-AD-8	BREDIF MM LSA LLC - Term Loan Series 202		.04/11/2024	CA_CASH_CLOSE		1,526,250	1,526,250	1,526,250	1,526,250	0	0	0	0	0	1,526,250	0	0	0	41,972	.10/01/2025
92846*-AB-1	VITAL BUYER LLC 2023 INCREMENTAL TERM LO		.09/30/2024	CA_CASH_CLOSE		50,000	50,000	48,500	48,500	0	0	0	0	0	48,500	0	1,500	1,500	3,466	.06/01/2028
784590-AA-8	SEI HLDG I CORP CLOSING DT TERM LOAN		.04/18/2024	VARIOUS		2,037,099	2,016,980	1,946,386	1,946,386	0	0	0	0	0	1,946,386	0	90,713	90,713	122,959	.03/27/2028
749230-AC-1	R1 HLDGS LLC DELAYED DRAW TERM LN		.12/31/2024	CA_CASH_CLOSE		1,344	1,344	1,344	1,344	0	0	0	0	0	1,344	0	0	0	168	.12/30/2028

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identi- fication	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
68144#-AE-0	Olympia Acquisition, Inc - 2023 First Ou		.01/17/2024	BANK LOANS BARINGS		943	943	943	943	0	0	0	0	0	943	0	0	0	0	02/26/2027
45054#-AB-0	ITI Intermodal INC - Delayed Draw Term L		.12/31/2024	CA_CASH_CLOSE		1,850	1,850	1,850	1,850	0	0	0	0	0	1,850	0	0	0	216	12/21/2027
78459#-AC-4	SEI HLDG I CORP/SINGER EQUITIES INC CLOS	C	.11/29/2024	CA_CASH_CLOSE		2,778	2,778	2,778	2,778	0	0	0	0	0	2,778	0	0	0	335	03/27/2028
45054#-AD-0	ITI Intermodal Inc. - 2023 Incremental T		.12/31/2024	CA_CASH_CLOSE		3,779	3,779	3,665	3,665	0	0	0	0	0	3,665	0	113	113	683	12/20/2027
78503#-AA-4	SPV FACILITY I LLC - Senior Secured Revo		.12/03/2024	CA_CASH_CLOSE		15,500,000	15,500,000	15,500,000	15,450,000	0	0	0	0	0	15,500,000	0	0	0	311,134	03/31/2033
62994*-AA-6	NF Holdco LLC - Term Loan	C	.12/31/2024	CA_CASH_CLOSE		7,326	7,326	7,107	7,107	0	0	0	0	0	7,107	0	220	220	1,010	04/02/2029
65412#-AC-7	NICOLA SP WAREHOUSE LENDER 1, LP - Senio		.09/19/2024	CA_CASH_CLOSE		1,582,000	1,582,000	1,582,000	1,582,000	0	0	0	0	0	1,582,000	0	0	0	111,345	04/21/2028
80586#-AA-8	Scaled Agile Inc. - 2021 Delayed Draw Te		.12/31/2024	CA_CASH_CLOSE		1,698	1,698	1,698	1,698	0	0	0	0	0	1,698	0	0	0	273	12/15/2028
83176*-AB-0	Smartling Inc. - Delayed Draw Term Loan		.12/31/2024	CA_CASH_CLOSE		5,419	5,419	5,419	5,419	0	0	0	0	0	5,419	0	0	0	580	11/08/2027
45054#-AE-8	ITI Intermodal Inc. - 2023 Columbia Dela		.12/31/2024	CA_CASH_CLOSE		1,996	1,996	1,996	1,996	0	0	0	0	0	1,996	0	0	0	338	12/21/2027
87339#-AA-5	TS OPCO HLDG LLC / TRYSTAR LLC 5TH AMEN		.08/06/2024	CA_CASH_CLOSE		677,268	677,268	660,336	660,336	0	0	0	0	0	660,336	0	16,932	16,932	62,495	09/28/2027
03233*-AC-7	Amtech Software - Delayed Draw Term Loan		.06/21/2024	CA_CASH_CLOSE		906,818	906,818	906,818	906,818	0	0	0	0	0	906,818	0	0	0	166,558	11/02/2028
10970#-AA-9	Brinley PD SPV I LLC/Revolving Facility		.02/06/2024	CA_CASH_CLOSE		4,114,583	4,114,583	4,080,432	3,930,432	0	0	0	0	0	4,080,432	0	34,152	34,152	50,324	10/14/2032
000000-00-0	NP Inc. - NP Line of Credit First Lien R		.12/27/2024	CA_CASH_CLOSE		664,703	664,703	664,703	664,703	0	0	0	0	0	664,703	0	0	0	98,238	05/18/2026
87339#-AB-3	TS OPCO HLDG LLC/TRYSTAR LLC 6TH AMEND T		.08/06/2024	CA_CASH_CLOSE		707,240	707,240	689,559	689,559	0	0	0	0	0	689,559	0	17,681	17,681	411,178	09/28/2027
000000-00-0	Tech 8 SASU Reinstated EUR	B	.03/15/2024	CA_CASH_CLOSE		439,748	439,748	311,777	175,679	144,164	0	0	144,164	(8,065)	311,777	2,862	125,108	127,970	0	09/15/2026
00911*-AA-6	Air Comm Corporation LLC - 2023 Increme		.12/11/2024	CA_CASH_CLOSE		259,342	259,342	259,342	259,342	0	0	0	0	0	259,342	0	0	0	33,165	07/01/2027
00777*-AC-0	Adviser Investments - 2022 Delayed Draw		.11/15/2024	CA_CASH_CLOSE		180,963	180,963	180,963	180,963	0	0	0	0	0	180,963	0	0	0	29,746	08/31/2028
74934#-AD-4	RCC REAL ESTATE SPE 9 LLC -Series 2023-3		.04/22/2024	CA_CASH_CLOSE		69,828	69,828	69,828	69,828	0	0	0	0	0	69,828	0	0	0	2,155	06/29/2028
74276#-AC-0	Process Insights - Term Loan		.09/30/2024	CA_CASH_CLOSE		4,557	4,557	4,443	4,443	0	0	0	0	0	4,443	0	114	114	387	06/30/2029
31575*-AA-8	First Eagle DCF-A Funding LLC - Revolvin		.10/18/2024	CA_CASH_CLOSE		559,203	559,203	559,203	559,203	0	0	0	0	0	559,203	0	0	0	13,694	07/31/2031
89668#-AA-2	Trintech Inc - 2023 Term Loan		.10/31/2024	CA_CASH_CLOSE		12,526	12,526	12,150	12,150	0	0	0	0	0	12,150	0	376	376	1,313	07/25/2029
05637#-AB-4	BTC Holdings Fund III LLC Class A-D DOTL		.01/22/2024	DIRECT		17,500,000	17,500,000	17,500,000	17,500,000	0	0	0	0	0	17,500,000	0	0	0	26,686	07/19/2032
95483#-AB-8	WEST NR ACQUISITIONCO LLC 2ND AMEND FUND		.09/30/2024	CA_CASH_CLOSE		2,304	2,304	2,258	2,258	0	0	0	0	0	2,258	0	46	46	0	12/27/2027
95483#-AA-0	WEST NR ACQUISITIONCO LLC 2ND AMEND TERM		.09/30/2024	CA_CASH_CLOSE		924	924	906	906	0	0	0	0	0	906	0	18	18	90	12/27/2027
928432-A#-0	Visual Edge Technology, Inc./Last Out T		.09/30/2024	CA_CASH_CLOSE		39,845	39,845	39,845	0	0	0	0	0	0	39,845	0	0	0	482	12/31/2025
64288#-AC-0	HARBOURVEST DOVER STR X INVT LP 2ND AME	C	.09/30/2024	CA_CASH_CLOSE		932,997	932,997	932,997	932,997	0	0	0	0	0	932,997	0	0	0	23,163	01/05/2028
84724#-AB-3	Spatial Business Systems - Delayed Draw		.09/30/2024	CA_CASH_CLOSE		7,031	7,031	7,031	7,031	0	0	0	0	0	7,031	0	0	0	885	10/03/2028
00463#-AA-6	Accuserve Solutions, Inc. - Term Loan		.12/31/2024	CA_CASH_CLOSE		28,725	28,725	28,725	28,725	0	0	0	0	0	28,725	0	0	0	0	08/11/2029
05634#-AB-7	BSI3 Hold Teal Inc. - First Lien Term Lo		.09/30/2024	CA_CASH_CLOSE		458,333	458,333	458,333	458,333	0	0	0	0	0	458,333	0	0	0	40,033	08/21/2028
76027#-AF-4	REP HS ACQ CORP / HEMASOURCE INITIAL TER		.09/17/2024	BANK LOANS BARINGS		613,071	615,533	600,145	600,145	0	0	0	0	0	600,145	0	12,926	12,926	71,718	08/31/2029
98876*-AD-7	ZB Holdco LLC - 2023 Incremental Term Lo		.04/19/2024	VARIOUS		406,522	414,797	405,464	405,464	0	0	0	0	0	405,464	0	1,058	1,058	13,460	02/09/2028
29643*-AC-6	EShipping LLC DOTL		.12/31/2024	CA_CASH_CLOSE		2,946	2,946	2,946	2,946	0	0	0	0	0	2,946	0	0	0	4,404	11/05/2027
82419*-AB-9	Shermco Intermediate Holdings Inc. - 201		.12/31/2024	CA_CASH_CLOSE		7,791	7,791	7,597	7,597	0	0	0	0	0	7,597	0	195	195	527	06/05/2026
82419*-AC-7	Shermco Intermediate Holdings Inc. - 202		.12/31/2024	CA_CASH_CLOSE		676	676	634	183	0	0	0	0	0	634	0	42	42	30	06/05/2026
62903#-AA-4	NAW Buyer LLC - Term Loan		.12/31/2024	CA_CASH_CLOSE		8,570	8,570	8,356	8,356	0	0	0	0	0	8,356	0	214	214	977	09/13/2029
77260#-AA-7	Rock Labor LLC - Term Loan		.09/30/2024	CA_CASH_CLOSE		1,967	1,967	1,908	1,908	0	0	0	0	0	1,908	0	59	59	159	09/14/2029
65412#-AA-1	NICOLA SP WAREHOUSE LENDER 1, LP - Senio		.09/19/2024	CA_CASH_CLOSE		4,019,296	4,019,296	4,019,296	4,019,296	0	0	0	0	0	4,019,296	0	0	0	287,595	10/05/2028
78029#-AE-9	ROYAL HOLDCO CORP 2023-2 INCREMENTAL TER		.04/18/2024	VARIOUS		1,225,533	1,250,480	1,240,572	1,240,572	0	0	0	0	0	1,240,572	0	(15,038)	(15,038)	44,804	12/30/2026
00241#-AA-5	AMF ENDEAVOUR, LLC, - Senior Secured Loa		.10/07/2024	CA_CASH_CLOSE		4,086,821	4,086,821	4,086,821	4,086,821	0	0	0	0	0	4,086,821	0	0	0	157,273	10/02/2033
14741#-AA-1	Cascade Services - Term Loan		.09/30/2024	CA_CASH_CLOSE		3,253	3,253	3,172	3,172	0	0	0	0	0	3,172	0	81	81	173	10/04/2029
86602#-AH-2	Summit Buyer L.L.C.		.05/31/2024	CA_CASH_CLOSE		333,563	333,563	333,563	333,563	0	0	0	0	0	333,563	0	0	0	24,188	01/14/2026
65412#-AD-5	NICOLA SP WAREHOUSE LENDER 1, LP - Senio		.09/19/2024	CA_CASH_CLOSE		1,118,601	1,118,601	1,118,601	1,118,601	0	0	0	0	0	1,118,601	0	0	0	77,647	04/21/2028
000000-00-0	Checkout Holding Corp. - 2023 Exit Term		.01/31/2024	CA_CASH_CLOSE		5,395	5,395	5,108	330	0	0	0	0	0	5,108	0	287	287	4	04/24/2027
87338*-AC-4	Technosylva - Delayed Draw Term Loan		.11/29/2024	CA_CASH_CLOSE		423,723	423,723	423,723	211,858	0	0	0	0	0	423,723	0	0	0	31,054	12/19/2028
L9714*-AA-3	WEST STREET EUROPEAN PRIVATE CREDIT MM S		.10/11/2024	CA_CASH_CLOSE		5,168,015	5,168,016	5,257,729	0	0	0	0	0	0	5,257,729	(89,714)	0	(89,714)	7,736	10/13/2033
78029#-AF-6	ROYAL HOLDCO CORP DOTL A		.09/30/2024	CA_CASH_CLOSE		5,667	5,668	5,668	0	0	0	0	0	0	5,667	0	0	0	(77)	12/30/2027
00751#-AA-7	ADVANCED BIOLOGICS LLC TERM A LN		.09/23/2024	VARIOUS		437,107	437,107	426,179	426,179	0	0	0	0	0	426,179	0	10,928	10,928	35,736	10/18/2028
89617*-AD-0	Trident Maritime Systems Inc. - 2023 Inc		.10/22/2024	CA_CASH_CLOSE		31,594	31,594	30,883	30,883	0	0	0	0	0	30,883	0	711	711	3,485	02/26/2027

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
96222#-AA-4	WHLF IV (RP), LP Senior Secured		12/06/2024	CA_CASH_CLOSE		3,347,856	3,347,856	3,347,856	3,347,856	0	0	0	0	0	3,347,856	0	0	0	88,543	03/31/2026
50246*-AF-6	LVNV Funding LLC/ Term Loan 10/2023		12/31/2024	BANK LOANS BARINGS		0	0	0	0	0	0	0	0	0	0	0	0	0	112,371	10/18/2028
09580*-AA-7	BLUE OCEAN INCOME FUND III LP - Class A		12/12/2024	CA_CASH_CLOSE		742,570	742,570	742,570	651,372	0	0	0	0	0	742,570	0	0	0	0	11/07/2027
000000-00-0	CyrusOne LP Senior Term Lo		07/15/2024	CA_CASH_CLOSE		16,876,790	22,421,500	21,748,855	0	0	0	0	0	0	16,290,750	0	586,040	586,040	1,168,588	04/15/2025
00242*-AC-2	AirX Climate Solutions Inc - Term Loan		09/20/2024	VARIOUS		586,353	586,645	571,979	571,979	0	0	0	0	0	571,979	0	14,374	14,374	70,179	11/07/2029
65343#-AA-5	NEXT HOLDCO LLC CLOSING DT TERM LN		09/18/2024	VARIOUS		1,843,851	1,843,851	1,816,193	0	0	0	0	0	0	1,816,193	0	27,658	27,658	161,970	11/09/2030
65412#-AB-9	NICOLA SP WAREHOUSE LENDER 1, LP - Senio		09/19/2024	CA_CASH_CLOSE		1,556,255	1,556,256	1,556,256	1,556,256	0	0	0	0	0	1,556,255	0	0	0	108,882	11/24/2028
40494#-AA-3	HXSG Intermediary 2 LLC - Term Loan		12/31/2024	CA_CASH_CLOSE		12,453	12,453	12,204	12,204	0	0	0	0	0	12,204	0	249	249	975	11/28/2029
86614D-AK-4	Summit Materials Cos I L New Incremental		09/30/2024	CA_CASH_CLOSE		23,810	23,810	23,750	0	0	0	0	0	0	23,750	0	60	60	0	11/30/2028
16117L-CB-3	Charter Communications I TL B-4 due Dece		12/31/2024	CA_CASH_CLOSE		54,127	54,127	53,856	53,856	0	0	0	0	0	53,856	0	271	271	2,492	11/30/2030
62907#-AF-9	NEFCO Holding Company LLC - 2023 Amendme		09/30/2024	CA_CASH_CLOSE		251	251	246	246	0	0	0	0	0	246	0	5	5	16	08/05/2028
25822C-CB-3	Dorel Industries Inc. - Asset Backed Fir		10/01/2024	CA_CASH_CLOSE		56,249	56,250	56,250	56,250	0	0	0	0	0	56,249	0	0	0	2,915	12/08/2026
002100-AA-3	ASF Crabapple, L.P. - Term Loan		12/31/2024	CA_CASH_CLOSE		346,268	346,268	344,537	344,537	0	0	0	0	0	344,537	0	1,731	1,731	1,710	12/07/2029
20470*-AB-5	Comply365 - 2023 Incremental Term Loan		09/30/2024	CA_CASH_CLOSE		1,837	1,837	1,800	1,800	0	0	0	0	0	1,800	0	37	37	81	12/21/2029
69152#-AA-6	290419 LTD USD FIRST AMENDMENT UK INCREM		09/18/2024	VARIOUS		1,549,985	1,559,273	1,528,088	1,528,088	0	0	0	0	0	1,528,085	0	21,900	21,900	112,168	12/21/2029
26745L-AE-8	Dwyer Instruments Inc - 2023 Incremental		11/18/2024	VARIOUS		359,685	359,685	352,492	352,492	0	0	0	0	0	352,492	0	7,194	7,194	36,176	07/21/2027
5526B#-AB-3	MB PURCHASER LLC INITIAL TERM LOAN		09/30/2024	CA_CASH_CLOSE		5,288	5,288	5,182	0	0	0	0	0	0	5,182	0	106	106	383	01/03/2030
98876*-AE-5	ZB Holdco LLC - 2023 Incremental Delayed		12/31/2024	CA_CASH_CLOSE		3,379	3,379	3,379	0	0	0	0	0	0	3,379	0	0	0	304	02/09/2028
48773*-AF-7	Kellermeyer Bergensons Services, LLC - 2		03/18/2024	CA_CASH_CLOSE		1,287,813	1,287,815	1,287,815	0	0	0	0	0	0	1,287,813	0	0	0	0	11/07/2026
34960#-AD-5	FORTIS PAYMENT SYSTEMS LLC 10TH AMEND DD		12/31/2024	CA_CASH_CLOSE		3,209	3,209	3,145	0	0	0	0	0	0	3,145	0	64	64	214	02/13/2026
63930#-AA-8	GLOBAL CRITICAL LOGISTICS LTD GBP 7TH AM		12/31/2024	CA_CASH_CLOSE		1,372	1,372	1,352	0	0	0	0	0	0	1,352	0	21	21	90	07/31/2026
7848#-AC-1	SSE Buyer, Inc - 2022 2nd Lien Term Loan		05/21/2024	CA_CASH_CLOSE		330,881	330,883	330,883	0	0	0	0	0	0	330,881	0	0	0	0	12/01/2026
00233#-AB-1	ATL II MRO HLDGS INC 1ST AMEND TERM LN		12/31/2024	CA_CASH_CLOSE		7,388	7,388	7,203	0	0	0	0	0	0	7,203	0	185	185	377	11/08/2028
12787*-AA-2	COFF BUYER, LLC INITIAL TERM LN		09/30/2024	CA_CASH_CLOSE		380	380	373	0	0	0	0	0	0	373	0	8	8	25	02/26/2030
75279*-AB-2	RANDYS HLDGS INC DELAYED DRAW TERM LOAN		12/31/2024	CA_CASH_CLOSE		663	663	663	0	0	0	0	0	0	663	0	0	0	54	11/01/2028
14741#-AB-9	Cascade Services - Delayed Draw Term Loa		12/31/2024	CA_CASH_CLOSE		433	433	433	0	0	0	0	0	0	433	0	0	0	43	09/30/2029
34559*-AA-2	Forest Buyer LLC - Term Loan		12/31/2024	CA_CASH_CLOSE		2,742	2,742	2,673	0	0	0	0	0	0	2,673	0	69	69	168	03/15/2030
34960#-AE-3	Fortis Payment Systems LLC 10TH AMEND TE		09/30/2024	CA_CASH_CLOSE		48	48	48	0	0	0	0	0	0	48	0	0	0	7	02/13/2026
W8000#-AE-4	Samh-nllsbyggnadsbolaget i Norden AB - T		06/14/2024	BANK LOANS BARINGS		13,800,000	15,000,000	15,000,000	0	0	0	0	0	0	15,000,000	0	(1,200,000)	(1,200,000)	356,250	07/21/2027
62907#-AG-7	NEFCO Holding Company LLC - 2023 Delayed		12/31/2024	CA_CASH_CLOSE		1,357	1,357	1,357	0	0	0	0	0	0	1,357	0	0	0	114	08/05/2028
00640#-AA-0	Adams Street Global Secondary Fund 6 LP		10/15/2024	CA_CASH_CLOSE		187,783	187,783	185,905	0	0	0	0	0	0	185,905	0	1,878	1,878	0	03/14/2030
5526B#-AB-1	MB PURCHASER LLC DDTL		09/30/2024	CA_CASH_CLOSE		2,203	2,203	2,203	0	0	0	0	0	0	2,203	0	0	0	171	01/03/2030
40494#-AB-1	HXSG INTERMEDIARY 2 LLC INITIAL DDTL		12/31/2024	CA_CASH_CLOSE		419	419	419	0	0	0	0	0	0	419	0	0	0	46	11/28/2029
97959#-AC-9	Woodland Foods Inc - 2024 Incremental Te		09/30/2024	CA_CASH_CLOSE		735	735	721	0	0	0	0	0	0	721	0	15	15	13	12/01/2027
78029#-AG-4	ROYAL HOLDCO CORP DELAYED DRAW TERM LN B		09/30/2024	CA_CASH_CLOSE		109	109	109	0	0	0	0	0	0	109	0	0	0	11	12/30/2027
48773#-AH-3	Kellermeyer Bergensons Services, LLC - 2		09/30/2024	CA_CASH_CLOSE		9,805	9,805	9,805	0	0	0	0	0	0	9,805	0	0	0	0	11/06/2028
88033#-AD-4	Tencarva Machinery Company LLC - 2024 In		12/31/2024	CA_CASH_CLOSE		12,298	12,298	12,052	0	0	0	0	0	0	12,052	0	246	246	224	12/20/2027
37963#-AC-7	GLOBAL CRITICAL LOGISTICS LLC USD 7TH AM		12/31/2024	CA_CASH_CLOSE		3,609	3,609	3,609	0	0	0	0	0	0	3,609	0	0	0	192	07/31/2026
239426-AD-1	DAWSON RATED FUND 6-R1 LP - Secured Clas		09/16/2024	CA_CASH_CLOSE		613,103	613,103	613,103	0	0	0	0	0	0	613,103	0	0	0	8,800	06/15/2034
239426-AF-6	DAWSON RATED FUND 6-R1 LP - Secured Clas		09/16/2024	CA_CASH_CLOSE		153,275	153,276	153,276	0	0	0	0	0	0	153,275	0	0	0	2,779	06/15/2034
52172*-AB-9	LeadsOnline LLC - Amendment No 6 Term Ln		09/30/2024	CA_CASH_CLOSE		1,873	1,873	1,864	0	0	0	0	0	0	1,864	0	9	9	72	02/07/2028
06784#-AA-0	NSPC-L HLDGS II LP SECURED LOAN FACILIT		05/21/2024	BANK LOANS BARINGS		5,100,000	5,100,000	5,100,000	0	0	0	0	0	0	5,100,000	0	0	0	0	05/17/2033
67117*-AD-1	OA BUYER INC 2024 INCREMENTAL TERM LN		12/31/2024	CA_CASH_CLOSE		2,169	2,169	2,159	0	0	0	0	0	0	2,159	0	11	11	52	12/20/2028
55314V-AR-7	MI OPOC HOLDINGS INC Term Loan TL-B		12/31/2024	VARIOUS		188,302	188,302	173,647	0	0	0	0	0	0	173,647	0	14,655	14,655	2,805	03/31/2028
55183*-AF-0	EMPOWER BRANDS FRANCHISI Term Loan TL US		09/30/2024	CA_CASH_CLOSE		3,005	3,005	2,915	0	0	0	0	0	0	2,915	0	90	90	0	12/18/2026
04941*-AD-6	Atlas Securitized Products Funding 1 LP		12/13/2024	CA_CASH_CLOSE		10,852,345	10,852,345	10,756,264	0	0	0	0	0	0	10,756,264	0	96,081	96,081	22,325	05/25/2063
04941*-AB-0	Atlas Securitized Products Funding 1 LP		12/13/2024	CA_CASH_CLOSE		10,852,345	10,852,345	10,756,264	0	0	0	0	0	0	10,756,264	0	96,081	96,081	22,455	05/25/2063
04941*-AC-8	Atlas Securitized Products Funding 1 LP		12/13/2024	CA_CASH_CLOSE		22,183,369	22,183,369	21,690,837	0	0	0	0	0	0	21,690,837	0	492,532	492,532	30,905	05/25/2063
04941*-AA-2	Atlas Securitized Products Funding 1 LP		12/13/2024	CA_CASH_CLOSE		22,183,369	22,183,369	21,690,837	0	0	0	0	0	0	21,690,837	0	492,532	492,532	26,521	05/25/2063

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identification	Description	Foreign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Contractual Maturity Date
63942#-AA-3	NAW BUYER LLC DELAYED DRAW TERM LN		12/31/2024	CA_CASH_CLOSE		27	27	27	0	0	0	0	0	0	27	0	0	0	3	09/13/2029
84729#-AC-4	SPATCO ENERGY SOLUTIONS DOTL B		12/31/2024	CA_CASH_CLOSE		187	187	187	0	0	0	0	0	0	187	0	0	0	17	07/23/2030
84729#-AA-8	SPATCO ENERGY SOLUTIONS INC CLOSING DT T		12/31/2024	CA_CASH_CLOSE		3,686	3,686	3,612	0	0	0	0	0	0	3,612	0	74	74	114	07/23/2030
84729#-AB-6	SPATCO ENERGY SOLUTIONS Tranche A DOTL		12/31/2024	CA_CASH_CLOSE		590	590	590	0	0	0	0	0	0	590	0	0	0	24	07/23/2030
74972#-A#-0	RPX CORP Term Loan		12/31/2024	CA_CASH_CLOSE		7,922	7,922	7,803	0	0	0	0	0	0	7,803	0	119	119	36	08/02/2030
62907#-AH-5	NEFCO HLDG CO LLC AMEND NO. 3 TERM LN		12/31/2024	CA_CASH_CLOSE		1,492	1,492	1,477	0	0	0	0	0	0	1,477	0	15	15	0	08/05/2028
69451#-AC-3	PPW AERO BUYER INC INCREMENTAL DOTL		12/27/2024	CA_CASH_CLOSE		2,831	124,912	124,912	0	0	0	0	0	0	2,831	0	0	0	2,977	02/15/2029
98876#-AF-2	ZIYAD INC 2024-1 DOTL		12/31/2024	CA_CASH_CLOSE		197	197	197	0	0	0	0	0	0	197	0	0	0	11	02/09/2028
83428#-AA-4	Solar Ln Borrower 2024-1 LLC Class A Loa		12/20/2024	CA_CASH_CLOSE		953,043	953,043	910,251	0	0	0	0	0	0	910,251	0	42,792	42,792	0	09/01/2050
12881#-AC-9	CALDWELL & GREGORY LLC 1L Term Loan		12/31/2024	CA_CASH_CLOSE		2,810	2,810	2,768	0	0	0	0	0	0	2,768	0	42	42	4	09/30/2030
000000-00-0	TECHNOSYLVA TSYL TA Term Loan TL US		11/08/2024	CA_CASH_CLOSE		1,450,944	1,450,944	1,436,434	0	0	0	0	0	0	1,436,434	0	14,509	14,509	0	09/17/2027
000000-00-0	PROJECT EOS Unitranche	B	12/16/2024	BANK LOANS BARINGS		1,107,006	1,135,391	1,113,009	0	0	0	0	0	0	1,113,009	(6,003)	0	0	0	11/04/2027
92840#-AC-3	VistaPharm Inc./Term B-1 Loans 10/17		12/16/2024	VARIOUS		0	0	0	0	0	0	0	0	0	1,902,302	0	(1,902,302)	(1,902,302)	0	12/31/2023
1909999999. Subtotal - Bonds - Unaffiliated Bank Loans						870,007,951	877,211,575	872,692,369	731,400,169	144,164	(166)	0	143,998	(948,378)	869,447,728	163,782	396,456	560,238	53,701,872	XXX
2509999997. Total - Bonds - Part 4						6,804,692,656	6,967,477,915	6,886,258,230	6,687,691,513	8,873,089	32,545,808	2,196,230	39,222,667	(7,606,963)	6,952,860,740	2,446,298	(150,614,382)	(148,168,084)	280,698,136	XXX
2509999998. Total - Bonds - Part 5						651,392,185	650,455,869	648,358,061	0	0	(713,234)	0	(713,234)	0	647,764,093	(31,410)	3,659,505	3,628,095	17,618,193	XXX
2509999999. Total - Bonds						7,456,084,841	7,617,933,784	7,534,616,291	6,687,691,513	8,873,089	31,832,574	2,196,230	38,509,433	(7,606,963)	7,600,624,833	2,414,888	(146,954,877)	(144,539,889)	298,316,329	XXX
857477-60-8	State Street Corp-PREFERRED STOCK		03/15/2024	CALL 25		19,800,000	495,000	0.00	357,602	496,188	(138,586)	0	(138,586)	0	357,602	0	137,398	137,398	7,301	
333333-ZB-1	ECORINE SYSTEM B-2 PERP PFD		03/27/2024	DIRECT		1,163,370,000	0.00	0.00	700,000	0	700,000	0	700,000	0	0	0	0	0	0	
333333-ZA-3	ECORINE SYS SER B REDEEM PFD		03/27/2024	DIRECT		5,619,203,000	0	0.00	3,381,074	0	3,381,074	0	3,381,074	0	0	0	0	0	0	
09069Z-ZA-2	BIOWISH TECHNOLOGIES SERIES B PERP PFD	C	12/31/2024	DIRECT		0.000	0.00	0.00	0	0	811,671	0	811,671	0	0	0	0	0	0	
09069Z-ZB-0	BIOWISH TECHNOLOGIES SERIES C PERP PFD	C	12/31/2024	DIRECT		0.000	0.00	0.00	0	0	2,873,365	0	2,873,365	0	0	0	0	0	0	
61686Z-ZZ-1	MORGAN JOSEPH TRI-ARTISAN GRP D 5.00% PE	C	12/31/2024	DIRECT		0.000	0.00	0.00	0	0	25,853	0	25,853	0	0	0	0	0	0	
714239-ZB-9	PERMIAN HOLDCO 2 A PERP PFD		12/31/2024	DIRECT		0.000	0.00	0.00	0	0	70,125	0	70,125	0	0	0	0	0	0	
4019999999. Subtotal - Preferred Stocks - Industrial and Miscellaneous (Unaffiliated) Perpetual Preferred						495,000	XXX	4,438,676	496,188	7,723,502	0	0	7,723,502	0	357,602	0	137,398	137,398	7,301	XXX
084423-80-5	W R Berkley Corp-W R BERKLEY CORP		02/21/2024	SEAPORT GROUP		457,760,000	10,316,706	0.00	6,860,513	6,860,513	0	0	0	0	6,657,691	0	3,659,015	3,659,015	145,911	
45822P-20-4	Integrus Holding Inc		12/31/2024	VARIOUS		0.000	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	
00850L-20-3	AgriBank FCB		01/01/2024	VARIOUS		0.000	5,000,000	0.00	0	0	0	0	0	0	5,000,000	0	0	0	85,940	
768475-A*-#	River Valley Bancorp - Non Convertible P		12/12/2024	DIRECT		0.000	7,122,500	0.00	0	0	0	0	0	0	7,122,500	0	0	0	0	
743615-A*-#	The Prosperity Banking C Junior Sub Note		12/12/2024	DIRECT		0.000	4,578,750	0.00	0	0	0	0	0	0	4,578,750	0	0	0	0	
4029999999. Subtotal - Preferred Stocks - Industrial and Miscellaneous (Unaffiliated) Redeemable Preferred						27,017,956	XXX	6,860,513	6,860,513	0	0	0	0	0	23,358,941	0	3,659,015	3,659,015	381,851	XXX
4509999997. Total - Preferred Stocks - Part 4						27,512,956	XXX	11,299,189	7,356,701	7,723,502	0	0	7,723,502	0	23,716,543	0	3,796,413	3,796,413	389,152	XXX
4509999998. Total - Preferred Stocks - Part 5						22,289,800	XXX	647,875	0	4,332	0	0	4,332	0	22,445,109	0	(155,309)	(155,309)	1,583,881	XXX
4509999999. Total - Preferred Stocks						49,802,756	XXX	11,947,064	7,356,701	7,727,834	0	0	7,727,834	0	46,161,652	0	3,641,104	3,641,104	1,973,033	XXX
142339-10-0	CARLISLE COS INC-COMMON STOCK		04/18/2024	BLOOMBERG TRADEBOOK		570,000	209,114	152,822	178,085	(25,263)	0	0	(25,263)	0	152,822	0	56,292	56,292	485	
76155G-20-6	REVOLUTION LIGHTING TECH-COMMON STOCK		12/31/2024	DIRECT		0.000	0	0	6,146,565	0	6,146,565	0	6,146,565	0	0	0	0	0	0	
61945C-10-3	MOSAIC CO/THE-COMMON STOCK		02/29/2024	BLOOMBERG TRADEBOOK		4,600,000	141,458	216,210	164,358	51,852	0	0	51,852	0	216,210	0	(74,752)	(74,752)	0	
56585A-10-2	MARATHON PETROLEUM CORP-COMMON STOCK		10/17/2024	BLOOMBERG TRADEBOOK		3,709,000	605,600	473,934	550,267	(76,333)	0	0	(76,333)	0	473,934	0	131,665	131,665	5,898	
29273V-10-0	ENERGY TRANSFER EQUITY L P LTD PARTNERSH		06/06/2024	VARIOUS		63,993,000	727,037	1,013,141	(45,396)	0	0	0	(45,396)	0	727,037	0	249,568	249,568	37,588	
718546-10-4	PHILLIPS 66-COMMON STOCK		10/17/2024	BLOOMBERG TRADEBOOK		677,000	90,030	91,979	90,136	1,843	0	0	1,843	0	91,979	0	(1,949)	(1,949)	2,268	
16411R-20-8	CHENIERE ENERGY INC-COMMON STOCK		03/26/2024	BLOOMBERG TRADEBOOK		20,039,000	3,196,993	3,149,348	3,420,858	(271,509)	0	0	(271,509)	0	3,149,348	0	47,645	47,645	8,717	
12008R-10-7	BUILDERS FIRSTSOURCE INC-COMMON STOCK		04/18/2024	BLOOMBERG TRADEBOOK		800,000	145,266	113,531	133,552	(20,021)	0	0	(20,021)	0	113,531	0	31,735	31,735	0	
293792-10-7	ENTERPRISE PRODS PARTNERS L P COMMON UNI		08/21/2024	BLOOMBERG TRADEBOOK		21,337,000	622,783	559,875	562,230	(2,355)	0	0	(2,355)	0	559,875	0	62,908	62,908	33,179	
67058H-10-2	NUSTAR ENERGY LP-COMMON STOCK LTD PART		05/02/2024	MERGER		113,038,000	1,794,033	1,794,033	2,111,550	(317,517)	0	0	(317,517)	0	1,794,033	0	0	0	69,179	
86765K-10-9	SUNOCO LP COMMON STK		11/22/2024	VARIOUS		28,451,000	1,529,532	1,574,056	0	0	0	0	0	0	1,574,056	0	(44,524)	(44,524)	74,735	
29336T-10-0	ENLINK MIDSTREAM LLC COMMON UNIT		11/22/2024	BLOOMBERG TRADEBOOK		11,861,000	186,593	119,720	144,230	(24,510)	0	0	(24,510)	0	119,720	0	66,873	66,873	3,143	

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 4

Showing All Long-Term Bonds and Stocks SOLD, REDEEMED or Otherwise DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21
										11	12	13	14	15						
CUSIP Identi- fication	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Con- sideration	Par Value	Actual Cost	Prior Year Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Value (11+12-13)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Book/ Adjusted Carrying Value at Disposal Date	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Bond Interest/ Stock Dividends Received During Year	Stated Con- tractual Maturity Date
723787-10-7	PIONEER NATURAL RESOURCE-COMMON STOCK		.05/03/2024	MERGER	500.000	113,744		113,744	112,440	1,304	0	0	1,304	0	113,744	0	0	0	1,280	
682680-10-3	ONEOK INC COMMON STK		.10/14/2024	BLOOMBERG TRADEBOOK	6,460.000	619,727		251,242	453,621	(202,379)	0	0	(202,379)	0	251,242	0	368,485	368,485	19,186	
49456B-10-1	Kinder Morgan Inc/DE-KINDER MORGAN INC		.02/28/2024	BLOOMBERG TRADEBOOK	31,279.000	536,743		562,130	551,762	10,369	0	0	10,369	0	562,130	0	(25,388)	(25,388)	8,836	
67077M-10-8	NUTRIEN LTD-COMMON STOCK		.02/29/2024	BLOOMBERG TRADEBOOK	8,000.000	417,711		498,560	450,640	47,920	0	0	47,920	0	498,560	0	(80,849)	(80,849)	3,180	
912909-10-8	UNITED STATES STEEL CORP-COMMON STOCK		.10/17/2024	BLOOMBERG TRADEBOOK	11,700.000	441,575		298,301	569,205	(270,904)	0	0	(270,904)	0	298,301	0	143,274	143,274	1,755	
87612G-10-1	TARGA RES CORP COMMON STK		.10/14/2024	VARIOUS	26,227.000	2,699,241		2,087,302	2,278,339	(191,037)	0	0	(191,037)	0	2,087,302	0	611,939	611,939	22,858	
608190-10-4	MOHAWK INDUSTRIES INC-COMMON STOCK		.04/18/2024	BLOOMBERG TRADEBOOK	1,700.000	184,684		175,643	175,950	(307)	0	0	(307)	0	175,643	0	9,041	9,041	0	
25179M-10-3	DEVON ENERGY CORP-COMMON STOCK		.09/11/2024	BLOOMBERG TRADEBOOK	3,101.000	123,475		153,469	140,475	12,993	0	0	12,993	0	153,469	0	(29,994)	(29,994)	3,298	
75513E-10-1	Raytheon Technologies Co-COMMON STOCK		.12/31/2024	BLOOMBERG TRADEBOOK	0.000	0		0	0	0	0	0	0	0	0	0	0	0	1,829	
651639-10-6	Newmont Corp-COMMON STOCK		.02/28/2024	BLOOMBERG TRADEBOOK	10,900.000	324,640		509,196	451,151	58,045	0	0	58,045	0	509,196	0	(184,556)	(184,556)	0	
03485P-30-0	Anglo American PLC-ADR	C	.02/28/2024	BLOOMBERG TRADEBOOK	9,200.000	99,462		122,820	114,816	8,004	0	0	8,004	0	122,820	0	(23,358)	(23,358)	0	
09628D-10-4	Bluestem Group Inc-COMMON STOCK		.12/31/2024	DIRECT	0.000	0		0	0	14,287	0	0	14,287	0	0	0	0	0	0	
636180-10-1	National Fuel Gas Co-COMMON STOCK		.02/28/2024	BLOOMBERG TRADEBOOK	1,600.000	78,198		106,403	80,272	26,131	0	0	26,131	0	106,403	0	(28,205)	(28,205)	792	
037430-10-8	APA Corp-COMMON STOCK		.09/11/2024	BLOOMBERG TRADEBOOK	7,764.000	183,279		275,420	278,572	(3,152)	0	0	(3,152)	0	275,420	0	(92,141)	(92,141)	5,823	
403949-10-0	HF Sinclair Corp-COMMON STOCK		.10/17/2024	BLOOMBERG TRADEBOOK	2,121.000	93,344		91,381	117,864	(26,483)	0	0	(26,483)	0	91,381	0	1,963	1,963	3,182	
565849-10-6	MARATHON OIL CORP-COMMON STOCK		.11/22/2024	MERGER	3,500.000	86,975		86,975	84,560	2,415	0	0	2,415	0	86,975	0	0	0	1,540	
91913Y-10-0	VALERO ENERGY CORP-COMMON STOCK		.10/17/2024	BLOOMBERG TRADEBOOK	665.000	90,360		73,639	86,450	(12,811)	0	0	(12,811)	0	73,638	0	16,721	16,721	2,135	
20825C-10-4	ConocoPhillips-COMMON STOCK		.11/22/2024	DIRECT	1.000	57		49	0	0	0	0	0	0	49	0	8	8	0	
019091-10-3	Albertsons Cos Inc-COMMON STOCK		.12/31/2024	JONES TRADING INST	0.000	0		(849,729)	0	0	0	0	0	0	(849,729)	0	849,729	849,729	0	
670346-10-5	NUCOR CORP-COMMON STOCK		.04/29/2024	BLOOMBERG TRADEBOOK	3,155.000	552,599		431,407	549,096	(117,689)	0	0	(117,689)	0	431,407	0	121,192	121,192	3,407	
039483-10-2	Archer-Daniels-Midland C-COMMON STOCK		.09/11/2024	BLOOMBERG TRADEBOOK	3,000.000	175,970		234,350	216,660	17,690	0	0	17,690	0	234,349	0	(58,379)	(58,379)	4,500	
626717-10-2	MURPHY OIL CORP-COMMON STOCK		.09/11/2024	BLOOMBERG TRADEBOOK	2,000.000	67,587		87,620	85,320	2,300	0	0	2,300	0	87,620	0	(20,033)	(20,033)	1,800	
553530-10-6	MSC Industrial Direct Co-COMMON STOCK		.09/11/2024	BLOOMBERG TRADEBOOK	770.000	59,561		77,023	77,970	(947)	0	0	(947)	0	77,023	0	(17,462)	(17,462)	1,917	
000000-00-0	TCS Squeeze Out Share Warrant	B	.06/30/2024	VARIOUS	3,956.000	0		0	0	7,051	0	6,780	271	(352)	0	0	0	0	0	
67098H-10-4	O-I Glass Inc-COMMON STOCK		.07/17/2024	BLOOMBERG TRADEBOOK	5,500.000	64,373		61,050	90,090	(1,629)	0	27,411	(29,040)	0	61,050	0	3,323	3,323	0	
829073-10-5	Simpson Manufacturing Co-COMMON STOCK		.04/18/2024	BLOOMBERG TRADEBOOK	900.000	164,150		178,371	178,182	189	0	0	189	0	178,371	0	(14,221)	(14,221)	486	
833635-10-5	Sociedad Quimica y Miner-ADR	C	.02/28/2024	BLOOMBERG TRADEBOOK	3,700.000	172,123		205,757	222,814	(17,057)	0	0	(17,057)	0	205,757	0	(33,634)	(33,634)	1,193	
5019999999. Subtotal - Common Stocks - Industrial and Miscellaneous (Unaffiliated) Publicly Traded						16,847,586	XXX	14,804,668	15,734,656	4,781,659	0	34,191	4,747,468	(352)	14,804,666	0	2,042,916	2,042,916	324,189	XXX
23359*-10-9	DTV AMERICA CORPORATION		.12/31/2024	DIRECT	0.000	0		0	0	2,453,333	0	0	2,453,333	0	0	0	0	0	0	
714239-ZA-1	PERMIAN HOLDINGS INC.		.12/31/2024	DIRECT	0.000	0		0	0	70,125	0	0	70,125	0	0	0	0	0	0	
749999-ZZ-4	Quibi LLC Class C		.03/27/2024	DIRECT	2,360,279.000	0		2,360,279	0	2,360,279	0	0	2,360,279	0	944	0	(944)	(944)	0	
749999-ZA-9	QUIBI LLC CLASS C		.03/27/2024	DIRECT	270,270.000	0		500,000	0	500,000	0	0	500,000	0	0	0	0	0	0	
872222-ZZ-0	TS OPCO HOLDINGS LLC		.09/13/2024	VARIOUS	5,302.000	33,841,839		5,452,117	19,686,553	(14,234,436)	0	0	(14,234,436)	0	1,153,733	0	32,688,106	32,688,106	0	
50118Z-MM-5	KUDU INVESTMENT MANAGEMENT, LLC - Common		.12/31/2024	DIRECT	0.000	0		0	0	0	0	0	0	0	0	0	0	0	(120,834)	
652935-MM-6	NEXT.E.GO NV Warrants	D	.12/31/2024	DIRECT	0.000	0		0	0	(63,525)	0	0	(63,525)	0	0	0	0	0	0	
000000-00-0	PLH Group Inc-COMMON STOCK		.12/31/2024	VARIOUS	0.000	0		0	0	(4,457,902)	0	0	(4,457,902)	0	0	0	0	0	0	
5029999999. Subtotal - Common Stocks - Industrial and Miscellaneous (Unaffiliated) Other						33,841,839	XXX	8,312,396	19,686,553	(13,372,126)	0	0	(13,372,126)	0	1,154,677	0	32,687,162	32,687,162	(120,834)	XXX
78463V-10-7	SPDR Gold Shares-ETF		.02/29/2024	BLOOMBERG TRADEBOOK	3,300.000	626,295		588,650	630,861	(42,211)	0	0	(42,211)	0	588,650	0	37,645	37,645	0	
5819999999. Subtotal - Common Stocks - Exchange Traded Funds						626,295	XXX	588,650	630,861	(42,211)	0	0	(42,211)	0	588,650	0	37,645	37,645	0	XXX
5989999997. Total - Common Stocks - Part 4						51,315,720	XXX	23,705,714	36,052,070	(8,632,678)	0	34,191	(8,666,869)	(352)	16,547,993	0	34,767,723	34,767,723	203,355	XXX
5989999998. Total - Common Stocks - Part 5						2,646,344	XXX	2,177,785	0	0	0	0	0	0	2,177,785	0	468,560	468,560	15,476	XXX
5989999999. Total - Common Stocks						53,962,064	XXX	25,883,499	36,052,070	(8,632,678)	0	34,191	(8,666,869)	(352)	18,725,778	0	35,236,283	35,236,283	218,831	XXX
5999999999. Total - Preferred and Common Stocks						103,764,819	XXX	37,830,563	43,408,771	(904,844)	0	34,191	(939,035)	(352)	64,887,430	0	38,877,387	38,877,387	2,191,864	XXX
6009999999 - Totals						7,559,849,660	XXX	7,572,446,854	6,731,100,284	7,968,244	31,832,574	2,230,421	37,570,398	(7,607,315)	7,665,512,263	2,414,888	(108,077,490)	(105,662,602)	300,508,193	XXX

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 5

Showing All Long-Term Bonds and Stocks ACQUIRED During Year and Fully DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	11	Change in Book/Adjusted Carrying Value					17	18	19	20	21
											12	13	14	15	16					
CUSIP Identification	Description	For- eign	Date Acquired	Name of Vendor	Disposal Date	Name of Purchaser	Par Value (Bonds) or Number of Shares (Stock)	Actual Cost	Consid- eration	Book/ Adjusted Carrying Value at Disposal	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amort- ization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Valu (12 + 13 - 14)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Interest and Dividends Received During Year	Paid for Accrued Interest and Dividends
777543--YY-9	Village of Rosemont IL-GENERAL OBLIGATIO		09/20/2024	EXCHANGE OFFER	12/01/2024	MATURITY	985,000	5,382,190	5,382,190	5,382,190	0	0	0	0	0	0	0	0	22,409	13,570
0709999999. Subtotal - Bonds - U.S. Political Subdivisions of States, Territories and Possessions							985,000	5,382,190	5,382,190	5,382,190	0	0	0	0	0	0	0	0	22,409	13,570
04685A-30-2	ATH 5.583 01/09/29		04/09/2024	BOFAMILSEC	10/30/2024	VARIOUS	8,000,000	8,020,080	8,166,108	8,017,998	0	(2,082)	0	(2,082)	0	0	148,110	148,110	355,109	114,141
04685A-3T-6	Athene Global Funding-SECURED		03/21/2024	BOFAMILSEC	10/29/2024	VARIOUS	15,000,000	15,000,000	15,231,672	15,000,000	0	0	0	0	0	0	231,672	231,672	464,215	0
08888#-AA-4	Bitditect, Inc. Promissory Note		10/01/2024	CORPORATE ACTION	10/01/2024	CORPORATE ACTION	1	0	386,325	0	0	0	0	0	0	0	386,325	386,325	0	0
088929-AB-0	BGC Group Inc-SENIOR UNSECURED		01/29/2024	EXCHANGE OFFER	01/30/2024	EXCHANGE OFFER	4,400,000	4,397,190	4,397,162	4,397,162	0	(28)	0	(28)	0	0	0	0	24,063	32,254
125430-BN-9	CHS/Community Health Sys-FIRST LIEN		05/21/2024	U B S SECURITIES	06/03/2024	U B S SECURITIES	3,239,000	3,303,780	3,352,365	3,303,780	0	0	0	0	0	0	48,585	48,585	159,487	159,487
36120F-AA-3	Granite Park FX Notes Is Senior Secured		02/28/2024	DIRECT	11/26/2024	VARIOUS	12,155,300	12,153,343	12,384,273	12,153,569	0	226	0	226	0	0	230,704	230,704	599,984	0
36120F-AB-1	Granite Park FX Notes Is Senior Secured		02/28/2024	DIRECT	11/26/2024	VARIOUS	12,977,000	12,973,542	13,221,452	12,973,944	0	402	0	402	0	0	247,507	247,507	776,729	0
38349Y-AA-3	GoTo Group Inc-FIRST LIEN		02/05/2024	EXCHANGE OFFER	02/09/2024	JP MORGAN SECURITIES	531,250	431,040	448,906	431,388	0	348	0	348	0	0	17,518	17,518	649	12,499
38349Y-AB-1	GoTo Group Inc-LOGM 5 1/2 05/01/28		02/05/2024	EXCHANGE OFFER	02/15/2024	JP MORGAN SECURITIES	531,250	583,172	297,500	580,976	0	(2,196)	0	(2,196)	0	0	(283,476)	(283,476)	1,217	16,911
451102-CG-0	Intercontinental Exchang-SENIOR UNSECURE		08/09/2024	VARIOUS	10/24/2024	EXCHANGE OFFER	3,749,000	3,713,188	3,714,703	3,714,703	0	1,516	0	1,516	0	0	0	0	136,839	23,434
45866F-AZ-7	Kroger Co/The-SENIOR UNSECURED		07/26/2024	CITIGROUP GLOBAL MAR	09/10/2024	EXCHANGE OFFER	14,299,000	13,630,093	13,647,684	13,647,684	0	17,591	0	17,591	0	0	0	0	273,568	213,095
501044-DS-7	Kroger Co/The-SENIOR UNSECURED		08/20/2024	WELLS FARGO	12/18/2024	CALL 101	10,000,000	9,998,000	10,100,000	9,997,594	0	(406)	0	(406)	0	0	102,406	102,406	141,833	0
501044-DT-5	Kroger Co/The		08/20/2024	WELLS FARGO	12/18/2024	CALL 101	10,274,000	10,263,212	10,376,740	10,263,128	0	(84)	0	(84)	0	0	113,612	113,612	147,303	0
501044-DU-2	KR 4.9 09/15/31		10/21/2024	U. S. BANCORP	12/18/2024	CALL 101	10,000,000	10,032,100	10,100,000	10,031,388	0	(712)	0	(712)	0	0	68,612	68,612	151,083	74,861
756109-CE-2	Realty Income Corp-SENIOR UNSECURED		01/23/2024	EXCHANGE OFFER	08/26/2024	VARIOUS	25,765,000	23,716,084	23,326,298	23,835,875	0	119,791	0	119,791	0	0	(509,577)	(509,577)	684,044	305,315
27829P-AL-0	Eaton Vance QLO 2020-2 L-EATON 2020-2A A	D	08/05/2024	DEUTSCHE BANK SECURI	10/03/2024	PAYDOWN	7,000,000	7,000,000	7,000,000	7,000,000	0	0	0	0	0	0	0	0	104,424	28,717
38138F-AG-6	Goldentree Loan Manageme-GLM 2022-12A B	D	01/10/2024	MIZUHO SECURITIES	08/21/2024	PAYDOWN	6,000,000	5,997,000	6,000,000	6,000,000	0	3,000	0	3,000	0	0	0	0	372,117	103,121
1109999999. Subtotal - Bonds - Industrial and Miscellaneous (Unaffiliated)							143,920,801	141,211,824	142,151,188	141,349,189	0	137,366	0	137,366	0	0	801,998	801,998	4,392,664	1,083,835
03765H-AE-1	Apollo Management Holdin-SUBORDINATED		07/19/2024	SEAPORT GROUP	12/17/2024	CALL 100	18,200,000	18,053,500	18,200,000	18,055,518	0	2,018	0	2,018	0	0	144,482	144,482	450,450	83,463
26441C-BG-9	Duke Energy Corp-DUKE ENERGY COR		02/13/2024	CANTOR	09/16/2024	CALL 100	6,611,000	6,528,363	6,611,000	6,528,645	0	282	0	282	0	0	82,355	82,355	322,286	133,391
29336U-AH-0	ENLK Float PERP		08/15/2024	VARIOUS	09/17/2024	CALL 100	31,809,000	31,618,070	31,809,000	31,620,270	0	2,200	0	2,200	0	0	188,730	188,730	1,228,602	365,101
976657-AH-9	WEC Float 05/15/67		03/22/2024	VARIOUS	12/17/2024	CALL 100	24,957,000	23,898,750	24,957,000	23,039,181	0	(859,569)	0	(859,569)	0	0	1,917,819	1,917,819	1,674,987	281,791
00774Y-AA-7	Danske Bank A/S-DANBANK 1/8 PERP	D	07/25/2024	BOFAMILSEC	10/10/2024	CALL 100	40,211,000	40,083,460	40,211,000	40,086,534	0	3,074	0	3,074	0	0	124,466	124,466	1,181,198	423,098
K22273-6J-8	Danske Bank A/S-DANBANK 1/8 PERP	D	02/06/2024	BOFAMILSEC	03/28/2024	CALL 100	15,000,000	14,977,500	15,000,000	14,978,895	0	1,395	0	1,395	0	0	21,105	21,105	459,375	331,771
1309999999. Subtotal - Bonds - Hybrid Securities							136,788,000	135,159,643	136,788,000	134,309,043	0	(850,600)	0	(850,600)	0	0	2,478,957	2,478,957	5,316,898	1,618,615
00463#-AB-4	Accuserve Solutions Inc - 2024 Increment		06/04/2024	BANK LOANS BARINGS	09/30/2024	CA_CASH_CLOSE	86,978	86,978	86,978	86,978	0	0	0	0	0	0	0	0	0	0
00517#-BA-2	AD BIDCO INC INITIAL TERM LN		03/13/2024	BANK LOANS BARINGS	09/18/2024	VARIOUS	601,095	586,068	587,604	586,068	0	0	0	0	0	0	1,537	1,537	38,236	0
00910#-AD-7	Air Comm Corporation LLC - 2021 Delayed		10/31/2024	BANK LOANS BARINGS	12/11/2024	CA_CASH_CLOSE	4,865,375	4,841,048	4,865,375	4,841,048	0	0	0	0	0	0	24,327	24,327	0	0
04250#-AC-9	ARMSTRONG TRANS GROUP LLC / MAXFRB LLC T		04/30/2024	PIK NOTE BUY UP	05/24/2024	CA_CASH_CLOSE	4,141	4,141	4,141	4,141	0	0	0	0	0	0	0	0	36	0
04940J-AB-9	Atlas Securitized Products Funding 1 LP		06/28/2024	VARIOUS	06/29/2024	VARIOUS	92,467,959	90,824,638	91,092,583	90,824,638	0	0	0	0	0	0	267,946	267,946	1,354,990	0
04940J-AC-7	Atlas Securitized Products Funding 1 LP		06/28/2024	VARIOUS	06/29/2024	VARIOUS	45,248,079	44,916,400	44,970,492	44,916,400	0	0	0	0	0	0	54,091	54,091	410,403	0
04941*-AA-2	Atlas Securitized Products Funding 1 LP		10/31/2024	VARIOUS	12/13/2024	CA_CASH_CLOSE	22,591,025	22,591,025	22,591,025	22,591,025	0	0	0	0	0	0	0	0	89,731	0
04941*-AB-0	Atlas Securitized Products Funding 1 LP		10/31/2024	VARIOUS	12/13/2024	CA_CASH_CLOSE	11,058,529	11,058,529	11,058,529	11,058,529	0	0	0	0	0	0	0	0	42,302	0

SCHEDULE D - PART 5

E15.1

1	2	3	4	5	6	7	8	9	10	11	Change in Book/Adjusted Carrying Value					17	18	19	20	21	
											12	13	14	15	16						
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Disposal Date	Name of Purchaser	Par Value (Bonds) or Number of Shares (Stock)	Actual Cost	Consideration	Book/ Adjusted Carrying Value at Disposal	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amortization)/ Accretion	Current Year's Other-Than-Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Valu (12 + 13 - 14)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Interest and Dividends Received During Year	Paid for Accrued Interest and Dividends	
04941*-AC-8	Atlas Securitized Products Funding 1 LP		10/31/2024	VARIOUS	12/13/2024	CA_CASH_CLOSE	22,591,025	22,591,025	22,591,025	22,591,025	0	0	0	0	0	0	0	0	0	102,753	0
04941*-AD-6	Atlas Securitized Products Funding 1 LP		10/31/2024	VARIOUS	12/13/2024	CA_CASH_CLOSE	11,058,529	11,058,529	11,058,529	11,058,529	0	0	0	0	0	0	0	0	0	52,996	0
08890@-AB-0	Beyond Risk - Delayed Draw Term Loan ... BLUE OCEAN INCOME FUND III LP - Class A		05/24/2024	BANK LOANS BARINGS	09/18/2024	BANK LOANS BARINGS	1,926,706	1,926,706	1,888,172	1,926,706	0	0	0	0	0	0	(38,534)	(38,534)	94,548	0	0
09580*-AA-7	CELf SPV LLC - Revolving Senior Secured		01/18/2024	BANK LOANS BARINGS	12/12/2024	CA_CASH_CLOSE	240,538	240,538	240,538	240,538	0	0	0	0	0	0	0	0	0	0	0
12759#-AA-2	CRE II LENDER SUB I, LLC - Term Loan Ser		06/21/2024	BANK LOANS BARINGS	07/19/2024	CA_CASH_CLOSE	35,714,286	35,714,286	35,714,286	35,714,286	0	0	0	0	0	0	0	0	982,144	0	0
12781@-AC-2	Kellermeyer Bergensons Services, LLC - 2		02/28/2024	BANK LOANS BARINGS	08/20/2024	CA_CASH_CLOSE	125,489	125,489	125,489	125,489	0	0	0	0	0	0	0	0	4,899	0	0
000000-00-0	CENTRIC BRANDS ILEXIT TL L+1000 10/09/20		03/18/2024	BANK LOANS BARINGS	03/18/2024	BANK LOANS BARINGS	144,484	144,484	144,484	144,484	0	0	0	0	0	0	0	0	0	0	0
15644G-A#-1	Cleaver-Brooks Inc - 2022 Fixed PIK Term		02/06/2024	PIK NOTE BUY UP	02/06/2024	BANK LOANS BARINGS	71,094	71,094	71,094	71,094	0	0	0	0	0	0	0	0	3,550	0	0
18539@-AB-8	CLIFFWATER ENHANCED LENDING FUND-Senior		04/01/2024	PIK NOTE BUY UP	05/15/2024	CA_CASH_CLOSE	23,032	23,032	23,032	23,032	0	0	0	0	0	0	0	0	352	0	0
18685Z-MM-5	Disa Holdings Corp. - Delayed Draw Term		07/19/2024	BANK LOANS BARINGS	09/03/2024	CA_CASH_CLOSE	5,749,129	5,749,129	5,749,129	5,749,129	0	0	0	0	0	0	0	0	62,658	0	0
23345U-AB-5	DISA Holdings Corp. - 2024 2nd Amendment		03/01/2024	BANK LOANS BARINGS	09/12/2024	BANK LOANS BARINGS	88,810	88,810	87,344	88,810	0	0	0	0	0	0	(1,465)	(1,465)	8,196	0	0
23345U-AE-9	Macon County Georgia School District - B		03/01/2024	BANK LOANS BARINGS	09/12/2024	VARIOUS	282,788	278,546	278,133	278,546	0	0	0	0	0	0	(413)	(413)	19,358	0	0
28931@-AB-9	Encina Business Credit SPV LLC Revolving		04/30/2024	VARIOUS	06/13/2024	CA_CASH_CLOSE	51,043	51,043	51,043	51,043	0	0	0	0	0	0	0	0	0	0	0
29251@-AB-9	FOREST BUYER LLC DELAYED DRAW TERM LN		04/24/2024	BANK LOANS BARINGS	11/07/2024	CA_CASH_CLOSE	30,560,000	30,560,000	30,560,000	30,560,000	0	0	0	0	0	0	0	0	960,780	0	0
34556*-AB-0	GLOBAL CRITICAL LOGISTICS LLC USD 7TH AM		08/19/2024	BANK LOANS BARINGS	08/19/2024	BANK LOANS BARINGS	171,360	171,360	171,360	171,360	0	0	0	0	0	0	0	0	2,390	0	0
000000-00-0	Gutter Buyer, Inc. - Term Loan Tranche A		01/31/2024	BANK LOANS BARINGS	04/18/2024	BANK LOANS BARINGS	1,309,749	1,290,103	1,290,103	1,290,103	0	0	0	0	0	0	0	0	0	0	0
40348#-AB-9	JEFFERIES DIRECT LENDING OFFSHORE FUND I		03/01/2024	BANK LOANS BARINGS	06/13/2024	CA_CASH_CLOSE	8,370	11,184	8,370	8,370	0	0	0	0	0	0	0	0	0	0	0
47237#-AA-0	Kano Laboratories LLC - 2024 Incremental		02/16/2024	BANK LOANS BARINGS	12/20/2024	CA_CASH_CLOSE	737,072	737,072	737,072	737,072	0	0	0	0	0	0	0	0	55,448	0	0
48458@-AD-6	KONA BUYER LLC 2024 INCREMENTAL TERM LN		01/16/2024	BANK LOANS BARINGS	09/18/2024	VARIOUS	879,228	861,644	877,129	861,644	0	0	0	0	0	0	15,485	15,485	79,894	0	0
50050@-AD-4	MEGAWATT ACQUISITIONCO INC INITIAL TERM		03/01/2024	BANK LOANS BARINGS	07/23/2024	CA_CASH_CLOSE	1,037,500	1,021,938	1,037,500	1,021,938	0	0	0	0	0	0	15,563	15,563	22,953	0	0
58522#-AA-1	Mission Lane Credit Card Master Trust -		03/01/2024	BANK LOANS BARINGS	09/18/2024	VARIOUS	1,009,355	989,168	991,433	989,168	0	0	0	0	0	0	2,266	2,266	59,860	0	0
60510M-AA#-5	Mission Lane Credit Card Master Trust -		04/05/2024	BANK LOANS BARINGS	11/06/2024	CA_CASH_CLOSE	3,733,333	3,733,333	3,733,333	3,733,333	0	0	0	0	0	0	0	0	287,231	0	0
60510M-AA#-7	Mission Lane Credit Card Master Trust -		04/05/2024	BANK LOANS BARINGS	11/06/2024	CA_CASH_CLOSE	17,733,333	17,733,333	17,733,333	17,733,333	0	0	0	0	0	0	0	0	1,045,410	0	0
60510M-B*-8	PPW AERO BUYER INC INCREMENTAL DOTL		04/05/2024	BANK LOANS BARINGS	11/06/2024	CA_CASH_CLOSE	1,866,667	1,866,667	1,866,667	1,866,667	0	0	0	0	0	0	0	0	305,313	0	0
69451*-AC-3	PARTNERS GROUP PRIVATE EQUITY II, LLC -		07/31/2024	BANK LOANS BARINGS	08/07/2024	CA_CASH_CLOSE	58,859	58,859	180,940	180,940	0	0	0	0	0	0	0	0	49,144	0	0
70216*-AA-1	SSE Buyer, Inc - 2022 2nd Lien Term Loan		09/27/2024	BANK LOANS BARINGS	10/25/2024	CA_CASH_CLOSE	27,500,000	27,500,000	27,500,000	27,500,000	0	0	0	0	0	0	0	0	1,049,557	0	0
78486@-AC-1	SPV FACILITY I LLC - Senior Secured Revo		03/28/2024	PIK NOTE BUY UP	05/21/2024	CA_CASH_CLOSE	13,416	13,416	13,416	13,416	0	0	0	0	0	0	0	0	0	0	0
78503@-AA-4	BANK LOANS BARINGS		08/26/2024	BANK LOANS BARINGS	12/03/2024	CA_CASH_CLOSE	20,000,000	20,000,000	20,000,000	20,000,000	0	0	0	0	0	0	0	0	478,067	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 5

Showing All Long-Term Bonds and Stocks ACQUIRED During Year and Fully DISPOSED OF During Current Year

1	2	3	4	5	6	7	8	9	10	11	Change in Book/Adjusted Carrying Value					17	18	19	20	21
											12	13	14	15	16					
CUSIP Identi- fication	Description	For- eign	Date Acquired	Name of Vendor	Disposal Date	Name of Purchaser	Par Value (Bonds) or Number of Shares (Stock)	Actual Cost	Consid- eration	Book/ Adjusted Carrying Value at Disposal	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amort- ization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Change in Book/ Adjusted Carrying Valu (12 + 13 - 14)	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Foreign Exchange Gain (Loss) on Disposal	Realized Gain (Loss) on Disposal	Total Gain (Loss) on Disposal	Interest and Dividends Received During Year	Paid for Accrued Interest and Dividends
866026-AH-2 ..	Summit Buyer L.L.C.		..02/22/2024 ..	BANK LOANS BARINGS	..05/31/2024 ..	CA_CASH_CLOSE	570,625	570,625	570,625	570,625	0	0	0	0	0	0	0	0	42,524	0
87338*-AC-4 ..	Technosylva - Delayed Draw Term Loan ...		..01/08/2024 ..	BANK LOANS BARINGS	..11/08/2024 ..	CA_CASH_CLOSE	557,522	557,522	557,522	557,522	0	0	0	0	0	0	0	0	47,214	0
87339@-AC-1 ..	TS Opco Hldg LLC 7th AMEND TERM LN		..02/01/2024 ..	BANK LOANS BARINGS	..08/06/2024 ..	CA_CASH_CLOSE	1,115,492	1,093,182	1,115,492	1,093,182	0	0	0	0	0	0	22,310	22,310	72,302	0
	Visual Edge Technology, Inc./Last Out T																			
928432-A#-0 ..			..02/22/2024 ..	PIK NOTE BUY UP	..09/30/2024 ..	CA_CASH_CLOSE	17,065	17,065	17,065	17,065	0	0	0	0	0	0	0	0	462	0
92991#-AA-2 ..	W50 Holdings LLC		..03/22/2024 ..	BANK LOANS BARINGS	..09/18/2024 ..	VARIOUS	2,006,797	1,966,661	1,970,365	1,966,661	0	0	0	0	0	0	3,704	3,704	60,521	0
BGS2GA-NM-7 ..	AirX Climate Solutions Inc		..07/03/2024 ..	BANK LOANS BARINGS	..09/20/2024 ..	BANK LOANS BARINGS	484,622	477,353	477,353	477,353	0	0	0	0	0	0	0	0	0	0
000000-00-0 ..	ICE HOUSE AMERICA DDTL - 2		..11/19/2024 ..	BANK LOANS BARINGS	..11/19/2024 ..	BANK LOANS BARINGS	477,119	468,770	477,119	468,770	0	0	0	0	0	0	8,350	8,350	0	0
69341J-AN-0 ..	Veritas US Inc. - 2021 USD Term Loan B		..04/04/2024 ..	BANK LOANS BARINGS	..04/04/2024 ..	BANK LOANS BARINGS	76	71	76	76	0	0	0	0	0	0	(6)	(6)	0	0
L0421#-AE-4 ..	AURIS LUXEMBOURG III SarL EUR FAC B3	B.....	..04/30/2024 ..	BANK LOANS BARINGS	..10/31/2024 ..	BANK LOANS BARINGS	1,086,200	1,064,568	1,086,200	1,064,568	0	0	0	0	0	18,243	3,389	21,632	0	0
N7680@-AA-3 ..	SG BIDCO B.V. EUR FAC B	B.....	..09/30/2024 ..	BANK LOANS BARINGS	..12/16/2024 ..	BANK LOANS BARINGS	838,174	868,968	819,315	868,968	0	0	0	0	0	(49,653)	0	(49,653)	0	0
1909999999. Subtotal - Bonds - Unaffiliated Bank Loans							368,762,068	366,604,405	367,070,808	366,723,672	0	0	0	0	0	(31,410)	378,550	347,140	7,886,222	0
2509999998. Total - Bonds							650,455,869	648,358,061	651,392,185	647,764,093	0	(713,234)	0	(713,234)	0	(31,410)	3,659,505	3,628,095	17,618,193	2,716,020
30767E-40-6 ..	Farm Credit Bank of Texa-FARM CREDIT BAN		..07/31/2024 ..	SEAPORT GROUP	..09/16/2024 ..	CALL 100	6,383,000	647,875	22,289,800	22,445,109	4,332	0	0	4,332	0	0	(155,309)	(155,309)	1,583,881	0
4019999999. Subtotal - Preferred Stocks - Industrial and Miscellaneous (Unaffiliated) Perpetual Preferred								647,875	22,289,800	22,445,109	4,332	0	0	4,332	0	0	(155,309)	(155,309)	1,583,881	0
4509999998. Total - Preferred Stocks								647,875	22,289,800	22,445,109	4,332	0	0	4,332	0	0	(155,309)	(155,309)	1,583,881	0
67058H-10-2 ..	MUSTAR ENERGY LP-COMMON STOCK LTD PART		..02/07/2024 ..	RILY	..05/02/2024 ..	MERGER	73,000,000	1,615,490	1,615,490	1,615,490	0	0	0	0	0	0	0	0	15,476	0
76150W-10-7 ..	Reverse Mortgage Investm-COMMON STOCK		..09/05/2024 ..	DIRECT	..09/05/2024 ..	DIRECT	1,000	0	611,648	0	0	0	0	0	0	0	611,648	611,648	0	0
38059T-10-6 ..	GOLD FIELDS LTD-ADR	C.....	..04/18/2024 ..	BLOOMBERG TRADEBOOK	..09/11/2024 ..	BLOOMBERG TRADEBOOK	16,000,000	283,370	215,552	283,370	0	0	0	0	0	0	(67,817)	(67,817)	0	0
86563T-10-4 ..	Sumitomo Metal Mining Co-ADR	C.....	..04/18/2024 ..	BLOOMBERG TRADEBOOK	..09/11/2024 ..	BLOOMBERG TRADEBOOK	34,000,000	278,925	203,654	278,925	0	0	0	0	0	0	(75,271)	(75,271)	0	0
5019999999. Subtotal - Common Stocks - Industrial and Miscellaneous (Unaffiliated) Publicly Traded								2,177,785	2,646,344	2,177,785	0	0	0	0	0	0	468,560	468,560	15,476	0
5989999998. Total - Common Stocks								2,177,785	2,646,344	2,177,785	0	0	0	0	0	0	468,560	468,560	15,476	0
5999999999. Total - Preferred and Common Stocks								2,825,660	24,936,144	24,622,894	4,332	0	0	4,332	0	0	313,251	313,251	1,599,357	0
6009999999 - Totals								651,183,721	676,328,329	672,386,987	4,332	(713,234)	0	(708,902)	0	(31,410)	3,972,756	3,941,346	19,217,550	2,716,020

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE D - PART 6 - SECTION 1

Valuation of Shares of Subsidiary, Controlled or Affiliated Companies

1 CUSIP Identification	2 Description, Name of Subsidiary, Controlled or Affiliated Company	3 Foreign	4 NAIC Company Code	5 ID Number	6 NAIC Valuation Method	7 Book/Adjusted Carrying Value	8 Total Amount of Goodwill Included in Book/Adjusted Carrying Value	9 Nonadmitted Amount	Stock of Such Company Owned by Insurer on Statement Date	
									10	11
									Number of Shares	% of Outstanding
0999999. Total Preferred Stocks						0	0	0	XXX	XXX
03612*-10-4	Annuity Investors Life Insurance Co		93661	31-1021738	8B1	464,499,730	0	0	20,000.000	100.0
1299999. Subtotal - Common Stock - U.S. Life Insurer						464,499,730	0	0	XXX	XXX
563138-10-2	Manhattan National Hldg LLC				8B11	16,546,125	0	0	100.000	100.0
1599999. Subtotal - Common Stock - Non - Insurer						16,546,125	0	0	XXX	XXX
554188-10-8	MM Ascend Life Inv Svcs LLC				8B111	1,010,867	0	0	100.000	100.0
1799999. Subtotal - Common Stock - Other Affiliates						1,010,867	0	0	XXX	XXX
1899999. Total Common Stocks						482,056,721	0	0	XXX	XXX
.....										
.....										
.....										
.....										
1999999 - Totals						482,056,721	0	0	XXX	XXX

1. Total amount of goodwill nonadmitted \$ 0

SCHEDULE D - PART 6 - SECTION 2

1 CUSIP Identification	2 Name of Lower-Tier Company	3 Name of Company Listed in Section 1 Which Controls Lower-Tier Company	4 Total Amount of Goodwill Included in Amount Shown in Column 8, Section 1	Stock in Lower-Tier Company Owned Indirectly by Insurer on Statement Date	
				5 Number of Shares	6 % of Outstanding
563116-10-2	MANHATTAN NATIONAL LIFE INSURANCE COMPANY	MANHATTAN NATIONAL HLDG LLC	0	200.000	100.0
0299999. Subtotal - Common Stock			0	XXX	XXX
.....					
.....					
.....					
.....					
.....					
.....					
.....					
.....					
.....					
.....					
.....					
.....					
0399999 - Total			0	XXX	XXX

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DA - PART 1

Showing All SHORT-TERM INVESTMENTS Owned December 31 of Current Year

1	Codes		4	5	6	7	Change in Book/Adjusted Carrying Value				12	13	Interest						20
	2	3					8	9	10	11			14	15	16	17	18	19	
Description	Code	For- eign	Date Acquired	Name of Vendor	Maturity Date	Book/ Adjusted Carrying Value	Unrealized Valuation Increase/ (Decrease)	Current Year's (Amor- tization)/ Accretion	Current Year's Other- Than- Temporary Impairment Recognized	Total Foreign Exchange Change in Book/ Adjusted Carrying Value	Par Value	Actual Cost	Amount Due and Accrued Dec. 31 of Current Year on Bond Not in Default	Non- Admitted Due and Accrued	Rate of	Effective Rate of	When Paid	Amount Received During Year	Paid for Accrued Interest
0109999999. Total - U.S. Government Bonds						0	0	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0
0309999999. Total - All Other Government Bonds						0	0	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0
0509999999. Total - U.S. States, Territories and Possessions Bonds						0	0	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0
0709999999. Total - U.S. Political Subdivisions Bonds						0	0	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0
0909999999. Total - U.S. Special Revenues Bonds						0	0	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0
NORDEA BANK ABP COMMERCIAL PAPER	@.....	C.....	07/09/2024	CITIGROUP GLOBAL MAR	02/10/2025	10,000,000	0	0	0	0	10,000,000	10,000,000	0	0	0.000	0.000	N/A	0	0
Skandinaviska Enskilda B-SEB CPIB 0 05/1		D.....	11/07/2024	JP MORGAN SECURITIES	05/12/2025	20,000,000	0	0	0	0	20,000,000	20,000,000	131,606	0	4.640	4.667	FMAN	0	0
Svenska Handelsbanken AB-SVSKHD CPIB 0 0		D.....	10/16/2024	WELLS FARGO	05/02/2025	19,999,294	0	492	0	0	20,000,000	19,998,802	78,961	0	4.660	5.071	MON	168,172	39,478
TELUS CORPORATION COMMERCIAL PAPER	@.....	A.....	12/10/2024	RBC CAPITAL MARKETS	04/14/2025	19,732,042	0	53,753	0	0	20,000,000	19,678,289	0	0	0.000	4.746	N/A	0	0
TELUS CORPORATION COMMERCIAL PAPER		A.....	11/08/2024	WELLS FARGO	04/28/2025	9,848,473	0	68,398	0	0	10,000,000	9,780,075	0	0	0.000	4.734	N/A	0	0
TELUS CORPORATION COMMERCIAL PAPER	@.....	A.....	10/28/2024	WELLS FARGO	04/29/2025	19,690,626	0	163,826	0	0	20,000,000	19,526,800	0	0	0.000	4.793	N/A	0	0
AMERICAN HONDA FINANCE CORPORATION COMME			12/03/2024	MIZUHO SECURITIES	03/06/2025	9,916,317	0	36,173	0	0	10,000,000	9,880,144	0	0	0.000	4.747	N/A	0	0
AMERICAN HONDA FINANCE CORPORATION COMME	@.....		12/11/2024	BARCLAYS CAPITAL INC	03/13/2025	14,861,766	0	40,399	0	0	15,000,000	14,821,367	0	0	0.000	4.716	N/A	0	0
EBAY INC COMMERCIAL PAPER	@.....		.09/24/2024	RBC CAPITAL MARKETS	01/27/2025	19,929,749	0	260,415	0	0	20,000,000	19,669,333	0	0	0.000	4.881	N/A	0	0
EBAY INC COMMERCIAL PAPER	@.....		.09/23/2024	GOLDMAN	01/29/2025	24,905,431	0	325,431	0	0	25,000,000	24,580,000	0	0	0.000	4.882	N/A	0	0
CONCENTRIX CORP Term Loan			12/18/2024	BANK LOANS BABSON CA	09/25/2025	12,569,671	0	0	0	0	12,846,256	12,569,671	0	0	4.860	4.860	MAT	0	0
Commonwealth Bank of Aus-COMMERCIAL PAPE		D.....	.10/22/2024	JP MORGAN SECURITIES	04/23/2025	20,000,000	0	0	0	0	20,000,000	20,000,000	22,939	0	4.630	4.627	MON	0	0
Westpac Banking Corp-WSTPAC CPIB 0 03/07		D.....	06/07/2024	CITIGROUP GLOBAL MAR	03/07/2025	15,000,000	0	0	0	0	15,000,000	15,000,000	45,396	0	4.700	4.710	MON	403,475	0
Westpac Banking Corp-WSTPAC CPIB 0 07/09		D.....	10/09/2024	CITIGROUP GLOBAL MAR	07/10/2025	20,000,000	0	0	0	0	20,000,000	20,000,000	57,961	0	4.710	4.713	MON	168,433	0
BNP PARIBAS (NEW YORK BRANCH) COMMERCIAL	@.....	C.....	07/30/2024	JP MORGAN SECURITIES	04/11/2025	14,787,083	0	318,333	0	0	15,000,000	14,468,750	0	0	0.000	5.184	N/A	0	0
ING US Funding LLC-INGFOL CPIB 0 08/19/2			11/18/2024	JP MORGAN SECURITIES	08/19/2025	20,000,000	0	0	0	0	20,000,000	20,000,000	33,800	0	4.720	4.718	MON	80,906	0
ROYAL BANK OF CANADA (NEW YORK BRANCH) C	@.....		.10/24/2024	RBC CAPITAL MARKETS	07/24/2025	20,000,000	0	0	0	0	20,000,000	20,000,000	0	0	0.000	0.000	N/A	0	0
PENSKE TRUCK LEASING CO LP COMMERCIAL PA	@.....		11/26/2024	DREXEL	05/28/2025	14,713,462	0	57,137	0	0	15,000,000	14,656,325	0	0	0.000	4.769	N/A	0	0
Sumitomo Mitsui Banking -SUMIBK CPIB 0 0		D.....	10/15/2024	CITIGROUP GLOBAL MAR	04/01/2025	9,999,490	0	461	0	0	10,000,000	9,999,030	39,375	0	4.660	5.041	MON	83,989	18,258
Bank of Nova Scotia/Hous-COMMERCIAL PAPE		A.....	06/03/2024	JP MORGAN SECURITIES	03/03/2025	15,000,000	0	0	0	0	15,000,000	15,000,000	57,671	0	4.710	4.730	MJSD	408,379	0
Australia & New Zealand -ANZ CPIB 0 09/0		D.....	.12/03/2024	JP MORGAN SECURITIES	09/04/2025	15,000,000	0	0	0	0	15,000,000	15,000,000	55,829	0	4.730	4.735	MJSD	0	0
National Australia Bank -NABLTD CPIB 0 0		D.....	11/06/2024	JP MORGAN SECURITIES	05/20/2025	20,000,000	0	0	0	0	20,000,000	20,000,000	32,067	0	4.810	4.810	MON	114,894	0
National Australia Bank -NABLTD CPIB 0 0		D.....	11/26/2024	JP MORGAN SECURITIES	08/27/2025	10,000,000	0	0	0	0	10,000,000	10,000,000	6,600	0	4.710	4.711	MON	0	0
1019999999. Subtotal - Bonds - Industrial and Miscellaneous (Unaffiliated) - Issuer Obligations						375,953,404	0	1,324,818	0	0	377,846,256	374,628,586	562,205	0	XXX	XXX	XXX	1,428,248	57,736
1109999999. Total - Industrial and Miscellaneous (Unaffiliated) Bonds						375,953,404	0	1,324,818	0	0	377,846,256	374,628,586	562,205	0	XXX	XXX	XXX	1,428,248	57,736
1309999999. Total - Hybrid Securities						0	0	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0
1509999999. Total - Parent, Subsidiaries and Affiliates Bonds						0	0	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0
1909999999. Subtotal - Unaffiliated Bank Loans						0	0	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0
2419999999. Total - Issuer Obligations						375,953,404	0	1,324,818	0	0	377,846,256	374,628,586	562,205	0	XXX	XXX	XXX	1,428,248	57,736
2429999999. Total - Residential Mortgage-Backed Securities						0	0	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0
2439999999. Total - Commercial Mortgage-Backed Securities						0	0	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0
2449999999. Total - Other Loan-Backed and Structured Securities						0	0	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0
2459999999. Total - SVO Identified Funds						0	0	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0
2469999999. Total - Affiliated Bank Loans						0	0	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0
2479999999. Total - Unaffiliated Bank Loans						0	0	0	0	0	0	0	0	0	XXX	XXX	XXX	0	0
2509999999. Total Bonds						375,953,404	0	1,324,818	0	0	377,846,256	374,628,586	562,205	0	XXX	XXX	XXX	1,428,248	57,736
7109999999. Total - Parent, Subsidiaries and Affiliates						0	0	0	0	0	XXX	0	0	0	XXX	XXX	XXX	0	0
7709999999 - Totals						375,953,404	0	1,324,818	0	0	XXX	374,628,586	562,205	0	XXX	XXX	XXX	1,428,248	57,736

1. Line Book/Adjusted Carrying Value by NAIC Designation Category Footnote:
Number
1A 1A ..\$ 0 1B ..\$ 0 1C ..\$ 0 1D ..\$ 254,160,656 1E ..\$ 49,999,490 1F ..\$ 0 1G ..\$ 0
1B 2A ..\$ 59,223,587 2B ..\$ 12,569,671 2C ..\$ 0
1C 3A ..\$ 3B ..\$ 3C ..\$

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

Line Number	Book/Adjusted Carrying Value by NAIC Designation Category Footnote:													
1A	1A ..\$	0	1B ..\$	0	1C ..\$	0	1D ..\$	254,160,656	1E ..\$	49,999,490	1F ..\$	0	1G ..\$	0
1B	2A ..\$	59,223,587	2B ..\$	12,569,671	2C ..\$	0								
1C	3A ..\$	0	3B ..\$	0	3C ..\$	0								
1D	4A ..\$	0	4B ..\$	0	4C ..\$	0								
1E	5A ..\$	0	5B ..\$	0	5C ..\$	0								
1F	6	0												

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
0079999999. Subtotal - Purchased Options - Hedging Effective Excluding Variable Annuity Guarantees Under SSAP No.108										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0149999999. Subtotal - Purchased Options - Hedging Effective Variable Annuity Guarantees Under SSAP No.108										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
141932 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	04/06/2021	04/06/2028	0	2,560,103	4073.94	182,785	60,400	39,943	60,978		80,405	0	0	(60,263)	0	0		
141936 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	04/06/2021	04/06/2026	0	643,934	4073.94	44,408	14,655	9,925	14,817		22,498	0	0	(14,626)	0	0		
141931 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A.	04/20/2021	04/20/2028	0	2,131,255	4134.94	166,598	55,334	36,988	55,536		111,377	0	0	(55,127)	0	0		
141935 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A.	04/20/2021	04/20/2026	0	1,033,297	4134.94	75,627	24,990	15,519	25,217		42,889	0	0	(24,925)	0	0		
141929 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	05/06/2021	05/06/2026	0	2,934,227	4201.62	207,762	67,890	43,091	70,122		97,437	0	0	(67,687)	0	0		
141934 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	05/06/2021	05/06/2028	0	3,525,201	4201.62	272,205	89,247	55,858	91,975		106,489	0	0	(88,879)	0	0		
139414 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	05/20/2021	05/20/2026	0	3,238,121	4159.12	233,956	78,390	50,276	78,970		108,008	0	0	(78,115)	0	0		
141933 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	05/20/2021	05/19/2028	0	4,387,198	4159.12	347,178	117,072	75,374	117,379		136,125	0	0	(116,493)	0	0		
142030 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	06/04/2021	06/05/2026	0	3,793,322	4229.89	273,975	91,734	58,869	92,423		122,858	0	0	(91,378)	0	0		
142031 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	06/04/2021	06/06/2028	0	3,756,297	4229.89	293,447	98,537	61,765	99,112		106,859	0	0	(98,036)	0	0		
142042 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	06/18/2021	06/19/2026	0	4,246,800	4166.45	309,339	103,647	65,176	104,315		148,092	0	0	(103,208)	0	0		
142043 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	06/18/2021	06/20/2028	0	5,895,992	4166.45	470,057	158,509	100,290	158,870		236,403	0	0	(157,561)	0	0		
142044 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	07/06/2021	07/06/2026	0	4,766,527	4343.54	342,979	114,919	74,612	115,591		161,444	0	0	(114,380)	0	0		
142045 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	07/06/2021	07/06/2028	0	3,597,757	4343.54	273,908	92,070	58,433	92,434		133,651	0	0	(91,549)	0	0		
142024 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	CITIBANK N.A.	07/20/2021	07/20/2026	0	4,182,637	4323.06	291,144	97,629	70,857	98,112		143,179	0	0	(97,111)	0	0		
142025 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	CITIBANK N.A.	07/20/2021	07/20/2028	0	2,039,052	4323.06	148,573	49,861	33,340	50,086		76,411	0	0	(49,583)	0	0		
142046 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	08/06/2021	08/06/2026	0	4,064,101	4436.52	280,227	93,517	57,692	94,153		139,537	0	0	(93,138)	0	0		
142047 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	08/06/2021	08/04/2028	0	3,826,358	4436.52	286,658	96,125	58,089	96,551		144,975	0	0	(95,572)	0	0		
142048 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	CITIBANK N.A.	08/20/2021	08/20/2026	0	1,809,340	4441.67	123,509	41,055	24,190	41,391		50,251	0	0	(40,903)	0	0		
142049 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	CITIBANK N.A.	08/20/2021	08/18/2028	0	2,137,781	4441.67	164,799	55,071	33,657	55,412		72,593	0	0	(54,684)	0	0		
142050 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A.	09/03/2021	09/04/2026	0	1,540,167	4535.43	127,053	42,366	14,195	42,613		43,907	0	0	(42,186)	0	0		
142051 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A.	09/03/2021	09/06/2028	0	2,111,925	4535.43	180,586	60,459	22,559	60,714		57,949	0	0	(60,105)	0	0		
142217 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	09/20/2021	09/18/2026	0	1,174,913	4357.73	79,948	26,637	15,891	26,778		33,313	0	0	(26,525)	0	0		
142219 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	09/20/2021	09/20/2028	0	1,873,140	4357.73	136,949	45,813	26,825	45,991		57,166	0	0	(45,542)	0	0		
142231 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	10/06/2021	10/06/2026	0	1,802,792	4363.55	124,817	41,620	24,575	41,795		50,509	0	0	(41,419)	0	0		
142232 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	10/06/2021	10/06/2028	0	2,272,939	4363.55	175,701	59,012	35,060	59,137		72,378	0	0	(58,534)	0	0		

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
142242 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.10/20/2021	.10/20/2026	0	2,142,631	4536.19	151,478	50,470	27,119	50,657	.....	.....50,147	0	0	(50,233)	0	0	.....	.....
142243 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.10/20/2021	.10/20/2028	0	2,133,408	4536.19	162,937	54,577	29,972	54,709	.....	.....54,768	0	0	(54,183)	0	0	.....	.....
143735 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.11/05/2021	.11/06/2028	0	3,225,894	4697.53	236,840	79,292	47,557	79,449	.....	.....99,963	0	0	(78,709)	0	0	.....	.....
143737 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.11/05/2021	.11/06/2026	0	1,317,530	4697.53	90,049	30,017	18,102	30,101	.....	.....37,468	0	0	(29,862)	0	0	.....	.....
143909 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.11/19/2021	.11/20/2026	0	1,146,967	4697.96	78,046	26,004	15,538	26,060	.....	.....29,311	0	0	(25,869)	0	0	.....	.....
143911 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.11/19/2021	.11/20/2028	0	2,303,354	4697.96	177,394	59,619	36,746	59,675	.....	.....69,670	0	0	(59,040)	0	0	.....	.....
144235 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.12/06/2021	.12/04/2026	0	729,148	4591.67	49,819	16,580	9,307	16,603	.....	.....14,346	0	0	(16,500)	0	0	.....	.....
144237 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.12/06/2021	.12/06/2028	0	752,619	4591.67	55,909	18,697	10,366	18,715	.....	.....17,249	0	0	(18,557)	0	0	.....	.....
144701 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.12/20/2021	.12/18/2026	0	1,060,073	4568.02	72,432	24,110	13,641	24,124	.....	.....26,221	0	0	(23,987)	0	0	.....	.....
144703 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.12/20/2021	.12/20/2028	0	1,687,120	4568.02	130,889	43,919	24,948	43,931	.....	.....46,504	0	0	(43,492)	0	0	.....	.....
145280 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.01/06/2022	.01/06/2027	0	840,780	4696.05	40,249	19,939	10,402	327	.....	.....29,917	0	0	(19,937)	0	0	.....	.....
145291 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.01/06/2022	.01/05/2029	0	2,075,217	4696.05	109,154	54,229	26,698	890	.....	.....74,775	0	0	(54,223)	0	0	.....	.....
145768 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.01/20/2022	.01/20/2027	0	1,067,105	4482.73	53,186	26,401	14,290	1,446	.....	.....43,046	0	0	(26,389)	0	0	.....	.....
145772 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.01/20/2022	.01/19/2029	0	2,284,303	4482.73	130,052	64,947	36,140	3,556	.....	.....105,981	0	0	(64,900)	0	0	.....	.....
146459 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.02/04/2022	.02/05/2027	0	875,187	4500.53	46,034	22,908	12,685	2,196	.....	.....35,484	0	0	(22,885)	0	0	.....	.....
146461 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.02/04/2022	.02/06/2029	0	2,205,498	4500.53	122,524	61,077	32,482	5,855	.....	.....92,993	0	0	(61,007)	0	0	.....	.....
147150 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.02/18/2022	.02/19/2027	0	1,589,414	4348.87	85,480	42,558	22,873	5,712	.....	.....66,755	0	0	(42,496)	0	0	.....	.....
147153 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.02/18/2022	.02/20/2029	0	2,507,570	4348.87	139,306	69,435	36,726	9,319	.....	.....103,334	0	0	(69,324)	0	0	.....	.....
147912 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.03/04/2022	.03/04/2027	0	2,313,933	4328.87	132,195	66,011	36,271	11,391	.....	.....101,725	0	0	(65,855)	0	0	.....	.....
147914 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.03/04/2022	.03/02/2029	0	3,147,487	4328.87	190,357	95,281	51,529	16,442	.....	.....138,848	0	0	(95,018)	0	0	.....	.....
148494 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.03/18/2022	.03/19/2027	0	3,484,463	4463.12	203,186	101,363	49,318	21,380	.....	.....130,172	0	0	(101,089)	0	0	.....	.....
148496 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.03/18/2022	.03/20/2029	0	2,690,653	4463.12	164,848	82,387	38,967	17,377	.....	.....95,344	0	0	(82,133)	0	0	.....	.....
149383 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.04/06/2022	.04/06/2029	0	1,256,634	4481.15	76,495	38,234	18,595	10,055	.....	.....46,219	0	0	(38,086)	0	0	.....	.....
149385 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGQFU57RNE97	.04/06/2022	.04/06/2027	0	3,034,169	4481.15	161,388	80,480	49,577	21,165	.....	.....137,768	0	0	(80,216)	0	0	.....	.....
150021 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.04/20/2022	.04/20/2027	0	3,978,366	4459.45	247,661	123,893	59,606	37,332	.....	.....167,794	0	0	(123,311)	0	0	.....	.....
150023 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.04/20/2022	.04/20/2029	0	2,397,649	4459.45	150,675	75,491	38,858	22,747	.....	.....101,122	0	0	(75,103)	0	0	.....	.....
150452 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.05/06/2022	.05/06/2027	0	2,560,850	4123.34	155,622	78,041	42,747	26,937	.....	.....107,206	0	0	(77,598)	0	0	.....	.....

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
150453 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.05/06/2022	.05/04/2029	0	1,806,435	4123.34	116,192	58,345	29,371	20,138		70,471	0	0	(57,988)	0	0		
151098 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBMPRO8K5P83	.05/20/2022	.05/20/2027	0	5,069,803	3901.36	351,866	182,144	105,341	69,852		255,786	0	0	(180,555)	0	0		
151099 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBMPRO8K5P83	.05/20/2022	.05/18/2029	0	1,272,358	3901.36	90,354	46,752	24,991	17,929		56,515	0	0	(46,349)	0	0		
151704 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBMPRO8K5P83	.06/06/2022	.06/04/2027	0	4,053,241	4121.43	287,336	147,779	82,984	63,555		196,480	0	0	(146,273)	0	0		
151705 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBMPRO8K5P83	.06/06/2022	.06/06/2029	0	1,853,944	4121.43	130,682	67,058	33,937	28,840		73,293	0	0	(66,439)	0	0		
153001 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGGFU57RNE97	.06/17/2022	.06/18/2027	0	3,972,298	3674.84	261,765	135,127	81,640	62,181		188,417	0	0	(133,825)	0	0		
153006 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGGFU57RNE97	.06/17/2022	.06/20/2029	0	1,273,169	3674.84	86,044	44,550	27,853	20,500		69,276	0	0	(44,081)	0	0		
153829 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBMPRO8K5P83	.07/06/2022	.07/06/2029	0	4,331,917	3845.08	317,612	164,879	90,834	84,461		177,415	0	0	(162,798)	0	0		
153837 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.07/06/2022	.07/06/2027	0	4,143,069	3845.08	293,781	152,637	94,595	78,190		193,321	0	0	(150,668)	0	0		
154458 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBMPRO8K5P83	.07/20/2022	.07/20/2027	0	2,557,974	3959.9	184,369	95,601	53,215	52,640		115,484	0	0	(94,343)	0	0		
154462 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBMPRO8K5P83	.07/20/2022	.07/20/2029	0	1,734,536	3959.9	128,937	66,943	35,712	36,860		69,845	0	0	(66,032)	0	0		
155031 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGGFU57RNE97	.08/05/2022	.08/06/2029	0	2,584,672	4145.19	183,241	95,151	58,144	56,563		148,065	0	0	(93,747)	0	0		
155103 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.08/05/2022	.08/06/2027	0	1,336,139	4145.19	97,484	50,699	30,190	30,138		68,313	0	0	(49,920)	0	0		
155746 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBMPRO8K5P83	.08/19/2022	.08/20/2027	0	1,556,207	4228.48	112,181	57,556	31,617	36,422		47,624	0	0	(56,675)	0	0		
155753 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBMPRO8K5P83	.08/19/2022	.08/20/2029	0	1,396,739	4228.48	103,203	52,995	28,349	33,536		22,260	0	0	(52,156)	0	0		
156500 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.09/06/2022	.09/06/2027	0	1,564,291	3908.19	110,816	57,413	32,727	39,163		70,294	0	0	(56,498)	0	0		
156505 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGGFU57RNE97	.09/06/2022	.09/06/2029	0	987,646	3908.19	73,017	37,910	20,663	25,859		68,886	0	0	(37,270)	0	0		
156979 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGGFU57RNE97	.09/20/2022	.09/20/2027	0	1,181,616	3855.93	92,347	48,258	27,960	34,768		68,531	0	0	(47,250)	0	0		
156984 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGGFU57RNE97	.09/20/2022	.09/20/2029	0	908,253	3855.93	71,167	37,190	21,397	26,794		60,849	0	0	(36,414)	0	0		
158076 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBMPRO8K5P83	.10/06/2022	.10/06/2027	0	2,932,137	3744.52	282,047	150,962	96,600	115,375		113,864	0	0	(145,840)	0	0		
158083 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBMPRO8K5P83	.10/06/2022	.10/05/2029	0	2,188,606	3744.52	222,688	119,997	77,529	91,708		45,269	0	0	(115,531)	0	0		
158729 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.10/20/2022	.10/20/2027	0	6,530,815	3665.78	659,610	356,169	245,332	285,862		346,097	0	0	(341,869)	0	0		
158732 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBMPRO8K5P83	.10/20/2022	.10/19/2029	0	3,668,206	3665.78	382,590	206,671	132,737	165,875		53,063	0	0	(198,330)	0	0		
159834 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGGFU57RNE97	.11/04/2022	.11/05/2027	0	11,680,363	3770.55	1,019,060	550,261	523,176	464,254		879,671	0	0	(527,033)	0	0		
159838 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGGFU57RNE97	.11/04/2022	.11/06/2029	0	7,664,623	3770.55	708,308	382,883	329,617	323,037		589,347	0	0	(366,496)	0	0		
160843 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBMPRO8K5P83	.11/18/2022	.11/19/2027	0	12,068,585	3965.34	1,195,890	644,593	450,528	568,568		631,655	0	0	(616,789)	0	0		
160847 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBMPRO8K5P83	.11/18/2022	.11/20/2029	0	7,589,428	3965.34	781,510	423,495	300,885	373,543		391,410	0	0	(403,958)	0	0		

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
161965 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	12/06/2022	12/06/2027	0	8,250,589	3941.26	804,247	433,852	321,399	404,077		387,069	0	0	(413,876)	0	0		
161970 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	12/06/2022	12/06/2029	0	10,495,862	3941.26	1,078,741	584,721	421,024	544,588		620,278	0	0	(556,140)	0	0		
162533 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	12/20/2022	12/20/2027	0	6,695,471	3821.62	659,185	355,062	249,970	344,314		367,813	0	0	(338,370)	0	0		
162536 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	12/20/2022	12/20/2029	0	10,151,085	3821.62	1,043,108	565,098	403,907	547,987		560,426	0	0	(536,525)	0	0		
163351 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	01/06/2023	01/06/2028	0	11,272,223	3895.08	516,268	541,593	377,440	8,834		1,017,891	0	0	(541,246)	0	0		
163356 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	01/06/2023	01/04/2030	0	13,719,968	3895.08	684,626	720,137	438,315	11,741		1,131,278	0	0	(719,650)	0	0		
163922 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	01/20/2023	01/20/2028	0	5,705,912	3972.61	263,613	276,749	193,531	15,128		516,817	0	0	(276,065)	0	0		
163924 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	01/20/2023	01/18/2030	0	18,090,591	3972.61	891,866	939,596	620,488	51,354		1,635,577	0	0	(937,112)	0	0		
164600 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	02/06/2023	02/04/2028	0	5,580,626	4111.08	257,825	270,297	181,847	27,366		475,342	0	0	(269,067)	0	0		
164603 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	02/06/2023	02/06/2030	0	20,840,541	4111.08	1,025,355	1,079,134	697,616	109,244		1,789,712	0	0	(1,073,830)	0	0		
165308 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	02/17/2023	02/18/2028	0	8,592,432	4079.09	391,815	409,629	261,156	53,820		682,871	0	0	(407,335)	0	0		
165310 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	02/17/2023	02/20/2030	0	16,958,688	4079.09	827,584	869,947	554,950	114,288		1,361,903	0	0	(864,492)	0	0		
165863 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	03/06/2023	03/06/2028	0	9,177,411	4048.42	431,338	452,539	300,055	80,531		800,900	0	0	(448,822)	0	0		
165865 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	03/06/2023	03/06/2030	0	13,812,465	4048.42	661,617	693,367	422,723	123,389		1,007,842	0	0	(687,800)	0	0		
166386 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	03/20/2023	03/20/2028	0	10,912,967	3951.57	538,009	568,681	416,767	123,000		949,596	0	0	(562,126)	0	0		
166390 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	03/20/2023	03/20/2030	0	13,135,985	3951.57	650,231	685,913	471,111	148,360		1,373,382	0	0	(678,288)	0	0		
167410 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	04/06/2023	04/06/2028	0	17,613,170	4105.02	864,807	913,857	673,527	240,222		1,525,591	0	0	(901,090)	0	0		
167414 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	04/06/2023	04/05/2030	0	19,509,223	4105.02	963,756	1,016,922	709,825	267,319		1,643,306	0	0	(1,003,084)	0	0		
167991 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	04/20/2023	04/20/2028	0	15,613,951	4129.79	757,277	798,024	563,190	240,389		1,342,460	0	0	(785,856)	0	0		
167995 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	04/20/2023	04/18/2030	0	14,700,848	4129.79	721,812	760,581	519,680	229,110		1,253,357	0	0	(749,003)	0	0		
170976 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	05/05/2023	05/05/2028	0	15,646,372	4136.25	765,108	806,870	571,681	276,211		1,275,308	0	0	(792,682)	0	0		
170979 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	05/05/2023	05/06/2030	0	15,930,319	4136.25	767,841	807,742	551,925	276,515		1,216,642	0	0	(794,187)	0	0		
171609 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	05/19/2023	05/20/2030	0	20,432,234	4191.98	974,618	1,023,562	684,689	389,661		1,478,566	0	0	(1,005,057)	0	0		
171734 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	05/19/2023	05/19/2028	0	15,669,739	4191.98	756,848	796,105	541,263	303,067		1,147,966	0	0	(781,263)	0	0		
172334 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	06/06/2023	06/06/2028	0	19,270,434	4283.85	920,163	966,730	654,546	415,699		1,354,182	0	0	(946,827)	0	0		
172337 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	06/06/2023	06/06/2030	0	17,649,477	4283.85	831,290	871,424	570,042	374,722		1,122,112	0	0	(854,271)	0	0		
172868 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	06/20/2023	06/20/2028	0	17,848,623	4388.71	846,025	887,362	582,984	415,610		1,114,142	0	0	(868,109)	0	0		
172870 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	06/20/2023	06/20/2030	0	9,849,798	4388.71	459,001	480,894	318,272	225,235		633,235	0	0	(470,697)	0	0		

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)	
173539 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.07/06/2023	.07/06/2028	0	16,509,643	4411.59	789,161	827,414	527,709		423,803	956,697	0	0	(807,921)	0	0		
173541 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.07/06/2023	.07/05/2030	0	14,571,363	4411.59	690,683	723,693	461,752		370,678	833,080	0	0	(706,871)	0	0		
173543 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/06/2023	.01/06/2025	9	3,970,431	4411.59	447,867	0	(298,026)		4,895	96,015	0	0	(298,026)	0	0		
174172 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.07/20/2023	.07/20/2028	0	10,400,394	4534.87	0	527,761	123,357		289,184	656,728	502,339	0	(740,916)	0	0		
174176 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.07/20/2023	.07/19/2030	0	12,993,512	4534.87	0	671,567	165,481		367,982	849,576	637,981	0	(941,567)	0	0		
174182 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/20/2023	.01/17/2025	8	3,549,896	4534.87	383,032	0	(256,266)		11,926	92,015	0	0	(256,266)	0	0		
174697 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/04/2023	.02/06/2025	11	4,925,833	4478.03	548,735	0	(363,634)		36,982	132,988	0	0	(363,634)	0	0		
174777 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.08/04/2023	.08/04/2028	0	18,175,824	4478.03	885,163	929,958	606,839		550,209	1,244,168	0	0	(903,572)	0	0		
174779 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJISFPU8MPRO8K5P83	.08/04/2023	.08/06/2030	0	12,413,995	4478.03	615,734	647,970	424,967		383,368	795,088	0	0	(628,982)	0	0		
175362 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.08/18/2023	.08/18/2028	0	22,097,696	4369.71	1,082,787	1,138,529	752,650		717,277	1,311,957	0	0	(1,103,557)	0	0		
175364 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.08/18/2023	.08/20/2030	0	14,097,552	4369.71	696,419	732,879	486,878		461,714	837,775	0	0	(710,004)	0	0		
175426 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/18/2023	.02/20/2025	9	3,932,739	4369.71	458,955	0	(304,075)		42,635	101,558	0	0	(304,075)	0	0		
175981 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.09/06/2023	.03/06/2025	9	4,018,932	4465.48	450,117	0	(301,077)		53,585	117,538	0	0	(301,077)	0	0		
176071 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.09/06/2023	.09/06/2028	0	17,149,201	4465.48	874,609	923,452	627,439		629,837	1,165,848	0	0	(890,266)	0	0		
176074 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.09/06/2023	.09/06/2030	0	18,278,088	4465.48	939,494	993,144	684,681		677,368	1,265,432	0	0	(956,691)	0	0		
176735 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.09/20/2023	.03/20/2025	14	6,163,080	4402.2	687,190	0	(459,620)		99,429	146,944	0	0	(459,620)	0	0		
176794 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.09/20/2023	.09/20/2028	0	19,904,336	4402.2	1,100,710	1,173,710	855,191		845,514	1,251,050	0	0	(1,121,310)	0	0		
176797 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.09/20/2023	.09/20/2030	0	16,076,508	4402.2	901,892	963,369	707,702		693,985	1,012,291	0	0	(919,240)	0	0		
177507 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.10/06/2023	.04/04/2025	10	4,308,500	4308.5	388,200	0	(259,729)		67,326	96,113	0	0	(259,729)	0	0		
177594 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.10/06/2023	.10/06/2028	0	28,835,985	4308.5	1,603,281	1,709,145	1,226,248		1,306,153	1,708,451	0	0	(1,628,514)	0	0		
177597 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.10/06/2023	.10/04/2030	0	27,912,359	4308.5	1,599,378	1,708,708	1,204,875		1,305,809	1,531,748	0	0	(1,625,438)	0	0		
177932 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.10/20/2023	.04/17/2025	10	4,224,160	4224.16	500,140	0	(335,330)		98,736	218,972	0	0	(335,330)	0	0		
177980 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJISFPU8MPRO8K5P83	.10/20/2023	.10/20/2028	0	25,497,560	4224.16	1,455,911	1,556,140	1,122,245		1,248,901	1,410,974	0	0	(1,475,957)	0	0		
177984 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJISFPU8MPRO8K5P83	.10/20/2023	.10/18/2030	0	30,461,212	4224.16	1,812,442	1,944,952	1,399,083		1,560,927	1,524,315	0	0	(1,838,944)	0	0		
178390 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	.11/06/2023	.05/06/2025	0	4,703,317	4365.98	536,507	0	(358,526)		124,037	231,054	0	0	(358,526)	0	0		
178447 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.11/06/2023	.11/06/2028	0	37,538,719	4365.98	2,102,168	2,247,500	1,711,991		1,908,437	1,997,501	0	0	(2,124,466)	0	0		
178450 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.11/06/2023	.11/06/2030	0	43,943,432	4365.98	2,561,902	2,751,193	2,115,398		2,336,111	2,296,635	0	0	(2,590,944)	0	0		
178986 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.11/20/2023	.05/20/2025	7	3,183,166	4547.38	337,099	0	(225,396)		86,436	67,693	0	0	(225,396)	0	0		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
179038 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.11/20/2023	.11/20/2028	0	36,129,319	4547.38	2,066,597	2,214,882	1,706,306		1,965,680	0	0	(2,083,660)	0	0		
179048 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.11/20/2023	.11/20/2030	0	57,521,044	4547.38	3,416,750	3,678,815	2,880,409		3,264,860	0	0	(3,446,905)	0	0		
179467 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.12/06/2023	.06/06/2025	7	3,184,538	4549.34	335,972	0	(224,214)		96,431	0	0	(224,214)	0	0		
179541 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.12/06/2023	.12/06/2028	0	46,937,687	4549.34	2,651,979	2,844,325	2,295,633		2,648,981	0	0	(2,665,681)	0	0		
179547 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.12/06/2023	.12/06/2030	0	70,330,138	4549.34	4,128,379	4,445,426	3,592,385		4,140,076	0	0	(4,150,963)	0	0		
180100 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.12/20/2023	.12/20/2028	0	54,736,341	4698.35	3,065,235	3,280,120	2,576,491		3,180,679	0	0	(3,072,300)	0	0		
180106 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.12/20/2023	.12/20/2030	0	76,504,302	4698.35	4,414,298	4,738,745	3,738,044		4,595,044	0	0	(4,424,965)	0	0		
180127 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.12/20/2023	.06/20/2025	7	3,288,845	4698.35	338,422	0	(225,833)		105,796	0	0	(225,833)	0	0		
180473 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGFU57RNE97	.01/05/2024	.01/06/2025	0	46,576,850	1291.44	0	3,074,072	(3,023,261)		50,811	0	0	(3,023,261)	0	0		
180474 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	BFMBT61CT2L1QCMIK50	.01/05/2024	.01/06/2025	0	8,456,288	516.2	0	524,290	(515,624)		8,666	0	0	(515,624)	0	0		
180481 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	W22LR0WP21HZNBB6K528	.01/05/2024	.01/06/2025	0	37,091,436	189.35	0	2,918,735	(2,870,491)		48,244	0	0	(2,870,491)	0	0		
180499 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJSPFUBMPRO8K5P83	.01/05/2024	.01/06/2025	0	47,881,518	4697.24	0	4,037,848	(3,971,107)		66,741	0	0	(3,971,107)	0	0		
180503 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJSPFUBMPRO8K5P83	.01/05/2024	.01/06/2025	0	43,258,847	4697.24	0	3,648,451	(3,588,146)		60,305	0	0	(3,588,146)	0	0		
180510 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/05/2024	.01/06/2025	1,835	16,453,535	89.66	0	1,365,317	(1,342,812)		22,505	0	0	(1,342,812)	0	0		
180524 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/05/2024	.01/06/2025	151	1,117,209	74.17	0	74,712	(73,480)		1,232	0	0	(73,480)	0	0		
180526 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP517OUK5573	.01/05/2024	.01/06/2025	0	35,316,640	4697.24	0	2,983,465	(2,934,152)		49,313	0	0	(2,934,152)	0	0		
180537 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/05/2024	.07/03/2025	7	3,288,068	4697.24	0	340,312	(224,782)		115,530	0	0	(224,782)	0	0		
180539 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP517OUK5573	.01/05/2024	.01/06/2025	0	24,767,973	4697.24	0	1,079,471	(1,061,629)		17,843	0	0	(1,061,629)	0	0		
180544 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.01/05/2024	.01/05/2029	0	60,445,980	4697.24	0	3,348,707	(3,312,009)		36,698	0	0	(3,312,009)	0	0		
180545 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/05/2024	.01/06/2025	143	67,170,532	4697.24	0	5,427,422	(5,337,959)		89,463	0	0	(5,337,959)	0	0		
180551 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32WIEFA76	.01/05/2024	.01/06/2031	0	102,482,500	4697.24	0	5,913,240	(5,848,438)		64,803	0	0	(5,848,438)	0	0		
180558 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGFU57RNE97	.01/05/2024	.01/06/2025	0	17,094,461	4697.24	0	459,841	(452,240)		7,601	0	0	(452,240)	0	0		
180560 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/05/2024	.01/06/2025	127	59,654,948	4697.24	0	4,820,158	(4,740,705)		79,453	0	0	(4,740,705)	0	0		
180562 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/05/2024	.01/06/2025	216	101,448,876	4697.24	0	8,197,134	(8,062,017)		135,118	0	0	(8,062,017)	0	0		
180572 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/05/2024	.01/06/2025	97	45,399,200	4697.24	0	3,668,284	(3,607,818)		60,466	0	0	(3,607,818)	0	0		
180579 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/05/2024	.01/06/2025	110	51,669,640	4697.24	0	4,174,940	(4,106,122)		68,818	0	0	(4,106,122)	0	0		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
180698 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5I70UK5573	.01/12/2024	.01/10/2025	0	939,135	4783.45	0	41,437	(40,060)	1,377	144,674	0	0	(40,060)	0	0		
180796 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/19/2024	.01/17/2025	95	45,811,706	4839.81	0	3,559,539	(3,391,915)	167,624	1,870,824	0	0	(3,391,915)	0	0		
180815 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/19/2024	.01/17/2025	125	60,473,136	4839.81	0	4,698,722	(4,477,453)	221,269	2,927,075	0	0	(4,477,453)	0	0		
180824 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/19/2024	.01/17/2025	95	45,749,030	4839.81	0	3,554,669	(3,387,275)	167,394	2,651,431	0	0	(3,387,275)	0	0		
180835 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/19/2024	.01/17/2025	151	73,255,364	4839.81	0	5,691,893	(5,423,854)	268,039	6,822,193	0	0	(5,423,854)	0	0		
180848 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	4PQUHN3JPF6FNF3B8653	.01/19/2024	.01/17/2025	0	58,808,525	4839.81	0	4,495,870	(4,283,565)	212,305	1,317,599	0	0	(4,283,565)	0	0		
180849 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGGFU57RNE97	.01/19/2024	.01/19/2029	0	30,600,543	4839.81	0	1,621,829	(1,541,848)	79,981	3,289,375	0	0	(1,541,848)	0	0		
180854 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGGFU57RNE97	.01/19/2024	.01/17/2031	0	77,737,735	4839.81	0	4,361,087	(4,146,020)	215,067	9,211,773	0	0	(4,146,020)	0	0		
180856 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCJUFXT09	.01/19/2024	.01/17/2025	0	14,339,415	4839.81	0	421,579	(401,671)	19,908	1,208,389	0	0	(401,671)	0	0		
180859 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5I70UK5573	.01/19/2024	.01/17/2025	0	18,784,706	4839.81	0	779,957	(743,126)	36,831	496,483	0	0	(743,126)	0	0		
180863 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	4PQUHN3JPF6FNF3B8653	.01/19/2024	.01/17/2025	0	43,099,400	4839.81	0	3,294,918	(3,139,325)	155,593	1,317,378	0	0	(3,139,325)	0	0		
180867 Call Options – SPDR Gold shares – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/19/2024	.01/17/2025	1,573	29,564,873	187.93	0	2,243,362	(2,137,719)	105,643	1,870,958	0	0	(2,137,719)	0	0		
180876 Call Options – iShares U.S. Real Estate – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/19/2024	.01/17/2025	1,750	15,451,876	88.32	0	1,217,675	(1,160,333)	57,342	610,167	0	0	(1,160,333)	0	0		
180882 Call Options – iShares MSCI EAFE – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/19/2024	.01/17/2025	228	1,687,951	73.93	0	114,159	(108,783)	5,376	46,919	0	0	(108,783)	0	0		
180892 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/19/2024	.07/18/2025	6	2,903,886	4839.81	0	292,128	(185,068)	107,060	56,675	0	0	(185,068)	0	0		
180896 Call Options – S&P U.S. Retiree Spending Index – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	BFMBT61CT2L10CEMIK50	.01/19/2024	.01/17/2025	0	5,554,494	515.69	0	341,601	(325,470)	16,131	366,545	0	0	(325,470)	0	0		
180897 Call Options – S&P Equal Weight Energy – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCJUFXT09	.01/19/2024	.01/17/2025	0	30,326,908	1331.27	0	1,992,478	(1,898,389)	94,089	4,910,716	0	0	(1,898,389)	0	0		
180900 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/19/2024	.01/17/2025	122	59,045,682	4839.81	0	4,587,810	(4,371,764)	216,046	1,164,655	0	0	(4,371,764)	0	0		
181308 Call Options – SPDR Gold shares – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	2,448	46,148,103	188.55	0	3,404,509	(3,059,394)	345,115	2,868,354	0	0	(3,059,394)	0	0		
181340 Call Options – iShares U.S. Real Estate – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	2,753	23,818,090	86.52	0	1,932,536	(1,736,635)	195,901	1,375,762	0	0	(1,736,635)	0	0		
181352 Call Options – iShares MSCI EAFE – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	324	2,439,683	75.21	0	162,840	(146,333)	16,507	56,962	0	0	(146,333)	0	0		
181363 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	158	78,276,834	4954.23	0	6,082,052	(5,465,515)	616,537	1,520,246	0	0	(5,465,515)	0	0		
181370 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	135	66,882,105	4954.23	0	5,196,690	(4,669,902)	526,788	1,463,396	0	0	(4,669,902)	0	0		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
181379 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	96	 47,560,608	 4954.23	 0	 3,695,424	 (3,320,819)	374,605	.....	..... 1,419,494	 0	 0	 (3,320,819)	 0	 0	.....	.....
181385 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC 4PQUHN3JPFGNF3BB653	.02/06/2024	.02/06/2025	0	 25,062,639	 4954.23	 0	390,977	 (351,235)	39,742	.....	.....643,753	 0	 0	 (351,235)	 0	 0	.....	.....
181386 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	107	 52,929,755	 4954.23	 0	 4,112,603	 (3,695,709)	416,894	.....	..... 2,223,294	 0	 0	 (3,695,709)	 0	 0	.....	.....
181399 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	120	 59,450,760	 4954.23	 0	 4,619,280	 (4,151,024)	468,256	.....	..... 3,552,059	 0	 0	 (4,151,024)	 0	 0	.....	.....
181400 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	.02/06/2024	.02/06/2029	0	 41,505,951	 4954.23	 0	 2,137,556	 (1,926,729)	210,827	.....	..... 4,266,753	 0	 0	 (1,926,729)	 0	 0	.....	.....
181402 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	.02/06/2024	.02/06/2031	0	 79,357,783	 4954.23	 0	 4,317,063	 (3,891,271)	425,793	.....	..... 9,001,194	 0	 0	 (3,891,271)	 0	 0	.....	.....
181403 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	76	 37,756,682	 4954.23	 0	 2,933,666	 (2,636,281)	297,385	.....	..... 2,940,965	 0	 0	 (2,636,281)	 0	 0	.....	.....
181411 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	132	 65,395,836	 4954.23	 0	 5,081,208	 (4,566,127)	515,081	.....	..... 6,471,923	 0	 0	 (4,566,127)	 0	 0	.....	.....
181417 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCMIK50	.02/06/2024	.02/06/2025	0	 8,110,491	 515.55	 0	502,039	 (451,008)	51,031	.....	.....559,443	 0	 0	 (451,008)	 0	 0	.....	.....
181418 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.02/06/2024	.02/06/2025	0	 51,199,691	 1362.57	 0	 3,368,940	 (3,026,493)	342,447	.....	..... 7,071,508	 0	 0	 (3,026,493)	 0	 0	.....	.....
181419 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWEFA76	.02/06/2024	.02/06/2025	0	 22,087,163	 4954.23	 0	 700,163	 (628,993)	71,170	.....	..... 1,231,281	 0	 0	 (628,993)	 0	 0	.....	.....
181421 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIWSPU8MIPRO8K5P83	.02/06/2024	.08/06/2025	0	 3,694,660	 4954.23	 0	392,151	 (235,291)	156,860	.....	.....73,827	 0	 0	 (235,291)	 0	 0	.....	.....
181425 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIWSPU8MIPRO8K5P83	.02/06/2024	.02/06/2025	0	 99,871,911	 4954.23	 0	 8,132,570	 (7,305,907)	826,662	.....	..... 4,834,638	 0	 0	 (7,305,907)	 0	 0	.....	.....
181468 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIWSPU8MIPRO8K5P83	.02/09/2024	.02/09/2025	0	 1,119,734	4993.907396	 0	52,631	 (46,816)	5,816	.....	.....130,034	 0	 0	 (46,816)	 0	 0	.....	.....
181776 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.02/20/2024	.02/20/2025	95	 47,267,345	4975.51	 0	 3,795,535	 (3,265,200)	530,335	.....	..... 1,405,598	 0	 0	 (3,265,200)	 0	 0	.....	.....
181779 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	.02/20/2024	.02/20/2029	0	 27,738,664	4975.51	 0	 1,398,029	 (1,206,518)	191,511	.....	..... 2,593,534	 0	 0	 (1,206,518)	 0	 0	.....	.....
181784 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	.02/20/2024	.02/20/2031	0	 55,268,008	4975.51	 0	 2,956,838	 (2,551,792)	405,046	.....	..... 5,551,941	 0	 0	 (2,551,792)	 0	 0	.....	.....
181787 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.02/20/2024	.02/20/2025	2,131	 39,946,857	187.47	 0	 2,959,737	 (2,546,185)	413,552	.....	..... 2,368,514	 0	 0	 (2,546,185)	 0	 0	.....	.....
181793 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.02/20/2024	.02/20/2025	109	 54,248,981	4975.51	 0	 4,356,156	 (3,747,487)	608,668	.....	..... 2,201,214	 0	 0	 (3,747,487)	 0	 0	.....	.....
181808 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.02/20/2024	.02/20/2025	2,435	 21,178,304	86.96	 0	 1,719,398	 (1,479,153)	240,245	.....	..... 1,008,916	 0	 0	 (1,479,153)	 0	 0	.....	.....
181814 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.02/20/2024	.02/20/2025	200	 99,641,454	4975.51	 0	 8,001,140	 (6,883,172)	1,117,967	.....	..... 4,705,607	 0	 0	 (6,883,172)	 0	 0	.....	.....
181828 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.02/20/2024	.08/20/2025	6	2,985,306	4975.51	 0	307,188	 (176,661)	130,527	.....	.....59,104	 0	 0	 (176,661)	 0	 0	.....	.....
181830 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.02/20/2024	.02/20/2025	69	 34,297,584	4975.51	 0	 2,754,072	 (2,369,257)	384,816	.....	..... 2,066,414	 0	 0	 (2,369,257)	 0	 0	.....	.....
181832 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.02/20/2024	.02/20/2025	123	 61,198,773	4975.51	 0	 4,914,219	 (4,227,575)	686,644	.....	..... 1,314,614	 0	 0	 (4,227,575)	 0	 0	.....	.....
181844 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.02/20/2024	.02/20/2025	146	 1,113,790	76.38	 0	79,036	 (67,992)	11,043		17,313	 0	 0	 (67,992)	 0	 0		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
181853 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	02/20/2024	02/20/2025	0	20,721,749	4975.51	0	955,273	(821,429)	133,843		541,654	0	0	(821,429)	0	0		
181867 Call Options - S&P U.S. Retiree	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	02/20/2024	02/20/2025	0	6,980,531	517.24	0	439,773	(378,157)	61,617		470,644	0	0	(378,157)	0	0		
Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	02/20/2024	02/20/2025	0	42,729,051	1368.74	0	2,875,665	(2,472,756)	402,909		5,723,989	0	0	(2,472,756)	0	0		
181868 Call Options - S&P Equal Weight	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWEFA76	02/20/2024	02/20/2025	0	16,234,929	4975.51	0	451,331	(388,095)	63,236		1,024,999	0	0	(388,095)	0	0		
Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUWSPFU8MPRO8K5P83	02/20/2024	02/20/2025	0	65,276,252	4975.51	0	5,508,010	(4,736,283)	771,727		1,261,149	0	0	(4,736,283)	0	0		
181869 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	02/20/2024	02/20/2025	0	62,395,362	4975.51	0	5,241,210	(4,506,865)	734,345		5,626,979	0	0	(4,506,865)	0	0		
181878 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWEFA76	03/06/2024	03/06/2029	0	43,838,652	5104.76	0	2,183,165	(1,794,382)	388,783		3,449,049	0	0	(1,794,382)	0	0		
181884 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWEFA76	03/06/2024	03/06/2031	0	73,621,521	5104.76	0	3,857,768	(3,170,768)	687,000		5,819,276	0	0	(3,170,768)	0	0		
182202 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	03/06/2024	03/06/2025	2,268	45,093,299	198.81	0	3,472,554	(2,852,455)	620,099		2,749,396	0	0	(2,852,455)	0	0		
182204 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	03/06/2024	03/06/2025	172	1,349,120	78.58	0	87,904	(72,207)	15,697		11,515	0	0	(72,207)	0	0		
182206 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	03/06/2024	09/05/2025	4	2,041,904	5104.76	0	211,540	(115,632)	95,908		37,677	0	0	(115,632)	0	0		
182231 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	03/06/2024	03/06/2025	148	75,550,448	5104.76	0	6,059,120	(4,977,134)	1,081,986		1,425,157	0	0	(4,977,134)	0	0		
182240 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	03/06/2024	03/06/2025	131	66,872,356	5104.76	0	5,363,140	(4,405,436)	957,704		1,407,480	0	0	(4,405,436)	0	0		
182248 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RHHG71XBU11	03/06/2024	03/06/2025	0	50,269,144	5104.76	0	4,252,770	(3,491,254)	761,515		2,845,979	0	0	(3,491,254)	0	0		
182249 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL W22LR0WP21HZNB6K528	03/06/2024	03/06/2025	0	24,154,215	89.65	0	2,171,705	(1,782,832)	388,873		844,115	0	0	(1,782,832)	0	0		
182256 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	03/06/2024	03/06/2025	93	47,474,268	5104.76	0	3,807,420	(3,127,524)	679,896		1,371,157	0	0	(3,127,524)	0	0		
182257 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	03/06/2024	03/06/2025	116	58,971,208	5104.76	0	4,729,471	(3,884,922)	844,548		2,332,004	0	0	(3,884,922)	0	0		
182262 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	03/06/2024	03/06/2025	191	97,276,307	5104.76	0	7,801,526	(6,408,397)	1,393,130		8,062,799	0	0	(6,408,397)	0	0		
182272 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RHHG71XBU11	03/06/2024	03/06/2025	0	133,854,538	5104.76	0	11,324,094	(9,296,364)	2,027,730		6,357,904	0	0	(9,296,364)	0	0		
182279 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	03/06/2024	03/06/2025	0	8,863,281	520.97	0	557,500	(457,672)	99,828		548,253	0	0	(457,672)	0	0		
182292 Call Options - S&P U.S. Retiree	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	03/06/2024	03/06/2025	0	48,914,664	1398.28	0	3,291,957	(2,702,488)	589,469		5,534,460	0	0	(2,702,488)	0	0		
Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RHHG71XBU11	03/06/2024	03/06/2025	0	25,715,456	5104.76	0	1,445,209	(1,186,425)	258,784		683,224	0	0	(1,186,425)	0	0		
182293 Call Options - S&P Equal Weight	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUWSPFU8MPRO8K5P83	03/06/2024	03/06/2025	0	18,264,456	5104.76	0	503,551	(413,384)	90,168		753,163	0	0	(413,384)	0	0		
Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	03/15/2024	03/14/2025	0	1,396,661	5160.01	0	60,554	(48,275)	12,279		137,469	0	0	(48,275)	0	0		
182296 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	03/20/2024	03/20/2025	0	80,854,470	5224.62	0	6,904,972	(5,402,237)	1,502,735		1,473,356	0	0	(5,402,237)	0	0		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
182753 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/20/2024	03/20/2025	0	85,327,218	5224.62	0	7,304,010	(5,714,432)	1,589,578		7,083,681	0	0	(5,714,432)	0	0		
182764 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/20/2024	03/20/2025	0	1,573,725	5224.62	0	135,026	(105,640)	29,386		173,856	0	0	(105,640)	0	0		
182767 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2024	03/20/2025	2,103	42,516,432	202.18	0	3,141,733	(2,459,873)	681,860		2,459,510	0	0	(2,459,873)	0	0		
182777 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	03/20/2024	03/20/2025	0	18,424,934	5224.62	0	521,426	(407,947)	113,478		940,292	0	0	(407,947)	0	0		
182780 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2024	03/20/2025	3,062	27,184,699	88.79	0	1,781,901	(1,395,169)	386,731		1,040,299	0	0	(1,395,169)	0	0		
182781 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	03/20/2024	03/20/2029	0	23,117,461	5224.62	0	1,246,031	(976,342)	269,689		1,839,972	0	0	(976,342)	0	0		
182784 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	03/20/2024	03/20/2031	0	71,515,666	5224.62	0	3,954,816	(3,098,842)	855,974		6,353,497	0	0	(3,098,842)	0	0		
182789 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2024	03/20/2025	93	48,536,302	5224.62	0	3,936,325	(3,082,013)	854,312		1,771,859	0	0	(3,082,013)	0	0		
182790 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2024	03/20/2025	157	1,252,607	79.85	0	80,474	(63,009)	17,466		8,683	0	0	(63,009)	0	0		
182804 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2024	03/20/2025	260	135,800,674	5224.62	0	11,013,521	(8,623,224)	2,390,297		6,043,141	0	0	(8,623,224)	0	0		
182824 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2024	03/20/2025	98	50,960,630	5224.62	0	4,132,939	(3,235,955)	896,984		2,787,341	0	0	(3,235,955)	0	0		
182831 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	03/20/2024	03/20/2025	0	8,437,055	521.83	0	534,066	(417,836)	116,229		523,811	0	0	(417,836)	0	0		
182832 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/20/2024	03/20/2025	0	53,119,497	1426.8	0	3,617,438	(2,830,172)	787,266		4,994,123	0	0	(2,830,172)	0	0		
182833 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	03/20/2024	03/20/2025	0	22,696,844	5224.62	0	1,066,752	(834,594)	232,158		596,768	0	0	(834,594)	0	0		
182837 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2024	09/19/2025	7	3,657,234	5224.62	0	384,013	(200,080)	183,933		65,503	0	0	(200,080)	0	0		
182839 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2024	03/20/2025	99	51,723,738	5224.62	0	4,194,828	(3,284,412)	910,416		1,039,853	0	0	(3,284,412)	0	0		
182843 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2024	03/20/2025	91	47,544,042	5224.62	0	3,855,852	(3,019,005)	836,847		1,345,425	0	0	(3,019,005)	0	0		
183356 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/05/2024	04/04/2025	2,419	52,037,123	215.14	0	4,104,629	(3,035,834)	1,068,795		3,004,023	0	0	(3,035,834)	0	0		
183364 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/05/2024	04/04/2025	257	2,029,902	78.97	0	134,693	(99,620)	35,072		22,307	0	0	(99,620)	0	0		
183381 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/05/2024	10/06/2025	3	1,561,302	5204.34	0	167,997	(82,152)	85,845		27,758	0	0	(82,152)	0	0		
183385 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/05/2024	04/04/2025	241	125,424,594	5204.34	0	10,535,556	(7,792,226)	2,743,330		2,271,454	0	0	(7,792,226)	0	0		
183395 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/05/2024	04/04/2025	107	55,686,438	5204.34	0	4,677,612	(3,459,619)	1,217,993		1,461,411	0	0	(3,459,619)	0	0		
183413 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	04/05/2024	04/04/2025	0	648,438	266.23	0	18,610	(13,751)	4,859		5,359	0	0	(13,751)	0	0		
183416 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	04/05/2024	04/04/2025	0	28,624,148	5204.34	0	1,385,409	(1,023,663)	361,746		699,720	0	0	(1,023,663)	0	0		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

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Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
183421 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	04/05/2024	04/04/2025	0	30,140,606	87.19	0	2,772,424	(2,048,513)	723,911		1,216,994	0	0	(2,048,513)	0	0		
183427 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	04/05/2024	04/04/2025	0	11,325,091	520.2	0	715,746	(528,857)	186,889		763,307	0	0	(528,857)	0	0		
183430 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	04/05/2024	04/04/2025	0	56,267,973	1422.99	0	3,809,342	(2,814,680)	994,661		5,462,662	0	0	(2,814,680)	0	0		
183443 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	04/05/2024	04/04/2025	0	21,346,269	5204.34	0	593,426	(438,476)	154,950		553,216	0	0	(438,476)	0	0		
183449 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	04/05/2024	04/06/2029	0	30,875,127	5204.34	0	1,664,169	(1,231,029)	433,140		2,684,086	0	0	(1,231,029)	0	0		
183452 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	04/05/2024	04/04/2031	0	78,645,201	5204.34	0	4,294,028	(3,176,404)	1,117,624		6,100,577	0	0	(3,176,404)	0	0		
183455 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/05/2024	04/04/2025	97	50,483,139	5204.34	0	4,240,539	(3,136,355)	1,104,185		1,793,818	0	0	(3,136,355)	0	0		
183467 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/05/2024	04/04/2025	341	177,434,166	5204.34	0	14,904,314	(11,023,413)	3,880,902		7,844,212	0	0	(11,023,413)	0	0		
183475 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/05/2024	04/04/2025	97	50,482,098	5204.34	0	4,240,452	(3,136,290)	1,104,162		2,725,221	0	0	(3,136,290)	0	0		
183477 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/05/2024	04/04/2025	99	51,498,818	5204.34	0	4,325,856	(3,199,456)	1,126,400		3,858,582	0	0	(3,199,456)	0	0		
183483 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/05/2024	04/04/2025	100	52,043,400	5204.34	0	4,371,600	(3,233,289)	1,138,311		4,688,638	0	0	(3,233,289)	0	0		
183621 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	04/12/2024	04/12/2025	0	1,480,638	5161.54	0	74,423	(53,395)	21,028		160,209	0	0	(53,395)	0	0		
183798 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/19/2024	04/17/2025	1,812	40,042,378	221.03	0	3,387,741	(2,380,829)	1,006,912		2,247,486	0	0	(2,380,829)	0	0		
183826 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/19/2024	10/20/2025	4	1,986,892	4967.23	0	224,520	(104,036)	120,484		36,826	0	0	(104,036)	0	0		
183827 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	04/19/2024	04/17/2025	0	23,508,611	81.99	0	2,234,826	(1,568,736)	666,090		1,315,577	0	0	(1,568,736)	0	0		
183836 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/19/2024	04/17/2025	91	45,201,793	4967.23	0	3,991,351	(2,805,033)	1,186,318		1,360,076	0	0	(2,805,033)	0	0		
183840 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	04/19/2024	04/20/2029	0	28,050,131	4967.23	0	1,528,732	(1,072,207)	456,525		2,537,339	0	0	(1,072,207)	0	0		
183844 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	04/19/2024	04/18/2031	0	75,745,710	4967.23	0	4,196,312	(2,943,167)	1,253,145		6,012,700	0	0	(2,943,167)	0	0		
183849 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/19/2024	04/17/2025	128	63,769,299	4967.23	0	5,630,875	(3,957,254)	1,673,621		3,562,646	0	0	(3,957,254)	0	0		
183851 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	04/19/2024	04/17/2025	0	167,728	261.21	0	4,797	(3,367)	1,430		3,020	0	0	(3,367)	0	0		
183858 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	04/19/2024	04/17/2025	0	102,060,018	4967.23	0	9,372,172	(6,578,795)	2,793,377		1,898,331	0	0	(6,578,795)	0	0		
183863 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/19/2024	04/17/2025	245	1,862,047	76.12	0	104,208	(73,491)	30,717		48,970	0	0	(73,491)	0	0		
183868 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	04/19/2024	04/17/2025	0	7,633,998	514.38	0	490,866	(344,563)	146,303		615,802	0	0	(344,563)	0	0		
183875 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	04/19/2024	04/17/2025	0	19,724,534	4967.23	0	968,854	(680,087)	288,767		497,496	0	0	(680,087)	0	0		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
183876 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A. B4TYDEB6GMZ0031MB27	.04/19/2024	.04/17/2025	0	48,817,145	1366.11	0	3,353,738	(2,354,156)	999,582		6,984,222	0	0	(2,354,156)	0	0		
183880 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.04/19/2024	.04/17/2025	0	31,442	261.21	0	899	(631)	268		566	0	0	(631)	0	0		
183883 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ... 02RNE81BXP4ROTDBPU41	.04/19/2024	.04/17/2025	0	14,850,913	4967.23	0	374,243	(262,700)	111,543		1,430,632	0	0	(262,700)	0	0		
183885 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ... 02RNE81BXP4ROTDBPU41	.04/19/2024	.04/17/2025	0	41,158,209	4967.23	0	3,786,555	(2,657,972)	1,128,583		1,578,531	0	0	(2,657,972)	0	0		
183893 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.04/19/2024	.04/17/2025	0	87,088,826	4967.23	0	8,000,342	(5,615,839)	2,384,503		4,100,894	0	0	(5,615,839)	0	0		
183899 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.04/19/2024	.04/17/2025	0	48,490,412	4967.23	0	4,454,854	(3,127,084)	1,327,770		2,991,637	0	0	(3,127,084)	0	0		
183905 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ... 02RNE81BXP4ROTDBPU41	.04/19/2024	.04/17/2025	0	69,345,795	4967.23	0	6,379,813	(4,478,309)	1,901,504		6,005,739	0	0	(4,478,309)	0	0		
184304 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA BNP PARIBAS LONDON	.05/06/2024	.05/06/2025	0	27,071,786	5180.74	0	1,248,009	(814,816)	433,193		700,279	0	0	(814,816)	0	0		
184318 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROMUISFPUM8MPR08K5P83	.05/06/2024	.05/06/2025	0	18,406,314	5180.74	0	517,217	(337,687)	179,530		648,084	0	0	(337,687)	0	0		
184324 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWEFA76	.05/06/2024	.05/04/2029	0	28,800,434	5180.74	0	1,558,103	(1,020,238)	537,866		2,282,513	0	0	(1,020,238)	0	0		
184326 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFBMT61CT2L1QCEMIK50	.05/06/2024	.05/06/2025	0	10,958,068	520.85	0	701,316	(457,884)	243,432		769,010	0	0	(457,884)	0	0		
184328 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.05/06/2024	.05/06/2025	0	51,255,630	1412.21	0	3,459,755	(2,258,848)	1,200,907		5,706,136	0	0	(2,258,848)	0	0		
184329 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWEFA76	.05/06/2024	.05/06/2031	0	80,553,405	5180.74	0	4,406,271	(2,885,202)	1,521,069		6,276,506	0	0	(2,885,202)	0	0		
184330 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.05/06/2024	.05/06/2025	0	86,118	264.16	0	2,472	(1,614)	858		1,135	0	0	(1,614)	0	0		
184331 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.11/06/2025	5	2,590,370	5180.74	0	272,505	(118,351)	154,154		45,620	0	0	(118,351)	0	0		
184342 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	217	112,422,058	5180.74	0	9,049,985	(5,917,298)	3,132,687		2,009,915	0	0	(5,917,298)	0	0		
184349 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	74	38,337,476	5180.74	0	3,086,170	(2,017,880)	1,068,290		1,043,442	0	0	(2,017,880)	0	0		
184350 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.05/06/2024	.05/06/2025	0	1,049,935	264.1566	0	30,133	(19,674)	10,459		13,839	0	0	(19,674)	0	0		
184355 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.05/06/2024	.05/06/2025	0	29,255,040	84.67	0	2,624,464	(1,713,493)	910,971		1,420,743	0	0	(1,713,493)	0	0		
184366 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	146	75,799,407	5180.74	0	6,101,859	(3,989,677)	2,112,182		2,891,121	0	0	(3,989,677)	0	0		
184367 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	138	71,580,212	5180.74	0	5,762,213	(3,767,601)	1,994,612		3,809,005	0	0	(3,767,601)	0	0		
184379 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	2,325	50,043,555	215.2	0	4,018,367	(2,627,394)	1,390,973		3,020,356	0	0	(2,627,394)	0	0		
184382 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	109	56,349,873	5180.74	0	4,536,169	(2,965,957)	1,570,213		3,261,218	0	0	(2,965,957)	0	0		
184390 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	162	83,678,535	5180.74	0	6,736,129	(4,404,392)	2,331,737		3,809,948	0	0	(4,404,392)	0	0		

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Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

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Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
184391 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	163	84,461,604	5180.74	0	6,799,166	(4,445,609)		2,353,558		6,799,124	0	(4,445,609)	0		
184409 Call Options – Ishares MSCI EAFE – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	275	2,181,605	79.46	0	144,690	(94,605)		50,085		28,891	0	(94,605)	0		
184503 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUISFPUBM8PRO8K5P83	.05/10/2024	.05/09/2025	0	1,373,169	5187.45	0	67,888	(43,561)		24,326		152,990	0	(43,561)	0		
184782 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.05/20/2024	.05/20/2025	0	22,448,288	5308.13	0	1,009,346	(620,066)		389,279		572,037	0	(620,066)	0		
184796 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGOFU57RNE97	.05/20/2024	.05/20/2025	0	14,507,073	5308.13	0	427,959	(262,906)		165,053		1,050,036	0	(262,906)	0		
184810 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	84	44,415,512	5308.13	0	3,486,633	(2,145,620)		1,341,013		2,300,531	0	(2,145,620)	0		
184811 Call Options – First Trust Barclays Edge Index – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.05/20/2024	.05/20/2025	0	1,231,860	266.7778	0	35,354	(21,719)		13,635		12,356	0	(21,719)	0		
184823 Call Options – Ishares U.S. Real Estate – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUISFPUBM8PRO8K5P83	.05/20/2024	.05/20/2025	0	20,077,220	87.72	0	1,741,498	(1,069,846)		671,652		862,484	0	(1,069,846)	0		
184825 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	88	46,688,188	5308.13	0	3,665,039	(2,255,408)		1,409,630		2,614,202	0	(2,255,408)	0		
184840 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	96	50,726,985	5308.13	0	3,982,085	(2,450,514)		1,531,571		3,026,748	0	(2,450,514)	0		
184853 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	176	93,341,449	5308.13	0	7,327,335	(4,509,129)		2,818,206		6,720,421	0	(4,509,129)	0		
184854 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUISFPUBM8PRO8K5P83	.05/20/2024	.05/18/2029	0	28,210,224	5308.13	0	1,514,889	(933,836)		581,053		1,929,823	0	(933,836)	0		
184861 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZVZ7FF32TWEFA76	.05/20/2024	.05/20/2031	0	74,371,308	5308.13	0	4,082,985	(2,516,908)		1,566,076		5,412,256	0	(2,516,908)	0		
184871 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	78	41,246,506	5308.13	0	3,237,865	(1,992,532)		1,245,333		1,175,834	0	(1,992,532)	0		
184872 Call Options – S&P U.S. Retiree Spending Index – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	BFMBT61CT2L1QCEMIK50	.05/20/2024	.05/20/2025	0	8,660,981	525.47	0	555,169	(341,054)		214,115		546,462	0	(341,054)	0		
184873 Call Options – S&P Equal Weight Energy – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6KIMZ0031MB27	.05/20/2024	.05/20/2025	0	46,276,498	1439.08	0	3,169,940	(1,947,374)		1,222,566		4,276,960	0	(1,947,374)	0		
184881 Call Options – SPDR Gold shares – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	1,977	44,396,630	224.56	0	3,681,267	(2,265,395)		1,415,872		2,328,470	0	(2,265,395)	0		
184885 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	165	87,603,891	5308.13	0	6,876,935	(4,231,960)		2,644,975		3,367,279	0	(4,231,960)	0		
184895 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	91	48,549,219	5308.13	0	3,811,130	(2,345,311)		1,465,819		2,370,652	0	(2,345,311)	0		
184903 Call Options – Ishares MSCI EAFE – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	214	1,746,988	81.7	0	111,833	(68,820)		43,013		12,400	0	(68,820)	0		
184909 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.11/20/2025	4	2,123,252	5308.13	0	220,184	(90,002)		130,182		36,431	0	(90,002)	0		
184913 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	201	106,693,413	5308.13	0	8,375,469	(5,154,135)		3,221,334		1,835,273	0	(5,154,135)	0		
185335 Call Options – Ishares U.S. Real Estate – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.06/06/2024	.06/06/2025	0	22,233,527	87.13	0	1,877,040	(1,060,710)		816,330		982,420	0	(1,060,710)	0		
185341 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGOFU57RNE97	.06/06/2024	.06/06/2025	0	23,072,006	5352.96	0	582,352	(329,085)		253,267		571,477	0	(329,085)	0		

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Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

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Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
185345 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5I7OUK5573	.06/06/2024	.06/06/2025	0	2,327,162	264.854	0	66,790	(37,743)	29,047	.....	.....32,240	0	0	(37,743)	0	0	.....	.....
185349 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBM8PRO8K5P83	.06/06/2024	.12/05/2025	0	2,339,008	5352.96	0	258,694	(97,189)	161,505	.....	.....39,331	0	0	(97,189)	0	0	.....	.....
185357 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ... 02RNE81BX4R0TD8PU41	.06/06/2024	.06/06/2025	0	43,764,515	5352.96	0	3,632,455	(2,052,689)	1,579,766	.....	.....0	0	0	(2,052,689)	0	0	.....	.....
185367 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	.06/06/2024	.06/06/2025	0	15,733,852	5352.96	0	464,149	(262,289)	201,860	.....	.....287,347	0	0	(262,289)	0	0	.....	.....
185369 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	89	47,801,023	5352.96	0	3,728,472	(2,120,312)	1,608,160	.....	.....2,259,950	0	0	(2,120,312)	0	0	.....	.....
185370 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBM8PRO8K5P83	.06/06/2024	.06/06/2029	0	31,638,823	5352.96	0	1,695,841	(966,397)	729,444	.....	.....2,221,770	0	0	(966,397)	0	0	.....	.....
185372 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E57ODZVZ7FF32TWEFA76	.06/06/2024	.06/06/2031	0	92,684,199	5352.96	0	5,069,826	(2,889,106)	2,180,720	.....	.....6,800,392	0	0	(2,889,106)	0	0	.....	.....
185378 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	2,351	51,587,980	219.43	0	4,107,196	(2,335,686)	1,771,510	.....	.....3,015,415	0	0	(2,335,686)	0	0	.....	.....
185393 Call Options - Ishares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	354	2,910,682	82.16	0	183,512	(104,360)	79,152	.....	.....21,653	0	0	(104,360)	0	0	.....	.....
185407 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	96	51,351,481	5352.96	0	4,005,407	(2,277,800)	1,727,607	.....	.....2,630,221	0	0	(2,277,800)	0	0	.....	.....
185410 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	.06/06/2024	.06/06/2025	0	9,212,548	523.47	0	584,997	(330,580)	254,417	.....	.....637,247	0	0	(330,580)	0	0	.....	.....
185415 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBM8PRO8K5P83	.06/06/2024	.06/06/2025	0	56,652,620	1449.93	0	3,846,713	(2,173,766)	1,672,947	.....	.....4,916,010	0	0	(2,173,766)	0	0	.....	.....
185416 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	222	118,835,712	5352.96	0	9,269,166	(5,271,202)	3,997,964	.....	.....2,003,796	0	0	(5,271,202)	0	0	.....	.....
185418 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5I7OUK5573	.06/06/2024	.06/06/2025	0	245,158	264.854	0	7,036	(3,976)	3,060	.....	.....3,398	0	0	(3,976)	0	0	.....	.....
185425 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	209	111,675,486	5352.96	0	8,710,670	(4,953,595)	3,757,074	.....	.....4,207,548	0	0	(4,953,595)	0	0	.....	.....
185434 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	95	51,005,893	5352.96	0	3,978,451	(2,262,471)	1,715,980	.....	.....2,855,652	0	0	(2,262,471)	0	0	.....	.....
185444 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	115	61,522,105	5352.96	0	4,798,714	(2,728,939)	2,069,775	.....	.....3,667,815	0	0	(2,728,939)	0	0	.....	.....
185455 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	145	77,403,802	5352.96	0	6,037,484	(3,433,404)	2,604,080	.....	.....5,685,538	0	0	(3,433,404)	0	0	.....	.....
185735 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBM8PRO8K5P83	.06/14/2024	.06/13/2025	0	1,090,737	5417.66	0	49,658	(27,036)	22,622	.....	.....86,316	0	0	(27,036)	0	0	.....	.....
186119 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	.06/20/2024	.06/20/2025	0	13,491,957	5473.17	0	399,362	(210,190)	189,171	.....	.....766,534	0	0	(210,190)	0	0	.....	.....
186120 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBM8PRO8K5P83	.06/20/2024	.06/20/2029	0	22,181,244	5473.17	0	1,191,133	(633,095)	558,038	.....	.....1,472,827	0	0	(633,095)	0	0	.....	.....
186121 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBM8PRO8K5P83	.06/20/2024	.06/20/2031	0	70,189,078	5473.17	0	3,828,814	(2,035,041)	1,793,773	.....	.....4,468,486	0	0	(2,035,041)	0	0	.....	.....
186123 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	1,951	42,563,236	218.16	0	3,392,807	(1,798,933)	1,593,873	.....	.....2,382,866	0	0	(1,798,933)	0	0	.....	.....
186136 Call Options - Ishares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	212	1,667,313	78.5	0	111,296	(59,011)	52,285	.....	.....23,357	0	0	(59,011)	0	0	.....	.....

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
186144 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.12/19/2025	 4	2,189,268	5473.17	 0	223,304	(78,933)	144,371	.....	.....35,858	 0	 0	(78,933)	 0	 0	.....	.....
186148 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	 186	101,800,962	5473.17	 0	7,920,066	(4,199,376)	3,720,690	.....	.....1,646,087	 0	 0	(4,199,376)	 0	 0	.....	.....
186157 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.06/20/2024	.06/20/2025	 0	18,593,960	86.77	 0	1,564,228	(823,278)	740,950	.....	.....773,040	 0	 0	(823,278)	 0	 0	.....	.....
186158 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	75	40,876,370	5473.17	 0	3,180,162	(1,686,185)	1,493,977	.....	.....1,110,700	 0	 0	(1,686,185)	 0	 0	.....	.....
186173 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.06/20/2024	.06/20/2025	 0	1,692,734	265.0573	 0	48,581	(25,569)	23,012	.....	.....24,092	 0	 0	(25,569)	 0	 0	.....	.....
186183 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	.06/20/2024	.06/20/2025	 0	23,141,444	5473.17	 0	1,087,648	(572,446)	515,202	.....	.....550,789	 0	 0	(572,446)	 0	 0	.....	.....
186192 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	82	44,941,239	5473.17	 0	3,496,407	(1,853,864)	1,642,543	.....	.....2,516,630	 0	 0	(1,853,864)	 0	 0	.....	.....
186203 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	87	47,416,261	5473.17	 0	3,688,962	(1,955,961)	1,733,002	.....	.....2,234,992	 0	 0	(1,955,961)	 0	 0	.....	.....
186213 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	97	53,268,667	5473.17	 0	4,144,277	(2,197,378)	1,946,899	.....	.....2,719,878	 0	 0	(2,197,378)	 0	 0	.....	.....
186221 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	.06/20/2024	.06/20/2025	 0	7,539,960	522.02	 0	477,279	(251,200)	226,080	.....	.....556,030	 0	 0	(251,200)	 0	 0	.....	.....
186222 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	 104	56,794,319	5473.17	 0	4,418,571	(2,342,814)	2,075,757	.....	.....3,952,122	 0	 0	(2,342,814)	 0	 0	.....	.....
186223 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	.06/20/2024	.06/20/2025	 0	48,963,458	1479.53	 0	3,373,582	(1,775,570)	1,598,013	.....	.....3,491,782	 0	 0	(1,775,570)	 0	 0	.....	.....
186226 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.06/20/2024	.06/20/2025	 0	86,399	265.0573	 0	2,480	(1,305)	1,175	.....	.....1,231	 0	 0	(1,305)	 0	 0	.....	.....
186231 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	 236	129,260,130	5473.17	 0	10,056,376	(5,332,090)	4,724,287	.....	.....4,728,674	 0	 0	(5,332,090)	 0	 0	.....	.....
186663 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGQFUS7RNE97	.07/05/2024	.07/06/2029	 0	25,733,818	5567.19	 0	1,373,929	(673,790)	700,139	.....	.....1,826,369	 0	 0	(673,790)	 0	 0	.....	.....
186667 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGQFUS7RNE97	.07/05/2024	.07/03/2031	 0	65,925,769	5567.19	 0	3,598,888	(1,764,934)	1,833,954	.....	.....4,984,679	 0	 0	(1,764,934)	 0	 0	.....	.....
186670 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.07/05/2024	.07/03/2025	84	46,764,396	5567.19	 0	3,638,292	(1,778,721)	1,859,571	.....	.....1,226,905	 0	 0	(1,778,721)	 0	 0	.....	.....
186672 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPFU8MPR08K5P83	.07/05/2024	.07/03/2025	 0	19,804,094	87.47	 0	1,652,058	(805,321)	846,737	.....	.....828,635	 0	 0	(805,321)	 0	 0	.....	.....
186684 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.07/05/2024	.07/03/2025	 230	128,003,059	5567.19	 0	9,958,698	(4,868,697)	5,090,001	.....	.....4,288,473	 0	 0	(4,868,697)	 0	 0	.....	.....
186692 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.07/05/2024	.07/03/2025	 0	1,425,602	263.9177	 0	40,772	(19,875)	20,897	.....	.....23,909	 0	 0	(19,875)	 0	 0	.....	.....
186695 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPFU8MPR08K5P83	.07/05/2024	.01/06/2026	 0	1,416,098	5567.19	 0	154,539	(49,532)	105,007	.....	.....22,412	 0	 0	(49,532)	 0	 0	.....	.....
186710 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.07/05/2024	.07/03/2025	 100	55,754,740	5567.19	 0	4,337,745	(2,120,675)	2,217,070	.....	.....2,576,746	 0	 0	(2,120,675)	 0	 0	.....	.....
186711 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.07/05/2024	.07/03/2025	2,313	51,104,639	220.93	 0	4,061,909	(1,985,822)	2,076,087	.....	.....2,889,738	 0	 0	(1,985,822)	 0	 0	.....	.....
186718 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	.07/05/2024	.07/03/2025	 0	8,284,757	521.97	 0	515,312	(251,197)	264,115		624,210	 0	 0	(251,197)	 0	 0		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
186725 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	07/05/2024	07/03/2025	111	61,549,294	5567.19	0	4,788,564	(2,341,076)	2,447,488	3,260,738	0	0	(2,341,076)	0	0		
186726 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6KMZ0031MB27	07/05/2024	07/03/2025	0	61,684,934	1505.15	0	4,163,733	(2,029,675)	2,134,058	3,642,407	0	0	(2,029,675)	0	0		
186729 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	07/05/2024	07/03/2025	0	42,527	263.9177	0	1,216	(593)	623	714	0	0	(593)	0	0		
186731 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	07/05/2024	07/03/2025	355	2,842,708	80.09	0	181,019	(88,498)	92,521	20,956	0	0	(88,498)	0	0		
186732 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGQFU57RNE97	07/05/2024	07/03/2025	0	17,520,175	5567.19	0	560,646	(273,295)	287,350	244,312	0	0	(273,295)	0	0		
186738 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	07/05/2024	07/03/2025	150	83,507,850	5567.19	0	6,496,950	(3,176,287)	3,320,663	4,900,236	0	0	(3,176,287)	0	0		
186747 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	07/05/2024	07/03/2025	94	52,331,586	5567.19	0	4,071,422	(1,990,473)	2,080,949	3,607,595	0	0	(1,990,473)	0	0		
186748 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	07/05/2024	07/03/2025	235	130,828,965	5567.19	0	10,178,555	(4,961,691)	5,216,864	2,039,013	0	0	(4,961,691)	0	0		
186773 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGQFU57RNE97	07/05/2024	07/03/2025	0	22,246,975	5567.19	0	1,112,349	(542,231)	570,117	480,908	0	0	(542,231)	0	0		
186887 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJISFPUBMPRO8K5P83	07/12/2024	07/11/2025	0	1,203,242	5633.42	0	51,482	(24,025)	27,457	54,953	0	0	(24,025)	0	0		
187077 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32TWEFA76	07/19/2024	07/20/2029	0	45,282,432	5505	0	2,404,497	(1,086,964)	1,317,533	3,183,494	0	0	(1,086,964)	0	0		
187079 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32TWEFA76	07/19/2024	07/18/2031	0	61,765,444	5505	0	3,353,864	(1,516,130)	1,837,733	4,400,543	0	0	(1,516,130)	0	0		
187088 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	W22LR0WP2IHZNBB6K528	07/19/2024	07/18/2025	0	15,404,072	92.91	0	1,301,645	(582,125)	719,520	455,893	0	0	(582,125)	0	0		
187091 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	07/19/2024	07/18/2025	150	82,676,732	5505	0	6,614,139	(2,968,118)	3,646,021	2,748,855	0	0	(2,968,118)	0	0		
187104 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	07/19/2024	07/18/2025	0	878,199	267.5568	0	25,204	(11,272)	13,932	10,399	0	0	(11,272)	0	0		
187109 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	07/19/2024	07/18/2025	95	52,523,205	5505	0	4,201,856	(1,885,598)	2,316,259	2,395,407	0	0	(1,885,598)	0	0		
187120 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	07/19/2024	07/18/2025	92	50,567,168	5505	0	4,045,373	(1,815,375)	2,229,998	2,788,814	0	0	(1,815,375)	0	0		
187131 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	07/19/2024	07/18/2025	91	50,095,500	5505	0	4,007,640	(1,798,442)	2,209,198	3,116,680	0	0	(1,798,442)	0	0		
187134 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	07/19/2024	07/18/2025	0	19,457,970	5505	0	899,439	(402,249)	497,190	446,403	0	0	(402,249)	0	0		
187135 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	07/19/2024	07/18/2025	95	52,297,500	5505	0	4,183,800	(1,877,495)	2,306,305	3,932,345	0	0	(1,877,495)	0	0		
187141 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZ7FF32TWEFA76	07/19/2024	07/18/2025	0	10,014,011	5505	0	281,394	(125,846)	155,548	590,367	0	0	(125,846)	0	0		
187144 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	07/19/2024	07/18/2025	1,757	38,947,939	221.73	0	3,103,820	(1,392,850)	1,710,970	2,107,436	0	0	(1,392,850)	0	0		
187156 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	BFMBT61CT2L1QCEMIK50	07/19/2024	07/18/2025	0	6,400,300	533.56	0	392,978	(175,749)	217,230	358,978	0	0	(175,749)	0	0		
187157 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	07/19/2024	07/18/2025	285	2,270,091	79.53	0	144,146	(64,686)	79,460	21,882	0	0	(64,686)	0	0		

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Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
187158 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A. B4TYDEB6KMZ0031MB27	.07/19/2024	.07/18/2025	0	44,005,564	1488.34	0	2,965,535	(1,326,253)	1,639,282	.....	.....3,087,027	0	0	(1,326,253)	0	0	.....	.....
187161 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5I70UK5573	.07/19/2024	.07/18/2025	0	101,666	267.5568	0	2,918	(1,305)	1,613	.....	.....1,206	0	0	(1,305)	0	0	.....	.....
187166 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.07/19/2024	.01/20/2026	3	1,651,500	5505	0	170,106	(50,379)	119,727	.....	.....26,524	0	0	(50,379)	0	0	.....	.....
187174 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.07/19/2024	.07/18/2025	196	107,898,000	5505	0	8,631,840	(3,873,568)	4,758,272	.....	.....1,702,881	0	0	(3,873,568)	0	0	.....	.....
187192 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.07/19/2024	.07/18/2025	79	43,489,500	5505	0	3,479,160	(1,561,285)	1,917,875	.....	.....1,175,195	0	0	(1,561,285)	0	0	.....	.....
187653 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZWZ7FF32TWEFA76	.08/06/2024	.08/06/2025	0	13,653,767	5240.03	0	368,652	(147,258)	221,394	.....	.....678,560	0	0	(147,258)	0	0	.....	.....
187656 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZWZ7FF32TWEFA76	.08/06/2024	.08/06/2029	0	50,386,964	5240.03	0	2,610,045	(1,051,169)	1,558,876	.....	.....4,012,183	0	0	(1,051,169)	0	0	.....	.....
187658 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZWZ7FF32TWEFA76	.08/06/2024	.08/06/2031	0	95,861,892	5240.03	0	5,090,266	(2,050,053)	3,040,214	.....	.....7,858,329	0	0	(2,050,053)	0	0	.....	.....
187688 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/06/2024	.08/06/2025	2,146	47,368,201	220.7	0	3,790,315	(1,520,291)	2,270,024	.....	.....2,588,896	0	0	(1,520,291)	0	0	.....	.....
187698 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L10CEMIK50	.08/06/2024	.08/06/2025	0	7,383,782	538.91	0	427,521	(170,773)	256,748	.....	.....364,947	0	0	(170,773)	0	0	.....	.....
187702 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJFXT09	.08/06/2024	.08/06/2025	0	54,891,289	1434.1	0	3,485,597	(1,392,318)	2,093,279	.....	.....5,928,859	0	0	(1,392,318)	0	0	.....	.....
187705 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/06/2024	.08/06/2025	275	2,074,045	75.45	0	150,365	(60,311)	90,054	.....	.....65,553	0	0	(60,311)	0	0	.....	.....
187706 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5I70UK5573	.08/06/2024	.08/06/2025	0	100,521	271.6458	0	2,905	(1,160)	1,745	.....	.....800	0	0	(1,160)	0	0	.....	.....
187713 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/06/2024	.02/06/2026	5	2,620,015	5240.03	0	279,555	(74,480)	205,075	.....	.....44,160	0	0	(74,480)	0	0	.....	.....
187718 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ... 02RNE81BXP4ROT8BP41	.08/06/2024	.08/06/2025	0	18,740,199	94.84	0	1,630,397	(651,261)	979,137	.....	.....489,298	0	0	(651,261)	0	0	.....	.....
187728 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/06/2024	.08/06/2025	220	115,310,214	5240.03	0	9,974,276	(4,000,671)	5,973,605	.....	.....4,201,684	0	0	(4,000,671)	0	0	.....	.....
187738 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5I70UK5573	.08/06/2024	.08/06/2025	0	2,571,268	271.6458	0	74,310	(29,683)	44,627	.....	.....20,448	0	0	(29,683)	0	0	.....	.....
187742 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/06/2024	.08/06/2025	101	52,917,281	5240.03	0	4,577,319	(1,835,957)	2,741,361	.....	.....2,660,675	0	0	(1,835,957)	0	0	.....	.....
187750 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/06/2024	.08/06/2025	99	51,876,297	5240.03	0	4,487,274	(1,799,841)	2,687,433	.....	.....3,574,010	0	0	(1,799,841)	0	0	.....	.....
187756 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJISFPUBM8PRO8K5P83	.08/06/2024	.08/06/2025	0	113,273,266	5240.03	0	10,333,920	(4,127,874)	6,206,046	.....	.....1,897,219	0	0	(4,127,874)	0	0	.....	.....
187760 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJISFPUBM8PRO8K5P83	.08/06/2024	.08/06/2025	0	61,997,513	5240.03	0	5,656,033	(2,259,297)	3,396,736	.....	.....1,757,746	0	0	(2,259,297)	0	0	.....	.....
187769 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJFXT09	.08/06/2024	.08/06/2025	0	53,870,958	5240.03	0	5,144,677	(2,055,036)	3,089,640	.....	.....3,252,248	0	0	(2,055,036)	0	0	.....	.....
187782 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA ES71P3U8RH1GCT1XBU11	.08/06/2024	.08/06/2025	0	54,963,870	5240.03	0	5,001,712	(1,997,929)	3,003,783	.....	.....4,646,551	0	0	(1,997,929)	0	0	.....	.....
187784 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA ES71P3U8RH1GCT1XBU11	.08/06/2024	.08/06/2025	0	24,037,695	5240.03	0	1,348,515	(538,663)	809,852		591,453	0	0	(538,663)	0	0		

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Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
187845 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJISFPUBMPRO8K5P83	.08/09/2024	.08/08/2025	0	1,175,627	5206.04	0	82,648	(32,141)	50,507		157,434	0	0	(32,141)	0	0		
188217 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGGFU57RNE97	.08/20/2024	.08/20/2025	0	11,425,022	5597.12	0	342,751	(123,692)	219,058		593,837	0	0	(123,692)	0	0		
188219 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJISFPUBMPRO8K5P83	.08/20/2024	.08/20/2029	0	52,218,175	5597.12	0	2,642,240	(962,789)	1,679,451		3,289,068	0	0	(962,789)	0	0		
188221 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJISFPUBMPRO8K5P83	.08/20/2024	.08/20/2031	0	73,254,695	5597.12	0	3,787,268	(1,380,018)	2,407,250		4,703,345	0	0	(1,380,018)	0	0		
188223 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/20/2024	02/20/2026	3	1,679,136	5597.12	0	163,380	(39,354)	124,026		26,037	0	0	(39,354)	0	0		
188229 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/20/2024	.08/20/2025	162	90,673,344	5597.12	0	6,954,660	(2,522,020)	4,432,640		1,371,059	0	0	(2,522,020)	0	0		
188237 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/20/2024	.08/20/2025	90	50,374,080	5597.12	0	3,863,700	(1,401,122)	2,462,578		1,296,674	0	0	(1,401,122)	0	0		
188249 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/20/2024	.08/20/2025	125	69,964,000	5597.12	0	5,366,250	(1,946,003)	3,420,247		4,990,274	0	0	(1,946,003)	0	0		
188253 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/20/2024	.08/20/2025	148	82,848,570	5597.12	0	6,354,499	(2,293,221)	4,061,277		2,703,377	0	0	(2,293,221)	0	0		
188263 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/20/2024	.08/20/2025	84	47,190,438	5597.12	0	3,619,514	(1,312,571)	2,306,943		2,154,758	0	0	(1,312,571)	0	0		
188275 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/20/2024	.08/20/2025	125	70,152,959	5597.12	0	5,380,743	(1,951,259)	3,429,485		3,959,499	0	0	(1,951,259)	0	0		
188292 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG BFM8T61CT2L10CEMIK50	.08/20/2024	.08/20/2025	0	32,488,180	232.46	0	2,678,877	(966,757)	1,712,120		1,389,133	0	0	(966,757)	0	0		
188299 Call Options - S&P U.S. Retiree	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG BFM8T61CT2L10CEMIK50	.08/20/2024	.08/20/2025	0	5,833,128	544.83	0	337,738	(121,883)	215,855		244,684	0	0	(121,883)	0	0		
Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUJISFPUBMPRO8K5P83	.08/20/2024	.08/20/2025	0	40,428,115	1480.78	0	2,522,714	(910,401)	1,612,313		3,114,645	0	0	(910,401)	0	0		
188302 Call Options - S&P Equal Weight	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG BFM8T61CT2L10CEMIK50	.08/20/2024	.08/20/2025	0	14,816,346	96.35	0	1,096,410	(395,674)	700,736		364,821	0	0	(395,674)	0	0		
Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.08/20/2024	.08/20/2025	0	76,410	274.8627	0	2,208	(797)	1,411		441	0	0	(797)	0	0		
188303 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG BFM8T61CT2L10CEMIK50	.08/20/2024	.08/20/2025	0	2,541,627	81.06	0	162,664	(58,702)	103,962		43,542	0	0	(58,702)	0	0		
188304 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.08/20/2024	.08/20/2025	0	1,559,116	274.8627	0	45,058	(16,261)	28,798		8,984	0	0	(16,261)	0	0		
188311 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.08/20/2024	.08/20/2025	0	20,138,302	5597.12	0	948,721	(342,376)	606,345		449,842	0	0	(342,376)	0	0		
188328 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2024	.09/05/2025	304	2,422,651	79.8	0	183,976	(57,588)	126,388		43,013	0	0	(57,588)	0	0		
188330 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2024	03/06/2026	3	1,622,526	5408.42	0	164,037	(34,137)	129,900		26,311	0	0	(34,137)	0	0		
188736 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2024	.09/05/2025	85	45,971,570	5408.42	0	3,760,485	(1,177,105)	2,583,380		1,233,019	0	0	(1,177,105)	0	0		
188745 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2024	.09/05/2025	186	100,399,637	5408.42	0	8,212,713	(2,570,739)	5,641,975		3,375,859	0	0	(2,570,739)	0	0		
188751 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2024	.09/05/2025	90	48,482,159	5408.42	0	3,965,852	(1,241,388)	2,724,463		2,215,402	0	0	(1,241,388)	0	0		

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Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
188792 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2024	.09/05/2025	 100	 54,230,498	 5408.42	 0	 4,436,067	 (1,388,575)	 3,047,492		 3,034,920	 0	 0	 (1,388,575)	 0	 0	.....	.....
188805 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC 4PQUHN3JPFGNF3BB653	.09/06/2024	.09/05/2025	 0	 12,958,226	 5408.42	 0	 382,268	 (118,928)	 263,340		 616,486	 0	 0	 (118,928)	 0	 0	.....	.....
188807 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGQFUS7RNE97	.09/06/2024	.09/05/2025	 0	 24,045,861	 5408.42	 0	 529,020	 (164,584)	 364,436		 615,563	 0	 0	 (164,584)	 0	 0	.....	.....
188815 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWEFA76	.09/06/2024	.09/06/2029	 0	 39,950,611	 5408.42	 0	 1,973,560	 (627,214)	 1,346,347		 2,914,877	 0	 0	 (627,214)	 0	 0	.....	.....
188817 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWEFA76	.09/06/2024	.09/05/2031	 0	 96,706,819	 5408.42	 0	 4,806,329	 (1,527,491)	 3,278,838		 7,241,790	 0	 0	 (1,527,491)	 0	 0	.....	.....
188826 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCCEMIK50	.09/06/2024	.09/05/2025	 0	 8,607,761	 548.77	 0	 476,870	 (148,360)	 328,510		 329,522	 0	 0	 (148,360)	 0	 0	.....	.....
188827 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	.09/06/2024	.09/05/2025	 0	 50,791,159	 1455.61	 0	 3,133,815	 (974,965)	 2,158,850		 4,865,163	 0	 0	 (974,965)	 0	 0	.....	.....
188828 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.09/06/2024	.09/05/2025	 0	 38,577,710	 230.63	 0	 3,044,013	 (947,026)	 2,096,986		 1,675,822	 0	 0	 (947,026)	 0	 0	.....	.....
188829 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.09/06/2024	.09/05/2025	 0	 162,441	 277.1623	 0	 4,695	 (1,461)	 3,234		 771	 0	 0	 (1,461)	 0	 0	.....	.....
188837 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ... 02RNE81BX4R0TD8PU41	.09/06/2024	.09/05/2025	 0	 18,603,314	 99.4	 0	 1,482,684	 (461,280)	 1,021,405		 338,130	 0	 0	 (461,280)	 0	 0	.....	.....
188848 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.09/06/2024	.09/05/2025	 0	 3,015,303	 277.1623	 0	 87,142	 (27,111)	 60,031		 14,292	 0	 0	 (27,111)	 0	 0	.....	.....
188851 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMVMCFXT09	.09/06/2024	.09/05/2025	 0	 103,280,866	 5408.42	 0	 8,897,647	 (2,768,157)	 6,129,490		 1,637,135	 0	 0	 (2,768,157)	 0	 0	.....	.....
188855 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	.09/06/2024	.09/05/2025	 0	 56,472,783	 5408.42	 0	 4,879,248	 (1,517,988)	 3,361,260		 3,643,016	 0	 0	 (1,517,988)	 0	 0	.....	.....
188857 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	.09/06/2024	.09/05/2025	 0	 81,588,840	 5408.42	 0	 7,049,276	 (2,193,108)	 4,856,168		 6,497,805	 0	 0	 (2,193,108)	 0	 0	.....	.....
189082 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.09/13/2024	.09/12/2025	 0	 701,130	 5553.94	 0	 39,781	 (11,603)	 28,178		 54,182	 0	 0	 (11,603)	 0	 0	.....	.....
189363 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.09/20/2024	.09/19/2025	 0	 43,928,755	 5702.55	 0	 3,497,472	 (952,090)	 2,545,383		 2,265,364	 0	 0	 (952,090)	 0	 0	.....	.....
189371 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCCEMIK50	.09/20/2024	.09/19/2025	 0	 52,237,042	 5702.55	 0	 4,160,680	 (1,132,630)	 3,028,051		 3,039,928	 0	 0	 (1,132,630)	 0	 0	.....	.....
189374 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCCEMIK50	.09/20/2024	.09/19/2025	 0	 51,158,461	 5702.55	 0	 4,092,677	 (1,114,118)	 2,978,559		 3,477,491	 0	 0	 (1,114,118)	 0	 0	.....	.....
189383 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	.09/20/2024	.09/19/2025	 0	 23,305,878	 5702.55	 0	 1,083,723	 (295,014)	 788,710		 438,462	 0	 0	 (295,014)	 0	 0	.....	.....
189388 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGQFUS7RNE97	.09/20/2024	.09/19/2025	 0	 11,787,450	 5702.55	 0	 330,049	 (89,847)	 240,202		 379,670	 0	 0	 (89,847)	 0	 0	.....	.....
189390 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	.09/20/2024	.09/20/2029	 0	 56,564,285	 5702.55	 0	 2,703,773	 (755,575)	 1,948,198		 3,377,736	 0	 0	 (755,575)	 0	 0	.....	.....
189395 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	.09/20/2024	.09/19/2031	 0	 77,291,126	 5702.55	 0	 3,671,329	 (1,025,960)	 2,645,368		 5,073,003	 0	 0	 (1,025,960)	 0	 0	.....	.....
189400 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/20/2024	.09/19/2025	 1,399	 33,878,087	 242.21	 0	 2,611,386	 (716,142)	 1,895,244		 1,043,058	 0	 0	 (716,142)	 0	 0	.....	.....
189422 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/20/2024	.09/19/2025	 192	 1,578,513	 82.26	 0	 94,795	 (25,996)	 68,799		 19,164	 0	 0	 (25,996)	 0	 0		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
189432 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/20/2024	.03/20/2026	 3	 1,710,765	 5702.55	 0	 161,154	 (29,382)	 131,772		 25,563	 0	 0	 (29,382)	 0	 0	.....	.....
189436 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/20/2024	.09/19/2025	 154	 87,819,270	 5702.55	 0	 6,542,536	 (1,794,213)	 4,748,323		 1,260,763	 0	 0	 (1,794,213)	 0	 0	.....	.....
189467 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	.09/20/2024	.09/19/2025	 0	 7,462,432	 553.92	 0	 400,733	 (109,088)	 291,644		 246,226	 0	 0	 (109,088)	 0	 0	.....	.....
189469 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.09/20/2024	.09/19/2025	 0	 82,526	 279.6027	 0	 2,393	 (652)	 1,742		 312	 0	 0	 (652)	 0	 0	.....	.....
189471 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.09/20/2024	.09/19/2025	 0	 17,458,846	 102.27	 0	 1,128,201	 (307,121)	 821,080		 223,568	 0	 0	 (307,121)	 0	 0	.....	.....
189480 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.09/20/2024	.09/19/2025	 0	 2,731,652	 279.6027	 0	 79,218	 (21,565)	 57,653		 10,306	 0	 0	 (21,565)	 0	 0	.....	.....
189484 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJSFPU8MPRO8K5P83	.09/20/2024	.09/19/2025	 0	 129,994,882	 5702.55	 0	 10,360,592	 (2,820,383)	 7,540,209		 3,608,829	 0	 0	 (2,820,383)	 0	 0	.....	.....
189492 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJFXT09	.09/20/2024	.09/19/2025	 0	 42,887,451	 1499.51	 0	 2,624,729	 (714,510)	 1,910,220		 3,190,612	 0	 0	 (714,510)	 0	 0	.....	.....
189495 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJSFPU8MPRO8K5P83	.09/20/2024	.09/19/2025	 0	 43,607,605	 5702.55	 0	 3,471,601	 (945,047)	 2,526,554		 1,832,781	 0	 0	 (945,047)	 0	 0	.....	.....
189890 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.10/04/2024	.10/06/2025	 0	 23,568,020	 5751.07	 0	 1,100,824	 (254,736)	 846,088		 466,665	 0	 0	 (254,736)	 0	 0	.....	.....
189896 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC 4PQUH3JPF6FNF3B8653	.10/04/2024	.10/06/2025	 0	 13,925,263	 5751.07	 0	 362,057	 (83,782)	 278,275		 418,891	 0	 0	 (83,782)	 0	 0	.....	.....
189898 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZWZ7FF32TWEFA76	.10/04/2024	.10/05/2029	 0	 61,018,526	 5751.07	 0	 2,968,551	 (715,706)	 2,252,846		 3,374,030	 0	 0	 (715,706)	 0	 0	.....	.....
189899 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRJGQFU57RNE97	.10/04/2024	.10/06/2031	 0	 70,343,117	 5751.07	 0	 3,302,609	 (796,246)	 2,506,364		 4,440,073	 0	 0	 (796,246)	 0	 0	.....	.....
189909 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.10/04/2024	.10/06/2025	 172	 98,918,404	 5751.07	 0	 7,923,352	 (1,850,233)	 6,073,119		 1,388,953	 0	 0	 (1,850,233)	 0	 0	.....	.....
189913 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.10/04/2024	.10/06/2025	 76	 43,708,132	 5751.07	 0	 3,501,016	 (817,545)	 2,683,471		 913,992	 0	 0	 (817,545)	 0	 0	.....	.....
189937 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.10/04/2024	.10/06/2025	 73	 41,982,811	 5751.07	 0	 3,362,818	 (785,273)	 2,577,545		 1,100,903	 0	 0	 (785,273)	 0	 0	.....	.....
189946 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	.10/04/2024	.10/06/2025	 0	 8,559,766	 550.72	 0	 481,059	 (111,319)	 369,739		 334,006	 0	 0	 (111,319)	 0	 0	.....	.....
189948 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.10/04/2024	.10/06/2025	 135	 77,509,701	 5751.07	 0	 6,208,518	 (1,449,791)	 4,758,726		 2,302,545	 0	 0	 (1,449,791)	 0	 0	.....	.....
189950 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A. B4TYDEB66KMZ0031MB27	.10/04/2024	.10/06/2025	 0	 46,862,736	 1509.28	 0	 2,886,745	 (668,007)	 2,218,738		 3,239,458	 0	 0	 (668,007)	 0	 0	.....	.....
189960 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.10/04/2024	.10/06/2025	 0	 36,383	 275.3987	 0	 1,055	 (244)	 811		 245	 0	 0	 (244)	 0	 0	.....	.....
189962 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.10/04/2024	.10/06/2025	 71	 41,108,648	 5751.07	 0	 3,292,798	 (768,923)	 2,523,875		 1,720,962	 0	 0	 (768,923)	 0	 0	.....	.....
189990 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.10/04/2024	.10/06/2025	 0	 40,664,238	 245	 0	 3,304,278	 (764,626)	 2,539,652		 1,192,983	 0	 0	 (764,626)	 0	 0		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amorti-zation)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
189995 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	10/04/2024	10/06/2025	0	18,608,324	99.36	0	1,432,841	(331,567)	1,101,274		353,552	0	0	(331,567)	0	0		
190004 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPFU8MPR08K5P83	10/04/2024	10/06/2025	0	1,868,330	82.55	0	138,295	(32,002)	106,293		24,947	0	0	(32,002)	0	0		
190010 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	10/04/2024	04/06/2026	3	1,725,321	5751.07	0	174,084	(27,101)	146,983		25,270	0	0	(27,101)	0	0		
190018 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5I70UK5573	10/04/2024	10/06/2025	0	3,413,278	275.3987	0	98,985	(22,906)	76,079		22,838	0	0	(22,906)	0	0		
190020 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ... 02RNE81BXP4ROT8PU41	10/04/2024	10/06/2025	0	52,633,825	5751.07	0	4,537,036	(1,049,893)	3,487,143		2,958,750	0	0	(1,049,893)	0	0		
190024 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ... 02RNE81BXP4ROT8PU41	10/04/2024	10/06/2025	0	115,205,123	5751.07	0	9,930,682	(2,298,009)	7,632,673		7,445,934	0	0	(2,298,009)	0	0		
190201 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC ROYAL BANK OF CANADA ES71P3U3RH1GCT1XBU11	10/11/2024	10/10/2025	0	1,338,213	5790.12	0	66,174	(14,009)	52,165		62,518	0	0	(14,009)	0	0		
190424 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	10/18/2024	10/20/2025	0	16,632,878	5864.67	0	785,072	(151,391)	633,681		258,309	0	0	(151,391)	0	0		
190427 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPFU8MPR08K5P83	10/18/2024	10/19/2029	0	12,329,315	5864.67	0	348,920	(67,285)	281,635		284,833	0	0	(67,285)	0	0		
190431 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPFU8MPR08K5P83	10/18/2024	10/20/2031	0	77,022,938	5864.67	0	3,743,315	(758,919)	2,984,396		3,421,806	0	0	(758,919)	0	0		
190433 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPFU8MPR08K5P83	10/18/2024	10/20/2031	0	69,440,286	5864.67	0	3,242,861	(657,457)	2,585,405		2,824,864	0	0	(657,457)	0	0		
190435 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	10/18/2024	10/20/2025	114	931,139	81.94	0	61,250	(11,947)	49,303		10,659	0	0	(11,947)	0	0		
190448 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	10/18/2024	04/20/2026	3	1,759,401	5864.67	0	174,708	(22,718)	151,990		24,602	0	0	(22,718)	0	0		
190463 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	10/18/2024	10/20/2025	146	85,624,182	5864.67	0	6,670,156	(1,301,047)	5,369,109		1,135,347	0	0	(1,301,047)	0	0		
190467 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	10/18/2024	10/20/2025	72	42,225,624	5864.67	0	3,289,392	(641,612)	2,647,780		807,184	0	0	(641,612)	0	0		
190478 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	10/18/2024	10/20/2025	76	44,510,089	5864.67	0	3,467,353	(676,324)	2,791,028		1,136,729	0	0	(676,324)	0	0		
190485 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCCEMIK50	10/18/2024	10/20/2025	0	8,315,026	555.16	0	469,799	(90,595)	379,204		288,435	0	0	(90,595)	0	0		
190489 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	10/18/2024	10/20/2025	0	39,710,424	1533.36	0	2,540,320	(489,869)	2,050,451		2,350,024	0	0	(489,869)	0	0		
190493 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5I70UK5573	10/18/2024	10/20/2025	0	38,677	276.8968	0	1,122	(216)	905		234	0	0	(216)	0	0		
190498 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	10/18/2024	10/20/2025	73	42,891,147	5864.67	0	3,341,236	(651,725)	2,689,512		1,270,917	0	0	(651,725)	0	0		
190519 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5I70UK5573	10/18/2024	10/20/2025	0	32,157,531	251.27	0	2,640,134	(509,117)	2,131,017		761,165	0	0	(509,117)	0	0		
190533 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ... 02RNE81BXP4ROT8PU41	10/18/2024	10/20/2025	0	18,217,777	101.94	0	1,351,759	(260,670)	1,091,090		281,712	0	0	(260,670)	0	0		
190541 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5I70UK5573	10/18/2024	10/20/2025	0	2,031,965	276.8968	0	58,927	(11,363)	47,564		12,219	0	0	(11,363)	0	0		

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
190542 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	10/18/2024	10/20/2025	79	46,330,893	5864.67	0	3,609,194	(703,991)	2,905,203		2,659,776	0	0	(703,991)	0	0		
190544 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ... 02RNE81BXP4ROTDBPU41	10/18/2024	10/20/2025	0	51,769,658	5864.67	0	4,291,705	(827,601)	3,464,103		3,106,602	0	0	(827,601)	0	0		
190547 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	10/18/2024	10/20/2025	112	65,684,304	5864.67	0	5,116,832	(998,063)	4,118,769		3,566,229	0	0	(998,063)	0	0		
190550 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	10/18/2024	10/20/2025	75	44,116,804	5864.67	0	3,436,716	(670,348)	2,766,367		1,811,050	0	0	(670,348)	0	0		
191073 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RH1GCT1XB11	11/06/2024	11/06/2025	0	24,122,447	5929.04	0	1,104,808	(163,900)	940,908		338,148	0	0	(163,900)	0	0		
191090 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGQFU57RNE97	11/06/2024	11/06/2025	0	16,863,782	5929.04	0	450,263	(66,797)	383,466		247,858	0	0	(66,797)	0	0		
191093 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGQFU57RNE97	11/06/2024	11/06/2029	0	84,715,570	5929.04	0	4,039,238	(608,652)	3,430,586		4,297,618	0	0	(608,652)	0	0		
191095 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGQFU57RNE97	11/06/2024	11/06/2031	0	86,158,985	5929.04	0	3,978,822	(599,549)	3,379,273		4,521,074	0	0	(599,549)	0	0		
191103 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	11/06/2024	05/06/2026	1	592,904	5929.04	0	58,757	(5,822)	52,935		8,072	0	0	(5,822)	0	0		
191110 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	11/06/2024	11/06/2025	190	112,651,760	5929.04	0	8,674,260	(1,286,841)	7,387,419		1,428,141	0	0	(1,286,841)	0	0		
191121 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	11/06/2024	11/06/2025	83	49,211,032	5929.04	0	3,789,282	(562,146)	3,227,136		870,799	0	0	(562,146)	0	0		
191127 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ... 02RNE81BXP4ROTDBPU41	11/06/2024	11/06/2025	0	20,898,552	97.08	0	1,579,931	(234,385)	1,345,546		512,472	0	0	(234,385)	0	0		
191141 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	11/06/2024	11/06/2025	65	38,770,585	5929.04	0	2,985,361	(442,883)	2,542,478		887,476	0	0	(442,883)	0	0		
191150 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	11/06/2024	11/06/2025	0	2,909,915	271.3706	0	84,097	(12,476)	71,621		32,677	0	0	(12,476)	0	0		
191154 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	11/06/2024	11/06/2025	0	67,398,386	5929.04	0	5,546,887	(822,890)	4,723,997		3,491,677	0	0	(822,890)	0	0		
191158 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	11/06/2024	11/06/2025	0	7,952,576	555.67	0	454,092	(67,365)	386,727		285,532	0	0	(67,365)	0	0		
191160 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	11/06/2024	11/06/2025	0	55,214,868	5929.04	0	4,544,184	(674,137)	3,870,047		2,963,287	0	0	(674,137)	0	0		
191162 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A. B4TYDEB6QKMZ0031MB27	11/06/2024	11/06/2025	0	47,267,087	1552.53	0	3,086,541	(457,893)	2,628,647		2,508,458	0	0	(457,893)	0	0		
191164 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	11/06/2024	11/06/2025	117	69,202,213	5929.04	0	5,328,616	(790,509)	4,538,107		1,843,404	0	0	(790,509)	0	0		
191165 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	11/06/2024	11/06/2025	0	202,018	271.3706	0	5,838	(866)	4,972		2,298	0	0	(866)	0	0		
191166 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	11/06/2024	11/06/2025	0	61,037,379	5929.04	0	5,023,376	(745,226)	4,278,150		3,434,093	0	0	(745,226)	0	0		
191173 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	11/06/2024	11/06/2025	1,531	37,621,731	245.7	0	3,021,069	(448,181)	2,572,889		1,045,645	0	0	(448,181)	0	0		
191184 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	11/06/2024	11/06/2025	75	44,516,833	5929.04	0	3,427,826	(508,524)	2,919,302		1,589,104	0	0	(508,524)	0	0		
191190 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	11/06/2024	11/06/2025	225	1,779,819	79.07	0	117,724	(17,465)	100,260		42,401	0	0	(17,465)	0	0		
191199 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	11/06/2024	11/06/2025	71	42,244,410	5929.04	0	3,252,848	(482,565)	2,770,282		1,906,520	0	0	(482,565)	0	0		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
191421 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5I70UK5573	11/15/2024	11/14/2025	0	1,184,716	5964.73	0	48,374	(5,762)	42,612	35,968	0	0	(5,762)	0	0		
191549 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG	BFBMT61CT2L1QCEMIK50	11/20/2024	11/20/2025	0	7,535,485	556.29	0	434,044	(47,697)	386,347	275,995	0	0	(47,697)	0	0		
191553 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6GKMZ0031MB27	11/20/2024	11/20/2025	0	40,697,206	1554.67	0	2,676,518	(294,123)	2,382,395	2,184,139	0	0	(294,123)	0	0		
191557 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5I70UK5573	11/20/2024	11/20/2025	0	626,830	269.8502	0	18,115	(1,991)	16,125	8,510	0	0	(1,991)	0	0		
191559 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	1,408	34,433,836	244.62	0	2,771,655	(304,577)	2,467,078	982,748	0	0	(304,577)	0	0		
191570 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHIGC71XBU11	11/20/2024	11/20/2025	0	21,003,296	5917.11	0	1,010,259	(111,017)	899,241	290,653	0	0	(111,017)	0	0		
191592 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A.	E570DZIVZF32TWEFA76	11/20/2024	11/20/2025	0	13,825,747	5917.11	0	366,382	(40,262)	326,121	351,843	0	0	(40,262)	0	0		
191598 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHIGC71XBU11	11/20/2024	11/20/2029	0	41,646,461	5917.11	0	1,957,384	(219,870)	1,737,513	1,803,916	0	0	(219,870)	0	0		
191599 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	1,666	16,476,550	98.91	0	1,132,752	(124,478)	1,008,274	294,316	0	0	(124,478)	0	0		
191601 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	ROMUWSPFUM8MPR08K5P83	11/20/2024	11/20/2031	0	63,627,615	5917.11	0	2,955,503	(331,988)	2,623,515	2,938,873	0	0	(331,988)	0	0		
191616 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	192	1,481,982	77.24	0	92,480	(10,163)	82,317	49,114	0	0	(10,163)	0	0		
191630 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	74	43,891,939	5917.11	0	3,467,451	(381,039)	3,086,412	1,239,804	0	0	(381,039)	0	0		
191640 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	05/20/2026	1	591,711	5917.11	0	59,881	(4,395)	55,486	8,117	0	0	(4,395)	0	0		
191647 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5I70UK5573	11/20/2024	11/20/2025	0	2,804,675	269.8502	0	81,055	(8,907)	72,148	37,405	0	0	(8,907)	0	0		
191650 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	72	42,603,192	5917.11	0	3,365,640	(369,851)	2,995,789	778,291	0	0	(369,851)	0	0		
191654 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	78	45,978,312	5917.11	0	3,632,273	(399,151)	3,233,123	1,750,709	0	0	(399,151)	0	0		
191658 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	72	42,874,432	5917.11	0	3,387,068	(372,205)	3,014,863	1,060,455	0	0	(372,205)	0	0		
191659 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	154	91,123,494	5917.11	0	7,198,730	(791,069)	6,407,661	5,193,879	0	0	(791,069)	0	0		
191666 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	121	71,550,641	5917.11	0	5,652,480	(621,152)	5,031,329	3,683,422	0	0	(621,152)	0	0		
191675 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	154	91,123,494	5917.11	0	7,198,730	(791,069)	6,407,661	1,166,562	0	0	(791,069)	0	0		
192085 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2024	12/05/2025	147	89,526,969	6090.27	0	6,723,486	(409,742)	6,313,744	1,014,807	0	0	(409,742)	0	0		
192104 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2024	12/05/2025	71	43,240,917	6090.27	0	3,247,398	(197,902)	3,049,496	696,480	0	0	(197,902)	0	0		
192130 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2024	12/05/2025	102	62,120,754	6090.27	0	4,665,276	(284,310)	4,380,966	2,733,190	0	0	(284,310)	0	0		
192138 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2024	12/05/2025	92	56,030,484	6090.27	0	4,207,896	(256,437)	3,951,459	2,579,274	0	0	(256,437)	0	0		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

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Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
192144 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	BFM8T61CT2L1QCMIK50	12/06/2024	12/05/2025	0	8,382,113	562.15	0	471,913	(28,759)		443,154	0	0	(28,759)	0	0		
192149 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGQFU57RNE97	12/06/2024	12/05/2025	0	45,879,702	1588.91	0	2,995,944	(182,578)		2,813,366	0	0	(182,578)	0	0		
192154 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2024	12/05/2025	1,616	16,105,039	99.69	0	1,106,626	(67,440)		1,039,186	0	0	(67,440)	0	0		
192155 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	12/06/2024	12/05/2025	0	378,402	273.8722	0	10,936	(666)		10,269	0	0	(666)	0	0		
192203 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2024	12/05/2025	1,369	33,256,721	242.95	0	2,591,273	(157,917)		2,433,356	0	0	(157,917)	0	0		
192205 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2024	12/05/2025	84	674,878	80.08	0	39,947	(2,434)		37,512	0	0	(2,434)	0	0		
192207 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHHG71XBUI1	12/06/2024	12/05/2025	0	17,696,721	6090.27	0	796,352	(48,531)		747,821	0	0	(48,531)	0	0		
192211 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC BNP PARIBAS LONDON	G5GSEF7VJP5170UK5573	12/06/2024	12/05/2025	0	2,555,653	273.8722	0	73,858	(4,501)		69,357	0	0	(4,501)	0	0		
192217 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index		ROMUWSPU8MIPR08K5P83	12/06/2024	06/05/2026	0	2,048,642	6090.27	0	224,572	(9,099)		215,473	0	0	(9,099)	0	0		
192227 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2024	12/05/2025	76	46,495,192	6090.27	0	3,491,794	(212,796)		3,278,998	0	0	(212,796)	0	0		
192228 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGQFU57RNE97	12/06/2024	12/05/2025	0	12,979,975	6090.27	0	394,591	(24,047)		370,544	0	0	(24,047)	0	0		
192229 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	W22LROWP21HZNB6K528	12/06/2024	12/06/2029	0	44,671,415	6090.27	0	2,028,082	(138,910)		1,889,173	0	0	(138,910)	0	0		
192232 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZWI7FF32TWEFA76	12/06/2024	12/05/2031	0	58,222,283	6090.27	0	2,695,692	(184,636)		2,511,055	0	0	(184,636)	0	0		
192238 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2024	12/05/2025	78	47,486,140	6090.27	0	3,566,215	(217,332)		3,348,883	0	0	(217,332)	0	0		
192244 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2024	12/05/2025	71	43,169,356	6090.27	0	3,242,024	(197,575)		3,044,449	0	0	(197,575)	0	0		
192250 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2024	12/05/2025	65	39,404,656	6090.27	0	2,959,294	(180,345)		2,778,950	0	0	(180,345)	0	0		
192498 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	12/13/2024	12/12/2025	0	1,830,234	6071.43	0	86,145	(3,579)		44,046	0	0	(3,579)	0	0		
192946 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2024	12/19/2025	162	96,079,770	5930.85	0	7,792,038	(172,677)		7,619,361	0	0	(172,677)	0	0		
192954 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	BFM8T61CT2L1QCMIK50	12/20/2024	12/19/2025	0	8,235,623	548.35	0	467,783	(10,366)		417,868	0	0	(10,366)	0	0		
192956 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6GKMZ0031MB27	12/20/2024	12/19/2025	0	43,286,590	1552.08	0	2,817,957	(62,448)		2,755,509	0	0	(62,448)	0	0		
192957 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	12/20/2024	12/19/2025	0	279,695	263.3144	0	8,083	(179)		7,904	0	0	(179)	0	0		
192962 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2024	06/18/2026	2	1,186,170	5930.85	0	122,532	(1,809)		120,723	0	0	(1,809)	0	0		
192973 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2024	12/19/2025	127	75,321,795	5930.85	0	6,108,573	(135,370)		5,973,203	0	0	(135,370)	0	0		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amorti-zation)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
192978 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2024	12/19/2025	72	42,702,120	5930.85	0	3,463,128	(76,745)	3,386,383	793,629	0	0	(76,745)	0	0		
192983 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2024	12/19/2025	78	45,968,120	5930.85	0	3,728,000	(82,615)	3,645,385	1,145,382	0	0	(82,615)	0	0		
193005 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2024	12/19/2025	81	47,861,248	5930.85	0	3,881,532	(86,017)	3,795,514	1,366,913	0	0	(86,017)	0	0		
193011 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ...	02RNE81BXP4ROTDBPU41	12/20/2024	12/19/2025	0	32,545,192	242.1	0	2,580,834	(57,193)	2,523,641	1,067,939	0	0	(57,193)	0	0		
193022 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2024	12/19/2025	79	46,741,147	5930.85	0	3,790,692	(84,004)	3,706,688	1,803,685	0	0	(84,004)	0	0		
193029 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	12/20/2024	12/19/2025	0	1,985,668	263.3144	0	57,386	(1,272)	56,114	0	0	(1,272)	0	0			
193035 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2024	12/19/2025	71	42,231,033	5930.85	0	3,424,923	(75,899)	3,349,024	2,051,304	0	0	(75,899)	0	0		
193044 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	12/20/2024	12/19/2025	0	17,240,472	5930.85	0	862,024	(19,103)	842,921	248,871	0	0	(19,103)	0	0		
193047 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2024	12/19/2025	1,784	16,480,609	92.39	0	1,170,179	(25,932)	1,144,247	404,389	0	0	(25,932)	0	0		
193050 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	12/20/2024	12/19/2025	0	12,939,189	5930.85	0	348,064	(7,713)	340,351	455,359	0	0	(7,713)	0	0		
193053 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGQFU57RNE97	12/20/2024	12/20/2029	0	42,236,322	5930.85	0	1,972,436	(59,443)	1,912,993	2,004,007	0	0	(59,443)	0	0		
193054 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGQFU57RNE97	12/20/2024	12/19/2031	0	56,179,875	5930.85	0	2,634,836	(79,406)	2,555,430	2,756,858	0	0	(79,406)	0	0		
193059 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2024	12/19/2025	152	1,141,400	75.1	0	80,248	(1,778)	78,469	47,813	0	0	(1,778)	0	0		
0159999999. Subtotal - Purchased Options - Hedging Other - Call Options and Warrants										82,593,673	1,383,725,638	(633,257,827)	681,781,312	XXX	972,210,643	1,140,320	0	(752,052,698)	0	0	XXX	XXX
0219999999. Subtotal - Purchased Options - Hedging Other										82,593,673	1,383,725,638	(633,257,827)	681,781,312	XXX	972,210,643	1,140,320	0	(752,052,698)	0	0	XXX	XXX
0289999999. Subtotal - Purchased Options - Replications										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0359999999. Subtotal - Purchased Options - Income Generation										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0429999999. Subtotal - Purchased Options - Other										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0439999999. Total Purchased Options - Call Options and Warrants										82,593,673	1,383,725,638	(633,257,827)	681,781,312	XXX	972,210,643	1,140,320	0	(752,052,698)	0	0	XXX	XXX
0449999999. Total Purchased Options - Put Options										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0459999999. Total Purchased Options - Caps										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0469999999. Total Purchased Options - Floors										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0479999999. Total Purchased Options - Collars										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0489999999. Total Purchased Options - Other										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0499999999. Total Purchased Options										82,593,673	1,383,725,638	(633,257,827)	681,781,312	XXX	972,210,643	1,140,320	0	(752,052,698)	0	0	XXX	XXX
0569999999. Subtotal - Written Options - Hedging Effective Excluding Variable Annuity Guarantees Under SSAP No.108										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0639999999. Subtotal - Written Options - Hedging Effective Variable Annuity Guarantees Under SSAP No.108										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
173547 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	07/06/2023	01/06/2025	9	4,066,515	4518.35	(385,812)	0	256,733	(4,217)	0	0	0	256,733	0	0		
174186 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	07/20/2023	01/17/2025	8	3,642,196	4652.78	(323,289)	0	216,295	(10,066)	0	0	0	216,295	0	0		
174701 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	08/04/2023	02/06/2025	11	5,059,813	4599.83	(463,023)	0	306,835	(31,206)	0	0	0	306,835	0	0		
175427 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	08/18/2023	02/20/2025	9	4,035,384	4483.76	(394,659)	0	261,477	(36,662)	0	0	0	261,477	0	0		
175982 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/06/2023	03/06/2025	9	4,138,290	4598.1	(375,039)	0	250,859	(44,648)	0	0	0	250,859	0	0		

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Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
176737 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	03/20/2025	14	6,312,838	4509.17	(584,622)	0	397,707	(86,035)	0	0	0	397,707	0	0		
177509 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	04/04/2025	10	4,406,730	4406.73	(327,970)	0	219,431	(56,880)	0	0	0	219,431	0	0		
177934 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/20/2023	04/17/2025	10	4,448,890	4448.89	(365,680)	0	245,179	(72,191)	0	0	0	245,179	0	0		
178395 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHIGC71XBUI1	11/06/2023	05/06/2025	0	4,943,180	4568.64	(392,727)	0	262,443	(90,796)	0	0	0	262,443	0	0		
178990 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2023	05/20/2025	7	3,254,153	4648.79	(292,215)	0	195,385	(74,927)	0	0	0	195,385	0	0		
179470 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	06/06/2025	7	3,260,964	4658.52	(288,078)	0	192,252	(82,684)	0	0	0	192,252	0	0		
180128 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	06/20/2025	7	3,361,855	4802.65	(292,474)	0	195,172	(91,432)	0	0	0	195,172	0	0		
180490 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	W22LR0WP21HZNB6K528	01/05/2024	01/06/2025	0	39,395,081	201.11	(1,895,753)	1,864,419	(31,335)	0	0	0	0	1,864,419	0	0		
180501 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUWSPU8MPRO8K5P83	01/05/2024	01/06/2025	0	49,351,528	4841.45	(3,114,693)	3,063,210	(51,483)	0	0	0	0	3,063,210	0	0		
180509 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUWSPU8MPRO8K5P83	01/05/2024	01/06/2025	0	44,954,577	4881.37	(2,598,126)	2,555,182	(42,944)	0	0	0	0	2,555,182	0	0		
180519 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/05/2024	01/06/2025	1,835	17,440,821	95.04	(851,488)	837,452	(14,036)	0	0	0	0	837,452	0	0		
180531 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/05/2024	01/06/2025	151	1,189,662	78.98	(37,356)	36,740	(616)	0	0	0	0	36,740	0	0		
180538 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	01/05/2024	01/06/2025	0	38,526,930	5124.22	(1,208,098)	1,188,129	(19,969)	0	0	0	0	1,188,129	0	0		
180543 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/05/2024	07/03/2025	7	3,371,585	4816.55	(288,197)	190,359	(97,838)	0	0	0	0	190,359	0	0		
180547 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/05/2024	01/06/2025	143	68,493,854	4789.78	(4,579,718)	4,504,228	(75,490)	0	0	0	0	4,504,228	0	0		
180548 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	01/05/2024	01/06/2025	0	25,436,732	4824.07	(675,506)	664,340	(11,165)	0	0	0	0	664,340	0	0		
180561 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/05/2024	01/06/2025	127	60,991,242	4802.46	(3,967,734)	3,902,332	(65,402)	0	0	0	0	3,902,332	0	0		
180565 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/05/2024	01/06/2025	216	106,318,475	4922.71	(5,230,711)	5,144,490	(86,221)	0	0	0	0	5,144,490	0	0		
180576 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/05/2024	01/06/2025	97	48,173,078	4984.24	(2,022,998)	1,989,652	(33,346)	0	0	0	0	1,989,652	0	0		
180580 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/05/2024	01/06/2025	110	57,275,790	5206.89	(1,218,360)	1,198,277	(20,083)	0	0	0	0	1,198,277	0	0		
180800 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/19/2024	01/17/2025	95	47,689,965	5038.24	(2,389,496)	2,276,971	(112,525)	0	0	0	0	2,276,971	0	0		
180819 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/19/2024	01/17/2025	125	63,412,070	5075.02	(2,896,577)	2,760,173	(136,404)	0	0	0	0	2,760,173	0	0		
180829 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/19/2024	01/17/2025	95	48,411,652	5121.49	(1,954,808)	1,862,753	(92,055)	0	0	0	0	1,862,753	0	0		
180842 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/19/2024	01/17/2025	151	80,112,124	5292.82	(1,920,758)	1,830,307	(90,451)	0	0	0	0	1,830,307	0	0		
180850 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	4PQUH3JPF6GFNF3B8653	01/19/2024	01/17/2025	0	60,131,769	4948.71	(3,643,146)	3,471,109	(172,037)	0	0	0	0	3,471,109	0	0		
180862 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	01/19/2024	01/17/2025	0	19,282,482	4968.06	(479,026)	456,406	(22,621)	0	0	0	0	456,406	0	0		

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Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

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Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
180865 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	4PQUHNGJPF6GFMF3BB653	.01/19/2024	.01/17/2025	0	44,422,532	4988.39	0	(2,454,480)	2,338,574	(115,906)	0	0	0	2,338,574	0	0	.....	.....
180871 Call Options – SPDR Gold shares – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/19/2024	.01/17/2025	1,573	31,441,683	199.86	0	(1,356,086)	1,292,226	(63,860)	0	0	0	1,292,226	0	0	.....	.....
180877 Call Options – iShares U.S. Real Estate – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/19/2024	.01/17/2025	1,750	16,356,385	93.49	0	(762,796)	726,875	(35,921)	0	0	0	726,875	0	0	.....	.....
180889 Call Options – iShares MSCI EAFE – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/19/2024	.01/17/2025	228	1,813,298	79.42	0	(47,490)	45,254	(2,236)	0	0	0	45,254	0	0	.....	.....
180894 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/19/2024	.07/18/2025	6	2,966,610	4944.35	0	(252,342)	159,863	(92,479)	0	0	0	159,863	0	0	.....	.....
180901 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/19/2024	.01/17/2025	122	60,214,808	4935.64	0	(3,830,800)	3,650,402	(180,398)	0	0	0	3,650,402	0	0	.....	.....
181322 Call Options – SPDR Gold shares – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	2,448	49,031,288	200.33	0	(2,019,209)	1,814,522	(204,687)	0	0	0	1,814,522	0	0	.....	.....
181346 Call Options – iShares U.S. Real Estate – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	2,753	25,299,150	91.9	0	(1,194,759)	1,073,646	(121,113)	0	0	0	1,073,646	0	0	.....	.....
181357 Call Options – iShares MSCI EAFE – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	324	2,642,747	81.47	0	(59,038)	53,053	(5,985)	0	0	0	53,053	0	0	.....	.....
181365 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	158	79,818,914	5051.83	0	(5,094,236)	4,577,834	(516,402)	0	0	0	4,577,834	0	0	.....	.....
181372 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	135	68,366,835	5064.21	0	(4,250,340)	3,819,484	(430,856)	0	0	0	3,819,484	0	0	.....	.....
181381 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	96	49,001,664	5104.34	0	(2,790,336)	2,507,480	(282,856)	0	0	0	2,507,480	0	0	.....	.....
181390 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	4PQUHNGJPF6GFMF3BB653	.02/06/2024	.02/06/2025	0	25,709,259	5082.05	0	0	0	0	0	0	0	0	0	0	.....	.....
181391 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	107	55,189,902	5165.78	0	(2,728,523)	2,451,933	(276,590)	0	0	0	2,451,933	0	0	.....	.....
181401 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	120	63,071,280	5255.94	0	(2,489,160)	2,236,834	(252,326)	0	0	0	2,236,834	0	0	.....	.....
181407 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	76	40,765,874	5349.08	0	(1,243,687)	1,117,615	(126,072)	0	0	0	1,117,615	0	0	.....	.....
181412 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/06/2024	.02/06/2025	132	72,059,724	5459.07	0	(1,564,200)	1,405,637	(158,563)	0	0	0	1,405,637	0	0	.....	.....
181422 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.....	.02/06/2024	.08/06/2025	0	3,777,790	5065.7	0	(339,650)	203,790	(135,860)	0	0	0	203,790	0	0	.....	.....
181430 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWISFPUBMPRO8K5P83	.....	.02/06/2024	.02/06/2025	0	104,795,525	5198.47	0	(5,156,387)	4,632,249	(524,138)	0	0	0	4,632,249	0	0	.....	.....
181780 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/20/2024	.02/20/2025	95	48,708,970	5127.26	0	(2,888,950)	2,485,288	(403,662)	0	0	0	2,485,288	0	0	.....	.....
181800 Call Options – SPDR Gold shares – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/20/2024	.02/20/2025	2,131	42,335,529	198.68	0	(1,777,121)	1,528,811	(248,310)	0	0	0	1,528,811	0	0	.....	.....
181801 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/20/2024	.02/20/2025	109	56,511,177	5182.99	0	(2,963,054)	2,549,038	(414,016)	0	0	0	2,549,038	0	0	.....	.....
181817 Call Options – iShares U.S. Real Estate – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/20/2024	.02/20/2025	2,435	22,381,396	91.9	0	(1,110,546)	955,374	(155,172)	0	0	0	955,374	0	0		

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Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amorti-zation)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
181823 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	02/20/2024	02/20/2025	200	104,484,033	5217.32	0	(5,059,665)	4,352,698	(706,967)	0	0	0	4,352,698	0	0		
181829 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	02/20/2024	08/20/2025	6	3,052,476	5087.46	0	(264,978)	152,387	(112,591)	0	0	0	152,387	0	0		
181836 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	02/20/2024	02/20/2025	123	62,545,131	5084.97	0	(4,054,326)	3,487,831	(566,495)	0	0	0	3,487,831	0	0		
181839 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	02/20/2024	02/20/2025	69	36,430,916	5284.99	0	(1,496,049)	1,287,012	(209,037)	0	0	0	1,287,012	0	0		
181850 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	02/20/2024	02/20/2025	146	1,192,242	81.76	0	(37,330)	32,114	(5,216)	0	0	0	32,114	0	0		
181854 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCJFXT09	02/20/2024	02/20/2025	0	21,266,748	5106.37	0	(629,941)	541,680	(88,261)	0	0	0	541,680	0	0		
181879 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMJWSFPUBM8PRO8K5P83	02/20/2024	02/20/2025	0	66,568,786	5074.03	0	(4,678,349)	4,022,866	(655,483)	0	0	0	4,022,866	0	0		
181887 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCJFXT09	02/20/2024	02/20/2025	0	68,266,823	5443.71	0	(2,046,568)	1,759,824	(286,744)	0	0	0	1,759,824	0	0		
182214 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/06/2024	03/06/2025	2,268	47,885,404	211.12	0	(2,168,361)	1,781,154	(387,207)	0	0	0	1,781,154	0	0		
182225 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/06/2024	03/06/2025	172	1,438,570	83.79	0	(44,982)	36,950	(8,033)	0	0	0	36,950	0	0		
182233 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/06/2024	09/05/2025	4	2,086,008	5215.02	0	(184,056)	100,608	(83,448)	0	0	0	100,608	0	0		
182242 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/06/2024	03/06/2025	148	77,046,284	5205.83	0	(5,113,992)	4,200,779	(913,213)	0	0	0	4,200,779	0	0		
182251 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/06/2024	03/06/2025	131	68,350,298	5217.58	0	(4,433,564)	3,641,856	(791,708)	0	0	0	3,641,856	0	0		
182253 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	03/06/2024	03/06/2025	0	53,290,358	5411.56	0	(2,490,836)	2,044,819	(446,017)	0	0	0	2,044,819	0	0		
182258 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/06/2024	03/06/2025	93	48,917,442	5259.94	0	(2,912,574)	2,392,472	(520,103)	0	0	0	2,392,472	0	0		
182267 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/06/2024	03/06/2025	116	61,436,217	5318.14	0	(3,235,194)	2,657,480	(577,713)	0	0	0	2,657,480	0	0		
182268 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	W22LR0WP21HZNB6K528	03/06/2024	03/06/2025	0	25,520,215	94.72	0	(1,449,495)	1,189,944	(259,552)	0	0	0	1,189,944	0	0		
182278 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/06/2024	03/06/2025	191	106,021,486	5563.68	0	(3,058,297)	2,512,173	(546,125)	0	0	0	2,512,173	0	0		
182286 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	03/06/2024	03/06/2025	0	140,574,064	5361.02	0	(7,319,166)	6,008,572	(1,310,595)	0	0	0	6,008,572	0	0		
182298 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	03/06/2024	03/06/2025	0	26,404,642	5241.57	0	(1,038,904)	852,875	(186,030)	0	0	0	852,875	0	0		
182746 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCJFXT09	03/20/2024	03/20/2025	0	82,447,380	5327.55	0	(5,902,376)	4,617,837	(1,284,539)	0	0	0	4,617,837	0	0		
182759 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCJFXT09	03/20/2024	03/20/2025	0	93,493,096	5724.62	0	(2,935,256)	2,296,454	(638,802)	0	0	0	2,296,454	0	0		
182765 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCJFXT09	03/20/2024	03/20/2025	0	1,786,177	5929.94	0	(33,363)	26,102	(7,261)	0	0	0	26,102	0	0		
182772 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2024	03/20/2025	2,103	45,033,604	214.15	0	(1,922,051)	1,504,902	(417,148)	0	0	0	1,504,902	0	0		
182785 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2024	03/20/2025	3,062	28,740,035	93.87	0	(1,028,726)	805,459	(223,267)	0	0	0	805,459	0	0		

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182797 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2024	03/20/2025	157	1,358,965	86.63	0	(27,609)	21,617		0	0	0	21,617	0	0		
182800 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2024	03/20/2025	93	50,477,709	5433.6	0	(2,757,899)	2,159,344		0	0	0	2,159,344	0	0		
182808 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2024	03/20/2025	260	142,468,517	5481.15	0	(7,038,755)	5,506,905		0	0	0	5,506,905	0	0		
182827 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2024	03/20/2025	98	54,059,067	5542.28	0	(2,331,484)	1,825,475		0	0	0	1,825,475	0	0		
182834 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBUI1	03/20/2024	03/20/2025	0	23,300,559	5363.59	0	(710,411)	555,804		0	0	0	555,804	0	0		
182838 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2024	09/19/2025	7	3,736,229	5337.47	0	(334,894)	174,488		0	0	0	174,488	0	0		
182840 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2024	03/20/2025	99	52,851,348	5338.52	0	(3,487,275)	2,730,421		0	0	0	2,730,421	0	0		
182844 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2024	03/20/2025	91	49,008,414	5385.54	0	(2,951,130)	2,310,638		0	0	0	2,310,638	0	0		
183360 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/05/2024	04/04/2025	2,419	55,358,075	228.87	0	(2,585,650)	1,912,379		0	0	0	1,912,379	0	0		
183376 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/05/2024	04/04/2025	257	2,177,190	84.7	0	(58,864)	43,536		0	0	0	43,536	0	0		
183383 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/05/2024	10/06/2025	3	1,594,869	5316.23	0	(147,060)	71,914		0	0	0	71,914	0	0		
183386 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/05/2024	04/04/2025	241	127,908,099	5307.39	0	(8,971,466)	6,635,406		0	0	0	6,635,406	0	0		
183397 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/05/2024	04/04/2025	107	57,280,154	5354.22	0	(3,684,117)	2,724,818		0	0	0	2,724,818	0	0		
183417 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBUI1	04/05/2024	04/04/2025	0	29,334,039	5333.41	0	(961,771)	710,642		0	0	0	710,642	0	0		
183418 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	04/05/2024	04/04/2025	0	739,238	303.51	0	(454)	335		0	0	0	335	0	0		
183431 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	4PQUHN3JPF6FNFB8B653	04/05/2024	04/04/2025	0	31,886,335	92.24	0	(1,898,347)	1,402,667		0	0	0	1,402,667	0	0		
183461 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/05/2024	04/04/2025	97	52,462,077	5408.35	0	(3,037,036)	2,246,229		0	0	0	2,246,229	0	0		
183470 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/05/2024	04/04/2025	341	186,146,078	5459.87	0	(9,712,556)	7,183,525		0	0	0	7,183,525	0	0		
183476 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/05/2024	04/04/2025	97	53,531,196	5518.68	0	(2,466,031)	1,823,907		0	0	0	1,823,907	0	0		
183480 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/05/2024	04/04/2025	99	55,912,247	5650.35	0	(1,903,867)	1,408,123		0	0	0	1,408,123	0	0		
183484 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/05/2024	04/04/2025	100	57,497,500	5749.75	0	(1,523,300)	1,126,651		0	0	0	1,126,651	0	0		
183812 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/19/2024	04/17/2025	1,812	42,834,095	236.44	0	(2,146,777)	1,508,707		0	0	0	1,508,707	0	0		
183832 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/19/2024	10/20/2025	4	2,029,808	5074.52	0	(198,036)	91,764		0	0	0	91,764	0	0		
183839 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/19/2024	04/17/2025	91	46,652,788	5126.68	0	(3,103,100)	2,180,790		0	0	0	2,180,790	0	0		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
183841 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L10CEMIK50	.04/19/2024	.04/17/2025	0	25,065,530	87.42	0	(1,446,816)	1,015,592	(431,224)	.....	.....0	0	0	1,015,592	0	0	.....	.....
183855 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.04/19/2024	.04/17/2025	0	191,024	297.49	0	(117)	82	(35)	.....	.....0	0	0	82	0	0	.....	.....
183856 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.04/19/2024	.04/17/2025	128	67,614,537	5266.75	0	(3,391,928)	2,383,772	(1,008,156)	.....	.....0	0	0	2,383,772	0	0	.....	.....
183862 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.04/19/2024	.04/17/2025	0	104,080,783	5065.58	0	(8,108,669)	5,691,879	(2,416,790)	.....	.....0	0	0	5,691,879	0	0	.....	.....
183874 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.04/19/2024	.04/17/2025	245	1,992,185	81.44	0	(37,916)	26,647	(11,270)	.....	.....0	0	0	26,647	0	0	.....	.....
183879 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.04/19/2024	.04/17/2025	0	20,229,478	5094.39	0	(670,224)	470,464	(199,760)	.....	.....0	0	0	470,464	0	0	.....	.....
183888 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ... 02RNE81BXP4R0TD8PU41	.04/19/2024	.04/17/2025	0	42,849,786	5171.38	0	(2,766,243)	1,941,764	(824,479)	.....	.....0	0	0	1,941,764	0	0	.....	.....
183896 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.04/19/2024	.04/17/2025	0	91,495,489	5218.57	0	(5,386,807)	3,781,268	(1,605,538)	.....	.....0	0	0	3,781,268	0	0	.....	.....
183902 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.04/19/2024	.04/17/2025	0	51,724,682	5298.54	0	(2,594,277)	1,821,052	(773,225)	.....	.....0	0	0	1,821,052	0	0	.....	.....
183908 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ... 02RNE81BXP4R0TD8PU41	.04/19/2024	.04/17/2025	0	75,926,709	5438.62	0	(2,815,439)	1,976,297	(839,142)	.....	.....0	0	0	1,976,297	0	0	.....	.....
184309 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RH1GCT1XBUI1	.05/06/2024	.05/06/2025	0	27,786,474	5317.51	0	(831,104)	542,622	(288,482)	.....	.....0	0	0	542,622	0	0	.....	.....
184334 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.11/06/2025	5	2,646,065	5292.13	0	(238,210)	103,456	(134,754)	.....	.....0	0	0	103,456	0	0	.....	.....
184345 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	217	114,648,044	5283.32	0	(7,659,232)	5,007,959	(2,651,273)	.....	.....0	0	0	5,007,959	0	0	.....	.....
184351 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	74	39,499,128	5337.72	0	(2,373,846)	1,552,130	(821,716)	.....	.....0	0	0	1,552,130	0	0	.....	.....
184352 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.05/06/2024	.05/06/2025	0	1,201,441	302.2744	0	(630)	411	(219)	.....	.....0	0	0	411	0	0	.....	.....
184361 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.05/06/2024	.05/06/2025	0	31,127,749	90.09	0	(1,664,901)	1,087,001	(577,900)	.....	.....0	0	0	1,087,001	0	0	.....	.....
184374 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	138	75,903,703	5493.66	0	(3,262,652)	2,133,272	(1,129,380)	.....	.....0	0	0	2,133,272	0	0	.....	.....
184375 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	146	79,043,685	5402.48	0	(4,158,423)	2,718,969	(1,439,454)	.....	.....0	0	0	2,718,969	0	0	.....	.....
184385 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	109	60,063,321	5522.15	0	(2,414,650)	1,578,809	(835,840)	.....	.....0	0	0	1,578,809	0	0	.....	.....
184386 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	162	87,979,612	5447.03	0	(4,202,388)	2,747,715	(1,454,673)	.....	.....0	0	0	2,747,715	0	0	.....	.....
184397 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	163	92,375,733	5666.18	0	(2,571,798)	1,681,560	(890,238)	.....	.....0	0	0	1,681,560	0	0	.....	.....
184406 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	2,325	53,522,419	230.16	0	(2,437,065)	1,593,466	(843,600)	.....	.....0	0	0	1,593,466	0	0	.....	.....
184412 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	275	2,340,023	85.23	0	(62,598)	40,930	(21,669)	.....	.....0	0	0	40,930	0	0	.....	.....
184783 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.05/20/2024	.05/20/2025	0	23,038,662	5447.73	0	(655,336)	402,589	(252,747)		0	0	0	402,589	0	0		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse		Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
184816 Call Options – First Trust Barclays Edge Index – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5I70UK5573	.05/20/2024	.05/20/2025	0	1,411,465	305.674	0	(739)	454	(285)		0	0	0	454	0	0	.....	.....
184818 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	84	47,147,066	5634.58	0	(1,885,438)	1,160,269	(725,168)		0	0	0	1,160,269	0	0	.....	.....
184832 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	88	49,806,932	5662.71	0	(1,859,566)	1,144,348	(715,218)		0	0	0	1,144,348	0	0	.....	.....
184836 Call Options – iShares U.S. Real Estate – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	ROMUJSFPU8MPR08K5P83	.05/20/2024	.05/20/2025	0	21,409,293	93.54	0	(1,066,703)	655,302	(411,401)		0	0	0	655,302	0	0	.....	.....
184849 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	96	54,353,952	5687.66	0	(1,906,325)	1,173,123	(733,202)		0	0	0	1,173,123	0	0	.....	.....
184858 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	176	101,527,441	5773.65	0	(2,833,937)	1,743,961	(1,089,976)		0	0	0	1,743,961	0	0	.....	.....
184880 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	78	42,611,772	5483.83	0	(2,386,924)	1,468,876	(918,048)		0	0	0	1,468,876	0	0	.....	.....
184891 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	165	91,546,135	5547	0	(4,480,100)	2,756,985	(1,723,115)		0	0	0	2,756,985	0	0	.....	.....
184894 Call Options – SPDR Gold shares – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	1,977	47,668,648	241.11	0	(2,245,929)	1,382,110	(863,819)		0	0	0	1,382,110	0	0	.....	.....
184900 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	91	51,355,364	5614.94	0	(2,151,735)	1,324,145	(827,590)		0	0	0	1,324,145	0	0	.....	.....
184906 Call Options – iShares MSCI EAFE – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	214	1,860,531	87.01	0	(51,961)	31,976	(19,985)		0	0	0	31,976	0	0	.....	.....
184910 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.11/20/2025	4	2,168,900	5422.25	0	(191,516)	78,284	(113,232)		0	0	0	78,284	0	0	.....	.....
184914 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/20/2024	.05/20/2025	201	108,805,923	5413.23	0	(7,024,749)	4,322,922	(2,701,827)		0	0	0	4,322,922	0	0	.....	.....
185340 Call Options – iShares U.S. Real Estate – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5I70UK5573	.06/06/2024	.06/06/2025	0	23,703,343	92.89	0	(1,143,334)	646,094	(497,239)		0	0	0	646,094	0	0	.....	.....
185346 Call Options – First Trust Barclays Edge Index – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5I70UK5573	.06/06/2024	.06/06/2025	0	2,666,928	303.5227	0	(1,396)	789	(607)		0	0	0	789	0	0	.....	.....
185350 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	ROMUJSFPU8MPR08K5P83	.06/06/2024	.12/05/2025	0	2,389,297	5468.05	0	(226,767)	85,194	(141,573)		0	0	0	85,194	0	0	.....	.....
185355 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGQF57RNE97	.06/06/2024	.06/06/2025	0	23,674,175	5492.67	0	(215,507)	121,782	(93,725)		0	0	0	121,782	0	0	.....	.....
185362 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ...	02RNE81BXP4ROT8PU41	.06/06/2024	.06/06/2025	0	45,204,348	5529.07	0	(2,726,529)	1,540,753	(1,185,776)		1,210,981	0	0	1,540,753	0	0	.....	.....
185377 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	89	50,535,247	5659.15	0	(2,098,421)	1,193,333	(905,088)		0	0	0	1,193,333	0	0	.....	.....
185384 Call Options – SPDR Gold shares – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	2,351	55,431,864	235.78	0	(2,390,966)	1,359,698	(1,031,268)		0	0	0	1,359,698	0	0	.....	.....
185403 Call Options – iShares MSCI EAFE – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	354	3,111,553	87.83	0	(78,294)	44,524	(33,770)		0	0	0	44,524	0	0	.....	.....
185417 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	96	54,545,503	5685.91	0	(2,120,267)	1,205,756	(914,511)		0	0	0	1,205,756	0	0	.....	.....
185419 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	222	121,188,690	5458.95	0	(7,756,458)	4,410,953	(3,345,505)		0	0	0	4,410,953	0	0	.....	.....
185429 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	209	116,712,081	5594.38	0	(5,622,829)	3,197,598	(2,425,231)		0	0	0	3,197,598	0	0		

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Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

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Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
185439 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	95	 54,489,623	5718.57	0	(1,950,969)	1,109,479	(841,489)	.....	.....0	0	0	1,109,479	0	0	.....	.....
185448 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	115	 66,019,355	5744.26	0	(2,212,996)	1,258,490	(954,507)	.....	.....0	0	0	1,258,490	0	0	.....	.....
185459 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/06/2024	.06/06/2025	145	 84,540,390	5846.5	0	(2,128,657)	1,210,527	(918,129)	.....	.....0	0	0	1,210,527	0	0	.....	.....
186127 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	1,951	 45,534,625	233.39	0	(2,062,218)	1,093,429	(968,789)	.....	.....0	0	0	1,093,429	0	0	.....	.....
186140 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	212	 1,779,245	83.77	0	(52,887)	28,042	(24,845)	.....	.....0	0	0	28,042	0	0	.....	.....
186146 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.12/19/2025	4	2,236,556	5591.39	0	(193,092)	68,254	(124,838)	.....	.....0	0	0	68,254	0	0	.....	.....
186149 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	186	 103,816,644	5581.54	0	(6,607,836)	3,503,605	(3,104,231)	.....	.....0	0	0	3,503,605	0	0	.....	.....
186163 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	75	42,253,935	5657.62	0	(2,306,198)	1,222,792	(1,083,406)	.....	.....0	0	0	1,222,792	0	0	.....	.....
186165 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.06/20/2024	.06/20/2025	0	 19,766,127	92.24	0	(985,958)	518,925	(467,033)	.....	.....0	0	0	518,925	0	0	.....	.....
186175 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC ROYAL BANK OF CANADA ES71P3U3RH1GC71XBUI1	.06/20/2024	.06/20/2025	0	 1,935,134	303.0135	0	(1,016)	535	(481)	.....	.....0	0	0	535	0	0	.....	.....
186187 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	82	 48,208,471	5871.07	0	(1,595,845)	846,148	(749,696)	.....	.....0	0	0	846,148	0	0	.....	.....
186208 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	87	 50,266,000	5802.11	0	(1,980,107)	1,049,892	(930,215)	.....	.....0	0	0	1,049,892	0	0	.....	.....
186216 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	97	 56,763,092	5832.21	0	(2,075,885)	1,100,676	(975,210)	.....	.....0	0	0	1,100,676	0	0	.....	.....
186227 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	104	 62,127,299	5987.1	0	(1,487,419)	788,659	(698,760)	.....	.....0	0	0	788,659	0	0	.....	.....
186236 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2024	.06/20/2025	236	 135,180,215	5723.84	0	(6,391,955)	3,389,141	(3,002,814)	.....	.....0	0	0	3,389,141	0	0	.....	.....
186673 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.07/05/2024	.07/03/2025	84	 48,345,024	5755.36	0	(2,634,744)	1,288,097	(1,346,647)	.....	.....0	0	0	1,288,097	0	0	.....	.....
186681 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPFU8MPRO8K5P83	.07/05/2024	.07/03/2025	0	 21,105,952	93.22	0	(998,918)	486,938	(511,981)	.....	.....0	0	0	486,938	0	0	.....	.....
186694 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.07/05/2024	.07/03/2025	0	 1,635,166	302.7136	0	(713)	347	(365)	.....	.....0	0	0	347	0	0	.....	.....
186702 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.07/05/2024	.07/03/2025	230	 133,609,526	5811.03	0	(6,475,809)	3,165,951	(3,309,858)	.....	.....0	0	0	3,165,951	0	0	.....	.....
186703 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPFU8MPRO8K5P83	.07/05/2024	.01/06/2026	0	 1,446,686	5687.44	0	(135,138)	43,314	(91,825)	.....	.....0	0	0	43,314	0	0	.....	.....
186719 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.07/05/2024	.07/03/2025	2,313	 54,972,243	237.65	0	(2,405,686)	1,176,113	(1,229,573)	.....	.....0	0	0	1,176,113	0	0	.....	.....
186720 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.07/05/2024	.07/03/2025	100	 59,222,692	5913.47	0	(2,267,569)	1,108,589	(1,158,980)	.....	.....0	0	0	1,108,589	0	0	.....	.....
186730 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.07/05/2024	.07/03/2025	111	 66,023,875	5971.92	0	(2,186,821)	1,069,113	(1,117,709)		0	0	0	1,069,113	0	0		

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Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
186739 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/05/2024	.07/03/2025	355	3,058,156	86.16	0	(68,503)	33,490		(35,013)	0	0	33,490	0	0		
186744 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/05/2024	.07/03/2025	150	90,397,200	6026.48	0	(2,594,700)	1,268,520		(1,326,180)	0	0	1,268,520	0	0		
186749 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/05/2024	.07/03/2025	94	57,632,810	6131.15	0	(1,222,000)	597,422		(624,578)	0	0	597,422	0	0		
186750 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/05/2024	.07/03/2025	235	133,419,370	5677.42	0	(8,489,610)	4,150,476		(4,339,134)	0	0	4,150,476	0	0		
186775 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGOFU57RNE97	.07/05/2024	.07/03/2025	0	22,820,932	5710.82	0	(756,397)	368,717		(387,680)	0	0	368,717	0	0		
187095 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	W22LROIWP21HZNB6K528	.07/19/2024	.07/18/2025	0	16,410,451	98.98	0	(825,659)	369,253		(456,406)	0	0	369,253	0	0		
187098 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/19/2024	.07/18/2025	150	86,190,456	5738.96	0	(4,438,111)	1,991,618		(2,446,493)	0	0	1,991,618	0	0		
187110 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5I7OUK5573	.07/19/2024	.07/18/2025	0	1,000,181	304.7204	0	(615)	275		(340)	0	0	275	0	0		
187116 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/19/2024	.07/18/2025	95	55,653,607	5833.1	0	(2,330,962)	1,046,027		(1,284,935)	0	0	1,046,027	0	0		
187125 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/19/2024	.07/18/2025	92	54,283,878	5909.62	0	(1,893,720)	849,813		(1,043,906)	0	0	849,813	0	0		
187133 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/19/2024	.07/18/2025	91	54,323,542	5969.62	0	(1,625,624)	729,504		(896,120)	0	0	729,504	0	0		
187136 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/19/2024	.07/18/2025	95	57,877,610	6092.38	0	(1,226,925)	550,587		(676,338)	0	0	550,587	0	0		
187138 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5I7OUK5573	.07/19/2024	.07/18/2025	0	19,959,989	5647.03	0	(591,030)	264,322		(326,708)	0	0	264,322	0	0		
187151 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/19/2024	.07/18/2025	1,757	41,826,921	238.12	0	(1,842,619)	826,882		(1,015,737)	0	0	826,882	0	0		
187162 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/19/2024	.07/18/2025	285	2,434,789	85.3	0	(61,084)	27,412		(33,672)	0	0	27,412	0	0		
187171 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/19/2024	.01/20/2026	3	1,687,008	5623.36	0	(147,645)	43,727		(103,918)	0	0	43,727	0	0		
187176 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/19/2024	.07/18/2025	196	110,034,400	5614	0	(7,251,804)	3,254,272		(3,997,532)	0	0	3,254,272	0	0		
187195 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/19/2024	.07/18/2025	79	44,981,178	5693.82	0	(2,540,640)	1,140,121		(1,400,519)	0	0	1,140,121	0	0		
187701 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/06/2024	.08/06/2025	2,146	50,868,769	237.01	0	(2,275,047)	912,519		(1,362,528)	0	0	912,519	0	0		
187709 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/06/2024	.08/06/2025	275	2,226,059	80.98	0	(76,419)	30,652		(45,768)	0	0	30,652	0	0		
187719 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/06/2024	.02/06/2026	5	2,676,345	5352.69	0	(244,995)	65,272		(179,723)	0	0	65,272	0	0		
187725 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	02RNE81BXP4ROT08PU41	.08/06/2024	.08/06/2025	0	19,969,258	101.06	0	(1,032,584)	412,465		(620,119)	0	0	412,465	0	0		
187734 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/06/2024	.08/06/2025	220	120,337,842	5468.5	0	(6,893,267)	2,764,882		(4,128,385)	0	0	2,764,882	0	0		
187741 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5I7OUK5573	.08/06/2024	.08/06/2025	0	2,936,902	310.2738	0	(1,800)	719		(1,081)	0	0	719	0	0		

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187747 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/06/2024	08/06/2025	101	56,145,217	5559.67	0	(2,658,573)	1,066,351	(1,592,222)		0	0	0	1,066,351	0	0		
187752 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/06/2024	08/06/2025	99	56,285,757	5685.43	0	(1,984,257)	795,883	(1,188,374)		0	0	0	795,883	0	0		
187758 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	08/06/2024	08/06/2025	0	115,516,021	5343.78	0	(8,911,208)	3,559,573	(5,351,634)		0	0	0	3,559,573	0	0		
187762 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	08/06/2024	08/06/2025	0	64,092,993	5417.14	0	(4,352,845)	1,738,740	(2,614,105)		0	0	0	1,738,740	0	0		
187776 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROMUISFPUBMPROBK5P83	08/06/2024	08/06/2025	0	57,857,386	5627.79	0	(2,833,612)	1,131,884	(1,701,729)		0	0	0	1,131,884	0	0		
187783 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	08/06/2024	08/06/2025	0	60,817,489	5798.09	0	(1,836,893)	733,745	(1,103,148)		0	0	0	733,745	0	0		
187785 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	08/06/2024	08/06/2025	0	24,665,057	5376.79	0	(968,719)	386,954	(581,765)		0	0	0	386,954	0	0		
188225 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/20/2024	02/20/2026	3	1,715,238	5717.46	0	(140,427)	33,825	(106,602)		0	0	0	33,825	0	0		
188230 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/20/2024	08/20/2025	162	92,468,628	5707.94	0	(5,785,020)	2,097,864	(3,687,156)		0	0	0	2,097,864	0	0		
188239 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/20/2024	08/20/2025	90	52,096,860	5788.54	0	(2,771,100)	1,004,904	(1,766,196)		0	0	0	1,004,904	0	0		
188250 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/20/2024	08/20/2025	125	77,541,125	6203.29	0	(1,389,500)	503,885	(885,615)		0	0	0	503,885	0	0		
188258 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/20/2024	08/20/2025	148	86,493,859	5843.39	0	(4,088,608)	1,482,682	(2,605,926)		0	0	0	1,482,682	0	0		
188270 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/20/2024	08/20/2025	84	50,177,612	5951.42	0	(1,840,868)	667,568	(1,173,301)		0	0	0	667,568	0	0		
188281 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/20/2024	08/20/2025	125	75,821,352	6049.37	0	(2,154,428)	781,276	(1,373,152)		0	0	0	781,276	0	0		
188298 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	08/20/2024	08/20/2025	0	34,999,634	250.43	0	(1,644,129)	593,336	(1,050,793)		0	0	0	593,336	0	0		
188307 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	08/20/2024	08/20/2025	0	15,811,279	102.82	0	(622,287)	224,572	(397,715)		0	0	0	224,572	0	0		
188324 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	08/20/2024	08/20/2025	0	2,787,763	88.91	0	(50,833)	18,345	(32,488)		0	0	0	18,345	0	0		
188329 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	08/20/2024	08/20/2025	0	1,781,290	314.0306	0	(1,091)	394	(698)		0	0	0	394	0	0		
188333 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	08/20/2024	08/20/2025	0	20,684,043	5748.8	0	(614,828)	221,880	(392,948)		0	0	0	221,880	0	0		
188741 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2024	09/05/2025	304	2,618,467	86.25	0	(83,791)	26,228	(57,563)		0	0	0	26,228	0	0		
188749 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2024	03/06/2026	3	1,657,410	5524.7	0	(142,053)	29,562	(112,491)		0	0	0	29,562	0	0		
188754 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2024	09/05/2025	85	47,525,370	5591.22	0	(2,787,235)	872,459	(1,914,776)		0	0	0	872,459	0	0		
188774 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2024	09/05/2025	186	104,676,686	5638.82	0	(5,569,260)	1,743,286	(3,825,973)		0	0	0	1,743,286	0	0		
188787 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2024	09/05/2025	90	51,328,023	5725.89	0	(2,257,813)	706,739	(1,551,074)		0	0	0	706,739	0	0		
188799 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2024	09/05/2025	100	58,178,448	5802.15	0	(2,129,144)	666,463	(1,462,681)		0	0	0	666,463	0	0		

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Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
188810 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	09/06/2024	09/05/2025	0	24,735,970	5563.64	0	(120,232)	37,405	(82,826)		0	0	0	37,405	0	0		
188833 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	09/06/2024	09/05/2025	0	41,489,898	248.04	0	(1,813,383)	564,164	(1,249,220)		0	0	0	564,164	0	0		
188842 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	09/06/2024	09/05/2025	0	19,819,829	105.9	0	(909,702)	283,018	(626,684)		0	0	0	283,018	0	0		
188850 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	09/06/2024	09/05/2025	0	3,424,781	314.8009	0	(2,412)	750	(1,662)		0	0	0	750	0	0		
188852 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	09/06/2024	09/05/2025	0	105,325,890	5515.51	0	(7,591,144)	2,361,689	(5,229,455)		0	0	0	2,361,689	0	0		
188856 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	09/06/2024	09/05/2025	0	61,278,652	5868.68	0	(2,145,966)	667,634	(1,478,332)		0	0	0	667,634	0	0		
188858 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	09/06/2024	09/05/2025	0	90,416,737	5993.61	0	(2,300,805)	715,806	(1,584,999)		0	0	0	715,806	0	0		
189367 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	09/20/2024	09/19/2025	0	47,390,334	6151.91	0	(1,512,771)	411,810	(1,100,961)		0	0	0	411,810	0	0		
189372 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	09/20/2024	09/19/2025	0	57,032,365	6226.04	0	(1,514,874)	412,382	(1,102,492)		0	0	0	412,382	0	0		
189376 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	09/20/2024	09/19/2025	0	56,985,406	6352.07	0	(1,099,907)	299,419	(800,488)		0	0	0	299,419	0	0		
189385 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	09/20/2024	09/19/2025	0	23,900,198	5847.97	0	(720,152)	196,041	(524,110)		0	0	0	196,041	0	0		
189415 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/20/2024	09/19/2025	1,399	36,443,316	260.55	0	(1,551,166)	425,389	(1,125,777)		0	0	0	425,389	0	0		
189426 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/20/2024	09/19/2025	192	1,706,122	88.91	0	(29,935)	8,209	(21,726)		0	0	0	8,209	0	0		
189435 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/20/2024	03/20/2026	3	1,747,545	5825.15	0	(137,544)	25,077	(112,467)		0	0	0	25,077	0	0		
189438 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/20/2024	09/19/2025	154	89,558,084	5815.46	0	(5,402,628)	1,481,607	(3,921,021)		0	0	0	1,481,607	0	0		
189475 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	09/20/2024	09/19/2025	0	18,633,353	109.15	0	(606,182)	165,016	(441,166)		0	0	0	165,016	0	0		
189482 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	09/20/2024	09/19/2025	0	3,102,337	317.5448	0	(2,185)	595	(1,590)		0	0	0	595	0	0		
189489 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	09/20/2024	09/19/2025	0	135,168,645	5929.51	0	(7,097,721)	1,932,157	(5,165,563)		0	0	0	1,932,157	0	0		
189498 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	09/20/2024	09/19/2025	0	46,337,444	6059.53	0	(1,838,497)	500,480	(1,338,017)		0	0	0	500,480	0	0		
189892 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	10/04/2024	10/06/2025	0	24,225,548	5911.52	0	(693,333)	160,441	(532,892)		0	0	0	160,441	0	0		
189912 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/04/2024	10/06/2025	172	100,886,944	5865.52	0	(6,617,700)	1,545,342	(5,072,358)		0	0	0	1,545,342	0	0		
189915 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/04/2024	10/06/2025	76	45,015,028	5923.03	0	(2,648,676)	618,510	(2,030,166)		0	0	0	618,510	0	0		
189938 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/04/2024	10/06/2025	73	43,582,387	5970.19	0	(2,333,007)	544,796	(1,788,211)		0	0	0	544,796	0	0		
189955 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/04/2024	10/06/2025	135	80,889,169	6001.82	0	(4,056,844)	947,340	(3,109,504)		0	0	0	947,340	0	0		

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
189969 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/04/2024	10/06/2025	71	43,731,393	6117.99	0	(1,688,358)	394,259	(1,294,098)		0	0	0	394,259	0	0		
190000 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	10/04/2024	10/06/2025	0	19,842,511	105.95	0	(841,096)	194,634	(646,462)		0	0	0	194,634	0	0		
190003 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	10/04/2024	10/06/2025	0	43,953,892	264.82	0	(1,966,425)	455,040	(1,511,384)		0	0	0	455,040	0	0		
190009 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	10/04/2024	10/06/2025	0	2,031,511	89.76	0	(55,713)	12,892	(42,820)		0	0	0	12,892	0	0		
190017 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/04/2024	04/06/2026	3	1,762,416	5874.72	0	(149,982)	23,349	(126,633)		0	0	0	23,349	0	0		
190019 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	10/04/2024	10/06/2025	0	3,846,082	310.3193	0	(3,755)	869	(2,886)		0	0	0	869	0	0		
190023 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	10/04/2024	10/06/2025	0	57,470,843	6279.59	0	(1,773,760)	410,457	(1,363,303)		0	0	0	410,457	0	0		
190025 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	10/04/2024	10/06/2025	0	128,096,482	6394.61	0	(2,972,292)	687,803	(2,284,489)		0	0	0	687,803	0	0		
190426 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	10/18/2024	10/20/2025	0	17,068,647	6018.32	0	(513,956)	99,110	(414,846)		0	0	0	99,110	0	0		
190442 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/18/2024	10/20/2025	114	993,639	87.44	0	(29,205)	5,697	(23,508)		0	0	0	5,697	0	0		
190450 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/18/2024	04/20/2026	3	1,797,228	5990.76	0	(150,375)	19,554	(130,821)		0	0	0	19,554	0	0		
190466 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/18/2024	10/20/2025	146	87,328,148	5881.38	0	(5,545,080)	1,081,595	(4,463,485)		0	0	0	1,081,595	0	0		
190471 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/18/2024	10/20/2025	72	43,458,624	6035.92	0	(2,489,184)	485,528	(2,003,656)		0	0	0	485,528	0	0		
190483 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/18/2024	10/20/2025	76	46,286,039	6098.67	0	(2,334,995)	455,452	(1,879,543)		0	0	0	455,452	0	0		
190503 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/18/2024	10/20/2025	73	44,907,034	6140.31	0	(2,075,492)	404,835	(1,670,657)		0	0	0	404,835	0	0		
190528 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	10/18/2024	10/20/2025	0	34,733,768	271.4	0	(1,585,366)	305,718	(1,279,648)		0	0	0	305,718	0	0		
190538 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	10/18/2024	10/20/2025	0	19,515,218	109.2	0	(737,820)	142,279	(595,541)		0	0	0	142,279	0	0		
190543 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	10/18/2024	10/20/2025	0	2,292,260	312.3673	0	(2,032)	392	(1,640)		0	0	0	392	0	0		
190545 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/18/2024	10/20/2025	79	51,418,019	6508.61	0	(900,205)	175,589	(724,616)		0	0	0	175,589	0	0		
190546 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	10/18/2024	10/20/2025	0	57,961,270	6566.08	0	(1,092,340)	210,644	(881,696)		0	0	0	210,644	0	0		
190549 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/18/2024	10/20/2025	112	72,285,584	6454.07	0	(1,500,912)	292,760	(1,208,152)		0	0	0	292,760	0	0		
190553 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/18/2024	10/20/2025	75	47,147,607	6267.57	0	(1,622,597)	316,496	(1,306,101)		0	0	0	316,496	0	0		
191077 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	11/06/2024	11/06/2025	0	24,737,567	6080.23	0	(726,086)	107,716	(618,370)		0	0	0	107,716	0	0		
191106 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2024	05/06/2026	1	605,651	6056.51	0	(50,533)	5,007	(45,526)		0	0	0	5,007	0	0		

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Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

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191113 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2024	11/06/2025	190	114,893,570	6047.03	0	(7,195,110)	1,067,406		(6,127,704)	0	0	1,067,406	0	0		
191130 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2024	11/06/2025	83	50,598,792	6096.24	0	(2,887,238)	428,327		(2,458,911)	0	0	428,327	0	0		
191140 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	02RNE81BXP4ROT8PU41	11/06/2024	11/06/2025	0	22,362,398	103.88	0	(873,559)	129,594		(743,965)	0	0	129,594	0	0		
191148 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2024	11/06/2025	65	40,212,849	6149.6	0	(2,064,198)	306,227		(1,757,971)	0	0	306,227	0	0		
191153 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5I70UK5573	11/06/2024	11/06/2025	0	3,274,527	305.3733	0	(3,201)	475		(2,726)	0	0	475	0	0		
191155 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	11/06/2024	11/06/2025	0	74,367,348	6542.1	0	(1,792,797)	265,964		(1,526,833)	0	0	265,964	0	0		
191163 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	11/06/2024	11/06/2025	0	61,271,979	6579.46	0	(1,347,243)	199,866		(1,147,377)	0	0	199,866	0	0		
191169 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	11/06/2024	11/06/2025	0	68,331,343	6637.56	0	(1,300,096)	192,871		(1,107,225)	0	0	192,871	0	0		
191171 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2024	11/06/2025	117	72,247,137	6189.92	0	(3,410,366)	505,933		(2,904,432)	0	0	505,933	0	0		
191183 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2024	11/06/2025	1,531	40,570,834	264.96	0	(1,768,543)	262,366		(1,506,177)	0	0	262,366	0	0		
191193 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2024	11/06/2025	225	1,929,957	85.74	0	(44,344)	6,578		(37,765)	0	0	6,578	0	0		
191194 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2024	11/06/2025	75	47,263,508	6294.86	0	(1,764,669)	261,792		(1,502,877)	0	0	261,792	0	0		
191203 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2024	11/06/2025	71	45,767,580	6423.52	0	(1,236,544)	183,443		(1,053,100)	0	0	183,443	0	0		
191573 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	1,408	37,002,790	262.87	0	(1,680,729)	184,696		(1,496,034)	0	0	184,696	0	0		
191577 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U9RH1G71XBUI1	11/20/2024	11/20/2025	0	21,524,162	6063.85	0	(688,908)	75,704		(613,204)	0	0	75,704	0	0		
191605 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	1,666	17,620,964	105.78	0	(603,024)	66,266		(536,758)	0	0	66,266	0	0		
191632 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	192	1,599,213	83.35	0	(35,879)	3,943		(31,936)	0	0	3,943	0	0		
191642 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	74	45,919,743	6190.48	0	(2,201,158)	241,885		(1,959,272)	0	0	241,885	0	0		
191649 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5I70UK5573	11/20/2024	11/20/2025	0	3,154,698	303.5275	0	(3,366)	370		(2,996)	0	0	370	0	0		
191651 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	05/20/2026	1	604,492	6044.92	0	(51,680)	3,793		(47,887)	0	0	3,793	0	0		
191655 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	72	43,830,144	6087.52	0	(2,573,208)	282,770		(2,290,438)	0	0	282,770	0	0		
191660 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	78	48,980,716	6303.5	0	(1,833,581)	201,492		(1,632,089)	0	0	201,492	0	0		
191661 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	154	101,620,904	6598.76	0	(1,708,476)	187,745		(1,520,731)	0	0	187,745	0	0		
191669 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2024	11/20/2025	72	44,585,103	6153.2	0	(2,305,336)	253,334		(2,052,003)	0	0	253,334	0	0		

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

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Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
191670 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	11/20/2024	11/20/2025	121	78,533,984	6494.62	0	(1,805,239)	198,378	(1,606,861)		0	0	0	198,378	0	0		
191676 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	11/20/2024	11/20/2025	154	92,936,844	6034.86	0	(6,008,618)	660,288	(5,348,330)		0	0	0	660,288	0	0		
192101 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/06/2024	12/05/2025	147	91,299,642	6210.86	0	(5,551,602)	338,325	(5,213,277)		0	0	0	338,325	0	0		
192123 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/06/2024	12/05/2025	71	44,490,588	6266.28	0	(2,435,797)	148,442	(2,287,355)		0	0	0	148,442	0	0		
192135 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/06/2024	12/05/2025	102	68,817,360	6746.8	0	(1,125,672)	68,601	(1,057,071)		0	0	0	68,601	0	0		
192142 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/06/2024	12/05/2025	92	62,675,736	6812.58	0	(818,064)	49,854	(768,210)		0	0	0	49,854	0	0		
192192 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/06/2024	12/05/2025	1,616	17,261,746	106.85	0	(571,891)	34,852	(537,039)		0	0	0	34,852	0	0		
192214 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5I70UK5573	12/06/2024	12/05/2025	0	2,873,576	307.9419	0	(3,067)	187	(2,880)		0	0	0	187	0	0		
192215 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/06/2024	12/05/2025	84	729,910	86.61	0	(14,495)	883	(13,612)		0	0	0	883	0	0		
192218 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/06/2024	12/05/2025	1,369	35,720,689	260.95	0	(1,513,971)	92,264	(1,421,707)		0	0	0	92,264	0	0		
192219 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RH1GC71XB11	12/06/2024	12/05/2025	0	18,126,741	6238.26	0	(525,593)	32,031	(493,562)		0	0	0	32,031	0	0		
192220 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMJWSFPUBMPRO8K5P83	12/06/2024	06/05/2026	0	2,094,531	6226.69	0	(194,293)	7,872	(186,421)		0	0	0	7,872	0	0		
192235 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/06/2024	12/05/2025	76	48,359,650	6334.49	0	(2,308,014)	140,655	(2,167,359)		0	0	0	140,655	0	0		
192241 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/06/2024	12/05/2025	78	49,689,508	6372.86	0	(2,186,761)	133,265	(2,053,495)		0	0	0	133,265	0	0		
192247 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/06/2024	12/05/2025	71	45,932,214	6480.05	0	(1,583,869)	96,524	(1,487,346)		0	0	0	96,524	0	0		
192253 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/06/2024	12/05/2025	65	42,954,994	6639	0	(976,856)	59,531	(917,324)		0	0	0	59,531	0	0		
192955 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/20/2024	12/19/2025	162	106,610,094	6580.87	0	(2,045,574)	45,331	(2,000,243)		0	0	0	45,331	0	0		
192965 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/20/2024	06/18/2026	2	1,211,672	6058.36	0	(106,092)	1,566	(104,526)		0	0	0	1,566	0	0		
192975 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/20/2024	12/19/2025	127	76,813,156	6048.28	0	(5,124,831)	113,570	(5,011,261)		0	0	0	113,570	0	0		
192979 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/20/2024	12/19/2025	72	43,961,832	6105.81	0	(2,644,560)	58,605	(2,585,955)		0	0	0	58,605	0	0		
192995 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/20/2024	12/19/2025	78	47,825,261	6170.46	0	(2,543,386)	56,363	(2,487,023)		0	0	0	56,363	0	0		
193014 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/20/2024	12/19/2025	81	50,105,966	6209.01	0	(2,466,236)	54,653	(2,411,583)		0	0	0	54,653	0	0		
193021 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ... 02RNE81BX4R0TD8PU41	12/20/2024	12/19/2025	0	35,015,992	260.48	0	(1,513,351)	33,537	(1,479,815)		0	0	0	33,537	0	0		
193031 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CB0E 529900RLNSGA90UPEH54	12/20/2024	12/19/2025	79	49,844,772	6324.66	0	(1,905,158)	42,220	(1,862,938)		0	0	0	42,220	0	0		
193032 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5I70UK5573	12/20/2024	12/19/2025	0	2,233,877	296.2287	0	(2,383)	53	(2,330)		0	0	0	53	0	0		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
193039 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	12/20/2024	12/19/2025	71	 45,989,625	 6458.7	 0	 (1,254,644)	 27,804	 (1,226,841)	.....	..... 0	 0	 0	 27,804	 0	 0	.....	.....
193048 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBUI1	12/20/2024	12/19/2025	 0	 17,688,718	 6085.05	 0	 (577,556)	 12,799	 (564,757)	.....	..... 0	 0	 0	 12,799	 0	 0	.....	.....
193055 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	12/20/2024	12/19/2025	 1,784	 17,638,300	 98.88	 0	 (633,252)	 14,033	 (619,219)	.....	..... 0	 0	 0	 14,033	 0	 0	.....	.....
193064 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	12/20/2024	12/19/2025	 152	 1,236,390	 81.35	 0	 (33,285)	 738	 (32,547)	.....	..... 0	 0	 0	 738	 0	 0	.....	.....
0649999999. Subtotal - Written Options - Hedging Other - Call Options and Warrants										(4,495,588)	(652,447,473)	351,554,737	(304,574,245)	XXX	1,210,981	0	0	351,554,737	0	0	XXX	XXX
0709999999. Subtotal - Written Options - Hedging Other										(4,495,588)	(652,447,473)	351,554,737	(304,574,245)	XXX	1,210,981	0	0	351,554,737	0	0	XXX	XXX
0779999999. Subtotal - Written Options - Replications										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0849999999. Subtotal - Written Options - Income Generation										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0919999999. Subtotal - Written Options - Other										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0929999999. Total Written Options - Call Options and Warrants										(4,495,588)	(652,447,473)	351,554,737	(304,574,245)	XXX	1,210,981	0	0	351,554,737	0	0	XXX	XXX
0939999999. Total Written Options - Put Options										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0949999999. Total Written Options - Caps										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0959999999. Total Written Options - Floors										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0969999999. Total Written Options - Collars										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0979999999. Total Written Options - Other										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
0989999999. Total Written Options										(4,495,588)	(652,447,473)	351,554,737	(304,574,245)	XXX	1,210,981	0	0	351,554,737	0	0	XXX	XXX
1049999999. Subtotal - Swaps - Hedging Effective Excluding Variable Annuity Guarantees Under SSAP No.108										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
1109999999. Subtotal - Swaps - Hedging Effective Variable Annuity Guarantees Under SSAP No.108										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
Interest Rate Swap /169502 /Pay USD[Quarterly] SOFR [1.03414%]/ Receive USDQuarterly FIXED 2.434%	Portfolio Hedge	Exhibit 5 ...	Interest	MORGAN STANLEY CAPITAL SERVICES / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZQ078	06/04/2015	06/23/2030	0	 70,000,000	.. 2.434% [SOFR]	 19,376	 0	 (2,242,409)	 (5,329,059)	.....	..... (5,329,059)	 (648,719)	 0	 0	 0	 820,076	.....	.....
Interest Rate Swap /169504 /Pay USD[Quarterly] SOFR [1.03414%]/ Receive USDQuarterly FIXED 1.618%																						
Interest Rate Swap /169501 /Pay USD[Quarterly] SOFR [3.93255%]/ Receive USDQuarterly FIXED 2.233%	Portfolio Hedge	Exhibit 5 ...	Interest	MORGAN STANLEY CAPITAL SERVICES / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZQ078	10/06/2016	06/23/2030	0	 155,000,000	.. 1.618% [SOFR]	 47,172	 0	 (6,416,501)	 (15,914,454)	.....	..... (15,914,454)	 144,108	 0	 0	 0	 1,815,883	.....	.....
Interest Rate Swap /169503 /Pay USD[Quarterly] SOFR [1.03414%]/ Receive USDQuarterly FIXED 2.4175%																						
Interest Rate Swap /169503 /Pay USD[Quarterly] SOFR [1.03414%]/ Receive USDQuarterly FIXED 2.4175%	Portfolio Hedge	Exhibit 5 ...	Interest	MORGAN STANLEY CAPITAL SERVICES / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZQ078	10/25/2017	06/23/2030	 0	 45,000,000	.. 2.233% [SOFR]	 8,967	 0	 (2,024,731)	 (546,596)	.....	..... (546,596)	 1,474,146	 0	 0	 0	 204,985	.....	.....
Interest Rate Swap /169503 /Pay USD[Quarterly] SOFR [1.03414%]/ Receive USDQuarterly FIXED 2.4175%	Portfolio Hedge	Exhibit 5 ...	Interest	MORGAN STANLEY CAPITAL SERVICES / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZQ078	10/25/2017	06/23/2030	 0	 64,000,000	2.4175% [SOFR]	 17,735	 0	 (2,060,314)	 (4,623,994)		 (4,623,994)	 (453,203)	 0	 0	 0	 749,784		

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SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
Interest Rate Swap /145478 /Pay USD[Annual] SOFR [5.06391%]/ Receive USDAnnual FIXED 1.481%	Portfolio Hedge	Exhibit 5 ...	Interest ...	CITIBANK N.A. / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	.01/13/2022	.01/18/2030	0	286,000,000	.. 1.481% [SOFR]	0	0	... (11,056,937)	... (33,380,877)	.....	... (33,380,877)	(2,580,090)	0	0	0	3,216,705	.....	.....
Interest Rate Swap /162729 /Pay USD[Annual] FIXED [3.28%]/ Receive USDAnnual SOFR 0.1926%	Portfolio Hedge	Exhibit 5 ...	Interest ...	THE TORONTO-DOMINION BANK / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	.12/21/2022	.12/23/2042	0	240,000,000	.. SOFR [3.28%]	0	0	4,873,209	25,688,773	.....	.....25,688,773	19,197,764	0	0	0	5,089,754	.....	.....
Interest Rate Swap /162730 /Pay USD[Annual] FIXED [3.36%]/ Receive USDAnnual SOFR 0.1926%	Portfolio Hedge	Exhibit 5 ...	Interest ...	THE TORONTO-DOMINION BANK / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	.12/21/2022	.12/23/2032	0	280,000,000	.. SOFR [3.36%]	0	0	5,457,677	13,476,280	.....	.....13,476,280	11,596,455	0	0	0	3,957,322	.....	.....
Interest Rate Swap /162732 /Pay USD[Annual] FIXED [3.354%]/ Receive USDAnnual SOFR 0.1926%	Portfolio Hedge	Exhibit 5 ...	Interest ...	CITIBANK N.A. / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	.12/21/2022	.12/23/2032	0	195,000,000	.SOFR [3.354%]	0	0	3,812,777	9,464,520	.....	.....9,464,520	8,065,695	0	0	0	2,755,992	.....	.....
Interest Rate Swap /162733 /Pay USD[Annual] FIXED [3.276%]/ Receive USDAnnual SOFR 0.1926%	Portfolio Hedge	Exhibit 5 ...	Interest ...	THE TORONTO-DOMINION BANK / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	.12/21/2022	.12/23/2042	0	240,000,000	.SOFR [3.276%]	0	0	4,882,969	25,810,231	.....	.....25,810,231	19,186,376	0	0	0	5,089,754	.....	.....
Interest Rate Swap /162735 /Pay USD[Annual] FIXED [3.3545%]/ Receive USDAnnual SOFR 0.1926%	Portfolio Hedge	Exhibit 5 ...	Interest ...	THE TORONTO-DOMINION BANK / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	.12/21/2022	.12/23/2032	0	400,000,000	SOFR [3.3545%]	0	0	7,819,048	19,400,853	.....	.....19,400,853	16,546,795	0	0	0	5,653,318	.....	.....
Interest Rate Swap /162736 /Pay USD[Annual] FIXED [3.354%]/ Receive USDAnnual SOFR 0.1926%	Portfolio Hedge	Exhibit 5 ...	Interest ...	JPMORGAN CHASE BANK, N.A. / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	.12/21/2022	.12/23/2032	0	190,000,000	.SOFR [3.354%]	0	0	3,715,014	9,221,840	.....	.....9,221,840	7,858,882	0	0	0	2,685,326	.....	.....
Interest Rate Swap /179971 /Pay USD[Annual] FIXED [3.468%]/ Receive USDAnnual SOFR 0.19313%	Portfolio Hedge	Exhibit 5 ...	Interest ...	CITIBANK N.A. / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	.12/20/2023	.12/22/2035	0	410,000,000	.SOFR [3.468%]	0	0	7,555,402	22,636,202		22,636,202	22,735,752	0	0	0	6,795,990		

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
Interest Rate Swap /179972 /Pay USD[Annual] SOFR [0.19313%]/ Receive USDAnnual FIXED 3.8165%	Portfolio Hedge	Exhibit 5 ...	Interest	CITIBANK N.A. / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/20/2023	12/22/2026	0	1,400,000,000	3.8165% [SOFR]	0	0	... (20,838,617)	 (7,253,274)		 (7,253,274)	... (10,321,686)	 0	 0	 0	 9,849,873	.....	.....
Interest Rate Swap /179973 /Pay USD[Annual] SOFR [0.19313%]/ Receive USDAnnual FIXED 3.5615%	Portfolio Hedge	Exhibit 5 ...	Interest	MUFG SECURITIES EMEA PLC / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/20/2023	12/22/2028	0	1,090,000,000	3.5615% [SOFR]	0	0	... (19,050,177)	... (19,611,635)		 (19,611,635)	... (21,982,426)	 0	 0	 0	10,886,366	.....	.....
Interest Rate Swap /179974 /Pay USD[Annual] FIXED [3.482%]/ Receive USDAnnual SOFR 0.19313%	Portfolio Hedge	Exhibit 5 ...	Interest	MUFG SECURITIES EMEA PLC / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/20/2023	12/22/2038	0	425,000,000	SOFR [3.482%]	0	0	7,771,328	28,841,465		28,841,465	28,783,222	 0	 0	 0	7,945,341	.....	.....
Interest Rate Swap /179975 /Pay USD[Annual] FIXED [3.4655%]/ Receive USDAnnual SOFR 0.19313%	Portfolio Hedge	Exhibit 5 ...	Interest	JPMORGAN CHASE BANK, N.A. / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/20/2023	12/22/2035	0	100,000,000	SOFR [3.4655%]	0	0	1,845,323	5,543,034		5,543,034	5,542,939	 0	 0	 0	1,657,558	.....	.....
Interest Rate Swap /179976 /Pay USD[Annual] SOFR [0.19313%]/ Receive USDAnnual FIXED 3.5585%	Portfolio Hedge	Exhibit 5 ...	Interest	JPMORGAN CHASE BANK, N.A. / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/20/2023	12/22/2028	0	210,000,000	3.5585% [SOFR]	0	0	 (3,676,623)	 (3,801,357)		 (3,801,357)	 (4,229,640)	 0	 0	 0	2,097,373	.....	.....
1119999999. Subtotal - Swaps - Hedging Other - Interest Rate										93,250	0	(19,633,564)	69,621,954	XXX	69,621,954	100,916,371	0	0	0	71,271,400	XXX	XXX
Currency Swap /154919 /Pay EUR[Semi-Annual] FIXED [3.33%]/ Receive USD Semi-Annual FIXED 5.214%	ASSET HEDGE	Schedule D ..	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	08/04/2022	08/20/2027	0	22,972,500	5.214% [3.33%]	0	0	387,129	 (473,576)		 (473,576)	1,227,414	 0	 0	 0	186,629	.....	.....
Currency Swap /156715 /Pay GBP[Semi-Annual] FIXED [6.66%]/ Receive USD Semi-Annual FIXED 6.78%	ASSET HEDGE	Schedule D ..	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	09/09/2022	09/20/2032	0	19,669,000	6.78% [6.66%]	0	0	 (113,261)	 (1,911,489)		 (1,911,489)	1,068,076	 0	 0	 0	273,250	.....	.....
Currency Swap /158392 /Pay EUR[Semi-Annual] FIXED [6.04%]/ Receive USD Semi-Annual FIXED 7.672%	ASSET HEDGE	Schedule D ..	Currency.....	ROYAL BANK OF CANADA ES71P3U3RHI6C71XB11	10/13/2022	10/30/2027	0	21,802,500	7.672% [6.04%]	0	0	202,273	 (2,122,993)		 (2,122,993)	1,416,966	 0	 0	 0	183,711	.....	.....
Currency Swap /158652 /Pay EUR[Quarterly] FIXED [6.408%]/ Receive USD Quarterly FIXED 7.7987%	ASSET HEDGE	Schedule D ..	Currency.....	CITIBANK N.A. E570DZVZ7FF32TWEFA76	10/20/2022	10/19/2027	0	9,790,000	7.7987% [6.408%]	0	0	35,027	 (1,027,332)		 (1,027,332)	36,210	 0	 0	 0	81,909		

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
Currency Swap /158899 /Pay GBP[Semi-Annual] FIXED [6.22%]/ Receive USDSemi-Annual Currency Swap /158983 /Pay GBP[Semi-Annual] FIXED [9.2279%]/ Receive USDSemi-Annual Currency Swap /159089 /Pay GBP[Semi-Annual] FIXED [6.07%]/ Receive USDSemi-Annual Currency Swap /159812 /Pay EUR[Quarterly] FIXED [5.01%]/ Receive USDQuarterly Currency Swap /161475 /Pay EUR[Semi-Annual] FIXED [5.08%]/ Receive USDSemi-Annual Currency Swap /162602 /Pay EUR[Semi-Annual] FIXED [5.478%]/ Receive USDSemi-Annual Currency Swap /166905 /Pay GBP[Semi-Annual] FIXED [6.2%]/ Receive USDSemi-Annual Currency Swap /166906 /Pay GBP[Semi-Annual] FIXED [6.26%]/ Receive USDSemi-Annual Currency Swap /166959 /Pay GBP[Semi-Annual] FIXED [6.11%]/ Receive USDSemi-Annual Currency Swap /167021 /Pay EUR[Semi-Annual] FIXED [6.01%]/ Receive USDSemi-Annual Currency Swap /167275 /Pay EUR[Semi-Annual] FIXED [4.57%]/ Receive USDSemi-Annual FIXED 5.219%	ASSET HEDGE	Schedule D ..	Currency.....	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	. 10/25/2022	. 01/31/2030	0	 27,528,000	 6.2485% [6.22%]	 0	 0	 (187,613)	 (2,938,530)	.....	..... (2,938,530)	 1,211,027	 0	 0	 0	 310,225	.....	.....
ASSET HEDGE	ASSET HEDGE	Schedule D ..	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJFXT09	. 10/26/2022	. 05/02/2025	0	 5,785,000	 9.495% [9.2279%]	 0	 0	 (50,196)	 (469,869)	.....	..... (469,869)	 154,589	 0	 0	 0	 16,866	.....	.....
ASSET HEDGE	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	. 10/27/2022	. 11/09/2037	0	 18,528,000	 6.282% [6.07%]	 0	 0	 (77,075)	 (1,533,279)	.....	..... (1,533,279)	 1,265,511	 0	 0	 0	 332,215	.....	.....
ASSET HEDGE	ASSET HEDGE	Schedule D ..	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJFXT09	. 11/07/2022	. 01/31/2030	0	 20,000,000	 6.691% [5.01%]	 0	 0	 176,932	 (1,285,277)	.....	..... (1,285,277)	 1,200,031	 0	 0	 0	 225,389	.....	.....
ASSET HEDGE	ASSET HEDGE	Schedule D ..	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. 17331LVCZKQKXST7XV54	. 12/02/2022	. 06/27/2030	0	 18,445,000	 6.418% [5.08%]	 0	 0	 221,944	 (326,692)	.....	..... (326,692)	 1,056,467	 0	 0	 0	 216,090	.....	.....
ASSET HEDGE	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	. 12/21/2022	. 01/04/2032	0	 21,180,000	 6.6425% [5.478%]	 0	 0	 201,773	 (812,032)	.....	..... (812,032)	 1,110,253	 0	 0	 0	 280,385	.....	.....
ASSET HEDGE	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	. 03/28/2023	. 08/23/2029	0	 17,262,000	 6.13% [6.2%]	 0	 0	 (51,066)	 (352,317)	.....	..... (352,317)	 704,669	 0	 0	 0	 186,118	.....	.....
ASSET HEDGE	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	. 03/28/2023	. 08/23/2031	0	 11,097,000	 6.2675% [6.26%]	 0	 0	 (24,470)	 (241,823)	.....	..... (241,823)	 508,456	 0	 0	 0	 143,190	.....	.....
ASSET HEDGE	ASSET HEDGE	Schedule D ..	Currency.....	CITIBANK N.A. ES70DZIWZ7FF32TWEFA76	. 03/30/2023	. 06/29/2030	0	 24,760,000	 6.055% [6.11%]	 0	 0	 (62,312)	 (466,845)	.....	..... (466,845)	 1,042,683	 0	 0	 0	 290,337	.....	.....
ASSET HEDGE	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	. 03/31/2023	. 06/30/2028	0	 27,175,000	 6.839% [5.62%]	 0	 0	 232,925	 354,527	.....	..... 354,527	 1,694,753	 0	 0	 0	 254,199	.....	.....
ASSET HEDGE	ASSET HEDGE	Schedule D ..	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJFXT09	. 04/05/2023	. 06/19/2029	0	 24,046,000	 5.219% [4.57%]	 0	 0	 167,174	 (35,583)		 (35,583)	 1,351,887	 0	 0	 0	 254,195		

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
Currency Swap /167714 /Pay EUR[Semi-Annual] FIXED [4.7%]/ Receive USD Semi-Annual FIXED 5.471%	ASSET HEDGE	Schedule D ..	Currency.....	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.04/18/2023	.06/07/2029	0	21,880,000	5.471% [4.7%]	0	0	180,032	102,633	.....	.....102,633	1,249,766	0	0	0	230,520	.....	.....
Currency Swap /167928 /Pay GBP[Semi-Annual] FIXED [7.16%]/ Receive USD Semi-Annual FIXED 6.791%	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57PNE97	.04/20/2023	.05/12/2030	0	18,690,000	6.791% [7.16%]	0	0	(103,112)	(473,026)	.....	.....(473,026)	867,188	0	0	0	216,554	.....	.....
Currency Swap /170669 /Pay GBP[Annual] FIXED [6.24%]/ Receive USD Annual FIXED 5.9265%	ASSET HEDGE	Schedule D ..	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. 17331LVCZKQKX5T7XV54	.04/27/2023	.05/16/2033	0	25,563,500	5.9265% [6.24%]	0	0	(124,158)	(842,992)	.....	.....(842,992)	1,357,556	0	0	0	370,009	.....	.....
Currency Swap /171291 /Pay EUR[Semi-Annual] FIXED [4.27%]/ Receive USD Semi-Annual FIXED 5.08%	ASSET HEDGE	Schedule D ..	Currency.....	BNP PARIBAS LONDON ROMUWSPFUMPRO8K5P83	.05/11/2023	.06/20/2030	0	18,018,000	5.08% [4.27%]	0	0	153,030	(79,881)	.....	.....(79,881)	931,634	0	0	0	210,703	.....	.....
Currency Swap /171895 /Pay DKK[Semi-Annual] FIXED [5.26%]/ Receive USD Semi-Annual FIXED 6.34%	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57PNE97	.05/25/2023	.06/30/2030	0	24,446,362	6.34% [5.26%]	0	0	126,903	(371,751)	.....	.....(371,751)	1,422,184	0	0	0	286,919	.....	.....
Currency Swap /171910 /Pay CAD[Semi-Annual] FIXED [5.96%]/ Receive USD Semi-Annual FIXED 6.152%	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57PNE97	.05/26/2023	.06/30/2033	0	14,684,288	6.152% [5.96%]	0	0	33,521	(280,233)	.....	.....(280,233)	668,712	0	0	0	214,058	.....	.....
Currency Swap /176821 /Pay EUR[Annual] FIXED [5.194%]/ Receive USD Annual FIXED 6.8%	ASSET HEDGE	Schedule D ..	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. 17331LVCZKQKX5T7XV54	.09/21/2023	.09/28/2030	0	10,650,000	6.8% [5.194%]	0	0	162,228	42,448	.....	.....42,448	567,666	0	0	0	127,689	.....	.....
Currency Swap /177781 /Pay GBP[Quarterly] SONIA [5.9305%]/ Receive USD Quarterly SOFR 6.04319%	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57PNE97	.10/16/2023	.07/13/2027	0	24,400,000	6.5667% [6.2199%]	0	0	(19,519)	(558,908)	.....	.....(558,908)	592,723	0	0	0	194,436	.....	.....
Currency Swap /180765 /Pay EUR[Quarterly] FIXED [5.629%]/ Receive USD Quarterly FIXED 7.3215%	ASSET HEDGE	Schedule D ..	Currency.....	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.01/19/2024	.10/19/2027	0	14,520,000	7.3215% [5.629%]	0	0	47,818	480,328	.....	.....480,328	480,328	0	0	0	121,483	.....	.....
Currency Swap /181109 /Pay CAD[Semi-Annual] FIXED [5.583%]/ Receive USD Semi-Annual FIXED 5.8805%	ASSET HEDGE	Schedule D ..	Currency.....	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.01/31/2024	.07/31/2033	0	14,720,066	5.8805% [5.583%]	0	0	60,030	437,338	.....	.....437,338	437,338	0	0	0	215,713	.....	.....
Currency Swap /182949 /Pay EUR[Semi-Annual] FIXED [4.07%]/ Receive USD Semi-Annual FIXED 5.815%	ASSET HEDGE	Schedule D ..	Currency.....	CREDIT AGRICOLE ... 1VUV7VQFKUQGSJ21A208	.03/27/2024	.07/18/2031	0	21,642,000	5.815% [4.07%]	0	0	170,871	588,845		588,845	588,845	0	0	0	276,942		

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Currency Swap /182950 /Pay EUR[Semi-Annual] FIXED [4.79%]/ Receive USDSemi-Annual FIXED 6.5675%	ASSET HEDGE	Schedule D ..	Currency.....	CREDIT AGRICOLE ... 1VUV7VQFKUOQSJ21A208	.03/27/2024	.04/17/2031	0	27,050,000	6.5675% [4.79%]	0	0	340,170	762,477		762,477	762,477	0	0	0	339,475		
Currency Swap /183595 /Pay EUR[Semi-Annual] FIXED [4.88%]/ Receive USDSemi-Annual FIXED 6.8425%	ASSET HEDGE	Schedule D ..	Currency.....	CREDIT AGRICOLE ... 1VUV7VQFKUOQSJ21A208	.04/10/2024	.05/07/2034	0	25,531,250	6.8425% [4.88%]	0	0	333,328	809,344		809,344	809,344	0	0	0	390,553		
Currency Swap /184052 /Pay EUR[Semi-Annual] FIXED [4.67%]/ Receive USDSemi-Annual FIXED 6.709%	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGGFU57PNE97	.04/26/2024	.07/15/2031	0	21,440,000	6.709% [4.67%]	0	0	185,788	677,596		677,596	677,596	0	0	0	274,147		
Currency Swap /184056 /Pay EUR[Semi-Annual] FIXED [5.12%]/ Receive USDSemi-Annual FIXED 7.12%	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGGFU57PNE97	.04/26/2024	.05/08/2031	0	37,450,000	7.12% [5.12%]	0	0	471,153	1,128,718		1,128,718	1,128,718	0	0	0	472,227		
Currency Swap /184476 /Pay GBP[Semi-Annual] FIXED [5.51%]/ Receive USDSemi-Annual FIXED 5.9145%	ASSET HEDGE	Schedule D ..	Currency.....	CREDIT AGRICOLE ... 1VUV7VQFKUOQSJ21A208	.05/10/2024	.05/15/2029	0	35,710,500	5.9145% [5.51%]	0	0	56,989	524,513		524,513	524,513	0	0	0	373,683		
Currency Swap /185019 /Pay DKK[Semi-Annual] FIXED [4.27%]/ Receive USDSemi-Annual FIXED 6.1525%	ASSET HEDGE	Schedule D ..	Currency.....	CREDIT AGRICOLE ... 1VUV7VQFKUOQSJ21A208	.05/23/2024	.06/11/2029	0	24,345,930	6.1525% [4.27%]	0	0	256,032	729,878		729,878	729,878	0	0	0	256,789		
Currency Swap /185230 /Pay EUR[Semi-Annual] FIXED [5.05%]/ Receive USDSemi-Annual FIXED 6.782%	ASSET HEDGE	Schedule D ..	Currency.....	CREDIT AGRICOLE ... 1VUV7VQFKUOQSJ21A208	.05/30/2024	.07/02/2029	0	19,512,000	6.782% [5.05%]	0	0	168,653	600,175		600,175	600,175	0	0	0	207,186		
Currency Swap /185245 /Pay EUR[Semi-Annual] FIXED [4.04%]/ Receive USDSemi-Annual FIXED 5.6875%	ASSET HEDGE	Schedule D ..	Currency.....	THE TORONTO-DOMINION BANK PT3QB789TSUIDF371261	.05/31/2024	.11/21/2029	0	21,702,000	5.6875% [4.04%]	0	0	43,110	670,555		670,555	670,555	0	0	0	239,952		
Currency Swap /185683 /Pay EUR[Semi-Annual] FIXED [5.82%]/ Receive USDSemi-Annual FIXED 7.4075%	ASSET HEDGE	Schedule D ..	Currency.....	CREDIT AGRICOLE ... 1VUV7VQFKUOQSJ21A208	.06/13/2024	.07/15/2034	0	21,540,000	7.4075% [5.82%]	0	0	172,572	233,881		233,881	233,881	0	0	0	332,826		
Currency Swap /186337 /Pay EUR[Semi-Annual] FIXED [4.57%]/ Receive USDSemi-Annual FIXED 6.139%	ASSET HEDGE	Schedule D ..	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMVCMCFXT09	.06/26/2024	.06/30/2031	0	24,541,000	6.139% [4.57%]	0	0	170,020	92,444		92,444	92,444	0	0	0	312,838		
Currency Swap /186965 /Pay EUR[Semi-Annual] FIXED [4.88%]/ Receive USDSemi-Annual FIXED 6.3%	ASSET HEDGE	Schedule D ..	Currency.....	CREDIT AGRICOLE ... 1VUV7VQFKUOQSJ21A208	.07/15/2024	.08/28/2027	0	10,910,000	6.3% [4.88%]	0	0	55,086	358,460		358,460	358,460	0	0	0	89,135		

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Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
Currency Swap /189509 /Pay GBP[Semi-Annual] FIXED [5.87%]/ Receive USDSemi-Annual FIXED 5.5665%	ASSET HEDGE	Schedule D ..	Currency.....	CREDIT AGRICOLE ... 1VUV7VQFKUQGSJ21A208	.09/24/2024	.11/26/2029	0	16,725,000	5.5665% [5.87%]	0	0	363	947,371	.....	.....947,371	947,371	0	0	0	185,301	.....	.....
Currency Swap /189510 /Pay GBP[Semi-Annual] FIXED [6.02%]/ Receive USDSemi-Annual FIXED 5.792%	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	.09/24/2024	.11/26/2031	0	8,362,500	5.792% [6.02%]	0	0	863	445,787	.....	.....445,787	445,787	0	0	0	109,912	.....	.....
Currency Swap /190346 /Pay EUR[Semi-Annual] FIXED [3.56%]/ Receive USDSemi-Annual FIXED 5.141%	ASSET HEDGE	Schedule D ..	Currency.....	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.10/16/2024	.11/26/2029	0	8,167,500	5.141% [3.56%]	0	0	13,623	233,460	.....	.....233,460	233,460	0	0	0	90,490	.....	.....
Currency Swap /190615 /Pay GBP[Semi-Annual] FIXED [6.43%]/ Receive USDSemi-Annual FIXED 6.493%	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	.10/23/2024	.01/15/2032	0	12,950,000	6.493% [6.43%]	0	0	0	33,339	.....	.....33,339	33,339	0	0	0	171,801	.....	.....
Currency Swap /190649 /Pay CAD[Semi-Annual] FIXED [4.76%]/ Receive USDSemi-Annual FIXED 5.623%	ASSET HEDGE	Schedule D ..	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.10/23/2024	.11/15/2031	0	10,115,607	5.623% [4.76%]	0	0	14,928	108,502	.....	.....108,502	108,502	0	0	0	132,665	.....	.....
Currency Swap /192483 /Pay EUR[Semi-Annual] FIXED [3.75%]/ Receive USDSemi-Annual FIXED 5.676%	ASSET HEDGE	Schedule D ..	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.12/12/2024	.01/10/2032	0	4,204,000	5.676% [3.75%]	0	0	0	(22,489)	.....	.....(22,489)	(22,489)	0	0	0	55,733	.....	.....
Currency Swap /192485 /Pay SEK[Semi-Annual] FIXED [3.87%]/ Receive USDSemi-Annual FIXED 5.648%	ASSET HEDGE	Schedule D ..	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.12/12/2024	.01/10/2032	0	9,126,586	5.648% [3.87%]	0	0	0	65,215	.....	.....65,215	65,215	0	0	0	120,992	.....	.....
1139999999. Subtotal - Swaps - Hedging Other - Foreign Exchange										0	0	4,029,508	(6,199,084)	XXX	(6,199,084)	32,612,155	0	0	0	9,855,439	XXX	XXX
1169999999. Subtotal - Swaps - Hedging Other										93,250	0	(15,604,056)	63,422,870	XXX	63,422,870	133,528,525	0	0	0	81,126,839	XXX	XXX
1229999999. Subtotal - Swaps - Replication										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
1289999999. Subtotal - Swaps - Income Generation										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
1349999999. Subtotal - Swaps - Other										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
1359999999. Total Swaps - Interest Rate										93,250	0	(19,633,564)	69,621,954	XXX	69,621,954	100,916,371	0	0	0	71,271,400	XXX	XXX
1369999999. Total Swaps - Credit Default										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
1379999999. Total Swaps - Foreign Exchange										0	0	4,029,508	(6,199,084)	XXX	(6,199,084)	32,612,155	0	0	0	9,855,439	XXX	XXX
1389999999. Total Swaps - Total Return										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
1399999999. Total Swaps - Other										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
1409999999. Total Swaps										93,250	0	(15,604,056)	63,422,870	XXX	63,422,870	133,528,525	0	0	0	81,126,839	XXX	XXX
REC 25630044.84 USD PAY [23032031.67] EUR /166475	Asset Hedge	Schedule BA, D	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.03/21/2023	.03/27/2026	0	25,630,045	0.898634076	0	0	0	1,111,073	.....	.....1,111,073	1,763,454	0	0	0	142,702	.....	.....
REC 3409000.00 GBP PAY [4562094.25] USD /189591	Asset Hedge	Schedule BA, D	Currency.....	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.09/30/2024	.01/02/2025	0	4,562,094	0.747244536	0	0	0	(294,088)	.....	.....(294,088)	(294,088)	0	0	0	2,281	.....	.....
REC 16814392.70 USD PAY [14971000.00] EUR /189595	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUWISFPUBMIPR08K5P83	.09/30/2024	.01/02/2025	0	16,814,393	0.890368087	0	0	0	1,310,734		1,310,734	1,310,734	0	0	0	8,407		

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
REC 5823057.84 USD PAY [5195000.00] EUR /189631	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUJSPFUMBP08K5P83	.09/30/2024	.01/02/2025	0	5,823,058	0.892142632	0	0	0	443,226		443,226	443,226	0	0	0	2,912		
REC 24823504.27 USD PAY [22319000.00] EUR /189695	Asset Hedge	Schedule BA, D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE .. 21G119DL770XHC3ZE78	.10/01/2024	.01/03/2025	0	24,823,504	0.899107546	0	0	0	1,703,760		1,703,760	1,703,760	0	0	0	12,412		
REC 33157768.17 USD PAY [337033000.00] SEK /189697	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. 17331LVCZKQKX5T7XV54	.10/01/2024	.01/03/2025	0	33,157,768	10.164526	0	0	0	2,712,306		2,712,306	2,712,306	0	0	0	16,579		
REC 18069521.05 USD PAY [16291000.00] EUR /189799	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. 17331LVCZKQKX5T7XV54	.10/02/2024	.01/06/2025	0	18,069,521	0.901573426	0	0	0	1,204,199		1,204,199	1,204,199	0	0	0	12,777		
REC 208439.11 USD PAY [159000.00] GBP /189855	Asset Hedge	Schedule BA, D	Currency.....	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.10/04/2024	.01/02/2025	0	208,439	0.762812582	0	0	0	9,375		9,375	9,375	0	0	0	104		
REC 5493517.96 USD PAY [4986000.00] EUR /190037	Asset Hedge	Schedule BA, D	Currency.....	ROYAL BANK OF CANADA ES71P3U3RH1GCT1XBU11	.10/08/2024	.01/10/2025	0	5,493,518	0.907614797	0	0	0	305,249		305,249	305,249	0	0	0	4,758		
REC 1336097.24 USD PAY [1025000.00] GBP /190134	Asset Hedge	Schedule BA, D	Currency.....	ROYAL BANK OF CANADA ES71P3U3RH1GCT1XBU11	.10/10/2024	.01/02/2025	0	1,336,097	0.767159439	0	0	0	48,582		48,582	48,582	0	0	0	668		
REC 4398000.00 EUR PAY [4812296.44] USD /190267	Asset Hedge	Schedule BA, D	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.10/15/2024	.01/06/2025	0	4,812,296	0.91390887	0	0	0	(257,827)		(257,827)	(257,827)	0	0	0	3,403		
REC 5462179.00 USD PAY [5000000.00] EUR /190330	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. 17331LVCZKQKX5T7XV54	.10/16/2024	.01/21/2025	0	5,462,179	0.915385432	0	0	0	282,393		282,393	282,393	0	0	0	6,690		
REC 1840408.78 USD PAY [1411000.00] GBP /190410	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO-DOMINION BANK PT30B789TSUIDF371261	.10/18/2024	.01/02/2025	0	1,840,409	0.766677732	0	0	0	75,497		75,497	75,497	0	0	0	920		
REC 7045156.52 USD PAY [10530000.00] AUD /190581	Asset Hedge	Schedule BA, D	Currency.....	ROYAL BANK OF CANADA ES71P3U3RH1GCT1XBU11	.10/22/2024	.01/28/2025	0	7,045,157	1.494643199	0	0	0	490,423		490,423	490,423	0	0	0	9,963		
REC 36437591.16 USD PAY [54900000.00] AUD /190618	Asset Hedge	Schedule BA, D	Currency.....	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.10/23/2024	.01/28/2025	0	36,437,591	1.506686675	0	0	0	2,469,716		2,469,716	2,469,716	0	0	0	51,531		
REC 131394.79 USD PAY [181000.00] CAD /190655	Asset Hedge	Schedule BA, D	Currency.....	ROYAL BANK OF CANADA ES71P3U3RH1GCT1XBU11	.10/24/2024	.01/24/2025	0	131,395	1.377528	0	0	0	5,594		5,594	5,594	0	0	0	174		
REC 4383558.96 USD PAY [6600000.00] AUD /190707	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIZ7FF32TWEFA76	.10/25/2024	.01/09/2025	0	4,383,559	1.505625015	0	0	0	296,782		296,782	296,782	0	0	0	3,796		
REC 2974837.50 USD PAY [4500000.00] AUD /190727	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO-DOMINION BANK PT30B789TSUIDF371261	.10/28/2024	.01/09/2025	0	2,974,838	1.512687668	0	0	0	191,751		191,751	191,751	0	0	0	2,576		
REC 18431738.85 USD PAY [16964000.00] EUR /190739	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO-DOMINION BANK PT30B789TSUIDF371261	.10/28/2024	.01/28/2025	0	18,431,739	0.920368773	0	0	0	853,228		853,228	853,228	0	0	0	26,066		
REC 1672000.00 GBP PAY [2171371.39] USD /190754	Asset Hedge	Schedule BA, D	Currency.....	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.10/28/2024	.01/28/2025	0	2,171,371	0.770020336	0	0	0	(74,628)		(74,628)	(74,628)	0	0	0	3,071		
REC 16725709.88 USD PAY [12903000.00] GBP /190914	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO-DOMINION BANK PT30B789TSUIDF371261	.11/04/2024	.02/05/2025	0	16,725,710	0.771447196	0	0	0	578,996		578,996	578,996	0	0	0	26,446		
REC 59254898.65 USD PAY [54869000.00] EUR /191211	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIZ7FF32TWEFA76	.11/08/2024	.02/10/2025	0	59,254,899	0.925982514	0	0	0	2,337,862		2,337,862	2,337,862	0	0	0	98,263		

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Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
REC 2292948.29 USD PAY [2154000.00] EUR /191274	Asset Hedge	Schedule BA, D	Currency	BNP PARIBAS LONDON ROMUWSPUBMPRO8K5P83	11/12/2024	01/06/2025	0	2,292,948	0.939401995	0	0	0	61,946		61,946	61,946	0	0	0	1,621		
REC 4163763.46 USD PAY [6364000.00] AUD /191291	Asset Hedge	Schedule BA, D	Currency	BNP PARIBAS LONDON ROMUWSPUBMPRO8K5P83	11/12/2024	02/12/2025	0	4,163,763	1.52842566	0	0	0	224,402		224,402	224,402	0	0	0	7,212		
REC 75240.11 USD PAY [115000.00] AUD /191294	Asset Hedge	Schedule BA, D	Currency	BNP PARIBAS LONDON ROMUWSPUBMPRO8K5P83	11/12/2024	02/05/2025	0	75,240	1.528439677	0	0	0	4,058		4,058	4,058	0	0	0	119		
REC 3436934.25 USD PAY [2685000.00] GBP /191326	Asset Hedge	Schedule BA, D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE .. 2IG119DL770XHC3ZE78	11/12/2024	02/12/2025	0	3,436,934	0.781219484	0	0	0	76,282		76,282	76,282	0	0	0	5,953		
REC 325761.32 USD PAY [454000.00] CAD /191366	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK PT30B789TSUIDF371261	11/13/2024	02/14/2025	0	325,761	1.393658	0	0	0	9,776		9,776	9,776	0	0	0	564		
REC 50586240.91 USD PAY [39820000.00] GBP /191412	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC G5G8EF7VJP5170UK5573	11/13/2024	01/31/2025	0	50,586,241	0.787170382	0	0	0	742,564		742,564	742,564	0	0	0	71,540		
REC 212041.44 USD PAY [200000.00] EUR /191426	Asset Hedge	Schedule BA, D	Currency	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	11/18/2024	02/10/2025	0	212,041	0.943212033	0	0	0	4,615		4,615	4,615	0	0	0	352		
REC 88711.20 USD PAY [137000.00] AUD /191429	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK PT30B789TSUIDF371261	11/18/2024	02/12/2025	0	88,711	1.544337147	0	0	0	3,966		3,966	3,966	0	0	0	154		
REC 892879.34 USD PAY [840000.00] EUR /191523	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA ES71P3U3RHHG71XBU11	11/19/2024	02/20/2025	0	892,879	0.940776253	0	0	0	17,267		17,267	17,267	0	0	0	1,670		
REC 284785.85 USD PAY [270000.00] EUR /191687	Asset Hedge	Schedule BA, D	Currency	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	11/21/2024	01/06/2025	0	284,786	0.948081179	0	0	0	5,188		5,188	5,188	0	0	0	201		
REC 27407039.63 USD PAY [26250000.00] EUR /191713	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK PT30B789TSUIDF371261	11/22/2024	02/06/2025	0	27,407,040	0.957782848	0	0	0	199,906		199,906	199,906	0	0	0	43,334		
REC 9762811.50 USD PAY [15000000.00] AUD /191759	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A. ES70DZVZ7FF32TWIFA76	11/25/2024	01/09/2025	0	9,762,812	1.536442889	0	0	0	474,899		474,899	474,899	0	0	0	8,455		
REC 498420.30 USD PAY [473000.00] EUR /191762	Asset Hedge	Schedule BA, D	Currency	SOCIETE GENERAL .. 02RNE81BXP4R0TD8PU41	11/25/2024	02/10/2025	0	498,420	0.948998	0	0	0	7,723		7,723	7,723	0	0	0	827		
REC 4419096.30 USD PAY [3493000.00] GBP /191989	Asset Hedge	Schedule BA, D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE .. 2IG119DL770XHC3ZE78	11/27/2024	03/04/2025	0	4,419,096	0.790433229	0	0	0	47,872		47,872	47,872	0	0	0	9,374		
REC 2481658.92 USD PAY [2340000.00] EUR /191991	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK PT30B789TSUIDF371261	11/27/2024	03/04/2025	0	2,481,659	0.942917651	0	0	0	53,086		53,086	53,086	0	0	0	5,264		
REC 22719607.29 USD PAY [17929000.00] GBP /192012	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK PT30B789TSUIDF371261	12/03/2024	01/28/2025	0	22,719,607	0.789142037	0	0	0	284,344		284,344	284,344	0	0	0	32,130		
REC 4459065.66 USD PAY [6900000.00] AUD /192044	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A. ES70DZVZ7FF32TWIFA76	12/09/2024	01/09/2025	0	4,459,066	1.547410331	0	0	0	186,660		186,660	186,660	0	0	0	3,862		
REC 11526561.52 USD PAY [10850000.00] EUR /192074	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A. ES70DZVZ7FF32TWIFA76	12/09/2024	03/11/2025	0	11,526,562	0.941304045	0	0	0	256,560		256,560	256,560	0	0	0	25,774		

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
REC 10850000.00 EUR PAY [11504009.79] USD /192075	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	12/09/2024	01/28/2025	0	11,504,010	0.943149762	0	0	0	(256,691)		(256,691)	(256,691)	0	0	0	16,269		
REC 27871273.50 USD PAY [26250000.00] EUR /192089	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	12/09/2024	03/11/2025	0	27,871,274	0.941829768	0	0	0	.605,270		.605,270	.605,270	0	0	0	62,322		
REC 10208851.20 USD PAY [8000000.00] GBP /192274	Asset Hedge	Schedule BA, D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE .. 2IGI19DL770XOHC3ZE78	12/11/2024	01/31/2025	0	10,208,851	0.783633961	0	0	0	.195,306		.195,306	.195,306	0	0	0	14,437		
REC 2481226.88 USD PAY [2352000.00] EUR /192276	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	12/11/2024	03/13/2025	0	2,481,227	0.947918513	0	0	0	.38,074		.38,074	.38,074	0	0	0	5,548		
REC 10360000.00 EUR PAY [1092320.90] USD /192294	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	12/11/2024	03/13/2025	0	1,092,321	0.948439059	0	0	0	(16,176)		(16,176)	(16,176)	0	0	0	2,443		
REC 5025942.23 USD PAY [3939000.00] GBP /192309	Asset Hedge	Schedule BA, D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE .. 2IGI19DL770XOHC3ZE78	12/11/2024	03/13/2025	0	5,025,942	0.783733455	0	0	0	.96,482		.96,482	.96,482	0	0	0	11,238		
REC 639823.49 USD PAY [10059000.00] AUD /192327	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO- DOMINION BANK PT30B789TSUIDF371261	12/11/2024	03/13/2025	0	6,399,823	1.571761111	0	0	0	177,150		177,150	177,150	0	0	0	14,310		
REC 4758050.83 USD PAY [4518000.00] EUR /192342	Asset Hedge	Schedule BA, D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE .. 2IGI19DL770XOHC3ZE78	12/11/2024	03/17/2025	0	4,758,051	0.949548585	0	0	0	.62,415		.62,415	.62,415	0	0	0	10,902		
REC 5140109.21 USD PAY [8874000.00] NZD /192365	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO- DOMINION BANK PT30B789TSUIDF371261	12/11/2024	03/17/2025	0	5,140,109	1.726420974	0	0	0	172,766		172,766	172,766	0	0	0	11,777		
REC 10758801.90 USD PAY [10200000.00] EUR /192394	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO- DOMINION BANK PT30B789TSUIDF371261	12/11/2024	03/11/2025	0	10,758,802	0.948060505	0	0	0	.169,673		.169,673	.169,673	0	0	0	24,057		
REC 10200000.00 EUR PAY [10738922.10] USD /192395	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO- DOMINION BANK PT30B789TSUIDF371261	12/11/2024	01/30/2025	0	10,738,922	0.949815546	0	0	0	(169,701)		(169,701)	(169,701)	0	0	0	15,187		
REC 2729024.73 USD PAY [2590000.00] EUR /192408	Asset Hedge	Schedule BA, D	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMVMCJXF09	12/11/2024	02/10/2025	0	2,729,025	0.949056543	0	0	0	.42,936		.42,936	.42,936	0	0	0	4,526		
REC 310055.85 USD PAY [243000.00] GBP /192419	Asset Hedge	Schedule BA, D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE .. 2IGI19DL770XOHC3ZE78	12/11/2024	02/12/2025	0	.310,056	0.78372977	0	0	0	.5,912		.5,912	.5,912	0	0	0	.537		
REC 4041434.12 USD PAY [44283000.00] SEK /192420	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO- DOMINION BANK PT30B789TSUIDF371261	12/11/2024	01/03/2025	0	4,041,434	10.957249	0	0	0	.42,140		.42,140	.42,140	0	0	0	2,021		
REC 3852653.56 USD PAY [6019000.00] AUD /192439	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO- DOMINION BANK PT30B789TSUIDF371261	12/12/2024	03/17/2025	0	3,852,654	1.56229983	0	0	0	128,878		128,878	128,878	0	0	0	8,828		
REC 27562237.50 USD PAY [26250000.00] EUR /192441	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	12/12/2024	01/03/2025	0	27,562,238	0.952390023	0	0	0	.380,225		.380,225	.380,225	0	0	0	13,781		
REC 925025.16 USD PAY [731000.00] GBP /192548	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	12/16/2024	03/18/2025	0	.925,025	0.79024896	0	0	0	.9,932		.9,932	.9,932	0	0	0	2,169		
REC 42066530.04 USD PAY [39890000.00] EUR /192587	Asset Hedge	Schedule BA, D	Currency.....	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	12/16/2024	03/18/2025	0	42,066,530	0.948260085	0	0	0	.644,030		.644,030	.644,030	0	0	0	98,655		
REC 30545064.79 USD PAY [29056000.00] EUR /192594	Asset Hedge	Schedule BA, D	Currency.....	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	12/16/2024	01/06/2025	0	30,545,065	0.951250323	0	0	0	.470,975		.470,975	.470,975	0	0	0	21,599		

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
REC 12803125.65 USD PAY [12140000.00] EUR /192626	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK PT30B789TSUIDF371261	12/16/2024	03/18/2025	0	12,803,126	0.948206136	0	0	0	195,173		195,173	195,173	0	0	0	30,026		
REC 1369391.52 USD PAY [1302000.00] EUR /192658	Asset Hedge	Schedule BA, D	Currency	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJFXTO9	12/16/2024	01/02/2025	0	1,369,392	0.950787252	0	0	0	21,365		21,365	21,365	0	0	0	685		
REC 239303.40 USD PAY [415000.00] NZD /192664	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	12/17/2024	03/17/2025	0	239,303	1.734199277	0	0	0	5,882		5,882	5,882	0	0	0	548		
REC 1556000.00 EUR PAY [1634195.85] USD /192667	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	12/17/2024	01/02/2025	0	1,634,196	0.952150623	0	0	0	(14,466)		(14,466)	(14,466)	0	0	0	817		
REC 7050000.00 EUR PAY [7407259.46] USD /192678	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	12/17/2024	01/15/2025	0	7,407,259	0.951769101	0	0	0	(64,577)		(64,577)	(64,577)	0	0	0	7,407		
REC 7425154.47 USD PAY [7050000.00] EUR /192679	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	12/17/2024	03/11/2025	0	7,425,154	0.949475557	0	0	0	64,489		64,489	64,489	0	0	0	16,603		
REC 4500000.00 AUD PAY [2853114.30] USD /192703	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	12/17/2024	01/28/2025	0	2,853,114	1.577224873	0	0	0	(66,595)		(66,595)	(66,595)	0	0	0	4,035		
REC 29987061.05 USD PAY [28449000.00] EUR /192788	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA ES71P3U3RH1GCG71XBUI1	12/18/2024	03/20/2025	0	29,987,061	0.948708997	0	0	0	292,524		292,524	292,524	0	0	0	70,326		
REC 1985594.69 USD PAY [14041000.00] DKK /192812	Asset Hedge	Schedule BA, D	Currency	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJFXTO9	12/18/2024	03/20/2025	0	1,985,595	0.7071433	0	0	0	26,430		26,430	26,430	0	0	0	4,657		
REC 343226.92 USD PAY [326000.00] EUR /192833	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA ES71P3U3RH1GCG71XBUI1	12/18/2024	03/18/2025	0	343,227	0.949809231	0	0	0	2,995		2,995	2,995	0	0	0	805		
REC 37741566.00 USD PAY [30000000.00] GBP /192874	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	12/19/2024	03/21/2025	0	37,741,566	0.794879703	0	0	0	202,681		202,681	202,681	0	0	0	90,501		
REC 18041000.00 GBP PAY [22676045.01] USD /192893	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	12/20/2024	03/21/2025	0	22,676,045	0.795597482	0	0	0	(93,511)		(93,511)	(93,511)	0	0	0	54,375		
REC 45000000.00 EUR PAY [46981251.00] USD /193090	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	12/27/2024	02/06/2025	0	46,981,251	0.957828717	0	0	0	(346,218)		(346,218)	(346,218)	0	0	0	74,284		
REC 1511000.00 EUR PAY [1579443.92] USD /193092	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	12/27/2024	03/04/2025	0	1,579,444	0.956665905	0	0	0	(11,639)		(11,639)	(11,639)	0	0	0	3,351		
REC 15376792.54 USD PAY [14717000.00] EUR /193095	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	12/30/2024	04/01/2025	0	15,376,793	0.957091666	0	0	0	74,980		74,980	74,980	0	0	0	38,442		
REC 1022774.72 USD PAY [814000.00] GBP /193100	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	12/30/2024	01/02/2025	0	1,022,775	0.795874188	0	0	0	3,678		3,678	3,678	0	0	0	511		
REC 14717000.00 EUR PAY [15315098.88] USD /193101	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	12/30/2024	01/02/2025	0	15,315,099	0.960947109	0	0	0	(76,319)		(76,319)	(76,319)	0	0	0	7,658		
REC 467000.00 GBP PAY [586367.58] USD /193102	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	12/30/2024	04/01/2025	0	586,368	0.796428813	0	0	0	(2,073)		(2,073)	(2,073)	0	0	0	1,466		
REC 5790288.92 USD PAY [5550000.00] EUR /193134	Asset Hedge	Schedule BA, D	Currency	STATE STREET FX 571474TGEMMI/ANRLN572	12/30/2024	04/01/2025	0	5,790,289	0.95850167	0	0	0	20,369		20,369	20,369	0	0	0	14,476		

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Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Current Year Income	Book/ Adjusted Carrying Value	Code	Fair Value	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Adjustment to Carrying Value of Hedged Item	Potential Exposure	Credit Quality of Reference Entity	Hedge Effectiveness at Inception and at Year-end (b)
REC 5195000.00 EUR PAY [5398176.45] USD /193136	Asset Hedge	Schedule BA, D	Currency.....	STATE STREET FX ... 571474TGEMMIWANRLN572	. 12/30/2024	. 01/02/2025	0	5,398,176	0.962362021	0	0	0	(19,252)	.....	.....(19,252)	(19,252)	0	0	0	2,699	.....	.....
REC 4523892.48 USD PAY [4333000.00] EUR /193161	Asset Hedge	Schedule BA, D	Currency.....	STATE STREET FX ... 571474TGEMMIWANRLN572	. 12/30/2024	. 03/18/2025	0	4,523,892	0.95780303	0	0	0	22,372	.....	.....22,372	22,372	0	0	0	10,609	.....	.....
REC 4333000.00 EUR PAY [4508963.13] USD /193162	Asset Hedge	Schedule BA, D	Currency.....	STATE STREET FX ... 571474TGEMMIWANRLN572	. 12/30/2024	. 01/02/2025	0	4,508,963	0.960974813	0	0	0	(22,556)	.....	.....(22,556)	(22,556)	0	0	0	2,254	.....	.....
REC 381316000.00 SEK PAY [34564602.18] USD /193191	Asset Hedge	Schedule BA, D	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	. 12/31/2024	. 01/03/2025	0	34,564,602	11.03198	0	0	0	(85,666)	.....	.....(85,666)	(85,666)	0	0	0	17,282	.....	.....
REC 34774203.55 USD PAY [381771000.00] SEK /193198	Asset Hedge	Schedule BA, D	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	. 12/31/2024	. 04/02/2025	0	34,774,204	10.978569	0	0	0	83,692	.....	.....83,692	83,692	0	0	0	88,657	.....	.....
1439999999. Subtotal - Forwards - Hedging Other										0	0	0	21,478,673	XXX	21,478,673	22,131,054	0	0	0	1,537,985	XXX	XXX
1479999999. Subtotal - Forwards										0	0	0	21,478,673	XXX	21,478,673	22,131,054	0	0	0	1,537,985	XXX	XXX
1509999999. Subtotal - SSAP No. 108 Adjustments										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
1689999999. Subtotal - Hedging Effective Excluding Variable Annuity Guarantees Under SSAP No.108										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
1699999999. Subtotal - Hedging Effective Variable Annuity Guarantees Under SSAP No.108										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
1709999999. Subtotal - Hedging Other										78,191,335	731,278,165	(297,307,146)	462,108,609	XXX	1,058,323,167	156,799,900	0	(400,497,961)	0	82,664,824	XXX	XXX
1719999999. Subtotal - Replication										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
1729999999. Subtotal - Income Generation										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
1739999999. Subtotal - Other										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
1749999999. Subtotal - Adjustments for SSAP No. 108 Derivatives										0	0	0	0	XXX	0	0	0	0	0	0	XXX	XXX
1759999999 - Totals										78,191,335	731,278,165	(297,307,146)	462,108,609	XXX	1,058,323,167	156,799,900	0	(400,497,961)	0	82,664,824	XXX	XXX

(a)	Code	Description of Hedged Risk(s)
	{BLANK} .....	.....

(b)	Code	Financial or Economic Impact of the Hedge at the End of the Reporting Period
		

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

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ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

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Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
163825 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUISFPUBMPRO8K5P83	01/20/2023	01/19/2024	01/19/2024	Maturity	0	48,503,638	3972.61	4,753,405	0	10,588,091	10,339,973	0	0	0	(248,117)	10,588,091	0	0	0
163846 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUISFPUBMPRO8K5P83	01/20/2023	01/19/2024	01/19/2024	Maturity	0	47,719,167	3972.61	4,680,773	0	10,416,845	10,172,519	0	0	0	(244,326)	10,416,845	0	0	0
163857 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUISFPUBMPRO8K5P83	01/20/2023	01/19/2024	01/19/2024	Maturity	0	53,349,235	3972.61	5,233,026	0	11,645,859	11,372,707	0	0	0	(273,152)	11,645,859	0	0	0
163871 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUISFPUBMPRO8K5P83	01/20/2023	01/19/2024	01/19/2024	Maturity	0	66,289,291	3972.61	6,502,345	0	14,470,668	14,131,260	0	0	0	(339,408)	14,470,668	0	0	0
163880 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIZ7FF32TIEFA76	01/20/2023	01/19/2024	01/19/2024	Maturity	0	63,650,291	3972.61	6,158,185	0	13,894,526	13,573,083	0	0	0	(321,443)	13,894,526	0	0	0
163905 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIZ7FF32TIEFA76	01/20/2023	01/19/2024	01/19/2024	Maturity	0	59,390,723	3972.61	5,746,052	0	12,964,685	12,664,753	0	0	0	(299,931)	12,964,685	0	0	0
163907 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	K81H1DSPPRMYMCUFXT09	01/20/2023	01/19/2024	01/19/2024	Maturity	0	46,072,459	3972.61	4,549,655	0	10,057,377	9,819,895	0	0	0	(237,482)	10,057,377	0	0	0
163916 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	01/20/2023	01/19/2024	01/19/2024	Maturity	0	23,818,982	3972.61	1,310,044	0	2,341,511	2,273,129	0	0	0	(68,381)	2,341,511	0	0	0
163921 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	K81H1DSPPRMYMCUFXT09	01/20/2023	01/19/2024	01/19/2024	Maturity	0	16,019,215	3972.61	402,082	0	624,251	603,263	0	0	0	(20,988)	624,251	0	0	0
163946 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	W22LROIWP21HZNB6K528	01/20/2023	01/19/2024	01/19/2024	Expiration	0	17,685,862	89.47	1,651,228	0	(86,190)	(86,190)	0	0	0	(86,190)	0	0	0	0
163954 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUISFPUBMPRO8K5P83	01/20/2023	07/19/2024	07/19/2024	Maturity	0	4,043,828	3972.61	500,343	0	1,559,861	1,375,669	0	0	0	(184,192)	1,559,861	0	0	0
163964 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUISFPUBMPRO8K5P83	01/20/2023	01/19/2024	01/19/2024	Maturity	0	50,655,583	3972.61	4,964,298	0	11,057,849	10,798,724	0	0	0	(259,125)	11,057,849	0	0	0
163966 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	52990ORLNSGA90UPHE54	01/20/2023	01/19/2024	01/19/2024	Maturity	1,522	27,288,691	179.29	2,512,891	0	1,313,588	1,182,420	0	0	0	(131,167)	1,313,588	0	0	0
163973 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	52990ORLNSGA90UPHE54	01/20/2023	01/19/2024	01/19/2024	Maturity	133	946,734	71.01	77,328	0	38,804	34,767	0	0	0	(4,036)	38,804	0	0	0
164455 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6QLXDRUGJFU57RNE97	02/06/2023	02/06/2024	02/06/2024	Maturity	0	53,904,509	1167.94	3,557,698	0	8,982,854	8,622,211	0	0	0	(360,643)	8,982,854	0	0	0
164461 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	BFMBT61CT2L10CEMIK50	02/06/2023	02/06/2024	02/06/2024	Expiration	0	12,080,110	518.61	758,631	0	(76,902)	(76,902)	0	0	0	(76,902)	0	0	0	0
164465 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	K81H1DSPPRMYMCUFXT09	02/06/2023	02/06/2024	02/06/2024	Maturity	0	63,985,221	4111.08	6,068,998	0	13,122,863	12,507,649	0	0	0	(615,214)	13,122,863	0	0	0
164494 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6GKMZ0031MB27	02/06/2023	02/06/2024	02/06/2024	Maturity	0	49,998,347	4111.08	4,726,583	0	10,254,266	9,775,133	0	0	0	(479,133)	10,254,266	0	0	0
164511 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6GKMZ0031MB27	02/06/2023	02/06/2024	02/06/2024	Maturity	0	33,114,718	4111.08	3,130,493	0	6,791,567	6,474,229	0	0	0	(317,338)	6,791,567	0	0	0
164536 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6GKMZ0031MB27	02/06/2023	02/06/2024	02/06/2024	Maturity	0	50,710,941	4111.08	4,793,948	0	10,400,413	9,914,451	0	0	0	(485,962)	10,400,413	0	0	0
164563 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6GKMZ0031MB27	02/06/2023	02/06/2024	02/06/2024	Maturity	0	73,739,809	4111.08	6,970,977	0	15,123,452	14,416,805	0	0	0	(706,647)	15,123,452	0	0	0
164571 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6GKMZ0031MB27	02/06/2023	02/06/2024	02/06/2024	Maturity	0	37,982,426	4111.08	3,590,661	0	7,789,895	7,425,910	0	0	0	(363,985)	7,789,895	0	0	0
164575 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6GKMZ0031MB27	02/06/2023	02/06/2024	02/06/2024	Maturity	0	50,489,635	4111.08	4,773,027	0	10,355,025	9,871,184	0	0	0	(483,841)	10,355,025	0	0	0
164581 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	02/06/2023	02/06/2024	02/06/2024	Maturity	0	45,021,501	4111.08	4,268,038	0	9,233,554	8,800,903	0	0	0	(432,650)	9,233,554	0	0	0
164584 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	02/06/2023	02/06/2024	02/06/2024	Maturity	0	49,629,481	4111.08	4,704,875	0	10,178,614	9,701,682	0	0	0	(476,933)	10,178,614	0	0	0
164592 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	02/06/2023	02/06/2024	02/06/2024	Maturity	0	47,789,942	4111.08	4,530,486	0	9,801,339	9,342,084	0	0	0	(459,255)	9,801,339	0	0	0
164605 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	52990ORLNSGA90UPHE54	02/06/2023	02/06/2024	02/06/2024	Maturity	343	2,425,221	70.69	190,409	0	154,744	135,443	0	0	0	(19,302)	154,744	0	0	0
164615 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	W22LROIWP21HZNB6K528	02/06/2023	02/06/2024	02/06/2024	Maturity	0	45,132,548	173.82	3,874,646	0	3,824,660	3,431,888	0	0	0	(392,772)	3,824,660	0	0	0
164621 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6QLXDRUGJFU57RNE97	02/06/2023	02/06/2024	02/06/2024	Expiration	0	28,017,318	92.74	2,482,333	0	(251,634)	(251,634)	0	0	0	(251,634)	0	0	0	0
164628 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6GKMZ0031MB27	02/06/2023	08/06/2024	08/06/2024	Maturity	0	6,804,276	4111.08	819,228	0	1,868,533	1,540,542	0	0	0	(327,991)	1,868,533	0	0	0
164633 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	K81H1DSPPRMYMCUFXT09	02/06/2023	02/06/2024	02/06/2024	Maturity	0	66,315,525	4111.08	6,290,028	0	13,600,790	12,963,171	0	0	0	(637,619)	13,600,790	0	0	0
164639 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	02/06/2023	02/06/2024	02/06/2024	Maturity	0	29,689,385	4111.08	1,591,351	0	2,088,887	1,927,572	0	0	0	(161,315)	2,088,887	0	0	0
164641 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	BFMBT61CT2L10CEMIK50	02/06/2023	02/06/2024	02/06/2024	Maturity	0	21,353,699	4111.08	565,873	0	1,831,966	1,774,603	0	0	0	(57,362)	1,831,966	0	0	0
164704 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	K81H1DSPPRMYMCUFXT09	02/10/2023	02/09/2024	02/09/2024	Maturity	0	1,214,990	4114,285069	61,767	0	87,597	80,659	0	0	0	(6,938)	87,597	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
165119 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	02/17/2023	02/20/2024	02/20/2024	Expiration	0	26,009,908	90.66	2,412,753	0	0	(334,376)	0	0	0	0	(334,376)	0	0	0	0
165129 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	02/17/2023	02/20/2024	02/20/2024	Maturity	0	998,293	71.02	86,442	0	75,343	63,363	0	0	0	0	(11,980)	75,343	0	0	0
165141 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	02/17/2023	02/20/2024	02/20/2024	Maturity	0	51,453,325	4079.09	5,067,714	0	11,307,372	10,605,053	0	0	0	0	(702,319)	11,307,372	0	0	0
165170 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	02/17/2023	02/20/2024	02/20/2024	Maturity	0	48,983,356	4079.09	4,801,643	0	10,764,573	10,099,128	0	0	0	0	(665,445)	10,764,573	0	0	0
165187 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	02/17/2023	02/20/2024	02/20/2024	Maturity	0	36,822,879	4079.09	3,633,785	0	8,092,189	7,588,593	0	0	0	0	(503,595)	8,092,189	0	0	0
165229 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	02/17/2023	02/20/2024	02/20/2024	Maturity	0	24,302,451	4079.09	1,287,175	0	1,898,484	1,720,099	0	0	0	0	(178,386)	1,898,484	0	0	0
165236 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/17/2023	08/20/2024	08/20/2024	Maturity	17	6,934,453	4079.09	835,601	0	2,580,647	2,226,656	0	0	0	0	(353,991)	2,580,647	0	0	0
165237 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	02/17/2023	02/20/2024	02/20/2024	Maturity	0	43,532,760	1163.41	2,934,108	0	7,683,088	7,276,459	0	0	0	0	(406,629)	7,683,088	0	0	0
165239 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	02/17/2023	02/20/2024	02/20/2024	Expiration	0	10,435,563	517.77	672,050	0	0	(93,137)	0	0	0	0	(93,137)	0	0	0	0
165240 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/17/2023	02/20/2024	02/20/2024	Maturity	139	56,699,351	4079.09	5,465,758	0	12,460,203	11,702,720	0	0	0	0	(757,483)	12,460,203	0	0	0
165249 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/17/2023	02/20/2024	02/20/2024	Maturity	134	54,847,444	4079.09	5,287,236	0	12,053,230	11,320,488	0	0	0	0	(732,742)	12,053,230	0	0	0
165257 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/17/2023	02/20/2024	02/20/2024	Maturity	109	44,430,264	4079.09	4,283,031	0	9,763,959	9,170,386	0	0	0	0	(593,572)	9,763,959	0	0	0
165270 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/17/2023	02/20/2024	02/20/2024	Maturity	153	62,410,077	4079.09	6,016,266	0	13,715,188	12,881,412	0	0	0	0	(833,776)	13,715,188	0	0	0
165272 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/17/2023	02/20/2024	02/20/2024	Maturity	127	51,804,443	4079.09	4,993,894	0	11,384,502	10,692,414	0	0	0	0	(692,089)	11,384,502	0	0	0
165277 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/17/2023	02/20/2024	02/20/2024	Maturity	120	48,949,080	4079.09	4,718,640	0	10,757,010	10,103,068	0	0	0	0	(653,942)	10,757,010	0	0	0
165279 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/17/2023	02/20/2024	02/20/2024	Maturity	118	48,137,667	4079.09	4,640,421	0	10,578,695	9,935,593	0	0	0	0	(643,102)	10,578,695	0	0	0
165301 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	02/17/2023	02/20/2024	02/20/2024	Maturity	0	39,453,793	171.26	3,431,310	0	3,734,357	3,258,822	0	0	0	0	(475,535)	3,734,357	0	0	0
165307 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	N.A.	02/17/2023	02/20/2024	02/20/2024	Maturity	0	17,306,899	4079.09	418,827	0	553,282	495,238	0	0	0	0	(58,044)	553,282	0	0	0
165807 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	03/06/2023	03/06/2024	03/06/2024	Maturity	0	46,548,743	171.62	3,881,504	0	7,374,783	6,674,840	0	0	0	0	(699,943)	7,374,783	0	0	0
165815 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	28,758,645	87.97	2,734,948	0	549,216	56,029	0	0	0	0	(493,187)	549,216	0	0	0
165823 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	1,417,975	70.7	119,821	0	158,043	136,436	0	0	0	0	(21,607)	158,043	0	0	0
165834 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/06/2023	09/06/2024	09/06/2024	Maturity	11	4,453,262	4048.42	498,762	0	1,495,997	1,269,287	0	0	0	0	(226,710)	1,495,997	0	0	0
165836 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	50,425,583	1159.79	3,474,323	0	10,368,681	9,742,164	0	0	0	0	(626,517)	10,368,681	0	0	0
165837 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/06/2023	03/06/2024	03/06/2024	Maturity	162	65,584,404	4048.42	5,804,298	0	17,112,668	16,065,991	0	0	0	0	(1,046,677)	17,112,668	0	0	0
165839 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	03/06/2023	03/06/2024	03/06/2024	Maturity	0	11,534,942	513.13	753,232	0	176,240	40,411	0	0	0	0	(135,829)	176,240	0	0	0
165843 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/06/2023	03/06/2024	03/06/2024	Maturity	130	52,562,742	4048.42	4,651,865	0	13,714,979	12,876,118	0	0	0	0	(838,861)	13,714,979	0	0	0
165878 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	66,124,379	4048.42	6,407,452	0	17,253,602	16,098,160	0	0	0	0	(1,155,442)	17,253,602	0	0	0
165886 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	79,354,071	4048.42	7,693,377	0	20,705,579	19,318,248	0	0	0	0	(1,387,330)	20,705,579	0	0	0
165890 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	48,172,219	4048.42	4,667,888	0	12,569,408	11,727,657	0	0	0	0	(841,750)	12,569,408	0	0	0
165901 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	51,019,893	4048.42	4,948,930	0	13,312,441	12,420,011	0	0	0	0	(892,430)	13,312,441	0	0	0
165917 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	37,733,652	4048.42	3,658,278	0	9,845,709	9,186,020	0	0	0	0	(659,689)	9,845,709	0	0	0
165918 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	64,612,671	4048.42	6,264,198	0	16,859,157	15,729,547	0	0	0	0	(1,129,610)	16,859,157	0	0	0
165919 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	43,155,522	4048.42	4,186,086	0	11,260,419	10,505,551	0	0	0	0	(754,868)	11,260,419	0	0	0
165920 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	03/06/2023	03/06/2024	03/06/2024	Maturity	0	30,804,472	4048.42	1,712,729	0	3,347,477	3,038,624	0	0	0	0	(308,853)	3,347,477	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
166338 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	16,729,080	4048.42	418,227	0	1,947,821	1,872,403	0		0	0	(75,418)	1,947,821	0	0	0
165942 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	31,127,643	4048.42	3,017,825	0	8,122,027	7,577,829	0		0	0	(544,198)	8,122,027	0	0	0
165944 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	45,087,973	4048.42	4,374,503	0	11,767,256	10,978,411	0		0	0	(788,845)	11,767,256	0	0	0
166106 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC, JPMORGAN CHASE BANK, N.A.	03/10/2023	03/08/2024	03/08/2024	Maturity	0	1,446,382	3992.55381	65,531	0	189,661	177,419	0		0	0	(12,242)	189,661	0	0	0
166342 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	03/20/2023	03/20/2024	03/20/2024	Maturity	0	52,175,511	1142.99	3,323,580	0	12,955,434	12,228,969	0		0	0	(726,466)	12,955,434	0	0	0
166343 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	03/20/2023	03/20/2024	03/20/2024	Maturity	0	11,228,864	514	666,995	0	171,054	25,263	0		0	0	(145,791)	171,054	0	0	0
166351 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	03/20/2023	03/20/2024	03/20/2024	Maturity	0	45,143,279	183.84	4,062,895	0	4,503,523	3,615,459	0		0	0	(888,065)	4,503,523	0	0	0
166358 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL, ROYAL BANK OF CANADA	03/20/2023	03/20/2024	03/20/2024	Maturity	0	30,747,590	82.99	2,767,283	0	2,148,886	1,544,015	0		0	0	(604,871)	2,148,886	0	0	0
166366 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ES71P3U3RH1GC71XBU11	03/20/2023	03/20/2024	03/20/2024	Maturity	0	905,560	68.23	80,595	0	154,223	136,606	0		0	0	(17,616)	154,223	0	0	0
166374 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	03/20/2023	03/20/2024	03/20/2024	Maturity	0	60,473,792	3951.57	6,032,485	0	19,482,424	18,163,848	0		0	0	(1,318,576)	19,482,424	0	0	0
166385 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	03/20/2023	03/20/2024	03/20/2024	Maturity	0	19,494,043	3951.57	432,768	0	1,622,503	1,527,909	0		0	0	(94,594)	1,622,503	0	0	0
166392 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2023	03/20/2024	03/20/2024	Maturity	111	43,793,472	3951.57	3,972,097	0	14,108,613	13,240,395	0		0	0	(868,218)	14,108,613	0	0	0
166399 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2023	03/20/2024	03/20/2024	Maturity	127	50,089,943	3951.57	4,543,191	0	16,137,099	15,144,052	0		0	0	(993,047)	16,137,099	0	0	0
166405 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2023	03/20/2024	03/20/2024	Maturity	121	47,813,997	3951.57	4,336,761	0	15,403,875	14,455,949	0		0	0	(947,926)	15,403,875	0	0	0
166411 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2023	03/20/2024	03/20/2024	Maturity	126	49,789,782	3951.57	4,515,966	0	16,040,399	15,053,302	0		0	0	(987,096)	16,040,399	0	0	0
166415 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE, ROYAL BANK OF CANADA	03/20/2023	03/20/2024	03/20/2024	Maturity	184	72,687,075	3951.57	6,592,766	0	23,417,047	21,976,005	0		0	0	(1,441,042)	23,417,047	0	0	0
166441 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ES71P3U3RH1GC71XBU11	03/20/2023	03/20/2024	03/20/2024	Maturity	0	27,545,458	3951.57	1,647,218	0	4,129,161	3,769,113	0		0	0	(360,048)	4,129,161	0	0	0
166443 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2023	09/20/2024	09/20/2024	Maturity	12	4,741,884	3951.57	401,640	0	2,101,173	1,908,386	0		0	0	(192,787)	2,101,173	0	0	0
166445 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2023	03/20/2024	03/20/2024	Maturity	189	74,684,673	3951.57	6,773,949	0	24,060,598	22,579,953	0		0	0	(1,480,645)	24,060,598	0	0	0
166450 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2023	03/20/2024	03/20/2024	Maturity	168	66,260,242	3951.57	6,009,848	0	21,346,562	20,032,934	0		0	0	(1,313,628)	21,346,562	0	0	0
166456 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2023	03/20/2024	03/20/2024	Maturity	121	47,837,944	3951.57	4,338,933	0	15,411,589	14,463,189	0		0	0	(948,401)	15,411,589	0	0	0
166466 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2023	03/20/2024	03/20/2024	Maturity	125	49,316,779	3951.57	4,473,064	0	15,888,015	14,910,296	0		0	0	(977,719)	15,888,015	0	0	0
167352 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	04/06/2023	04/05/2024	04/05/2024	Maturity	0	54,827,848	1169.34	3,482,534	0	11,893,105	10,974,521	0		0	0	(918,584)	11,893,105	0	0	0
167353 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	04/06/2023	04/05/2024	04/05/2024	Expiration	0	15,849,534	520.9	950,972	0	0	(250,119)	0		0	0	(250,119)	0	0	0	0
167359 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC, WELLS FARGO BANK, N.A.	04/06/2023	04/05/2024	04/05/2024	Maturity	0	37,855,997	84.22	3,690,942	0	1,334,983	364,215	0		0	0	(970,768)	1,334,983	0	0	0
167368 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	04/06/2023	04/05/2024	04/05/2024	Maturity	0	1,762,377	71.94	141,519	0	172,220	134,999	0		0	0	(37,221)	172,220	0	0	0
167376 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	04/06/2023	10/04/2024	10/04/2024	Maturity	0	3,676,167	4105.02	433,677	0	1,474,086	1,253,680	0		0	0	(220,406)	1,474,086	0	0	0
167378 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	04/06/2023	04/05/2024	04/05/2024	Maturity	0	82,950,604	4105.02	7,818,924	0	22,214,084	20,157,600	0		0	0	(2,056,484)	22,214,084	0	0	0
167385 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	04/06/2023	04/05/2024	04/05/2024	Maturity	0	80,874,035	4105.02	7,621,569	0	21,657,981	19,653,404	0		0	0	(2,004,577)	21,657,981	0	0	0
167389 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	04/06/2023	04/05/2024	04/05/2024	Maturity	0	30,213,841	4105.02	1,533,667	0	8,091,235	7,687,859	0		0	0	(403,375)	8,091,235	0	0	0
167395 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	04/06/2023	04/05/2024	04/05/2024	Maturity	0	38,084,070	4105.02	2,253,069	0	10,198,873	9,606,285	0		0	0	(592,588)	10,198,873	0	0	0
167400 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	04/06/2023	04/05/2024	04/05/2024	Maturity	0	75,924,474	4105.02	4,954,863	0	20,332,494	19,029,297	0		0	0	(1,303,197)	20,332,494	0	0	0
167409 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	04/06/2023	04/05/2024	04/05/2024	Maturity	0	21,883,054	4105.02	538,323	0	2,668,693	2,527,106	0		0	0	(141,586)	2,668,693	0	0	0
167418 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/06/2023	04/05/2024	04/05/2024	Maturity	170	69,624,834	4105.02	6,384,592	0	18,645,414	16,966,179	0		0	0	(1,679,235)	18,645,414	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
167429 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/06/2023	04/05/2024	04/05/2024	Maturity	109	44,737,329	4105.02	4,102,409	0	11,980,582	10,901,592	0		0	0	(1,078,990)	11,980,582	0	0	
167430 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	04/06/2023	04/05/2024	04/05/2024	Maturity	0	35,993,766	4105.02	1,960,221	0	4,164,435	3,648,870	0		0	0	(515,565)	4,164,435	0	0	
167441 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/06/2023	04/05/2024	04/05/2024	Maturity	115	47,207,730	4105.02	4,328,945	0	12,642,151	11,503,579	0		0	0	(1,138,572)	12,642,151	0	0	
167444 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/06/2023	04/05/2024	04/05/2024	Maturity	132	54,186,264	4105.02	4,968,876	0	14,510,991	13,204,109	0		0	0	(1,306,882)	14,510,991	0	0	
167447 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/06/2023	04/05/2024	04/05/2024	Maturity	98	40,229,196	4105.02	3,689,014	0	10,773,312	9,803,050	0		0	0	(970,261)	10,773,312	0	0	
167450 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/06/2023	04/05/2024	04/05/2024	Maturity	2,709	50,527,459	186.49	4,698,086	0	7,759,774	6,524,112	0		0	0	(1,235,661)	7,759,774	0	0	
167459 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/06/2023	04/05/2024	04/05/2024	Maturity	113	46,540,418	4105.02	4,267,753	0	12,463,446	11,340,969	0		0	0	(1,122,477)	12,463,446	0	0	
167471 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/06/2023	04/05/2024	04/05/2024	Maturity	142	58,174,701	4105.02	5,334,615	0	15,579,088	14,176,011	0		0	0	(1,403,077)	15,579,088	0	0	
167612 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	04/14/2023	04/12/2024	04/12/2024	Maturity	0	1,501,343	4088.734848	92,018	0	199,918	173,520	0		0	0	(26,399)	199,918	0	0	
167989 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	04/20/2023	04/19/2024	04/19/2024	Maturity	0	18,066,330	4129.79	439,012	0	227,020	94,715	0		0	0	(132,305)	227,020	0	0	
167999 Call Options - Ishares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/20/2023	04/19/2024	04/19/2024	Maturity	189	1,381,870	73.26	98,274	0	53,899	24,283	0		0	0	(29,617)	53,899	0	0	
168016 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/20/2023	10/18/2024	10/18/2024	Maturity	9	3,716,811	4129.79	422,226	0	1,561,390	1,335,997	0		0	0	(225,393)	1,561,390	0	0	
168019 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/20/2023	04/19/2024	04/19/2024	Maturity	158	65,250,682	4129.79	5,944,276	0	13,231,513	11,440,087	0		0	0	(1,791,426)	13,231,513	0	0	
168026 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/20/2023	04/19/2024	04/19/2024	Maturity	117	48,407,333	4129.79	4,409,863	0	9,816,024	8,487,024	0		0	0	(1,329,000)	9,816,024	0	0	
168035 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	04/20/2023	04/19/2024	04/19/2024	Maturity	0	46,993,198	1174.71	3,045,159	0	7,656,782	6,739,063	0		0	0	(917,719)	7,656,782	0	0	
168045 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	04/20/2023	04/19/2024	04/19/2024	Expiration	0	10,195,645	520.2	633,150	0	0	(190,812)	0		0	0	(190,812)	0	0	0	
168045 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/20/2023	04/19/2024	04/19/2024	Maturity	157	64,826,553	4129.79	5,905,638	0	13,145,508	11,365,726	0		0	0	(1,779,781)	13,145,508	0	0	
168059 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/20/2023	04/19/2024	04/19/2024	Maturity	132	54,513,228	4129.79	4,966,104	0	11,054,175	9,557,541	0		0	0	(1,496,634)	11,054,175	0	0	
168067 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/20/2023	04/19/2024	04/19/2024	Maturity	120	49,611,663	4129.79	4,519,576	0	10,060,237	8,698,173	0		0	0	(1,362,064)	10,060,237	0	0	
168080 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/20/2023	04/19/2024	04/19/2024	Maturity	125	51,513,349	4129.79	4,692,818	0	10,445,860	9,031,587	0		0	0	(1,414,274)	10,445,860	0	0	
168092 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/20/2023	04/19/2024	04/19/2024	Maturity	144	59,272,728	4129.79	5,399,690	0	12,019,305	10,392,001	0		0	0	(1,627,304)	12,019,305	0	0	
168103 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	04/20/2023	04/19/2024	04/19/2024	Maturity	0	40,258,312	186.09	3,703,765	0	7,558,845	6,442,642	0		0	0	(1,116,203)	7,558,845	0	0	
168104 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/20/2023	04/19/2024	04/19/2024	Maturity	159	65,599,814	4129.79	5,976,082	0	13,302,309	11,501,299	0		0	0	(1,801,011)	13,302,309	0	0	
168117 Call Options - Ishares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	04/20/2023	04/19/2024	04/19/2024	Expiration	0	27,892,298	84.25	2,677,661	0	0	(806,966)	0		0	0	(806,966)	0	0	0	
168123 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA	04/20/2023	04/19/2024	04/19/2024	Maturity	0	61,413,075	4129.79	5,735,981	0	12,453,361	10,724,709	0		0	0	(1,728,652)	12,453,361	0	0	
168129 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	04/20/2023	04/19/2024	04/19/2024	Maturity	0	26,374,394	4129.79	1,404,964	0	3,179,873	2,756,459	0		0	0	(423,414)	3,179,873	0	0	
170968 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	05/05/2023	05/06/2024	05/06/2024	Maturity	0	35,484,164	4136.25	1,920,403	0	4,553,268	3,898,715	0		0	0	(664,554)	4,553,268	0	0	
170973 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	05/05/2023	05/06/2024	05/06/2024	Maturity	0	19,049,411	4136.25	485,760	0	2,105,151	1,937,054	0		0	0	(168,097)	2,105,151	0	0	
171005 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	05/05/2023	05/06/2024	05/06/2024	Maturity	2,771	51,935,962	187.46	4,756,964	0	7,682,698	6,036,556	0		0	0	(1,646,143)	7,682,698	0	0	
171015 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	05/05/2023	11/06/2024	11/06/2024	Maturity	9	3,722,625	4136.25	418,419	0	1,613,509	1,377,341	0		0	0	(236,168)	1,613,509	0	0	
171018 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	05/05/2023	05/06/2024	05/06/2024	Maturity	164	67,834,500	4136.25	6,186,572	0	17,129,595	14,988,738	0		0	0	(2,140,857)	17,129,595	0	0	
171024 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	05/05/2023	05/06/2024	05/06/2024	Maturity	115	47,542,926	4136.25	4,335,961	0	12,005,559	10,505,104	0		0	0	(1,500,455)	12,005,559	0	0	
171037 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	05/05/2023	05/06/2024	05/06/2024	Maturity	117	48,299,819	4136.25	4,404,990	0	12,196,689	10,672,347	0		0	0	(1,524,343)	12,196,689	0	0	
171064 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	05/05/2023	05/06/2024	05/06/2024	Maturity	0	49,157,145	1177.53	3,175,552	0	9,796,947	8,698,050	0		0	0	(1,098,897)	9,796,947	0	0	

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
171067 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG MORGAN STANLEY & CO.	05/05/2023	05/06/2024	05/06/2024	Expiration	0	14,753,987	521.41	899,993	0	0	(311,442)	0		0	0	(311,442)	0	0	0	0
171076 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	4PQUHNSJFFGNF38B653 MORGAN STANLEY & CO.	05/05/2023	05/06/2024	05/06/2024	Maturity	0	43,453,573	4136.25	4,097,164	0	10,972,940	9,555,120	0		0	0	(1,417,820)	10,972,940	0	0	0
171088 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	4PQUHNSJFFGNF38B653 INTERNATIONAL PLC.	05/05/2023	05/06/2024	05/06/2024	Maturity	0	56,879,950	4136.25	5,363,114	0	14,363,382	12,507,482	0		0	0	(1,855,901)	14,363,382	0	0	0
171105 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	C2RNE81BXP4R0TDBPU41 SOCIETE GENERAL	05/05/2023	05/06/2024	05/06/2024	Expiration	0	35,729,781	85.14	3,572,978	0	0	(1,236,426)	0		0	0	(1,236,426)	0	0	0	0
171111 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON MORGAN STANLEY & CO.	05/05/2023	05/06/2024	05/06/2024	Maturity	0	1,852,405	73.88	147,266	0	139,908	88,947	0		0	0	(50,961)	139,908	0	0	0
171118 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	4PQUHNSJFFGNF38B653 INTERNATIONAL PLC.	05/05/2023	05/06/2024	05/06/2024	Maturity	0	75,733,365	4136.25	7,140,771	0	19,124,265	16,653,209	0		0	0	(2,471,057)	19,124,265	0	0	0
171124 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	4PQUHNSJFFGNF38B653 INTERNATIONAL PLC.	05/05/2023	05/06/2024	05/06/2024	Maturity	0	61,715,852	4136.25	5,819,083	0	15,584,549	13,570,861	0		0	0	(2,013,688)	15,584,549	0	0	0
171128 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	4PQUHNSJFFGNF38B653 INTERNATIONAL PLC.	05/05/2023	05/06/2024	05/06/2024	Maturity	0	36,230,353	4136.25	3,416,099	0	9,148,925	7,966,787	0		0	0	(1,182,138)	9,148,925	0	0	0
171139 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	4PQUHNSJFFGNF38B653 INTERNATIONAL PLC.	05/05/2023	05/06/2024	05/06/2024	Maturity	0	43,678,050	4136.25	4,118,329	0	11,029,625	9,604,481	0		0	0	(1,425,144)	11,029,625	0	0	0
171147 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	4PQUHNSJFFGNF38B653 INTERNATIONAL PLC.	05/05/2023	05/06/2024	05/06/2024	Maturity	0	54,739,763	4136.25	5,161,319	0	13,822,940	12,036,870	0		0	0	(1,786,070)	13,822,940	0	0	0
171149 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	4PQUHNSJFFGNF38B653 INTERNATIONAL PLC.	05/05/2023	05/06/2024	05/06/2024	Maturity	0	51,001,825	4136.25	4,808,876	0	12,879,032	11,214,925	0		0	0	(1,664,107)	12,879,032	0	0	0
171349 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC JPMORGAN CHASE BANK, N.A.	05/12/2023	05/10/2024	05/10/2024	Maturity	0	1,395,983	4137.715995	70,853	0	191,743	165,996	0		0	0	(25,747)	191,743	0	0	0
171603 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	7H6GLXDRUGJFU57RNE97 N.A.	05/19/2023	05/20/2024	05/20/2024	Maturity	0	45,781,883	1190.69	2,998,713	0	9,550,565	8,398,470	0		0	0	(1,152,094)	9,550,565	0	0	0
171604 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	05/19/2023	05/20/2024	05/20/2024	Maturity	0	11,590,433	514.34	723,243	0	250,810	(27,057)	0		0	0	(277,867)	250,810	0	0	0
171605 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	05/19/2023	05/20/2024	05/20/2024	Maturity	0	17,832,253	4191.98	465,422	0	351,421	172,607	0		0	0	(178,813)	351,421	0	0	0
171613 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	05/19/2023	05/20/2024	05/20/2024	Maturity	160	66,998,195	4191.98	5,969,612	0	17,838,794	15,545,292	0		0	0	(2,293,502)	17,838,794	0	0	0
171627 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	05/19/2023	05/20/2024	05/20/2024	Maturity	98	40,925,295	4191.98	3,646,488	0	10,896,680	9,495,713	0		0	0	(1,400,967)	10,896,680	0	0	0
171636 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	05/19/2023	11/20/2024	11/20/2024	Maturity	0	2,088,258	4191.98	243,742	0	859,383	715,616	0		0	0	(143,768)	859,383	0	0	0
171641 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	05/19/2023	05/20/2024	05/20/2024	Maturity	0	69,645,168	4191.98	6,373,226	0	18,543,613	16,095,044	0		0	0	(2,448,569)	18,543,613	0	0	0
171644 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	05/19/2023	05/20/2024	05/20/2024	Maturity	0	64,722,568	4191.98	5,923,242	0	17,232,929	14,957,242	0		0	0	(2,275,687)	17,232,929	0	0	0
171648 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	05/19/2023	05/20/2024	05/20/2024	Maturity	0	43,887,976	4191.98	4,017,000	0	11,685,543	10,142,227	0		0	0	(1,543,316)	11,685,543	0	0	0
171660 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	05/19/2023	05/20/2024	05/20/2024	Maturity	0	82,522,946	4191.98	7,565,059	0	21,972,430	19,065,963	0		0	0	(2,906,467)	21,972,430	0	0	0
171673 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	05/19/2023	05/20/2024	05/20/2024	Maturity	0	46,379,406	4191.98	4,250,962	0	12,348,908	10,715,704	0		0	0	(1,633,203)	12,348,908	0	0	0
171685 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	05/19/2023	05/20/2024	05/20/2024	Maturity	0	46,457,408	4191.98	4,258,262	0	12,369,676	10,733,668	0		0	0	(1,636,008)	12,369,676	0	0	0
171695 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	05/19/2023	05/20/2024	05/20/2024	Maturity	0	61,931,663	4191.98	5,654,361	0	16,489,827	14,317,443	0		0	0	(2,172,384)	16,489,827	0	0	0
171713 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	INTERNATIONAL JPMORGAN CHASE BANK, N.A.	05/19/2023	05/20/2024	05/20/2024	Maturity	0	44,144,370	183.64	3,929,378	0	9,836,570	8,326,918	0		0	0	(1,509,652)	9,836,570	0	0	0
171716 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	7H6GLXDRUGJFU57RNE97 JPMORGAN CHASE BANK, N.A.	05/19/2023	05/20/2024	05/20/2024	Maturity	0	28,520,583	82.56	2,837,798	0	1,782,536	692,265	0		0	0	(1,090,271)	1,782,536	0	0	0
171722 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	7H6GLXDRUGJFU57RNE97 ROYAL BANK OF CANADA	05/19/2023	05/20/2024	05/20/2024	Maturity	0	2,004,582	73.66	156,157	0	218,800	158,806	0		0	0	(59,995)	218,800	0	0	0
171729 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ES71P3U3RPH1GC71YBU11	05/19/2023	05/20/2024	05/20/2024	Maturity	0	30,123,905	4191.98	1,545,356	0	3,698,987	3,105,267	0		0	0	(593,720)	3,698,987	0	0	0
171736 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	05/19/2023	05/20/2024	05/20/2024	Maturity	134	56,172,532	4191.98	5,005,034	0	14,956,377	13,033,462	0		0	0	(1,922,915)	14,956,377	0	0	0
172259 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	06/06/2023	06/06/2024	06/06/2024	Maturity	0	52,847,749	1211.64	3,561,938	0	10,393,426	8,855,758	0		0	0	(1,537,667)	10,393,426	0	0	0
172262 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	06/06/2023	06/06/2024	06/06/2024	Maturity	0	12,423,651	513.78	795,114	0	234,313	(108,933)	0		0	0	(343,246)	234,313	0	0	0
172265 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	06/06/2023	06/06/2024	06/06/2024	Maturity	0	2,498,944	72.83	195,018	0	320,131	235,943	0		0	0	(84,188)	320,131	0	0	0
172301 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	INTERNATIONAL PLC	06/06/2023	06/06/2024	06/06/2024	Maturity	0	19,174,909	4283.85	1,700,915	0	4,785,435	4,051,160	0		0	0	(734,275)	4,785,435	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
172310 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	06/06/2023	06/06/2024	06/06/2024	Maturity	0	51,407,480	182.34	4,349,072	0	10,456,858	8,579,390	0		0	0	(1,877,468)	10,456,858	0	0	
172317 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO.	06/06/2023	06/06/2024	06/06/2024	Maturity	0	61,630,714	4283.85	5,466,968	0	15,381,027	13,020,970	0		0	0	(2,360,057)	15,381,027	0	0	
172320 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO.	06/06/2023	06/06/2024	06/06/2024	Maturity	0	28,290,792	84.28	2,618,274	0	956,677	(173,616)	0		0	0	(1,130,293)	956,677	0	0	
172335 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	06/06/2023	06/06/2024	06/06/2024	Maturity	0	49,713,238	4283.85	4,419,507	0	12,406,812	10,498,937	0		0	0	(1,907,875)	12,406,812	0	0	
172357 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/06/2023	12/06/2024	12/06/2024	Maturity	10	4,283,850	4283.85	472,080	0	1,806,418	1,513,195	0		0	0	(293,223)	1,806,418	0	0	
172360 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	06/06/2023	06/06/2024	06/06/2024	Maturity	0	41,520,598	4283.85	3,691,181	0	10,362,195	8,768,734	0		0	0	(1,593,461)	10,362,195	0	0	
172361 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/06/2023	06/06/2024	06/06/2024	Maturity	210	89,960,850	4283.85	7,727,580	0	22,451,258	19,115,308	0		0	0	(3,335,950)	22,451,258	0	0	
172371 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/06/2023	06/06/2024	06/06/2024	Maturity	166	71,111,910	4283.85	6,108,468	0	17,747,185	15,110,196	0		0	0	(2,636,989)	17,747,185	0	0	
172372 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO.	06/06/2023	06/06/2024	06/06/2024	Maturity	0	63,682,625	4283.85	5,648,983	0	15,893,118	13,454,485	0		0	0	(2,438,632)	15,893,118	0	0	
172381 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	06/06/2023	06/06/2024	06/06/2024	Maturity	0	63,586,612	4283.85	5,652,850	0	15,869,156	13,428,854	0		0	0	(2,440,301)	15,869,156	0	0	
172389 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	06/06/2023	06/06/2024	06/06/2024	Maturity	0	47,373,463	4283.85	4,263,612	0	11,822,880	9,982,304	0		0	0	(1,840,576)	11,822,880	0	0	
172391 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	06/06/2023	06/06/2024	06/06/2024	Maturity	0	29,409,620	4283.85	1,406,002	0	3,202,413	2,595,451	0		0	0	(606,962)	3,202,413	0	0	
172392 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	06/06/2023	06/06/2024	06/06/2024	Maturity	0	17,253,840	4283.85	484,833	0	1,882,567	1,673,268	0		0	0	(209,299)	1,882,567	0	0	
172398 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/06/2023	06/06/2024	06/06/2024	Maturity	105	44,980,425	4283.85	3,863,790	0	11,225,629	9,557,654	0		0	0	(1,667,975)	11,225,629	0	0	
172406 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/06/2023	06/06/2024	06/06/2024	Maturity	117	50,121,045	4283.85	4,305,366	0	12,508,558	10,649,957	0		0	0	(1,858,601)	12,508,558	0	0	
172412 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/06/2023	06/06/2024	06/06/2024	Maturity	101	43,363,186	4283.85	3,724,870	0	10,822,019	9,214,015	0		0	0	(1,608,004)	10,822,019	0	0	
172527 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	06/09/2023	06/07/2024	06/07/2024	Maturity	0	1,140,207	4267.08371	60,010	0	135,485	109,087	0		0	0	(26,398)	135,485	0	0	
172786 Call Options - S&P Equal Weight Energy - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	06/20/2023	06/20/2024	06/20/2024	Maturity	0	46,758,408	1235.41	3,146,841	0	9,239,574	7,760,731	0		0	0	(1,478,843)	9,239,574	0	0	
172790 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	06/20/2023	06/20/2024	06/20/2024	Maturity	0	9,374,058	514.14	609,314	0	143,672	(142,672)	0		0	0	(286,344)	143,672	0	0	
172805 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	06/20/2023	06/20/2024	06/20/2024	Maturity	0	23,744,426	84.91	2,006,405	0	520,135	(422,766)	0		0	0	(942,901)	520,135	0	0	
172816 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	06/20/2023	06/20/2024	06/20/2024	Maturity	0	1,616,767	72.42	129,898	0	135,735	74,690	0		0	0	(61,045)	135,735	0	0	
172829 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC ..	06/20/2023	06/20/2024	06/20/2024	Maturity	0	44,290,751	4388.71	3,946,458	0	10,944,343	9,089,723	0		0	0	(1,854,620)	10,944,343	0	0	
172838 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC ..	06/20/2023	06/20/2024	06/20/2024	Maturity	0	45,128,233	4388.71	4,026,154	0	11,151,287	9,259,214	0		0	0	(1,892,072)	11,151,287	0	0	
172854 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC ..	06/20/2023	06/20/2024	06/20/2024	Maturity	0	49,445,911	4388.71	4,411,496	0	12,218,195	10,145,032	0		0	0	(2,073,162)	12,218,195	0	0	
172861 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	06/20/2023	06/20/2024	06/20/2024	Maturity	0	29,754,826	4388.71	1,452,036	0	2,768,792	2,086,415	0		0	0	(682,377)	2,768,792	0	0	
172864 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	06/20/2023	06/20/2024	06/20/2024	Maturity	0	15,722,268	4388.71	455,946	0	385,306	171,036	0		0	0	(214,270)	385,306	0	0	
172873 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	06/20/2024	06/20/2024	Maturity	2,462	44,258,717	179.75	3,722,903	0	9,454,852	7,705,291	0		0	0	(1,749,561)	9,454,852	0	0	
172879 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	06/20/2024	06/20/2024	Maturity	102	44,764,842	4388.71	3,849,786	0	11,061,467	9,252,277	0		0	0	(1,809,189)	11,061,467	0	0	
172885 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	06/20/2024	06/20/2024	Maturity	119	52,225,649	4388.71	4,491,417	0	12,905,044	10,794,324	0		0	0	(2,110,721)	12,905,044	0	0	
172889 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	12/20/2024	12/20/2024	Maturity	8	3,510,968	4388.71	390,416	0	1,233,710	981,255	0		0	0	(252,455)	1,233,710	0	0	
172892 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	06/20/2024	06/20/2024	Maturity	122	53,700,431	4388.71	4,618,249	0	13,269,465	11,099,141	0		0	0	(2,170,324)	13,269,465	0	0	
172894 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	06/20/2024	06/20/2024	Maturity	166	72,852,586	4388.71	6,265,338	0	18,001,995	15,057,628	0		0	0	(2,944,366)	18,001,995	0	0	
172902 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	06/20/2024	06/20/2024	Maturity	150	65,649,879	4388.71	5,645,904	0	16,222,194	13,568,927	0		0	0	(2,653,266)	16,222,194	0	0	
172906 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	06/20/2024	06/20/2024	Maturity	142	62,138,955	4388.71	5,343,963	0	15,354,639	12,843,268	0		0	0	(2,511,371)	15,354,639	0	0	

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
172916 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	06/20/2024	06/20/2024	Maturity	139	60,795,659	4388.71	5,228,440	0	15,022,708	12,565,627	0		0	0	(2,457,081)	15,022,708	0	0	
172929 Call Options - S&P	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	07/06/2023	07/05/2024	07/05/2024	Maturity	0	53,459,892	1242.07	3,715,463	0	11,323,217	9,419,679	0		0	0	(1,903,538)	11,323,217	0	0	
Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	07/06/2023	07/05/2024	07/05/2024	Maturity	0	11,358,299	509.3	749,648	0	282,564	(101,502)	0		0	0	(384,066)	282,564	0	0	
173431 Call Options - S&P	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	07/06/2023	07/05/2024	07/05/2024	Maturity	0	35,320,558	4411.59	3,154,126	0	9,252,092	7,636,143	0		0	0	(1,615,949)	9,252,092	0	0	
U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	07/06/2023	07/05/2024	07/05/2024	Maturity	0	40,238,615	4411.59	3,593,308	0	10,540,359	8,699,404	0		0	0	(1,840,955)	10,540,359	0	0	
173433 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	07/06/2023	07/05/2024	07/05/2024	Maturity	0	32,100,705	4411.59	2,824,862	0	8,408,663	6,961,405	0		0	0	(1,447,258)	8,408,663	0	0	
173450 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	07/06/2023	07/05/2024	07/05/2024	Maturity	0	64,052,663	4411.59	5,718,622	0	16,778,363	13,848,548	0		0	0	(2,929,815)	16,778,363	0	0	
173462 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	07/06/2023	07/05/2024	07/05/2024	Maturity	0	46,418,338	4411.59	4,084,814	0	12,159,115	10,066,348	0		0	0	(2,092,768)	12,159,115	0	0	
173478 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	07/06/2023	07/05/2024	07/05/2024	Maturity	0	58,191,264	4411.59	5,120,831	0	15,242,991	12,619,441	0		0	0	(2,623,549)	15,242,991	0	0	
173493 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	07/06/2023	07/05/2024	07/05/2024	Maturity	0	51,691,277	177.31	4,300,075	0	12,716,561	10,513,509	0		0	0	(2,203,052)	12,716,561	0	0	
173500 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	07/06/2023	07/05/2024	07/05/2024	Maturity	0	52,068,401	4411.59	4,582,019	0	13,639,129	11,291,629	0		0	0	(2,347,500)	13,639,129	0	0	
173508 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	07/06/2023	07/05/2024	07/05/2024	Maturity	0	25,582,286	86.88	2,155,414	0	173,729	(930,552)	0		0	0	(1,104,280)	173,729	0	0	
173514 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	07/06/2023	07/05/2024	07/05/2024	Maturity	0	89,247,208	4411.59	7,907,303	0	23,377,983	19,326,844	0		0	0	(4,051,139)	23,377,983	0	0	
173518 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	07/06/2023	07/05/2024	07/05/2024	Maturity	0	59,171,224	4411.59	5,242,570	0	15,499,688	12,813,768	0		0	0	(2,685,920)	15,499,688	0	0	
173530 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	07/06/2023	07/05/2024	07/05/2024	Maturity	0	17,545,575	4411.59	587,777	0	2,123,191	1,822,056	0		0	0	(301,135)	2,123,191	0	0	
173538 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	07/06/2023	07/05/2024	07/05/2024	Maturity	0	92,074,134	4411.59	8,222,220	0	24,118,485	19,906,006	0		0	0	(4,212,480)	24,118,485	0	0	
173552 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	07/06/2023	07/05/2024	07/05/2024	Maturity	389	2,737,328	70.37	193,717	0	377,719	278,472	0		0	0	(99,247)	377,719	0	0	
173555 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	07/06/2023	07/05/2024	07/05/2024	Maturity	0	73,279,913	4411.59	6,543,896	0	19,195,408	15,842,781	0		0	0	(3,352,626)	19,195,408	0	0	
173556 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	07/06/2023	07/05/2024	07/05/2024	Maturity	0	28,000,413	4411.59	1,346,820	0	2,712,390	2,022,376	0		0	0	(690,015)	2,712,390	0	0	
173566 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	07/14/2023	07/12/2024	07/12/2024	Maturity	0	1,393,454	4471.789142	76,578	0	135,767	94,954	0		0	0	(40,814)	135,767	0	0	
173838 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	07/20/2023	07/19/2024	07/19/2024	Maturity	0	75,164,825	4534.87	6,485,973	0	16,079,767	12,508,038	0		0	0	(3,571,727)	16,079,767	0	0	
174110 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	07/20/2023	07/19/2024	07/19/2024	Maturity	0	58,890,728	4534.87	5,055,281	0	12,598,302	9,814,435	0		0	0	(2,783,867)	12,598,302	0	0	
174116 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	07/20/2023	07/19/2024	07/19/2024	Maturity	0	54,369,681	4534.87	4,667,695	0	11,631,129	9,060,700	0		0	0	(2,570,429)	11,631,129	0	0	
174135 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	07/20/2023	07/19/2024	07/19/2024	Maturity	0	49,321,405	4534.87	4,233,871	0	10,551,168	8,219,639	0		0	0	(2,331,529)	10,551,168	0	0	
174150 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	07/20/2023	07/19/2024	07/19/2024	Maturity	0	51,657,563	4534.87	4,434,871	0	11,050,934	8,608,718	0		0	0	(2,442,217)	11,050,934	0	0	
174153 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	07/20/2023	07/19/2024	07/19/2024	Maturity	0	50,863,709	4534.87	4,368,563	0	10,881,108	8,475,406	0		0	0	(2,405,702)	10,881,108	0	0	
174156 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	07/20/2023	07/19/2024	07/19/2024	Maturity	0	31,135,872	4534.87	2,581,158	0	6,660,796	5,239,391	0		0	0	(1,421,405)	6,660,796	0	0	
174160 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	07/20/2023	07/19/2024	07/19/2024	Maturity	0	20,517,215	88.73	1,764,485	0	966,550	(5,126)	0		0	0	(971,675)	966,550	0	0	
174161 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	07/20/2023	07/19/2024	07/19/2024	Maturity	0	85,929,753	4534.87	7,414,878	0	18,382,673	14,299,411	0		0	0	(4,083,262)	18,382,673	0	0	
174170 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	07/20/2023	07/19/2024	07/19/2024	Maturity	0	24,291,529	4534.87	1,146,560	0	1,837,688	1,206,294	0		0	0	(631,393)	1,837,688	0	0	
174179 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	07/20/2023	07/19/2024	07/19/2024	Maturity	0	13,086,849	4534.87	0	0	199,217	(220,871)	0		420,088	0	(420,088)	199,217	0	0	
174181 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	07/20/2023	07/19/2024	07/19/2024	Maturity	2,123	38,795,702	182.74	3,184,500	0	8,275,330	6,521,674	0		0	0	(1,753,656)	8,275,330	0	0	
174183 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	07/20/2023	07/19/2024	07/19/2024	Maturity	338	2,495,454	73.83	166,972	0	192,333	100,384	0		0	0	(91,949)	192,333	0	0	
174188 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	07/20/2023	07/19/2024	07/19/2024	Maturity	103	46,709,161	4534.87	3,839,531	0	9,992,313	7,877,941	0		0	0	(2,114,372)	9,992,313	0	0	
174196 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	07/20/2023	07/19/2024	07/19/2024	Maturity																

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
174198 Call Options - S&P Equal Weight Energy - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6QLXDRUGFU57RNE97	07/20/2023	07/19/2024	07/19/2024	Maturity	0	40,365,295	1273.42	2,777,132	0	6,812,606	5,283,281	0		0	0	(1,529,325)	6,812,606	0	0	
174199 Call Options - S&P U.S. Retiree Spending Index - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	07/20/2023	07/19/2024	07/19/2024	Maturity	0	8,188,697	519.6	540,454	0	220,004	(77,616)	0		0	0	(297,620)	220,004	0	0	
174676 Call Options - SPDR Gold shares - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	2,426	43,705,560	180.19	3,565,524	0	9,825,807	7,703,933	0		0	0	(2,121,874)	9,825,807	0	0	
174686 Call Options - iShares U.S. Real Estate - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	2,458	21,075,524	85.75	1,649,175	0	2,234,128	1,252,690	0		0	0	(981,438)	2,234,128	0	0	
174705 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	113	50,472,548	4478.03	4,305,354	0	8,588,588	6,026,435	0		0	0	(2,562,154)	8,588,588	0	0	
174713 Call Options - S&P Equal Weight Energy - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6QLXDRUGFU57RNE97	08/04/2023	08/06/2024	08/06/2024	Maturity	0	45,819,727	1257.07	3,198,217	0	6,452,677	4,549,390	0		0	0	(1,903,287)	6,452,677	0	0	
174714 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	105	47,087,381	4478.03	4,016,596	0	8,012,556	5,622,245	0		0	0	(2,390,311)	8,012,556	0	0	
174715 Call Options - S&P U.S. Retiree Spending Index - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	08/04/2023	08/06/2024	08/06/2024	Maturity	0	10,625,339	517.99	699,147	0	429,124	13,056	0		0	0	(416,069)	429,124	0	0	
174724 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	109	48,732,430	4478.03	4,156,920	0	8,292,484	5,818,664	0		0	0	(2,473,819)	8,292,484	0	0	
174734 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	103	46,123,709	4478.03	3,934,394	0	7,848,574	5,507,182	0		0	0	(2,341,392)	7,848,574	0	0	
174740 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	105	46,916,679	4478.03	4,002,035	0	7,983,509	5,601,863	0		0	0	(2,381,646)	7,983,509	0	0	
174753 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	103	46,290,605	4478.03	3,948,630	0	7,876,974	5,527,110	0		0	0	(2,349,864)	7,876,974	0	0	
174762 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	118	52,758,358	4478.03	4,500,336	0	8,977,550	6,299,961	0		0	0	(2,678,189)	8,977,550	0	0	
174771 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	111	49,706,133	4478.03	4,239,978	0	8,458,172	5,934,924	0		0	0	(2,523,248)	8,458,172	0	0	
174774 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	68	30,450,604	4478.03	2,597,464	0	5,181,583	3,635,810	0		0	0	(1,545,773)	5,181,583	0	0	
174782 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A. E570DZIZ7ZF32TIEFA76	08/04/2023	08/06/2024	08/06/2024	Maturity	0	16,420,632	4478.03	525,460	0	659,846	347,140	0		0	0	(312,706)	659,846	0	0	
174788 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL I22LROIIP21HZNBB6K528	08/04/2023	08/06/2024	08/06/2024	Maturity	0	2,434,010	72.16	197,269	0	110,974	(6,422)	0		0	0	(117,397)	110,974	0	0	
174799 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUISFPUBMRR08K5P83	08/04/2023	08/06/2024	08/06/2024	Maturity	0	89,894,379	4478.03	8,061,728	0	15,296,797	10,499,193	0		0	0	(4,797,604)	15,296,797	0	0	
174818 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUISFPUBMRR08K5P83	08/04/2023	08/06/2024	08/06/2024	Maturity	0	70,805,946	4478.03	6,349,877	0	12,048,631	8,269,764	0		0	0	(3,778,867)	12,048,631	0	0	
174823 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC . G5GSEF7VJP5170UK5573	08/04/2023	08/06/2024	08/06/2024	Maturity	0	32,284,068	4478.03	1,481,041	0	2,934,889	2,053,509	0		0	0	(881,380)	2,934,889	0	0	
175024 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUISFPUBMRR08K5P83	08/11/2023	08/09/2024	08/09/2024	Maturity	0	1,278,375	4469.217841	62,197	0	141,161	103,096	0		0	0	(38,066)	141,161	0	0	
175304 Call Options - S&P Equal Weight Energy - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6QLXDRUGFU57RNE97	08/18/2023	08/20/2024	08/20/2024	Maturity	0	35,259,793	1226.67	2,464,660	0	7,304,219	5,743,714	0		0	0	(1,560,505)	7,304,219	0	0	
175305 Call Options - S&P U.S. Retiree Spending Index - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	08/18/2023	08/20/2024	08/20/2024	Maturity	0	7,360,918	508.53	485,821	0	525,439	217,840	0		0	0	(307,598)	525,439	0	0	
175351 Call Options - iShares MSCI EAFE - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA ES71P3U3PH1GC71XBU11	08/18/2023	08/20/2024	08/20/2024	Maturity	0	2,002,777	69.84	172,639	0	321,752	212,445	0		0	0	(109,307)	321,752	0	0	
175372 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/18/2023	08/20/2024	08/20/2024	Maturity	141	61,455,820	4369.71	5,574,005	0	17,262,320	13,733,127	0		0	0	(3,529,193)	17,262,320	0	0	
175384 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/18/2023	08/20/2024	08/20/2024	Maturity	111	48,503,781	4369.71	4,399,263	0	13,624,223	10,838,820	0		0	0	(2,785,403)	13,624,223	0	0	
175385 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC . G5GSEF7VJP5170UK5573	08/18/2023	08/20/2024	08/20/2024	Maturity	0	26,255,234	4369.71	1,308,609	0	3,424,814	2,596,265	0		0	0	(828,549)	3,424,814	0	0	
175387 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/18/2023	08/20/2024	08/20/2024	Maturity	120	52,496,691	4369.71	4,761,417	0	14,745,791	11,731,090	0		0	0	(3,014,702)	14,745,791	0	0	
175399 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A. E570DZIZ7ZF32TIEFA76	08/18/2023	08/20/2024	08/20/2024	Maturity	0	13,952,290	4369.71	435,311	0	1,012,609	736,991	0		0	0	(275,618)	1,012,609	0	0	
175400 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/18/2023	08/20/2024	08/20/2024	Maturity	114	49,769,249	0	4,514,040	0	13,979,680	11,121,606	0		0	0	(2,858,074)	13,979,680	0	0	
175404 Call Options - SPDR Gold shares - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/18/2023	08/20/2024	08/20/2024	Maturity	1,808	31,693,243	175.33	2,563,225	0	10,327,012	8,704,101	0		0	0	(1,622,911)	10,327,012	0	0	
175405 Call Options - S&P 500 - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/18/2023	08/20/2024	08/20/2024	Maturity	116	50,688,636	4369.71	4,597,428	0	14,237,927	11,327,055	0		0	0	(2,910,872)	14,237,927	0	0	
175419 Call Options - iShares U.S. Real Estate - USD ..	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	08/18/2023	08/20/2024	08/20/2024	Maturity	2,062	17,145,389	83.13	1,383,923	0	2,726,597	1,850,363	0		0	0	(876,234)	2,726,597	0	0	

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
175432 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/18/2023	08/20/2024	08/20/2024	Maturity	158	69,041,418	4369.71	6,262,014	0	19,393,039	15,428,231	0		0	0	(3,964,808)	19,393,039	0	0	
175434 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/18/2023	08/20/2024	08/20/2024	Maturity	143	62,486,853	4369.71	5,667,519	0	17,551,927	13,963,525	0		0	0	(3,588,402)	17,551,927	0	0	
175438 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/18/2023	08/20/2024	08/20/2024	Maturity	141	61,634,148	4369.71	5,590,179	0	17,312,411	13,772,977	0		0	0	(3,539,434)	17,312,411	0	0	
175910 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/18/2023	08/20/2024	08/20/2024	Maturity	2	36,786,381	177.83	2,982,959	0	10,922,347	8,884,806	0		0	0	(2,037,540)	10,922,347	0	0	
175967 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	2,069	19,890,491	84.16	1,536,219	0	3,601,843	2,552,513	0		0	0	(1,049,330)	3,601,843	0	0	
175973 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	219	1,548,938	70.72	107,979	0	198,874	125,118	0		0	0	(73,756)	198,874	0	0	
175985 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	159	71,001,132	4465.48	6,283,521	0	14,992,706	10,700,684	0		0	0	(4,292,023)	14,992,706	0	0	
175989 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	152	67,875,296	4465.48	6,006,888	0	14,332,650	10,229,584	0		0	0	(4,103,066)	14,332,650	0	0	
175992 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	81	36,170,388	4465.48	3,201,039	0	7,637,794	5,451,292	0		0	0	(2,186,502)	7,637,794	0	0	
175997 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	112	50,069,195	4465.48	4,431,068	0	10,572,687	7,546,001	0		0	0	(3,026,686)	10,572,687	0	0	
176006 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	112	49,838,329	4465.48	4,410,637	0	10,523,937	7,511,207	0		0	0	(3,012,730)	10,523,937	0	0	
176014 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	107	47,656,406	4465.48	4,217,539	0	10,063,199	7,182,366	0		0	0	(2,880,833)	10,063,199	0	0	
176024 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	105	46,846,547	4465.48	4,145,867	0	9,892,188	7,060,311	0		0	0	(2,831,876)	9,892,188	0	0	
176036 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	112	49,826,183	4465.48	4,409,562	0	10,521,372	7,509,376	0		0	0	(3,011,996)	10,521,372	0	0	
176040 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	09/06/2023	09/06/2024	09/06/2024	Maturity	0	44,820,899	1251.62	3,146,427	0	7,304,945	5,155,746	0		0	0	(2,149,199)	7,304,945	0	0	
176042 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	09/06/2023	09/06/2024	09/06/2024	Maturity	0	9,627,469	505.07	637,338	0	832,994	397,654	0		0	0	(435,340)	832,994	0	0	
176046 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	115	51,543,964	4465.48	4,561,583	0	10,884,101	7,768,266	0		0	0	(3,115,836)	10,884,101	0	0	
176053 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	94	41,975,512	4465.48	3,714,786	0	8,863,613	6,326,190	0		0	0	(2,537,422)	8,863,613	0	0	
176056 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	84	37,510,032	4465.48	3,319,596	0	7,920,675	5,653,191	0		0	0	(2,267,484)	7,920,675	0	0	
176065 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	09/06/2023	09/06/2024	09/06/2024	Maturity	0	29,235,625	4465.48	1,420,851	0	3,463,362	2,492,835	0		0	0	(970,527)	3,463,362	0	0	
176069 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	09/06/2023	09/06/2024	09/06/2024	Maturity	0	17,112,153	4465.48	586,947	0	1,225,125	824,205	0		0	0	(400,920)	1,225,125	0	0	
176415 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	09/15/2023	09/13/2024	09/13/2024	Maturity	0	705,893	4465.13074	35,049	0	98,819	74,017	0		0	0	(24,802)	98,819	0	0	
176715 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/20/2023	09/20/2024	09/20/2024	Maturity	1,743	31,259,701	179.35	2,459,294	0	10,956,146	9,182,229	0		0	0	(1,773,917)	10,956,146	0	0	
176721 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/20/2023	09/20/2024	09/20/2024	Maturity	2,178	18,214,000	83.63	1,374,272	0	4,059,655	3,068,377	0		0	0	(991,278)	4,059,655	0	0	
176728 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/20/2023	09/20/2024	09/20/2024	Maturity	161	1,146,091	71.02	80,527	0	181,386	123,302	0		0	0	(58,085)	181,386	0	0	
176739 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/20/2023	09/20/2024	09/20/2024	Maturity	145	63,831,900	4402.2	5,438,515	0	18,855,039	14,932,175	0		0	0	(3,922,863)	18,855,039	0	0	
176745 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/20/2023	09/20/2024	09/20/2024	Maturity	141	62,071,020	4402.2	5,288,487	0	18,334,900	14,520,253	0		0	0	(3,814,646)	18,334,900	0	0	
176748 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/20/2023	09/20/2024	09/20/2024	Maturity	122	53,706,840	4402.2	4,575,854	0	15,864,240	12,563,624	0		0	0	(3,300,616)	15,864,240	0	0	
176755 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/20/2023	09/20/2024	09/20/2024	Maturity	123	54,335,122	4402.2	4,629,384	0	16,049,825	12,710,597	0		0	0	(3,339,228)	16,049,825	0	0	
176766 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/20/2023	09/20/2024	09/20/2024	Maturity	104	45,818,714	4402.2	3,903,781	0	13,534,199	10,718,357	0		0	0	(2,815,842)	13,534,199	0	0	
176774 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/20/2023	09/20/2024	09/20/2024	Maturity	111	48,712,940	4402.2	4,150,371	0	14,389,112	11,395,402	0		0	0	(2,993,710)	14,389,112	0	0	
176780 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/20/2023	09/20/2024	09/20/2024	Maturity	106	46,444,971	4402.2	3,957,139	0	13,719,186	10,864,857	0		0	0	(2,854,329)	13,719,186	0	0	
176788 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/20/2023	09/20/2024	09/20/2024	Maturity	111	48,864,420	4402.2	4,163,277	0	14,433,857	11,430,838	0		0	0	(3,003,019)	14,433,857	0	0	
176789 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/20/2023	09/20/2024	09/20/2024	Maturity	77	33,896,940	4402.2	2,888,039	0	10,012,676	7,929,500	0		0	0	(2,083,176)	10,012,676	0	0	
176799 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	09/20/2023	09/20/2024	09/20/2024	Maturity	0	37,589,737	1236.49	2,631,282	0	7,995,902	6,097,928	0		0	0	(1,897,974)	7,995,902	0	0	

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SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
176801 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	09/20/2023	09/20/2024	09/20/2024	Maturity	0	13,691,679	4402.2	455,933	0	1,188,133	859,263	0		0	0	(328,870)	1,188,133	0	0	0
176802 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	09/20/2023	09/20/2024	09/20/2024	Maturity	0	8,260,357	505.76	547,682	0	786,576	391,542	0		0	0	(395,035)	786,576	0	0	0
176834 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	09/20/2023	09/20/2024	09/20/2024	Maturity	0	28,159,475	4402.2	1,348,839	0	4,390,592	3,417,659	0		0	0	(972,933)	4,390,592	0	0	0
177511 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/06/2023	10/04/2024	10/04/2024	Maturity	106	45,670,100	4308.5	4,114,920	0	15,291,216	12,148,502	0		0	0	(3,142,714)	15,291,216	0	0	0
177514 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/06/2023	10/04/2024	10/04/2024	Maturity	118	50,840,300	4308.5	4,580,760	0	17,022,297	13,523,804	0		0	0	(3,498,493)	17,022,297	0	0	0
177523 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/06/2023	10/04/2024	10/04/2024	Maturity	124	53,425,400	4308.5	4,813,680	0	17,887,837	14,211,455	0		0	0	(3,676,382)	17,887,837	0	0	0
177528 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	10/06/2023	10/04/2024	10/04/2024	Maturity	0	42,905,021	1214.7	2,990,480	0	10,405,006	8,121,068	0		0	0	(2,283,938)	10,405,006	0	0	0
177529 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	10/06/2023	10/04/2024	10/04/2024	Maturity	0	8,828,621	494.62	583,572	0	1,001,346	555,651	0		0	0	(445,695)	1,001,346	0	0	0
177531 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/06/2023	10/04/2024	10/04/2024	Maturity	99	42,837,649	4308.5	3,859,713	0	14,342,857	11,395,054	0		0	0	(2,947,803)	14,342,857	0	0	0
177546 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/06/2023	10/04/2024	10/04/2024	Maturity	108	46,746,622	4308.5	4,211,916	0	15,651,655	12,434,863	0		0	0	(3,216,793)	15,651,655	0	0	0
177560 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/06/2023	10/04/2024	10/04/2024	Maturity	122	52,369,214	4308.5	4,718,517	0	17,534,206	13,930,504	0		0	0	(3,603,702)	17,534,206	0	0	0
177570 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/06/2023	10/04/2024	10/04/2024	Maturity	108	46,423,097	4308.5	4,182,766	0	15,543,333	12,348,803	0		0	0	(3,194,530)	15,543,333	0	0	0
177579 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/06/2023	10/04/2024	10/04/2024	Maturity	114	49,266,836	4308.5	4,438,989	0	16,495,471	13,105,254	0		0	0	(3,390,217)	16,495,471	0	0	0
177590 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/06/2023	10/04/2024	10/04/2024	Maturity	184	79,276,400	4308.5	7,142,880	0	26,543,242	21,087,966	0		0	0	(5,455,276)	26,543,242	0	0	0
177593 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	10/06/2023	10/04/2024	10/04/2024	Maturity	0	73,931,298	4308.5	6,877,000	0	24,753,643	19,501,429	0		0	0	(5,252,214)	24,753,643	0	0	0
177598 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	10/06/2023	10/04/2024	10/04/2024	Maturity	0	31,934,184	4308.5	1,669,317	0	5,975,414	4,700,496	0		0	0	(1,274,918)	5,975,414	0	0	0
177600 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	10/06/2023	10/04/2024	10/04/2024	Maturity	0	15,614,459	4308.5	424,713	0	1,735,401	1,411,032	0		0	0	(324,369)	1,735,401	0	0	0
177479 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/09/2023	10/04/2024	10/04/2024	Maturity	2,242	38,053,352	169.7	3,083,286	0	16,885,194	14,510,807	0		0	0	(2,374,386)	16,885,194	0	0	0
177488 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/09/2023	10/04/2024	10/04/2024	Maturity	2,775	21,302,298	76.77	1,814,733	0	6,268,320	4,870,825	0		0	0	(1,397,495)	6,268,320	0	0	0
177498 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/09/2023	10/04/2024	10/04/2024	Maturity	232	1,588,530	68.52	127,277	0	325,264	227,250	0		0	0	(98,014)	325,264	0	0	0
177770 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	10/13/2023	10/11/2024	10/11/2024	Maturity	0	1,367,847	4375.574859	68,096	0	254,867	201,470	0		0	0	(53,397)	254,867	0	0	0
177903 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/20/2023	10/18/2024	10/18/2024	Maturity	1,637	30,405,998	183.59	2,656,172	0	11,076,383	8,945,608	0		0	0	(2,130,775)	11,076,383	0	0	0
177925 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/20/2023	10/18/2024	10/18/2024	Maturity	86	574,398	66.57	46,162	0	132,620	95,588	0		0	0	(37,031)	132,620	0	0	0
177939 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/20/2023	10/18/2024	10/18/2024	Maturity	138	58,293,408	4224.16	5,432,922	0	22,639,004	18,280,725	0		0	0	(4,358,278)	22,639,004	0	0	0
177949 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/20/2023	10/18/2024	10/18/2024	Maturity	104	44,033,320	4224.16	4,103,888	0	17,100,913	13,808,783	0		0	0	(3,292,130)	17,100,913	0	0	0
177959 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/20/2023	10/18/2024	10/18/2024	Maturity	147	61,983,381	4224.16	5,776,826	0	24,072,052	19,437,895	0		0	0	(4,634,157)	24,072,052	0	0	0
177970 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	10/20/2023	10/18/2024	10/18/2024	Maturity	104	43,750,470	4224.16	4,077,526	0	16,991,064	13,720,082	0		0	0	(3,270,982)	16,991,064	0	0	0
177971 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	10/20/2023	10/18/2024	10/18/2024	Maturity	0	35,345,118	1196.46	2,445,882	0	9,952,502	7,990,420	0		0	0	(1,962,081)	9,952,502	0	0	0
177974 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	10/20/2023	10/18/2024	10/18/2024	Maturity	0	7,651,762	492.53	501,956	0	972,996	570,329	0		0	0	(402,668)	972,996	0	0	0
177987 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	10/20/2023	10/18/2024	10/18/2024	Maturity	0	13,212,998	4224.16	402,996	0	2,020,547	1,697,264	0		0	0	(323,283)	2,020,547	0	0	0
177990 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	10/20/2023	10/18/2024	10/18/2024	Maturity	0	16,480,710	74.75	1,573,907	0	5,994,789	4,732,205	0		0	0	(1,262,584)	5,994,789	0	0	0
178004 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	10/20/2023	10/18/2024	10/18/2024	Maturity	0	72,956,407	4224.16	7,035,916	0	28,333,613	22,689,417	0		0	0	(5,644,196)	28,333,613	0	0	0
178011 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	10/20/2023	10/18/2024	10/18/2024	Maturity	0	52,541,392	4224.16	5,067,082	0	20,405,164	16,340,354	0		0	0	(4,064,810)	20,405,164	0	0	0

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SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
178025 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	10/20/2023	10/18/2024	10/18/2024	Maturity	0	48,792,077	4224.16	4,586,455	0	18,949,067	15,269,822	0		0	0	(3,679,244)	18,949,067	0	0	
178031 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	10/20/2023	10/18/2024	10/18/2024	Maturity	0	80,679,356	4224.16	7,583,859	0	31,332,926	25,249,170	0		0	0	(6,083,755)	31,332,926	0	0	
178036 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	10/20/2023	10/18/2024	10/18/2024	Maturity	0	23,572,584	4224.16	1,308,278	0	5,586,753	4,537,255	0		0	0	(1,049,498)	5,586,753	0	0	
178397 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	11/06/2023	11/06/2024	11/06/2024	Maturity	0	51,696,594	4365.98	4,562,224	0	18,507,844	14,631,200	0		0	0	(3,876,644)	18,507,844	0	0	
178406 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	11/06/2023	11/06/2024	11/06/2024	Maturity	0	49,921,490	4365.98	4,405,571	0	17,872,341	14,128,809	0		0	0	(3,743,532)	17,872,341	0	0	
178421 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	11/06/2023	11/06/2024	11/06/2024	Maturity	0	43,057,215	4365.98	3,799,799	0	15,414,869	12,186,078	0		0	0	(3,228,791)	15,414,869	0	0	
178431 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	11/06/2023	11/06/2024	11/06/2024	Maturity	0	51,713,051	4365.98	4,564,711	0	18,513,736	14,634,979	0		0	0	(3,878,757)	18,513,736	0	0	
178435 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	11/06/2023	11/06/2024	11/06/2024	Maturity	0	33,391,840	4365.98	2,947,498	0	11,954,578	9,450,010	0		0	0	(2,504,568)	11,954,578	0	0	
178444 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	11/06/2023	11/06/2024	11/06/2024	Maturity	0	18,621,821	4365.98	601,485	0	2,469,382	1,958,284	0		0	0	(511,038)	2,469,382	0	0	
178461 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	1,872	34,326,457	183.35	2,804,529	0	11,673,055	9,289,972	0		0	0	(2,383,083)	11,673,055	0	0	
178469 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	2,602	20,548,884	78.97	1,831,887	0	4,712,426	3,155,822	0		0	0	(1,556,604)	4,712,426	0	0	
178477 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	146	1,011,407	69.31	79,237	0	142,423	75,093	0		0	0	(67,330)	142,423	0	0	
178503 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	11/06/2023	11/06/2024	11/06/2024	Maturity	0	31,886,501	4365.98	1,543,307	0	6,419,446	5,108,057	0		0	0	(1,311,389)	6,419,446	0	0	
178509 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	134	58,504,132	4365.98	4,996,190	0	20,944,971	16,699,574	0		0	0	(4,245,396)	20,944,971	0	0	
178509 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	11/06/2023	11/06/2024	11/06/2024	Maturity	0	42,250,102	1225.02	2,847,657	0	11,295,596	8,875,865	0		0	0	(2,419,730)	11,295,596	0	0	
178510 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	11/06/2023	11/06/2024	11/06/2024	Maturity	0	11,133,582	499.3	722,569	0	1,256,960	642,973	0		0	0	(613,987)	1,256,960	0	0	
178512 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	134	58,504,132	4365.98	4,996,190	0	20,944,971	16,699,574	0		0	0	(4,245,396)	20,944,971	0	0	
178514 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	187	81,643,826	4365.98	6,972,295	0	29,229,175	23,304,629	0		0	0	(5,924,546)	29,229,175	0	0	
178519 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	183	80,027,278	4365.98	6,834,244	0	28,650,438	22,843,198	0		0	0	(5,807,240)	28,650,438	0	0	
178527 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	113	49,335,574	4365.98	4,213,205	0	17,662,550	14,082,477	0		0	0	(3,580,073)	17,662,550	0	0	
178529 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	95	41,476,810	4365.98	3,542,075	0	14,849,046	11,839,250	0		0	0	(3,009,796)	14,849,046	0	0	
178677 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	11/10/2023	11/08/2024	11/08/2024	Maturity	0	1,175,658	4377.960897	54,090	0	246,070	199,558	0		0	0	(46,511)	246,070	0	0	
178947 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	1,753	32,143,147	183.37	2,555,746	0	10,736,586	8,467,140	0		0	0	(2,269,446)	10,736,586	0	0	
178958 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	1,852	15,246,725	82.34	1,257,290	0	3,068,232	1,951,786	0		0	0	(1,116,446)	3,068,232	0	0	
178976 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	188	1,355,545	72.12	89,655	0	96,234	16,622	0		0	0	(79,612)	96,234	0	0	
178984 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	110	49,839,921	4547.38	4,091,859	0	15,012,405	11,378,924	0		0	0	(3,633,481)	15,012,405	0	0	
179006 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	111	50,348,319	4547.38	4,133,598	0	15,165,541	11,494,996	0		0	0	(3,670,545)	15,165,541	0	0	
179012 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	156	70,939,128	4547.38	5,824,104	0	21,367,749	16,196,072	0		0	0	(5,171,677)	21,367,749	0	0	
179022 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	122	55,478,036	4547.38	4,554,748	0	16,710,676	12,666,159	0		0	0	(4,044,517)	16,710,676	0	0	
179023 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	90	40,736,340	4547.38	3,344,454	0	12,270,293	9,300,490	0		0	0	(2,969,802)	12,270,293	0	0	
179025 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	105	47,878,455	4547.38	3,930,822	0	14,421,587	10,931,103	0		0	0	(3,490,484)	14,421,587	0	0	
179037 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	121	55,149,715	4547.38	4,527,793	0	16,611,781	12,591,200	0		0	0	(4,020,581)	16,611,781	0	0	
179049 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	83	37,743,254	4547.38	3,098,722	0	11,368,738	8,617,141	0		0	0	(2,751,597)	11,368,738	0	0	
179053 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	11/20/2023	11/20/2024	11/20/2024	Maturity	0	13,914,188	4547.38	414,643	0	1,734,075	1,365,881	0		0	0	(368,194)	1,734,075	0	0	

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SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
179057 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	11/20/2023	11/20/2024	11/20/2024	Maturity	0	27,764,868	4547.38	1,266,078	0	4,836,064	3,711,814	0		0	0	(1,124,250)	4,836,064	0	0	0
179061 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	11/20/2023	11/20/2024	11/20/2024	Maturity	0	34,534,766	1259.07	2,317,283	0	8,107,950	6,050,254	0		0	0	(2,057,697)	8,107,950	0	0	0
179063 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	11/20/2023	11/20/2024	11/20/2024	Maturity	0	9,381,654	503	607,931	0	993,933	454,103	0		0	0	(539,830)	993,933	0	0	0
179101 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	11/20/2023	11/20/2024	11/20/2024	Maturity	0	59,596,710	4547.38	5,062,591	0	17,951,304	13,455,834	0		0	0	(4,495,470)	17,951,304	0	0	0
179446 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/06/2023	12/06/2024	12/06/2024	Maturity	1,842	34,595,845	187.84	2,875,006	0	10,150,005	7,471,380	0		0	0	(2,678,626)	10,150,005	0	0	0
179457 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/06/2023	12/06/2024	12/06/2024	Maturity	1,878	16,182,101	96.18	1,370,728	0	2,536,786	1,259,687	0		0	0	(1,277,099)	2,536,786	0	0	0
179472 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/06/2023	12/06/2024	12/06/2024	Maturity	142	64,600,628	4549.34	5,277,856	0	21,881,171	16,963,824	0		0	0	(4,917,347)	21,881,171	0	0	0
179474 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/06/2023	12/06/2024	12/06/2024	Maturity	132	60,051,288	4549.34	4,906,176	0	20,340,243	15,769,188	0		0	0	(4,571,055)	20,340,243	0	0	0
179487 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/06/2023	12/06/2024	12/06/2024	Maturity	107	48,701,595	4549.34	3,978,909	0	16,495,937	12,788,812	0		0	0	(3,707,125)	16,495,937	0	0	0
179507 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/06/2023	12/06/2024	12/06/2024	Maturity	118	53,709,463	4549.34	4,388,050	0	18,192,175	14,103,855	0		0	0	(4,088,320)	18,192,175	0	0	0
179521 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	12/06/2023	12/06/2024	12/06/2024	Maturity	0	39,056,540	1260.04	2,597,260	0	10,193,743	7,773,892	0		0	0	(2,419,851)	10,193,743	0	0	0
179522 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/06/2023	12/06/2024	12/06/2024	Maturity	111	50,336,263	4549.34	4,112,461	0	17,049,623	13,218,068	0		0	0	(3,831,555)	17,049,623	0	0	0
179525 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	12/06/2023	12/06/2024	12/06/2024	Maturity	0	8,884,743	509.49	561,516	0	918,312	395,151	0		0	0	(523,161)	918,312	0	0	0
179527 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	12/06/2023	12/06/2024	12/06/2024	Maturity	0	22,348,709	4549.34	1,041,450	0	4,048,000	3,077,687	0		0	0	(970,313)	4,048,000	0	0	0
179531 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/06/2023	12/06/2024	12/06/2024	Maturity	108	49,132,872	4549.34	4,014,144	0	16,642,017	12,902,063	0		0	0	(3,739,954)	16,642,017	0	0	0
179535 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/06/2023	12/06/2024	12/06/2024	Maturity	79	36,066,986	4549.34	2,946,664	0	12,216,412	9,471,022	0		0	0	(2,745,389)	12,216,412	0	0	0
179546 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/06/2023	12/06/2024	12/06/2024	Maturity	146	66,420,364	4549.34	5,426,528	0	22,497,542	17,441,678	0		0	0	(5,055,864)	22,497,542	0	0	0
179554 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	12/06/2023	12/06/2024	12/06/2024	Maturity	0	48,669,647	4549.34	4,172,792	0	16,485,143	12,597,377	0		0	0	(3,887,765)	16,485,143	0	0	0
179558 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	12/06/2023	12/06/2024	12/06/2024	Maturity	0	14,728,925	4549.34	447,760	0	1,821,962	1,404,787	0		0	0	(417,175)	1,821,962	0	0	0
179559 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	12/06/2023	12/06/2024	12/06/2024	Maturity	0	676,641	72.57	47,839	0	70,023	25,452	0		0	0	(44,571)	70,023	0	0	0
179783 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	12/15/2023	12/13/2024	12/13/2024	Maturity	0	1,990,571	4685.24	99,532	0	320,301	225,120	0		0	0	(95,181)	320,301	0	0	0
180049 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/20/2023	12/20/2024	12/20/2024	Maturity	91	42,627,566	4698.35	3,567,910	0	11,182,302	7,721,624	0		0	0	(3,460,678)	11,182,302	0	0	0
180063 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/20/2023	12/20/2024	12/20/2024	Maturity	219	102,901,758	4698.35	8,612,836	0	26,993,766	18,639,786	0		0	0	(8,353,980)	26,993,766	0	0	0
180068 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	12/20/2023	12/20/2024	12/20/2024	Maturity	0	22,808,684	4698.35	1,050,879	0	3,610,851	2,591,556	0		0	0	(1,019,295)	3,610,851	0	0	0
180077 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/20/2023	12/20/2024	12/20/2024	Maturity	96	45,104,160	4698.35	3,775,200	0	11,831,976	8,170,238	0		0	0	(3,661,738)	11,831,976	0	0	0
180078 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	12/20/2023	12/20/2024	12/20/2024	Maturity	0	16,386,355	4698.35	504,700	0	1,903,250	1,413,719	0		0	0	(489,531)	1,903,250	0	0	0
180081 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/20/2023	12/20/2024	12/20/2024	Maturity	72	33,828,684	4698.35	2,831,447	0	8,874,130	6,127,781	0		0	0	(2,746,349)	8,874,130	0	0	0
180082 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/20/2023	12/20/2024	12/20/2024	Maturity	1,722	32,395,250	188.1	2,640,187	0	9,300,072	6,739,235	0		0	0	(2,560,837)	9,300,072	0	0	0
180094 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/20/2023	12/20/2024	12/20/2024	Maturity	107	50,272,345	4698.35	4,207,775	0	13,187,723	9,106,411	0		0	0	(4,081,312)	13,187,723	0	0	0
180105 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/20/2023	12/20/2024	12/20/2024	Maturity	1,794	16,082,971	89.63	1,309,893	0	495,247	(775,277)	0		0	0	(1,270,524)	495,247	0	0	0
180124 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	12/20/2023	12/20/2024	12/20/2024	Maturity	0	39,590,854	1292.08	2,632,792	0	7,966,706	5,413,042	0		0	0	(2,553,664)	7,966,706	0	0	0
180129 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	12/20/2023	12/20/2024	12/20/2024	Maturity	0	9,155,039	514.87	566,697	0	595,317	45,652	0		0	0	(549,665)	595,317	0	0	0
180133 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/20/2023	12/20/2024	12/20/2024	Maturity	127	59,669,045	4698.35	4,994,275	0	15,652,718	10,808,544	0		0	0	(4,844,174)	15,652,718	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
180136 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	12/20/2024	Maturity	149	70,005,415	4698.35	5,859,425	0	18,364,213	12,680,891	0	0	0	(5,683,322)	18,364,213	0	0	0
180149 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	12/20/2024	Maturity	93	43,694,655	4698.35	3,657,225	0	11,462,227	7,914,918	0	0	0	(3,547,308)	11,462,227	0	0	0
180157 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	12/20/2023	12/20/2024	12/20/2024	Maturity	0	924,215	73.47	68,854	0	20,505	(46,280)	0	0	0	(66,785)	20,505	0	0	0
0159999999. Subtotal - Purchased Options - Hedging Other - Call Options and Warrants												1,443,733,893	0	4,042,043,623	3,366,754,437	0	XXX	420,088	0	(675,289,110)	4,042,043,546	0	0	XXX
0219999999. Subtotal - Purchased Options - Hedging Other												1,443,733,893	0	4,042,043,623	3,366,754,437	0	XXX	420,088	0	(675,289,110)	4,042,043,546	0	0	XXX
0289999999. Subtotal - Purchased Options - Replications												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
0359999999. Subtotal - Purchased Options - Income Generation												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
0429999999. Subtotal - Purchased Options - Other												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
0439999999. Total Purchased Options - Call Options and Warrants												1,443,733,893	0	4,042,043,623	3,366,754,437	0	XXX	420,088	0	(675,289,110)	4,042,043,546	0	0	XXX
0449999999. Total Purchased Options - Put Options												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
0459999999. Total Purchased Options - Caps												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
0469999999. Total Purchased Options - Floors												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
0479999999. Total Purchased Options - Collars												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
0489999999. Total Purchased Options - Other												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
0499999999. Total Purchased Options												1,443,733,893	0	4,042,043,623	3,366,754,437	0	XXX	420,088	0	(675,289,110)	4,042,043,546	0	0	XXX
0569999999. Subtotal - Written Options - Hedging Effective Excluding Variable Annuity Guarantees Under SSAP No.108												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
0639999999. Subtotal - Written Options - Hedging Effective Variable Annuity Guarantees Under SSAP No.108												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
153789 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	07/06/2022	01/05/2024	01/05/2024	Maturity	15	5,991,404	3994.269104	(589,455)	0	(1,054,459)	(1,048,005)	0	0	0	6,454	(1,054,459)	0	0	0
154440 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	07/20/2022	01/19/2024	01/19/2024	Maturity	12	4,921,522	4101.26843	(499,176)	0	(886,251)	(868,033)	0	0	0	18,218	(886,251)	0	0	0
155061 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	02RNE81BX4P0TDBPU41	08/05/2022	02/06/2024	02/06/2024	Maturity	0	8,098,578	4331.309031	(935,495)	0	(1,164,721)	(1,100,087)	0	0	0	64,634	(1,164,721)	0	0	0
155782 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMIUSFPUBMR08K5P83	08/19/2022	02/20/2024	02/20/2024	Maturity	0	5,965,661	4398.464896	(591,003)	0	(782,656)	(726,779)	0	0	0	55,877	(782,656)	0	0	0
156459 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/06/2022	03/06/2024	03/06/2024	Maturity	12	4,851,158	4042.631736	(510,252)	0	(1,274,559)	(1,212,060)	0	0	0	62,499	(1,274,559)	0	0	0
156999 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2022	03/20/2024	03/20/2024	Maturity	19	7,584,884	3992.044329	(819,888)	0	(2,341,907)	(2,220,497)	0	0	0	121,409	(2,341,907)	0	0	0
158142 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMIUSFPUBMR08K5P83	10/06/2022	04/05/2024	04/05/2024	Maturity	0	6,268,896	3878.948268	(726,742)	0	(2,142,009)	(2,013,135)	0	0	0	128,874	(2,142,009)	0	0	0
158746 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/20/2022	04/19/2024	04/19/2024	Maturity	15	5,699,921	3799.947548	(672,270)	0	(1,750,924)	(1,614,503)	0	0	0	136,420	(1,750,924)	0	0	0
159844 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/04/2022	05/06/2024	05/06/2024	Maturity	22	8,588,031	3903.650415	(995,434)	0	(2,809,604)	(2,577,517)	0	0	0	232,087	(2,809,604)	0	0	0
160891 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	4PQUHNSJFFGNF38B653	11/18/2022	05/20/2024	05/20/2024	Maturity	0	6,833,287	4115.229852	(597,009)	0	(1,980,795)	(1,826,378)	0	0	0	154,418	(1,980,795)	0	0	0
161873 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2022	06/06/2024	06/06/2024	Maturity	16	6,553,212	4095.757392	(690,832)	0	(2,011,524)	(1,811,082)	0	0	0	200,442	(2,011,524)	0	0	0
162577 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2022	06/20/2024	06/20/2024	Maturity	16	6,342,055	3963.784264	(686,736)	0	(2,415,028)	(2,198,230)	0	0	0	216,798	(2,415,028)	0	0	0
163196 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	ES70DZIWZFF32TIEFA76	01/06/2023	01/05/2024	01/05/2024	Maturity	0	45,372,359	4010.374368	(3,856,213)	0	(7,771,073)	(7,718,103)	0	0	0	52,970	(7,771,073)	0	0	0
163294 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	ES70DZIWZFF32TIEFA76	01/06/2023	01/05/2024	01/05/2024	Maturity	0	64,732,760	4072.695648	(4,878,859)	0	(9,926,644)	(9,859,626)	0	0	0	67,017	(9,926,644)	0	0	0
163305 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	4PQUHNSJFFGNF38B653	01/06/2023	01/05/2024	01/05/2024	Maturity	0	35,770,655	4082.822856	(2,616,491)	0	(5,383,066)	(5,347,125)	0	0	0	35,941	(5,383,066)	0	0	0
163315 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5G8EF7VPJ5170UK5573	01/06/2023	01/05/2024	01/05/2024	Maturity	0	55,682,351	4115.931036	(3,819,423)	0	(7,864,235)	(7,811,771)	0	0	0	52,465	(7,864,235)	0	0	0
163328 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5G8EF7VPJ5170UK5573	01/06/2023	01/05/2024	01/05/2024	Maturity	0	52,540,549	4146.702168	(3,382,389)	0	(6,975,558)	(6,929,096)	0	0	0	46,461	(6,975,558)	0	0	0
163334 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5G8EF7VPJ5170UK5573	01/06/2023	01/05/2024	01/05/2024	Maturity	0	46,299,205	4299.389304	(2,128,687)	0	(4,284,369)	(4,255,129)	0	0	0	29,240	(4,284,369)	0	0	0
163339 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	ES70DZIWZFF32TIEFA76	01/06/2023	01/05/2024	01/05/2024	Maturity	0	67,065,858	4040.366484	(5,386,082)	0	(10,903,355)	(10,829,370)	0	0	0	73,985	(10,903,355)	0	0	0
163343 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	01/06/2023	01/05/2024	01/05/2024	Maturity	0	30,593,196	4006.868796	(1,302,597)	0	(2,467,655)	(2,449,762)	0	0	0	17,893	(2,467,655)	0	0	0
163355 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	W2LR0IWP21HZNB6K528	01/06/2023	01/05/2024	01/05/2024	Expiration	0	18,092,135	90.960171	(1,136,908)	0	0	15,617	0	0	0	15,617	0	0	0	0
163363 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6JLXDRUGJF057PNE97	01/06/2023	01/05/2024	01/05/2024	Maturity	0	1,144,030	71.461557	(68,278)	0	(43,360)	(42,422)	0	0	0	938	(43,360)	0	0	0
163371 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	ES70DZIWZFF32TIEFA76	01/06/2023	01/05/2024	01/05/2024	Maturity	0	54,924,863	3972.9816	(4,997,412)	0	(10,012,601)	(9,943,956)	0	0	0	68,646	(10,012,601)	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
163377 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	01/06/2023	01/05/2024	01/05/2024	Maturity	0	51,089,512	3973.371108	(4,647,982)	0	(9,307,503)	(9,243,657)	0		0	0	63,846	(9,307,503)	0	0	0
163383 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	01/06/2023	01/05/2024	01/05/2024	Maturity	1,908	34,960,372	183.211937	(2,177,248)	0	(1,173,443)	(1,143,536)	0		0	0	29,907	(1,173,443)	0	0	0
163387 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	01/06/2023	07/05/2024	07/05/2024	Maturity	11	4,464,112	4058.283852	(439,252)	0	(1,659,804)	(1,509,364)	0		0	0	150,440	(1,659,804)	0	0	0
163392 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	01/06/2023	01/05/2024	01/05/2024	Maturity	88	35,531,401	4056.72582	(2,677,429)	0	(5,610,018)	(5,573,241)	0		0	0	36,778	(5,610,018)	0	0	0
163829 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	01/20/2023	01/19/2024	01/19/2024	Maturity	0	49,541,615	4057.623854	(4,123,779)	0	(9,550,113)	(9,334,861)	0		0	0	215,252	(9,550,113)	0	0	0
163850 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	01/20/2023	01/19/2024	01/19/2024	Maturity	0	49,193,689	4095.363649	(3,793,197)	0	(8,942,322)	(8,744,326)	0		0	0	197,997	(8,942,322)	0	0	0
163868 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	01/20/2023	01/19/2024	01/19/2024	Maturity	0	55,499,209	4132.706183	(3,955,312)	0	(9,495,885)	(9,289,426)	0		0	0	206,459	(9,495,885)	0	0	0
163876 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	01/20/2023	01/19/2024	01/19/2024	Maturity	0	69,378,671	4157.733626	(4,682,033)	0	(11,381,574)	(11,137,182)	0		0	0	244,392	(11,381,574)	0	0	0
163884 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	01/20/2023	01/19/2024	01/19/2024	Maturity	0	67,017,392	4182.761069	(4,189,462)	0	(10,527,443)	(10,308,762)	0		0	0	218,681	(10,527,443)	0	0	0
163906 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	01/20/2023	01/19/2024	01/19/2024	Maturity	0	63,067,009	4218.514559	(3,624,022)	0	(9,288,467)	(9,099,301)	0		0	0	189,166	(9,288,467)	0	0	0
163911 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A. ROYAL BANK OF CANADA	01/20/2023	01/19/2024	01/19/2024	Maturity	0	50,564,523	4359.939475	(2,100,904)	0	(5,565,312)	(5,455,650)	0		0	0	109,663	(5,565,312)	0	0	0
163918 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ES71P3U3RH1GC71XBU11	01/20/2023	01/19/2024	01/19/2024	Maturity	0	24,538,316	4092.582822	(897,976)	0	(1,622,194)	(1,575,322)	0		0	0	46,872	(1,622,194)	0	0	0
163950 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	01/20/2023	01/19/2024	01/19/2024	Expiration	0	18,725,600	94.730836	(1,112,346)	0	0	58,062	0		0	0	58,062	0	0	0	0
163955 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	01/20/2023	07/19/2024	07/19/2024	Maturity	0	4,217,308	4143.034969	(399,368)	0	(1,386,381)	(1,239,361)	0		0	0	147,020	(1,386,381)	0	0	0
163965 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	01/20/2023	01/19/2024	01/19/2024	Maturity	0	51,653,498	4050.870417	(4,357,393)	0	(10,059,934)	(9,832,488)	0		0	0	227,446	(10,059,934)	0	0	0
163969 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	01/20/2023	01/19/2024	01/19/2024	Expiration	1,522	28,912,368	189.957755	(1,774,701)	0	0	92,635	0		0	0	92,635	0	0	0	0
163976 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	01/20/2023	01/19/2024	01/19/2024	Expiration	133	995,397	74.659914	(49,063)	0	0	2,561	0		0	0	2,561	0	0	0	0
164468 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A. BANK OF AMERICA	02/06/2023	02/06/2024	02/06/2024	Maturity	0	65,277,722	4194.123816	(5,253,187)	0	(11,830,421)	(11,297,906)	0		0	0	532,515	(11,830,421)	0	0	0
164503 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	N.A. BANK OF AMERICA	02/06/2023	02/06/2024	02/06/2024	Maturity	0	51,473,298	4232.35686	(3,806,614)	0	(8,779,276)	(8,393,400)	0		0	0	385,876	(8,779,276)	0	0	0
164531 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	N.A. BANK OF AMERICA	02/06/2023	02/06/2024	02/06/2024	Maturity	0	34,326,717	4261.545528	(2,382,100)	0	(5,579,532)	(5,338,059)	0		0	0	241,473	(5,579,532)	0	0	0
164540 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	N.A. BANK OF AMERICA	02/06/2023	02/06/2024	02/06/2024	Maturity	0	52,927,009	4290.734196	(3,439,966)	0	(8,184,397)	(7,835,688)	0		0	0	348,709	(8,184,397)	0	0	0
164566 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	N.A. BANK OF AMERICA	02/06/2023	02/06/2024	02/06/2024	Maturity	0	77,139,214	4300.600788	(4,906,263)	0	(11,724,061)	(11,226,713)	0		0	0	497,347	(11,724,061)	0	0	0
164573 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	N.A. BANK OF AMERICA	02/06/2023	02/06/2024	02/06/2024	Maturity	0	39,813,179	4309.234056	(2,481,574)	0	(5,959,180)	(5,707,623)	0		0	0	251,557	(5,959,180)	0	0	0
164577 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	N.A. ROYAL BANK OF CANADA	02/06/2023	02/06/2024	02/06/2024	Maturity	0	53,306,957	4340.478264	(3,086,673)	0	(7,537,682)	(7,224,786)	0		0	0	312,896	(7,537,682)	0	0	0
164583 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ES71P3U3RH1GC71XBU11	02/06/2023	02/06/2024	02/06/2024	Maturity	0	47,776,817	4362.678096	(2,639,160)	0	(6,478,217)	(6,210,686)	0		0	0	267,531	(6,478,217)	0	0	0
164588 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ES71P3U3RH1GC71XBU11	02/06/2023	02/06/2024	02/06/2024	Maturity	0	52,895,101	4381.589064	(2,784,214)	0	(6,912,983)	(6,630,748)	0		0	0	282,235	(6,912,983)	0	0	0
164596 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ES71P3U3RH1GC71XBU11	02/06/2023	02/06/2024	02/06/2024	Maturity	0	52,669,295	4530.821268	(1,863,808)	0	(4,922,001)	(4,733,067)	0		0	0	188,934	(4,922,001)	0	0	0
164608 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/06/2023	02/06/2024	02/06/2024	Expiration	343	2,588,924	75.461575	(99,493)	0	0	10,086	0		0	0	10,086	0	0	0	0
164618 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	02/06/2023	02/06/2024	02/06/2024	Maturity	0	47,795,368	184.07538	(2,604,165)	0	(1,160,640)	(896,656)	0		0	0	263,984	(1,160,640)	0	0	0
164625 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A. BANK OF AMERICA	02/06/2023	02/06/2024	02/06/2024	Expiration	0	29,709,564	98.341496	(1,605,392)	0	0	162,738	0		0	0	162,738	0	0	0	0
164629 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	N.A. BANK OF AMERICA	02/06/2023	08/06/2024	08/06/2024	Maturity	0	7,077,128	4275.934308	(653,884)	0	(1,595,688)	(1,333,896)	0		0	0	261,793	(1,595,688)	0	0	0
164634 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A. ROYAL BANK OF CANADA	02/06/2023	02/06/2024	02/06/2024	Maturity	0	67,641,836	4193.3016	(5,451,136)	0	(12,274,505)	(11,721,924)	0		0	0	552,581	(12,274,505)	0	0	0
164640 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ES71P3U3RH1GC71XBU11	02/06/2023	02/06/2024	02/06/2024	Maturity	0	30,526,625	4227.012456	(1,098,507)	0	(1,251,664)	(1,140,308)	0		0	0	111,356	(1,251,664)	0	0	0
165123 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	02/17/2023	02/20/2024	02/20/2024	Expiration	0	27,549,694	96.020772	(1,609,829)	0	0	223,101	0		0	0	223,101	0	0	0	0
165134 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	02/17/2023	02/20/2024	02/20/2024	Maturity	0	1,061,285	75.501362	(49,715)	0	(12,370)	(5,480)	0		0	0	6,890	(12,370)	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
165166 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC . G5GSEF7VJP5170UK5573	02/17/2023	02/20/2024	02/20/2024	Maturity	0	53,408,551	4234.09542	(3,881,715)	0	(9,352,146)	(8,814,191)	0		0	0	537,955	(9,352,146)	0	0	0
165191 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG . BFM18T61CT2L1QCE1K1K50	02/17/2023	02/20/2024	02/20/2024	Maturity	0	51,236,591	4266.72814	(3,458,226)	0	(8,511,316)	(8,032,051)	0		0	0	479,265	(8,511,316)	0	0	0
165197 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC . G5GSEF7VJP5170UK5573	02/17/2023	02/20/2024	02/20/2024	Maturity	0	40,512,532	4487.814818	(1,616,259)	0	(4,402,536)	(4,178,544)	0		0	0	223,992	(4,402,536)	0	0	0
165231 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC . G5GSEF7VJP5170UK5573	02/17/2023	02/20/2024	02/20/2024	Maturity	0	24,973,199	4191.672884	(898,579)	0	(1,227,737)	(1,103,205)	0		0	0	124,531	(1,227,737)	0	0	0
165238 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/17/2023	08/20/2024	08/20/2024	Maturity	17	7,200,043	4235.319147	(677,076)	0	(2,315,064)	(2,028,230)	0		0	0	286,834	(2,315,064)	0	0	0
165241 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/17/2023	02/20/2024	02/20/2024	Maturity	139	57,810,658	4159.040164	(4,773,399)	0	(11,348,968)	(10,687,437)	0		0	0	661,531	(11,348,968)	0	0	0
165253 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/17/2023	02/20/2024	02/20/2024	Maturity	134	56,015,695	4165.974617	(4,561,556)	0	(10,885,108)	(10,252,936)	0		0	0	632,172	(10,885,108)	0	0	0
165263 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/17/2023	02/20/2024	02/20/2024	Maturity	109	45,754,286	4200.65	(3,470,364)	0	(8,439,957)	(7,959,010)	0		0	0	480,947	(8,439,957)	0	0	0
165271 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/17/2023	02/20/2024	02/20/2024	Maturity	153	65,149,879	4258.162051	(4,367,385)	0	(10,975,493)	(10,370,231)	0		0	0	605,263	(10,975,493)	0	0	0
165273 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/17/2023	02/20/2024	02/20/2024	Maturity	127	54,394,665	4283.0445	(3,448,050)	0	(8,794,401)	(8,316,546)	0		0	0	477,855	(8,794,401)	0	0	0
165278 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/17/2023	02/20/2024	02/20/2024	Maturity	120	51,783,232	4315.269311	(3,048,000)	0	(7,922,910)	(7,500,497)	0		0	0	422,413	(7,922,910)	0	0	0
165282 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	02/17/2023	02/20/2024	02/20/2024	Maturity	118	51,300,312	4347.086213	(2,798,154)	0	(7,416,064)	(7,028,277)	0		0	0	387,788	(7,416,064)	0	0	0
165304 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL GOLDMAN SACHS	02/17/2023	02/20/2024	02/20/2024	Maturity	0	41,746,058	181.210206	(2,321,869)	0	(1,442,139)	(1,120,358)	0		0	0	321,781	(1,442,139)	0	0	0
165810 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	INTERNATIONAL	03/06/2023	03/06/2024	03/06/2024	Maturity	0	49,276,499	181.676932	(2,536,711)	0	(4,646,201)	(4,188,761)	0		0	0	457,440	(4,646,201)	0	0	0
165819 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Expiration	0	30,403,640	93.001884	(1,883,693)	0	0	339,682	0		0	0	339,682	0	0	0	0
165828 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	1,479,373	73.76131	(82,670)	0	(96,680)	(81,772)	0		0	0	14,908	(96,680)	0	0	0
165835 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/06/2023	09/06/2024	09/06/2024	Maturity	11	4,591,313	4173.92102	(415,217)	0	(1,357,953)	(1,169,218)	0		0	0	188,735	(1,357,953)	0	0	0
165838 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/06/2023	03/06/2024	03/06/2024	Maturity	162	66,915,767	4130.602926	(4,973,400)	0	(15,781,433)	(14,884,590)	0		0	0	896,843	(15,781,433)	0	0	0
165847 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/06/2023	03/06/2024	03/06/2024	Maturity	130	54,113,343	4167.84839	(3,696,798)	0	(12,164,422)	(11,497,787)	0		0	0	666,636	(12,164,422)	0	0	0
165882 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	67,446,867	4129.3884	(5,580,898)	0	(15,931,088)	(14,924,697)	0		0	0	1,006,391	(15,931,088)	0	0	0
165902 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	49,969,042	4199.426066	(3,574,379)	0	(10,772,537)	(10,127,977)	0		0	0	644,560	(10,772,537)	0	0	0
165906 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	54,213,738	4301.851092	(3,081,602)	0	(10,118,610)	(9,562,911)	0		0	0	555,699	(10,118,610)	0	0	0
165912 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	83,321,774	4250.841	(5,324,658)	0	(16,737,895)	(15,777,711)	0		0	0	960,184	(16,737,895)	0	0	0
165921 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	47,272,559	4434.639268	(1,916,105)	0	(7,143,374)	(6,797,847)	0		0	0	345,527	(7,143,374)	0	0	0
165926 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	67,416,861	4224.121428	(4,574,577)	0	(14,054,990)	(13,230,066)	0		0	0	824,924	(14,054,990)	0	0	0
165930 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	03/06/2023	03/06/2024	03/06/2024	Maturity	0	31,676,238	4162.990286	(1,207,535)	0	(2,475,710)	(2,257,958)	0		0	0	217,752	(2,475,710)	0	0	0
165937 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	39,552,414	4243.553844	(2,569,662)	0	(8,026,982)	(7,563,601)	0		0	0	463,382	(8,026,982)	0	0	0
165943 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	32,827,213	4269.463732	(2,010,846)	0	(6,422,486)	(6,059,874)	0		0	0	362,612	(6,422,486)	0	0	0
165945 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2023	03/06/2024	03/06/2024	Maturity	0	47,749,734	4286.467096	(2,814,114)	0	(9,115,462)	(8,607,999)	0		0	0	507,463	(9,115,462)	0	0	0
166354 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	03/20/2023	03/20/2024	03/20/2024	Maturity	0	47,729,989	194.374032	(2,934,313)	0	(1,917,804)	(1,276,424)	0		0	0	641,380	(1,917,804)	0	0	0
166362 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	03/20/2023	03/20/2024	03/20/2024	Maturity	0	32,438,707	87.55445	(1,906,351)	0	(457,768)	(41,080)	0		0	0	416,689	(457,768)	0	0	0
166371 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	03/20/2023	03/20/2024	03/20/2024	Maturity	0	955,728	72.008942	(53,428)	0	(104,055)	(92,376)	0		0	0	11,678	(104,055)	0	0	0
166379 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	03/20/2023	03/20/2024	03/20/2024	Maturity	0	66,103,902	4319.461167	(2,918,085)	0	(13,852,331)	(13,214,499)	0		0	0	637,833	(13,852,331)	0	0	0
166396 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2023	03/20/2024	03/20/2024	Maturity	111	45,628,419	4117.140783	(2,877,695)	0	(12,273,730)	(11,644,726)	0		0	0	629,004	(12,273,730)	0	0	0
166402 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/20/2023	03/20/2024	03/20/2024	Maturity	127	52,323,955	4127.810022	(3,215,257)	0	(13,903,151)	(13,200,363)	0		0	0	702,788	(13,903,151)	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
166407 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2023	03/20/2024	03/20/2024	Maturity	121	50,142,539	4144.011459	(2,960,144)	0	(13,075,411)	(12,428,385)	0	0	0	647,026	(13,075,411)	0	0	0
166412 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2023	03/20/2024	03/20/2024	Maturity	126	52,478,430	4164.95478	(2,937,186)	0	(13,351,874)	(12,709,866)	0	0	0	642,008	(13,351,874)	0	0	0
166419 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2023	03/20/2024	03/20/2024	Maturity	184	77,041,031	4188.269043	(4,056,719)	0	(19,063,165)	(18,176,451)	0	0	0	886,714	(19,063,165)	0	0	0
166442 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3PH1GC71XB11	03/20/2023	03/20/2024	03/20/2024	Maturity	0	28,311,222	4061.423646	(1,198,227)	0	(3,363,422)	(3,101,515)	0	0	0	261,908	(3,363,422)	0	0	0
166444 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2023	09/20/2024	09/20/2024	Maturity	12	4,876,079	4063.399431	(322,068)	0	(1,966,983)	(1,812,390)	0	0	0	154,593	(1,966,983)	0	0	0
166447 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2023	03/20/2024	03/20/2024	Maturity	189	76,148,493	4029.020772	(5,877,711)	0	(22,596,887)	(21,312,142)	0	0	0	1,284,746	(22,596,887)	0	0	0
166453 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2023	03/20/2024	03/20/2024	Maturity	168	67,625,203	4032.972342	(5,174,965)	0	(19,981,724)	(18,850,585)	0	0	0	1,131,140	(19,981,724)	0	0	0
166459 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2023	03/20/2024	03/20/2024	Maturity	121	49,258,730	4068.931629	(3,479,282)	0	(13,990,883)	(13,230,384)	0	0	0	760,499	(13,990,883)	0	0	0
166469 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	03/20/2023	03/20/2024	03/20/2024	Maturity	125	51,151,363	4098.568404	(3,372,801)	0	(14,053,473)	(13,316,249)	0	0	0	737,224	(14,053,473)	0	0	0
167363 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC . WELLS FARGO BANK, N.A.	G6S6EFTVJP5170UK5573	04/06/2023	04/05/2024	04/05/2024	Expiration	0	40,013,788	89.02054	(2,559,046)	0	0	673,064	0	0	0	673,064	0	0	0	0
167372 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	KB1H1DSPRFMYMCUFXT09	04/06/2023	04/05/2024	04/05/2024	Maturity	0	1,895,084	77.357082	(70,495)	0	(39,442)	(20,900)	0	0	0	18,541	(39,442)	0	0	0	0
167377 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMIUSFPUBMPRO8K5P83	04/06/2023	10/04/2024	10/04/2024	Maturity	0	3,777,261	4217.90805	(372,359)	0	(1,372,990)	(1,183,747)	0	0	0	189,243	(1,372,990)	0	0	0
167380 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMIUSFPUBMPRO8K5P83	04/06/2023	04/05/2024	04/05/2024	Maturity	0	84,576,435	4185.478392	(6,797,802)	0	(20,588,219)	(18,800,304)	0	0	0	1,787,915	(20,588,219)	0	0	0
167386 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMIUSFPUBMPRO8K5P83	04/06/2023	04/05/2024	04/05/2024	Maturity	0	82,540,040	4189.583412	(6,578,294)	0	(19,992,043)	(18,261,861)	0	0	0	1,730,181	(19,992,043)	0	0	0
167392 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC .	4PQUHNSJFFG9NF38B653	04/06/2023	04/05/2024	04/05/2024	Maturity	0	31,531,165	4283.998872	(736,022)	0	(6,773,903)	(6,580,319)	0	0	0	193,584	(6,773,903)	0	0	0
167399 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC .	4PQUHNSJFFG9NF38B653	04/06/2023	04/05/2024	04/05/2024	Maturity	0	40,323,413	4346.395176	(927,744)	0	(7,959,485)	(7,715,476)	0	0	0	244,009	(7,959,485)	0	0	0
167405 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC .	4PQUHNSJFFG9NF38B653	04/06/2023	04/05/2024	04/05/2024	Maturity	0	81,284,742	4394.834412	(1,849,552)	0	(14,972,307)	(14,485,850)	0	0	0	486,457	(14,972,307)	0	0	0
167424 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/06/2023	04/05/2024	04/05/2024	Maturity	170	72,528,189	4276.199334	(4,621,676)	0	(15,742,132)	(14,526,568)	0	0	0	1,215,564	(15,742,132)	0	0	0
167433 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMIUSFPUBMPRO8K5P83	04/06/2023	04/05/2024	04/05/2024	Maturity	0	36,922,405	4210.929516	(1,428,953)	0	(3,235,796)	(2,859,962)	0	0	0	375,834	(3,235,796)	0	0	0
167435 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/06/2023	04/05/2024	04/05/2024	Maturity	109	46,822,088	4296.313932	(2,845,738)	0	(9,895,920)	(9,147,452)	0	0	0	748,468	(9,895,920)	0	0	0
167442 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/06/2023	04/05/2024	04/05/2024	Maturity	115	49,685,577	4321.354554	(2,843,375)	0	(10,154,414)	(9,406,567)	0	0	0	747,847	(10,154,414)	0	0	0
167446 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/06/2023	04/05/2024	04/05/2024	Maturity	132	57,085,229	4324.63857	(3,240,336)	0	(11,612,073)	(10,759,820)	0	0	0	852,253	(11,612,073)	0	0	0
167448 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/06/2023	04/05/2024	04/05/2024	Maturity	98	44,404,987	4531.121076	(1,422,862)	0	(6,597,581)	(6,223,348)	0	0	0	374,232	(6,597,581)	0	0	0
167458 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/06/2023	04/05/2024	04/05/2024	Maturity	2,709	53,543,948	197.623453	(3,367,775)	0	(4,749,429)	(3,863,659)	0	0	0	885,771	(4,749,429)	0	0	0
167462 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/06/2023	04/05/2024	04/05/2024	Maturity	113	48,294,992	4259.779254	(3,195,911)	0	(10,708,921)	(9,868,352)	0	0	0	840,568	(10,708,921)	0	0	0
167474 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/06/2023	04/05/2024	04/05/2024	Maturity	142	59,890,855	4226.12	(4,274,721)	0	(13,862,978)	(12,738,668)	0	0	0	1,124,310	(13,862,978)	0	0	0
168003 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/20/2023	04/19/2024	04/19/2024	Expiration	189	1,458,979	77.347908	(51,683)	0	0	15,576	0	0	0	15,576	0	0	0	0
168018 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/20/2023	10/18/2024	10/18/2024	Maturity	9	3,803,041	4225.601128	(368,739)	0	(1,475,165)	(1,278,325)	0	0	0	196,841	(1,475,165)	0	0	0
168021 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/20/2023	04/19/2024	04/19/2024	Maturity	158	66,523,070	4210.320905	(5,126,626)	0	(11,959,218)	(10,414,207)	0	0	0	1,545,011	(11,959,218)	0	0	0
168031 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/20/2023	04/19/2024	04/19/2024	Maturity	117	49,999,935	4265.660091	(3,406,854)	0	(8,223,482)	(7,196,759)	0	0	0	1,026,723	(8,223,482)	0	0	0
168049 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/20/2023	04/19/2024	04/19/2024	Maturity	157	67,484,441	4299.11139	(4,250,672)	0	(10,487,719)	(9,206,695)	0	0	0	1,281,024	(10,487,719)	0	0	0
168061 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/20/2023	04/19/2024	04/19/2024	Maturity	132	56,971,775	4316.043529	(3,445,200)	0	(8,595,741)	(7,557,462)	0	0	0	1,038,279	(8,595,741)	0	0	0
168071 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/20/2023	04/19/2024	04/19/2024	Maturity	120	52,241,081	4348.66887	(2,912,100)	0	(7,430,866)	(6,553,246)	0	0	0	877,619	(7,430,866)	0	0	0
168087 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/20/2023	04/19/2024	04/19/2024	Maturity	125	54,521,728	4370.969736	(2,870,300)	0	(7,437,540)	(6,572,518)	0	0	0	865,022	(7,437,540)	0	0	0
168099 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	04/20/2023	04/19/2024	04/19/2024	Maturity	144	62,929,856	4384.598043	(3,195,293)	0	(8,362,221)	(7,399,256)	0	0	0	962,965	(8,362,221)	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
168111 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	04/20/2023	04/19/2024	04/19/2024	Maturity	0	42,790,560	197.795061	(2,556,404)	0	(5,025,528)	(4,255,105)	0		0	0	770,423	(5,025,528)	0	0	
168112 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/20/2023	04/19/2024	04/19/2024	Maturity	159	71,024,919	4471.323633	(2,828,580)	0	(7,877,342)	(7,024,899)	0		0	0	852,443	(7,877,342)	0	0	
168120 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	04/20/2023	04/19/2024	04/19/2024	Expiration	0	29,621,620	89.4735	(1,801,842)	0	0	543,021	0		0	0	543,021	0	0	0	
168126 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	04/20/2023	04/19/2024	04/19/2024	Maturity	0	62,678,185	4214.863674	(4,923,486)	0	(11,188,306)	(9,704,516)	0		0	0	1,483,790	(11,188,306)	0	0	
168130 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	04/20/2023	04/19/2024	04/19/2024	Maturity	0	27,081,227	4240.468372	(977,699)	0	(2,473,039)	(2,178,390)	0		0	0	294,649	(2,473,039)	0	0	
170969 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	05/05/2023	05/06/2024	05/06/2024	Maturity	0	36,474,172	4251.651375	(1,331,721)	0	(3,563,260)	(3,102,420)	0		0	0	460,841	(3,563,260)	0	0	
171009 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	05/05/2023	05/06/2024	05/06/2024	Maturity	2,771	55,213,121	199.288726	(3,296,906)	0	(4,410,512)	(3,269,621)	0		0	0	1,140,891	(4,410,512)	0	0	
171017 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	05/05/2023	11/06/2024	11/06/2024	Maturity	9	3,821,275	4245.860625	(358,227)	0	(1,514,864)	(1,312,670)	0		0	0	202,193	(1,514,864)	0	0	
171019 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	05/05/2023	05/06/2024	05/06/2024	Maturity	164	70,805,651	4317.41775	(4,363,876)	0	(14,158,489)	(12,648,374)	0		0	0	1,510,115	(14,158,489)	0	0	
171029 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	05/05/2023	05/06/2024	05/06/2024	Maturity	115	50,048,438	4354.230375	(2,818,840)	0	(9,500,108)	(8,524,651)	0		0	0	975,457	(9,500,108)	0	0	
171040 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	05/05/2023	05/06/2024	05/06/2024	Maturity	117	51,540,736	4413.792375	(2,485,025)	0	(8,965,858)	(8,095,917)	0		0	0	859,941	(8,965,858)	0	0	
171069 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	05/05/2023	05/06/2024	05/06/2024	Maturity	0	47,507,791	4522.162125	(1,811,506)	0	(6,918,744)	(6,291,874)	0		0	0	626,870	(6,918,744)	0	0	
171094 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	05/05/2023	05/06/2024	05/06/2024	Maturity	0	60,383,755	4391.043	(3,269,932)	0	(10,859,618)	(9,728,062)	0		0	0	1,131,557	(10,859,618)	0	0	
171109 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	05/05/2023	05/06/2024	05/06/2024	Expiration	0	37,877,141	90.256914	(2,451,061)	0	0	848,187	0		0	0	848,187	0	0	0	
171115 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	05/05/2023	05/06/2024	05/06/2024	Maturity	0	1,973,738	78.71914	(78,931)	0	(18,554)	8,760	0		0	0	27,314	(18,554)	0	0	
171119 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	05/05/2023	05/06/2024	05/06/2024	Maturity	0	77,217,739	4217.3205	(6,201,677)	0	(17,639,901)	(15,493,816)	0		0	0	2,146,084	(17,639,901)	0	0	
171125 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	05/05/2023	05/06/2024	05/06/2024	Maturity	0	62,987,198	4221.45675	(5,016,777)	0	(14,313,154)	(12,577,103)	0		0	0	1,736,051	(14,313,154)	0	0	
171134 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	05/05/2023	05/06/2024	05/06/2024	Maturity	0	37,302,771	4258.683	(2,745,837)	0	(8,076,533)	(7,126,339)	0		0	0	950,194	(8,076,533)	0	0	
171142 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	05/05/2023	05/06/2024	05/06/2024	Maturity	0	45,407,700	4300.0455	(3,052,585)	0	(9,299,927)	(8,243,583)	0		0	0	1,056,344	(9,299,927)	0	0	
171148 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	05/05/2023	05/06/2024	05/06/2024	Maturity	0	57,361,798	4334.376375	(3,562,918)	0	(11,200,857)	(9,967,913)	0		0	0	1,232,945	(11,200,857)	0	0	
171152 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	05/05/2023	05/06/2024	05/06/2024	Maturity	0	53,975,231	4377.393375	(3,023,812)	0	(9,894,532)	(8,848,145)	0		0	0	1,046,387	(9,894,532)	0	0	
171618 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	05/19/2023	05/20/2024	05/20/2024	Maturity	160	71,815,365	4493.383362	(3,096,124)	0	(13,021,757)	(11,832,238)	0		0	0	1,189,519	(13,021,757)	0	0	
171632 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	05/19/2023	05/20/2024	05/20/2024	Maturity	98	44,612,664	4569.677398	(1,526,993)	0	(7,209,335)	(6,622,670)	0		0	0	586,865	(7,209,335)	0	0	
171637 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	05/19/2023	11/20/2024	11/20/2024	Maturity	0	2,148,818	4313.54742	(206,236)	0	(798,822)	(677,177)	0		0	0	121,646	(798,822)	0	0	
171643 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	05/19/2023	05/20/2024	05/20/2024	Maturity	0	71,017,178	4274.562006	(5,485,947)	0	(17,171,636)	(15,063,957)	0		0	0	2,107,680	(17,171,636)	0	0	
171645 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	05/19/2023	05/20/2024	05/20/2024	Maturity	0	66,055,853	4278.334788	(5,061,785)	0	(15,899,718)	(13,955,000)	0		0	0	1,944,718	(15,899,718)	0	0	
171652 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	05/19/2023	05/20/2024	05/20/2024	Maturity	0	45,305,558	4327.380954	(3,120,808)	0	(10,267,972)	(9,068,969)	0		0	0	1,199,002	(10,267,972)	0	0	
171663 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	05/19/2023	05/20/2024	05/20/2024	Maturity	0	86,079,685	4372.654338	(5,337,765)	0	(18,415,776)	(16,365,027)	0		0	0	2,050,749	(18,415,776)	0	0	
171677 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	05/19/2023	05/20/2024	05/20/2024	Maturity	0	48,554,800	4388.583862	(2,898,074)	0	(10,173,756)	(9,060,327)	0		0	0	1,113,429	(10,173,756)	0	0	
171691 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	05/19/2023	05/20/2024	05/20/2024	Maturity	0	49,059,023	4426.73088	(2,666,632)	0	(9,768,071)	(8,743,562)	0		0	0	1,024,510	(9,768,071)	0	0	
171699 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	05/19/2023	05/20/2024	05/20/2024	Maturity	0	65,994,380	4466.973888	(3,201,867)	0	(12,427,168)	(11,197,022)	0		0	0	1,230,145	(12,427,168)	0	0	
171719 Call Options - iShares U.S. Real Estate - iShares	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	05/19/2023	05/20/2024	05/20/2024	Maturity	0	30,291,711	87.686976	(1,927,993)	0	(10,364)	730,364	0		0	0	740,727	(10,364)	0	0	
171725 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	05/19/2023	05/20/2024	05/20/2024	Maturity	0	2,130,470	78.285848	(85,495)	0	(92,800)	(59,953)	0		0	0	32,847	(92,800)	0	0	
171731 Call Options - SP&500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	05/19/2023	05/20/2024	05/20/2024	Maturity	0	30,970,387	4309.774638	(1,030,238)	0	(2,852,539)	(2,456,725)	0		0	0	395,813	(2,852,539)	0	0	

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SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
171737 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	05/19/2023	05/20/2024	05/20/2024	Maturity	134	59,582,205	4446.433186	(2,928,302)	0	(11,546,814)	(10,421,771)	0		0	0	1,125,042	(11,546,814)	0	0	0
171738 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	INTERNATIONAL	05/19/2023	05/20/2024	05/20/2024	Maturity	0	47,124,115	196.0357	(2,590,039)	0	(6,855,791)	(5,860,708)	0		0	0	995,083	(6,855,791)	0	0	0
172271 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	06/06/2023	06/06/2024	06/06/2024	Maturity	0	2,658,877	77.49112	(106,455)	0	(160,199)	(114,243)	0		0	0	45,956	(160,199)	0	0	0
172307 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	06/06/2023	06/06/2024	06/06/2024	Maturity	0	19,755,909	4413.650655	(1,327,004)	0	(4,204,438)	(3,631,579)	0		0	0	572,860	(4,204,438)	0	0	0
172315 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	06/06/2023	06/06/2024	06/06/2024	Maturity	0	54,867,203	194.611482	(2,724,596)	0	(6,997,552)	(5,821,360)	0		0	0	1,176,192	(6,997,552)	0	0	0
172324 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	06/06/2023	06/06/2024	06/06/2024	Maturity	0	64,028,149	4450.491765	(3,938,526)	0	(12,983,618)	(11,283,380)	0		0	0	1,700,238	(12,983,618)	0	0	0
172327 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	06/06/2023	06/06/2024	06/06/2024	Expiration	0	30,047,650	89.513788	(1,704,483)	0	0	735,815	0		0	0	735,815	0	0	0	0
172341 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	06/06/2023	06/06/2024	06/06/2024	Maturity	0	52,218,786	4499.75604	(2,853,540)	0	(9,901,219)	(8,669,363)	0		0	0	1,231,856	(9,901,219)	0	0	0
172359 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/06/2023	12/06/2024	12/06/2024	Maturity	10	4,395,658	4395.66	(401,140)	0	(1,694,614)	(1,445,454)	0		0	0	249,160	(1,694,614)	0	0	0
172362 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/06/2023	06/06/2024	06/06/2024	Maturity	210	91,733,079	4368.241845	(6,564,390)	0	(20,679,173)	(17,845,365)	0		0	0	2,833,808	(20,679,173)	0	0	0
172365 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	06/06/2023	06/06/2024	06/06/2024	Maturity	0	43,820,840	4521.17529	(2,267,025)	0	(8,061,908)	(7,083,247)	0		0	0	978,661	(8,061,908)	0	0	0
172374 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/06/2023	06/06/2024	06/06/2024	Maturity	166	72,576,815	4372.09731	(5,148,490)	0	(16,282,318)	(14,059,745)	0		0	0	2,222,572	(16,282,318)	0	0	0
172378 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	06/06/2023	06/06/2024	06/06/2024	Maturity	0	67,853,837	4564.442175	(3,114,415)	0	(11,721,938)	(10,377,464)	0		0	0	1,344,474	(11,721,938)	0	0	0
172384 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	06/06/2023	06/06/2024	06/06/2024	Maturity	0	68,177,565	4593.14397	(2,900,821)	0	(11,278,261)	(10,025,994)	0		0	0	1,252,267	(11,278,261)	0	0	0
172390 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ES71P3U3RH1GC71XB11	06/06/2023	06/06/2024	06/06/2024	Maturity	0	51,584,964	4664.684265	(1,830,984)	0	(7,611,426)	(6,821,001)	0		0	0	790,425	(7,611,426)	0	0	0
172393 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	06/06/2023	06/06/2024	06/06/2024	Maturity	0	29,851,389	4402.08426	(912,158)	0	(2,400,673)	(2,006,900)	0		0	0	393,773	(2,400,673)	0	0	0
172399 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	06/06/2023	06/06/2024	06/06/2024	Maturity	105	46,977,556	4474.05294	(2,601,690)	0	(9,228,581)	(8,105,447)	0		0	0	1,123,134	(9,228,581)	0	0	0
172402 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/06/2023	06/06/2024	06/06/2024	Maturity	101	45,383,910	4483.47741	(2,452,576)	0	(8,801,319)	(7,742,557)	0		0	0	1,058,762	(8,801,319)	0	0	0
172407 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/06/2023	06/06/2024	06/06/2024	Maturity	117	53,163,392	4543.879695	(2,438,387)	0	(9,466,265)	(8,413,624)	0		0	0	1,052,641	(9,466,265)	0	0	0
172809 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	06/20/2023	06/20/2024	06/20/2024	Expiration	0	25,145,347	89.91969	(1,286,947)	0	0	604,795	0		0	0	604,795	0	0	0	0
172819 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	06/20/2023	06/20/2024	06/20/2024	Maturity	0	1,704,881	76.36689	(75,914)	0	(47,552)	(11,876)	0		0	0	35,675	(47,552)	0	0	0
172833 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	06/20/2023	06/20/2024	06/20/2024	Maturity	0	45,809,824	4539.242753	(2,970,733)	0	(9,425,198)	(8,029,116)	0		0	0	1,396,082	(9,425,198)	0	0	0
172844 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	G5GSEF7VJP5170UK5573	06/20/2023	06/20/2024	06/20/2024	Maturity	0	47,339,516	4603.75679	(2,635,753)	0	(8,939,970)	(7,701,310)	0		0	0	1,238,660	(8,939,970)	0	0	0
172859 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	06/20/2023	06/20/2024	06/20/2024	Maturity	0	52,076,434	4622.189372	(2,771,375)	0	(9,587,665)	(8,285,270)	0		0	0	1,302,395	(9,587,665)	0	0	0
172865 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	06/20/2023	06/20/2024	06/20/2024	Maturity	0	30,582,010	4510.716138	(943,228)	0	(1,941,582)	(1,498,316)	0		0	0	443,266	(1,941,582)	0	0	0
172882 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	06/20/2024	06/20/2024	Maturity	2,462	46,914,240	190.535	(2,445,002)	0	(6,803,039)	(5,654,022)	0		0	0	1,149,017	(6,803,039)	0	0	0
172883 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	06/20/2024	06/20/2024	Maturity	102	46,806,119	4588.835176	(2,558,364)	0	(9,020,192)	(7,817,900)	0		0	0	1,202,291	(9,020,192)	0	0	0
172886 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	06/20/2024	06/20/2024	Maturity	119	55,406,191	4655.982439	(2,536,604)	0	(9,724,591)	(8,532,525)	0		0	0	1,192,065	(9,724,591)	0	0	0
172893 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	12/20/2024	12/20/2024	Maturity	8	3,617,350	4521.687913	(323,112)	0	(1,127,330)	(918,396)	0		0	0	208,934	(1,127,330)	0	0	0
172897 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	06/20/2024	06/20/2024	Maturity	122	57,260,770	4679.681473	(2,454,060)	0	(9,709,206)	(8,555,932)	0		0	0	1,153,274	(9,709,206)	0	0	0
172898 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	06/20/2024	06/20/2024	Maturity	166	74,287,782	4475.167587	(5,318,972)	0	(16,566,842)	(14,067,215)	0		0	0	2,499,626	(16,566,842)	0	0	0
172907 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	06/20/2024	06/20/2024	Maturity	150	70,842,784	4735.856961	(2,576,057)	0	(11,029,318)	(9,818,712)	0		0	0	1,210,606	(11,029,318)	0	0	0
172912 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	06/20/2024	06/20/2024	Maturity	142	63,419,017	4479.117426	(4,500,806)	0	(14,074,610)	(11,959,478)	0		0	0	2,115,133	(14,074,610)	0	0	0
172919 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	06/20/2023	06/20/2024	06/20/2024	Maturity	139	63,361,235	4573.913562	(3,596,033)	0	(12,457,250)	(10,767,311)	0		0	0	1,689,939	(12,457,250)	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
173441 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	07/06/2023	07/05/2024	07/05/2024	Maturity	0	36,493,163	4558.05	(2,390,142)	0	(8,079,488)	(6,854,949)	0		0	1,224,539	(8,079,488)	0	0	0	0
173454 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	07/06/2023	07/05/2024	07/05/2024	Maturity	0	41,828,061	4585.85	(2,568,028)	0	(8,950,914)	(7,635,239)	0		0	1,315,675	(8,950,914)	0	0	0	0
173465 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	07/06/2023	07/05/2024	07/05/2024	Maturity	0	33,471,370	4599.96	(1,945,303)	0	(7,037,999)	(6,041,364)	0		0	996,635	(7,037,999)	0	0	0	0
173479 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	07/06/2023	07/05/2024	07/05/2024	Maturity	0	66,806,951	4601.29	(3,952,690)	0	(14,024,075)	(11,998,998)	0		0	2,025,077	(14,024,075)	0	0	0	0
173487 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	07/06/2023	07/05/2024	07/05/2024	Maturity	0	48,623,204	4621.14	(2,682,980)	0	(9,954,250)	(8,579,682)	0		0	1,374,568	(9,954,250)	0	0	0	0
173499 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	07/06/2023	07/05/2024	07/05/2024	Maturity	0	61,473,203	4660.4	(3,072,499)	0	(11,961,052)	(10,386,922)	0		0	1,574,129	(11,961,052)	0	0	0	0
173505 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL W22LROIWP21HZNB6K528	07/06/2023	07/05/2024	07/05/2024	Maturity	0	55,215,881	189.4	(2,586,511)	0	(9,191,957)	(7,866,813)	0		0	1,325,144	(9,191,957)	0	0	0	0
173512 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL W22LROIWP21HZNB6K528	07/06/2023	07/05/2024	07/05/2024	Maturity	0	55,416,456	4695.26	(2,520,111)	0	(10,291,074)	(8,999,949)	0		0	1,291,125	(10,291,074)	0	0	0	0
173519 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL W22LROIWP21HZNB6K528	07/06/2023	07/05/2024	07/05/2024	Expiration	0	27,187,068	92.33	(1,292,268)	0	662,066	662,066	0		0	662,066	0	0	0	0	0
173523 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	N.A. B4TYDEB6GKMZ0031MB27	07/06/2023	07/05/2024	07/05/2024	Maturity	0	96,092,490	4749.96	(3,807,286)	0	(16,532,700)	(14,582,118)	0		0	1,950,582	(16,532,700)	0	0	0	0
173537 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	N.A. B4TYDEB6GKMZ0031MB27	07/06/2023	07/05/2024	07/05/2024	Maturity	0	64,395,998	4801.13	(2,198,803)	0	(10,274,914)	(9,148,404)	0		0	1,126,510	(10,274,914)	0	0	0	0
173554 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	07/06/2023	07/05/2024	07/05/2024	Maturity	0	93,915,579	4499.82	(6,999,476)	0	(22,277,040)	(18,691,008)	0		0	3,586,033	(22,277,040)	0	0	0	0
173557 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	07/06/2023	07/05/2024	07/05/2024	Maturity	0	74,752,790	4500.26	(5,566,342)	0	(17,722,530)	(14,870,733)	0		0	2,851,797	(17,722,530)	0	0	0	0
173561 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBQE 529900RLNSGA90UPEH54	07/06/2023	07/05/2024	07/05/2024	Maturity	389	2,927,156	75.25	(85,967)	0	(188,641)	(144,598)	0		0	44,043	(188,641)	0	0	0	0
173569 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	07/06/2023	07/05/2024	07/05/2024	Maturity	0	28,762,055	4531.59	(870,813)	0	(1,950,749)	(1,504,606)	0		0	446,142	(1,950,749)	0	0	0	0
174112 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	07/20/2023	07/19/2024	07/19/2024	Maturity	0	76,848,499	4636.45	(5,360,004)	0	(14,396,075)	(11,444,401)	0		0	2,951,673	(14,396,075)	0	0	0	0
174123 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC. G5GSEF7VJP1570UK5573	07/20/2023	07/19/2024	07/19/2024	Maturity	0	61,334,731	4723.07	(3,476,421)	0	(10,154,299)	(8,239,887)	0		0	1,914,413	(10,154,299)	0	0	0	0
174140 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC. G5GSEF7VJP1570UK5573	07/20/2023	07/19/2024	07/19/2024	Maturity	0	56,886,944	4744.83	(3,056,721)	0	(9,113,867)	(7,430,577)	0		0	1,683,290	(9,113,867)	0	0	0	0
174151 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC. G5GSEF7VJP1570UK5573	07/20/2023	07/19/2024	07/19/2024	Maturity	0	52,063,689	4787.01	(2,514,033)	0	(7,808,884)	(6,424,444)	0		0	1,384,440	(7,808,884)	0	0	0	0
174154 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC. G5GSEF7VJP1570UK5573	07/20/2023	07/19/2024	07/19/2024	Maturity	0	55,139,280	4840.52	(2,306,063)	0	(7,569,217)	(6,299,303)	0		0	1,269,914	(7,569,217)	0	0	0	0
174158 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC. G5GSEF7VJP1570UK5573	07/20/2023	07/19/2024	07/19/2024	Maturity	0	54,983,619	4902.19	(1,925,070)	0	(6,761,198)	(5,701,091)	0		0	1,060,107	(6,761,198)	0	0	0	0
174166 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	N.A. B4TYDEB6GKMZ0031MB27	07/20/2023	07/19/2024	07/19/2024	Maturity	0	34,180,959	4978.38	(852,189)	0	(3,615,710)	(3,146,422)	0		0	469,288	(3,615,710)	0	0	0	0
174167 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG BFMBT61CT2L10CEMIK50	07/20/2023	07/19/2024	07/19/2024	Expiration	0	21,782,054	94.2	(1,144,853)	0	630,453	630,453	0		0	630,453	0	0	0	0	0
174173 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	07/20/2023	07/19/2024	07/19/2024	Maturity	0	87,622,627	4624.21	(6,278,028)	0	(16,689,857)	(13,232,641)	0		0	3,457,215	(16,689,857)	0	0	0	0
174180 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSRPFMMUCUFTX09	07/20/2023	07/19/2024	07/19/2024	Maturity	0	24,961,962	4660.03	(728,746)	0	(1,167,254)	(765,945)	0		0	401,309	(1,167,254)	0	0	0	0
174187 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBQE 529900RLNSGA90UPEH54	07/20/2023	07/19/2024	07/19/2024	Maturity	2,123	41,392,131	194.97	(1,951,037)	0	(5,683,165)	(4,608,758)	0		0	1,074,407	(5,683,165)	0	0	0	0
174191 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBQE 529900RLNSGA90UPEH54	07/20/2023	07/19/2024	07/19/2024	Maturity	338	2,657,018	78.61	(75,374)	0	(31,417)	10,090	0		0	41,507	(31,417)	0	0	0	0
174197 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBQE 529900RLNSGA90UPEH54	07/20/2023	07/19/2024	07/19/2024	Maturity	103	48,409,382	4699.94	(2,731,148)	0	(8,292,144)	(6,788,142)	0		0	1,504,002	(8,292,144)	0	0	0	0
174680 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBQE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	2,426	46,555,554	191.94	(2,185,399)	0	(6,975,814)	(5,675,264)	0		0	1,300,550	(6,975,814)	0	0	0	0
174692 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBQE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	2,458	22,333,910	90.87	(999,582)	0	(975,741)	(380,882)	0		0	594,860	(975,741)	0	0	0	0
174710 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBQE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	113	52,072,488	4619.98	(3,263,561)	0	(6,988,705)	(5,046,531)	0		0	1,942,174	(6,988,705)	0	0	0	0
174718 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBQE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	105	48,857,825	4646.4	(2,874,225)	0	(6,242,164)	(4,531,688)	0		0	1,710,476	(6,242,164)	0	0	0	0
174729 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBQE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	109	50,735,365	4662.08	(2,872,343)	0	(6,289,603)	(4,580,247)	0		0	1,709,356	(6,289,603)	0	0	0	0
174736 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBQE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	103	48,162,388	4675.96	(2,632,783)	0	(5,809,947)	(4,243,155)	0		0	1,566,792	(5,809,947)	0	0	0	0
174745 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBQE 529900RLNSGA90UPEH54	08/04/2023	08/06/2024	08/06/2024	Maturity	105	49,182,766	4694.32	(2,565,942)	0	(5,717,474)	(4,190,459)	0		0	1,527,014	(5,717,474)	0	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
174758 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/04/2023	08/06/2024	08/06/2024	Maturity	103	48,998,556	4739.99	(2,263,655)	0	(5,169,074)	(3,821,953)	0		0	0	1,347,121	(5,169,074)	0	0	
174769 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/04/2023	08/06/2024	08/06/2024	Maturity	118	56,388,151	4786.12	(2,286,573)	0	(5,347,816)	(3,987,056)	0		0	0	1,360,759	(5,347,816)	0	0	
174772 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/04/2023	08/06/2024	08/06/2024	Maturity	111	53,777,058	4844.78	(1,825,728)	0	(4,387,303)	(3,300,796)	0		0	0	1,086,507	(4,387,303)	0	0	
174775 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/04/2023	08/06/2024	08/06/2024	Maturity	68	33,450,016	4919.12	(887,332)	0	(2,182,205)	(1,654,146)	0		0	0	528,959	(2,182,205)	0	0	
174792 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	08/04/2023	08/06/2024	08/06/2024	Expiration	0	2,596,930	76.99	(103,754)	0	0	61,745	0		0	0	61,745	0	0	0	
174802 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	08/04/2023	08/06/2024	08/06/2024	Maturity	0	91,665,355	4566.25	(6,886,808)	0	(13,525,878)	(9,427,478)	0		0	0	4,098,400	(13,525,878)	0	0	
174820 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	08/04/2023	08/06/2024	08/06/2024	Maturity	0	72,264,589	4570.28	(5,382,668)	0	(10,590,028)	(7,386,756)	0		0	0	3,203,273	(10,590,028)	0	0	
174824 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC - ROYAL BANK OF CANADA	08/04/2023	08/06/2024	08/06/2024	Maturity	0	33,184,814	4602.97	(924,787)	0	(2,034,142)	(1,483,794)	0		0	0	550,349	(2,034,142)	0	0	
175356 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ES71P3U3RH1GC71XBU11	08/18/2023	08/20/2024	08/20/2024	Maturity	0	2,161,933	75.39	(85,519)	0	(162,597)	(108,450)	0		0	0	54,146	(162,597)	0	0	
175375 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/18/2023	08/20/2024	08/20/2024	Maturity	141	64,030,807	4552.8	(3,982,236)	0	(14,687,404)	(12,166,043)	0		0	0	2,521,361	(14,687,404)	0	0	
175386 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/18/2023	08/20/2024	08/20/2024	Maturity	111	50,841,663	4580.33	(2,968,362)	0	(11,286,397)	(9,406,972)	0		0	0	1,879,425	(11,286,397)	0	0	
175388 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC - G5GSEFF7VJP5I70UK5573	08/18/2023	08/20/2024	08/20/2024	Maturity	0	26,977,271	4489.88	(872,510)	0	(2,702,777)	(2,150,345)	0		0	0	552,432	(2,702,777)	0	0	
175395 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/18/2023	08/20/2024	08/20/2024	Maturity	120	55,630,723	4630.58	(2,876,817)	0	(11,611,819)	(9,790,356)	0		0	0	1,821,463	(11,611,819)	0	0	
175403 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/18/2023	08/20/2024	08/20/2024	Maturity	114	53,566,656	4703.12	(2,299,332)	0	(10,182,331)	(8,726,504)	0		0	0	1,455,827	(10,182,331)	0	0	
175409 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/18/2023	08/20/2024	08/20/2024	Maturity	116	55,661,208	4798.38	(1,829,784)	0	(9,265,413)	(8,106,881)	0		0	0	1,158,532	(9,265,413)	0	0	
175416 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/18/2023	08/20/2024	08/20/2024	Maturity	1,808	33,817,213	187.08	(1,541,912)	0	(8,203,042)	(7,226,777)	0		0	0	976,265	(8,203,042)	0	0	
175423 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/18/2023	08/20/2024	08/20/2024	Maturity	2,062	18,199,316	88.24	(860,054)	0	(1,672,671)	(1,128,126)	0		0	0	544,545	(1,672,671)	0	0	
175433 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/18/2023	08/20/2024	08/20/2024	Maturity	158	70,401,482	4455.79	(5,392,066)	0	(18,033,054)	(14,619,055)	0		0	0	3,413,998	(18,033,054)	0	0	
175435 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/18/2023	08/20/2024	08/20/2024	Maturity	143	63,805,313	4461.91	(4,830,254)	0	(16,233,539)	(13,175,253)	0		0	0	3,058,286	(16,233,539)	0	0	
175441 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	08/18/2023	08/20/2024	08/20/2024	Maturity	141	63,785,139	4522.21	(4,246,550)	0	(15,161,490)	(12,472,778)	0		0	0	2,688,712	(15,161,490)	0	0	
175964 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	2,069	39,243,910	189.71	(1,793,499)	0	(8,464,819)	(7,239,751)	0		0	0	1,225,068	(8,464,819)	0	0	
175970 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	2,363	21,065,107	89.13	(954,819)	0	(2,427,226)	(1,775,027)	0		0	0	652,199	(2,427,226)	0	0	
175978 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	219	1,650,784	75.37	(51,033)	0	(97,028)	(62,169)	0		0	0	34,858	(97,028)	0	0	
175988 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	159	72,392,700	4553	(5,380,401)	0	(13,601,218)	(9,926,080)	0		0	0	3,675,137	(13,601,218)	0	0	
175991 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	152	69,273,544	4557.47	(5,100,816)	0	(12,934,478)	(9,450,314)	0		0	0	3,484,164	(12,934,478)	0	0	
175994 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	81	37,302,525	4605.25	(2,478,357)	0	(6,505,697)	(4,812,830)	0		0	0	1,692,867	(6,505,697)	0	0	
176000 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	112	51,986,868	4636.51	(3,220,342)	0	(8,655,069)	(6,455,382)	0		0	0	2,199,687	(8,655,069)	0	0	
176010 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	112	51,931,537	4653.03	(3,096,899)	0	(8,430,785)	(6,315,417)	0		0	0	2,115,368	(8,430,785)	0	0	
176018 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	107	49,824,780	4668.66	(2,864,083)	0	(7,894,879)	(5,938,531)	0		0	0	1,956,348	(7,894,879)	0	0	
176029 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	105	49,296,573	4699.02	(2,634,560)	0	(7,442,214)	(5,642,651)	0		0	0	1,799,563	(7,442,214)	0	0	
176041 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	112	52,950,334	4745.47	(2,519,160)	0	(7,397,277)	(5,676,540)	0		0	0	1,720,738	(7,397,277)	0	0	
176050 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	115	55,450,957	4803.96	(2,257,071)	0	(6,977,166)	(5,435,450)	0		0	0	1,541,715	(6,977,166)	0	0	
176055 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	94	45,812,028	4873.62	(1,527,030)	0	(5,027,144)	(3,984,090)	0		0	0	1,043,053	(5,027,144)	0	0	
176057 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	09/06/2023	09/06/2024	09/06/2024	Maturity	84	41,636,112	4956.68	(1,072,764)	0	(3,794,637)	(3,061,875)	0		0	0	732,762	(3,794,637)	0	0	
176066 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	09/06/2023	09/06/2024	09/06/2024	Maturity	0	30,086,412	4595.43	(906,304)	0	(2,612,575)	(1,993,515)	0		0	0	619,060	(2,612,575)	0	0	

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
176718 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	09/20/2024	Maturity	1,743	33,340,776	191.29	(1,450,129)	0	(8,875,071)	(7,829,076)	0	0	0	1,045,995	(8,875,071)	0	0	0
176724 Call Options - iShares U.S. Real Estate - iShares	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	09/20/2024	Maturity	2,178	19,313,853	88.68	(821,078)	0	(2,959,802)	(2,367,549)	0	0	0	592,253	(2,959,802)	0	0	0
176732 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	09/20/2024	Maturity	161	1,221,453	75.69	(37,439)	0	(106,024)	(79,019)	0	0	0	27,005	(106,024)	0	0	0
176740 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	09/20/2024	Maturity	145	65,082,960	4488.48	(4,647,685)	0	(17,604,051)	(14,251,623)	0	0	0	3,352,429	(17,604,051)	0	0	0
176747 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	09/20/2024	Maturity	141	63,349,749	4492.89	(4,481,544)	0	(17,056,241)	(13,823,652)	0	0	0	3,232,589	(17,056,241)	0	0	0
176750 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	09/20/2024	Maturity	122	55,500,606	4549.23	(3,465,776)	0	(14,070,535)	(11,570,631)	0	0	0	2,499,904	(14,070,535)	0	0	0
176759 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	09/20/2024	Maturity	123	56,519,413	4579.17	(3,293,778)	0	(13,865,596)	(11,489,756)	0	0	0	2,375,840	(13,865,596)	0	0	0
176771 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	09/20/2024	Maturity	104	47,853,089	4597.66	(2,668,959)	0	(11,499,876)	(9,574,725)	0	0	0	1,925,151	(11,499,876)	0	0	0
176777 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	09/20/2024	Maturity	111	51,416,485	4646.52	(2,544,311)	0	(11,685,623)	(9,850,382)	0	0	0	1,835,241	(11,685,623)	0	0	0
176783 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	09/20/2024	Maturity	106	49,631,086	4704.19	(2,115,566)	0	(10,533,124)	(9,007,142)	0	0	0	1,525,982	(10,533,124)	0	0	0
176788 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	09/20/2024	Maturity	111	53,301,312	4801.92	(1,728,381)	0	(9,997,021)	(8,750,320)	0	0	0	1,246,701	(9,997,021)	0	0	0
176791 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE ROYAL BANK OF CANADA	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	09/20/2024	Maturity	77	37,717,141	4898.33	(914,529)	0	(6,192,513)	(5,532,853)	0	0	0	659,660	(6,192,513)	0	0	0
176835 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ES71P3U3RH1GC71XBU11	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	09/20/2024	Maturity	0	28,919,784	4521.06	(887,023)	0	(3,630,282)	(2,990,462)	0	0	0	639,820	(3,630,282)	0	0	0
177512 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	10/04/2024	Maturity	106	46,610,956	4397.26	(3,523,440)	0	(14,350,413)	(11,659,434)	0	0	0	2,690,979	(14,350,413)	0	0	0
177516 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	10/04/2024	Maturity	118	52,218,068	4425.26	(3,722,074)	0	(15,644,588)	(12,801,905)	0	0	0	2,842,683	(15,644,588)	0	0	0
177525 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	10/04/2024	Maturity	124	55,343,432	4463.18	(3,632,456)	0	(15,969,867)	(13,195,629)	0	0	0	2,774,238	(15,969,867)	0	0	0
177539 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	10/04/2024	Maturity	99	44,525,404	4478.25	(2,825,585)	0	(12,655,152)	(10,497,151)	0	0	0	2,158,001	(12,655,152)	0	0	0
177551 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	10/04/2024	Maturity	108	48,728,674	4491.18	(3,002,590)	0	(13,669,657)	(11,376,470)	0	0	0	2,293,187	(13,669,657)	0	0	0
177564 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	10/04/2024	Maturity	122	54,940,575	4520.05	(3,168,407)	0	(14,962,906)	(12,543,079)	0	0	0	2,419,828	(14,962,906)	0	0	0
177573 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	10/04/2024	Maturity	108	49,250,288	4570.89	(2,509,228)	0	(12,716,195)	(10,799,806)	0	0	0	1,916,389	(12,716,195)	0	0	0
177582 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	10/04/2024	Maturity	114	54,060,533	4727.72	(1,797,322)	0	(11,701,831)	(10,329,151)	0	0	0	1,372,680	(11,701,831)	0	0	0
177595 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	10/04/2024	Maturity	184	88,210,888	4794.07	(2,390,344)	0	(17,608,846)	(15,783,254)	0	0	0	1,825,592	(17,608,846)	0	0	0
177596 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC .	G5GSEF7VJP5I70UK5573	10/06/2023	10/04/2024	10/04/2024	Maturity	0	75,395,167	4393.81	(5,955,076)	0	(23,289,775)	(18,741,667)	0	0	0	4,548,108	(23,289,775)	0	0	0
177601 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC .	G5GSEF7VJP5I70UK5573	10/06/2023	10/04/2024	10/04/2024	Maturity	0	32,853,853	4432.58	(1,121,326)	0	(5,055,746)	(4,199,348)	0	0	0	856,398	(5,055,746)	0	0	0
177483 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/09/2023	10/04/2024	10/04/2024	Maturity	2,242	40,759,916	181.77	(1,791,669)	0	(14,178,629)	(12,798,895)	0	0	0	1,379,734	(14,178,629)	0	0	0
177493 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/09/2023	10/04/2024	10/04/2024	Maturity	2,775	22,553,742	81.28	(1,148,776)	0	(5,016,876)	(4,132,223)	0	0	0	884,653	(5,016,876)	0	0	0
177502 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/09/2023	10/04/2024	10/04/2024	Maturity	232	1,681,233	72.95	(70,014)	0	(222,561)	(168,645)	0	0	0	53,917	(222,561)	0	0	0
177906 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/20/2023	10/18/2024	10/18/2024	Maturity	1,637	32,176,827	196.61	(1,718,410)	0	(8,945,554)	(7,567,049)	0	0	0	1,378,505	(8,945,554)	0	0	0
177928 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/20/2023	10/18/2024	10/18/2024	Maturity	86	606,582	70.3	(27,525)	0	(100,436)	(78,355)	0	0	0	22,080	(100,436)	0	0	0
177940 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/20/2023	10/18/2024	10/18/2024	Maturity	138	59,919,738	4342.01	(4,414,482)	0	(21,012,743)	(17,471,455)	0	0	0	3,541,288	(21,012,743)	0	0	0
177954 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/20/2023	10/18/2024	10/18/2024	Maturity	104	45,675,750	4381.72	(3,088,887)	0	(15,458,534)	(12,980,636)	0	0	0	2,477,898	(15,458,534)	0	0	0
177964 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/20/2023	10/18/2024	10/18/2024	Maturity	147	64,642,520	4405.38	(4,146,009)	0	(21,412,987)	(18,087,068)	0	0	0	3,325,919	(21,412,987)	0	0	0
177975 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/20/2023	10/18/2024	10/18/2024	Maturity	104	46,869,851	4525.34	(2,243,473)	0	(13,871,735)	(12,072,025)	0	0	0	1,799,709	(13,871,735)	0	0	0
177995 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6BLXDRUGJF957WNE97	10/20/2023	10/18/2024	10/18/2024	Maturity	0	17,501,522	79.38	(1,053,116)	0	(4,973,977)	(4,129,170)	0	0	0	844,808	(4,973,977)	0	0	0
178006 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMIUSFPU8PMRO8KSP83	10/20/2023	10/18/2024	10/18/2024	Maturity	0	74,430,160	4309.49	(6,102,803)	0	(26,859,894)	(21,964,238)	0	0	0	4,895,655	(26,859,894)	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
178020 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON BANK OF AMERICA, N.A.	10/20/2023	10/18/2024	10/18/2024	Maturity	0	55,299,835	4445.93	(3,396,801)	0	(17,646,741)	(14,921,835)	0		0	0	2,724,906	(17,646,741)	0	0	
178028 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BATYDEB6GMZ0031MB27	10/20/2023	10/18/2024	10/18/2024	Maturity	0	53,685,884	4647.84	(1,858,978)	0	(14,055,259)	(12,563,991)	0		0	0	1,491,268	(14,055,259)	0	0	
178033 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BATYDEB6GMZ0031MB27	10/20/2023	10/18/2024	10/18/2024	Maturity	0	89,868,700	4705.29	(2,605,943)	0	(22,143,582)	(20,053,100)	0		0	0	2,090,482	(22,143,582)	0	0	
178037 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	N.A. WELLS FARGO BANK, N.A.	10/20/2023	10/18/2024	10/18/2024	Maturity	0	24,381,131	4369.05	(832,112)	0	(4,778,206)	(4,110,688)	0		0	0	667,519	(4,778,206)	0	0	
178399 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	11/06/2023	11/06/2024	11/06/2024	Maturity	0	53,593,842	4526.21	(3,384,576)	0	(16,610,579)	(13,734,614)	0		0	0	2,875,965	(16,610,579)	0	0	
178412 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	11/06/2023	11/06/2024	11/06/2024	Maturity	0	51,973,243	4545.42	(3,141,080)	0	(15,820,568)	(13,151,525)	0		0	0	2,669,043	(15,820,568)	0	0	
178428 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	11/06/2023	11/06/2024	11/06/2024	Maturity	0	45,055,055	4568.56	(2,579,558)	0	(13,417,014)	(11,225,089)	0		0	0	2,191,919	(13,417,014)	0	0	
178434 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	11/06/2023	11/06/2024	11/06/2024	Maturity	0	54,608,924	4610.47	(2,823,533)	0	(15,617,805)	(13,218,574)	0		0	0	2,399,231	(15,617,805)	0	0	
178439 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	11/06/2023	11/06/2024	11/06/2024	Maturity	0	35,615,703	4656.75	(1,636,534)	0	(9,730,682)	(8,340,075)	0		0	0	1,390,607	(9,730,682)	0	0	
178464 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	1,872	36,728,466	196.18	(1,692,453)	0	(9,271,045)	(7,832,923)	0		0	0	1,438,122	(9,271,045)	0	0	
178474 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	2,602	21,790,092	83.74	(1,215,187)	0	(3,471,218)	(2,438,642)	0		0	0	1,032,577	(3,471,218)	0	0	
178484 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	146	1,080,284	74.03	(40,713)	0	(73,546)	(38,951)	0		0	0	34,595	(73,546)	0	0	
178506 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	N.A. WELLS FARGO BANK, N.A.	11/06/2023	11/06/2024	11/06/2024	Maturity	0	32,945,129	4510.93	(918,331)	0	(5,360,818)	(4,580,487)	0		0	0	780,331	(5,360,818)	0	0	
178511 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	134	59,662,562	4452.43	(4,259,056)	0	(19,786,608)	(16,167,574)	0		0	0	3,619,034	(19,786,608)	0	0	
178513 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	134	59,709,328	4455.92	(4,230,380)	0	(19,739,842)	(16,145,174)	0		0	0	3,594,667	(19,739,842)	0	0	
178515 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	187	83,937,942	4488.66	(5,528,084)	0	(26,935,153)	(22,237,783)	0		0	0	4,697,969	(26,935,153)	0	0	
178524 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	183	87,853,894	4792.97	(2,520,706)	0	(20,823,914)	(18,682,002)	0		0	0	2,141,911	(20,823,914)	0	0	
178528 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	113	54,772,343	4847.11	(1,308,314)	0	(12,225,837)	(11,114,128)	0		0	0	1,111,709	(12,225,837)	0	0	
178530 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/06/2023	11/06/2024	11/06/2024	Maturity	95	46,429,160	4887.28	(960,165)	0	(9,896,744)	(9,080,866)	0		0	0	815,878	(9,896,744)	0	0	
178951 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	1,753	34,202,819	195.12	(1,572,362)	0	(8,676,914)	(7,280,691)	0		0	0	1,396,223	(8,676,914)	0	0	
178972 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	1,852	16,148,493	87.21	(798,074)	0	(2,166,464)	(1,457,792)	0		0	0	708,672	(2,166,464)	0	0	
178980 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Expiration	188	1,455,350	77.43	(37,028)	0	0	32,880	0		0	0	32,880	0	0	0	
178989 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	110	52,057,815	4749.74	(2,717,238)	0	(12,794,566)	(10,381,718)	0		0	0	2,412,848	(12,794,566)	0	0	
179011 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	111	52,996,616	4786.57	(2,515,877)	0	(12,517,299)	(10,283,255)	0		0	0	2,234,044	(12,517,299)	0	0	
179017 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	156	72,350,772	4637.87	(4,909,632)	0	(19,956,183)	(15,596,537)	0		0	0	4,359,646	(19,956,183)	0	0	
179024 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	122	56,632,034	4641.97	(3,808,596)	0	(15,556,739)	(12,174,789)	0		0	0	3,381,950	(15,556,739)	0	0	
179029 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	90	43,738,591	4882.52	(1,589,901)	0	(9,268,087)	(7,856,289)	0		0	0	1,411,798	(9,268,087)	0	0	
179032 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	105	49,683,512	4718.82	(2,796,133)	0	(12,616,582)	(10,133,677)	0		0	0	2,482,905	(12,616,582)	0	0	
179041 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	121	61,078,269	5036.22	(1,351,765)	0	(10,683,288)	(9,482,951)	0		0	0	1,200,337	(10,683,288)	0	0	
179052 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	11/20/2023	11/20/2024	11/20/2024	Maturity	83	42,204,504	5084.88	(782,773)	0	(6,907,530)	(6,212,444)	0		0	0	695,085	(6,907,530)	0	0	
179059 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	11/20/2023	11/20/2024	11/20/2024	Maturity	0	28,495,108	4666.98	(819,064)	0	(4,105,824)	(3,378,513)	0		0	0	727,311	(4,105,824)	0	0	
179102 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	11/20/2023	11/20/2024	11/20/2024	Maturity	0	61,265,462	4674.71	(3,998,194)	0	(16,282,552)	(12,732,244)	0		0	0	3,550,309	(16,282,552)	0	0	
179453 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/06/2023	12/06/2024	12/06/2024	Maturity	1,842	36,828,073	199.96	(1,854,654)	0	(7,917,778)	(6,189,798)	0		0	0	1,727,980	(7,917,778)	0	0	
179462 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	12/06/2023	12/06/2024	12/06/2024	Maturity	1,878	17,192,309	91.56	(852,480)	0	(1,526,578)	(732,327)	0		0	0	794,251	(1,526,578)	0	0	

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
179473 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	12/06/2024	Maturity	142	65,873,232	4638.96	(4,457,380)	0	(20,608,638)	(16,455,723)	0	0	0	4,152,914	(20,608,638)	0	0	0
179491 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	12/06/2024	Maturity	132	61,750,788	4678.09	(3,824,040)	0	(18,640,809)	(15,077,974)	0	0	0	3,562,835	(18,640,809)	0	0	0
179494 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	12/06/2024	Maturity	107	50,561,944	4723.12	(2,813,969)	0	(14,635,641)	(12,013,883)	0	0	0	2,621,758	(14,635,641)	0	0	0
179513 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	12/06/2024	Maturity	118	56,100,898	4752.24	(2,906,753)	0	(15,796,798)	(13,088,594)	0	0	0	2,708,204	(15,796,798)	0	0	0
179526 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	12/06/2024	Maturity	111	52,958,776	4786.36	(2,513,306)	0	(14,427,166)	(12,085,534)	0	0	0	2,341,632	(14,427,166)	0	0	0
179530 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	12/06/2023	12/06/2024	12/06/2024	Maturity	0	22,943,172	4670.35	(679,401)	0	(3,453,536)	(2,820,542)	0	0	0	632,994	(3,453,536)	0	0	0
179534 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	12/06/2024	Maturity	108	52,100,496	4824.12	(2,233,548)	0	(13,674,447)	(11,593,464)	0	0	0	2,080,983	(13,674,447)	0	0	0
179540 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	12/06/2024	Maturity	79	39,551,086	4988.81	(1,025,402)	0	(8,732,351)	(7,776,989)	0	0	0	955,361	(8,732,351)	0	0	0
179548 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	12/06/2024	Maturity	146	74,032,074	5070.69	(1,437,370)	0	(14,885,905)	(13,546,716)	0	0	0	1,339,189	(14,885,905)	0	0	0
179555 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC.	4PQUH3JFFG9NF3BB653	12/06/2023	12/06/2024	12/06/2024	Maturity	0	49,682,015	4643.97	(3,520,620)	0	(15,472,774)	(12,192,633)	0	0	0	3,280,141	(15,472,774)	0	0	0
179565 Call Options - Ishares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	N.A.	KB1H1DSPRFIMVUCUFXT09	12/06/2023	12/06/2024	12/06/2024	Maturity	0	725,965	77.86	(25,103)	0	(20,699)	2,689	0	0	0	23,389	(20,699)	0	0	0
180055 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	12/20/2024	Maturity	91	44,311,311	4883.93	(2,524,801)	0	(9,498,602)	(7,049,683)	0	0	0	2,448,919	(9,498,602)	0	0	0
180069 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	12/20/2024	Maturity	219	107,882,200	4925.75	(5,582,300)	0	(22,013,433)	(16,598,907)	0	0	0	5,414,526	(22,013,433)	0	0	0
180070 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC.	G5GSEF7VJP5170UK5573	12/20/2023	12/20/2024	12/20/2024	Maturity	0	23,431,337	4826.61	(675,904)	0	(2,988,198)	(2,332,608)	0	0	0	655,590	(2,988,198)	0	0	0
180079 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	12/20/2024	Maturity	96	47,837,472	4983.07	(2,155,104)	0	(9,098,712)	(7,008,379)	0	0	0	2,090,333	(9,098,712)	0	0	0
180087 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	12/20/2024	Maturity	72	37,008,545	5139.99	(1,096,002)	0	(5,694,305)	(4,631,243)	0	0	0	1,063,062	(5,694,305)	0	0	0
180095 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	12/20/2024	Maturity	107	55,993,314	5233.02	(1,258,748)	0	(7,466,808)	(6,245,891)	0	0	0	1,220,917	(7,466,808)	0	0	0
180099 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	12/20/2024	Maturity	1,722	34,530,822	200.5	(1,668,846)	0	(7,164,500)	(5,545,810)	0	0	0	1,618,690	(7,164,500)	0	0	0
180122 Call Options - Ishares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	12/20/2024	Expiration	1,794	17,057,316	95.06	(805,674)	0	0	781,460	0	0	0	781,460	0	0	0	0
180134 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	12/20/2024	Maturity	127	60,844,557	4790.91	(4,239,514)	0	(14,477,270)	(10,365,173)	0	0	0	4,112,097	(14,477,270)	0	0	0
180137 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	12/20/2024	Maturity	149	71,587,497	4804.53	(4,848,609)	0	(16,782,205)	(12,079,319)	0	0	0	4,702,886	(16,782,205)	0	0	0
180151 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	12/20/2024	Maturity	93	45,044,829	4843.53	(2,807,391)	0	(10,112,099)	(7,389,083)	0	0	0	2,723,016	(10,112,099)	0	0	0
180161 Call Options - Ishares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ES71P3U3RH1GC71XBU11	12/20/2023	12/20/2024	12/20/2024	Expiration	0	992,396	78.89	(32,070)	0	0	31,106	0	0	0	31,106	0	0	0	0	0
0649999999. Subtotal - Written Options - Hedging Other - Call Options and Warrants												(912,228,151)	0	(3,050,612,761)	(2,636,172,568)	0	XXX	0	0	414,440,193	(3,050,612,761)	0	0	XXX
0709999999. Subtotal - Written Options - Hedging Other												(912,228,151)	0	(3,050,612,761)	(2,636,172,568)	0	XXX	0	0	414,440,193	(3,050,612,761)	0	0	XXX
0779999999. Subtotal - Written Options - Replications												0	0	0	0	0	XXX	0	0	0	0	0	XXX	
0849999999. Subtotal - Written Options - Income Generation												0	0	0	0	0	XXX	0	0	0	0	0	XXX	
0919999999. Subtotal - Written Options - Other												0	0	0	0	0	XXX	0	0	0	0	0	XXX	
0929999999. Total Written Options - Call Options and Warrants												(912,228,151)	0	(3,050,612,761)	(2,636,172,568)	0	XXX	0	0	414,440,193	(3,050,612,761)	0	0	XXX
0939999999. Total Written Options - Put Options												0	0	0	0	0	XXX	0	0	0	0	0	XXX	
0949999999. Total Written Options - Caps												0	0	0	0	0	XXX	0	0	0	0	0	XXX	
0959999999. Total Written Options - Floors												0	0	0	0	0	XXX	0	0	0	0	0	XXX	
0969999999. Total Written Options - Collars												0	0	0	0	0	XXX	0	0	0	0	0	XXX	
0979999999. Total Written Options - Other												0	0	0	0	0	XXX	0	0	0	0	0	XXX	
0989999999. Total Written Options												(912,228,151)	0	(3,050,612,761)	(2,636,172,568)	0	XXX	0	0	414,440,193	(3,050,612,761)	0	0	XXX
1049999999. Subtotal - Swaps - Hedging Effective Excluding Variable Annuity Guarantees Under SSAP No.108												0	0	0	0	0	XXX	0	0	0	0	0	XXX	
1109999999. Subtotal - Swaps - Hedging Effective Variable Annuity Guarantees Under SSAP No.108												0	0	0	0	0	XXX	0	0	0	0	0	XXX	
Interest Rate Swap /169507 /Pay [Quarterly] SOFR [5.57388%]/ Receive Quarterly FIXED 2.005%	Portfolio Hedge	Exhibit 5	Interest	BANK OF AMERICA, N.A. / MORGAN STANLEY/CLEARED THROUGH CME	9R7GPT507KV3UJZ0078	07/14/2017	04/15/2024	04/15/2024	Maturity	0	159,000,000	2.005% (SOFR)	22,117	0	0	(1,715,220)	0	1,689,566	0	0	(22,117)	0	0	0

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SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)	
Interest Rate Swap /169543 /Pay [Quarterly] SOFR [5.57388%]/ Receive Quarterly FIXED 2.974%	Portfolio Hedge	Exhibit 5	Interest	BANK OF AMERICA, N.A. / MORGAN STANLEY/CLEARED THROUGH CME	07/23/2018	04/15/2024	04/15/2024	Maturity	0	173,000,000	2.974% [SOFR]	23,526	0	0	(1,368,896)	0		1,348,508	0	0	(23,526)	0	0	0	
Interest Rate Swap /169500 /Pay [Quarterly] SOFR [5.57388%]/ Receive Quarterly FIXED 2.998%	Portfolio Hedge	Exhibit 5	Interest	MORGAN STANLEY CAPITAL SERVICES / MORGAN STANLEY/CLEARED THROUGH CME	09/11/2018	04/15/2024	04/15/2024	Maturity	0	103,000,000	2.998% [SOFR]	12,892	0	0	(791,393)	0		778,446	0	0	(12,892)	0	0	0	
Interest Rate Swap /169505 /Pay [Quarterly] SOFR [5.6057%]/ Receive Quarterly FIXED 3.1675%	Portfolio Hedge	Exhibit 5	Interest	BANK OF AMERICA, N.A. / MORGAN STANLEY/CLEARED THROUGH CME	10/05/2018	05/15/2024	05/15/2024	Maturity	0	44,000,000	3.1675% [SOFR]	3,378	0	0	(417,909)	0		395,845	0	0	(3,378)	0	0	0	
Interest Rate Swap /169508 /Pay [Quarterly] FIXED [3.1675%]/ Receive Quarterly SOFR 5.6057%	Portfolio Hedge	Exhibit 5	Interest	BNP PARIBAS LONDON / MORGAN STANLEY/CLEARED THROUGH CME	12/15/2021	05/15/2024	05/15/2024	Maturity	0	4,489,796	SOFR [3.1675%]	(402,345)	0	0	42,644	0		(442,392)	0	0	402,345	0	0	0	
Interest Rate Swap /162731 /Pay [Annual] SOFR [5.11131%]/ Receive Annual FIXED 4.2535%	Portfolio Hedge	Exhibit 5	Interest	CITIBANK N.A. / MORGAN STANLEY/CLEARED THROUGH CME	12/21/2022	12/23/2024	12/23/2024	Maturity	0	855,000,000	4.2535% [SOFR]	0	0	0	(8,861,918)	0		4,285,405	0	0	0	0	0	0	
1119999999. Subtotal - Swaps - Hedging Other - Interest Rate													(340,432)	0	0	(13,112,692)	0	XXX	8,055,377	0	0	340,432	0	0	XXX
1169999999. Subtotal - Swaps - Hedging Other													(340,432)	0	0	(13,112,692)	0	XXX	8,055,377	0	0	340,432	0	0	XXX
1229999999. Subtotal - Swaps - Replication													0	0	0	0	0	XXX	0	0	0	0	0	XXX	
1289999999. Subtotal - Swaps - Income Generation													0	0	0	0	0	XXX	0	0	0	0	0	XXX	
1349999999. Subtotal - Swaps - Other													0	0	0	0	0	XXX	0	0	0	0	0	XXX	
1359999999. Total Swaps - Interest Rate													(340,432)	0	0	(13,112,692)	0	XXX	8,055,377	0	0	340,432	0	0	XXX
1369999999. Total Swaps - Credit Default													0	0	0	0	0	XXX	0	0	0	0	0	XXX	
1379999999. Total Swaps - Foreign Exchange													0	0	0	0	0	XXX	0	0	0	0	0	XXX	
1389999999. Total Swaps - Total Return													0	0	0	0	0	XXX	0	0	0	0	0	XXX	
1399999999. Total Swaps - Other													0	0	0	0	0	XXX	0	0	0	0	0	XXX	
1409999999. Total Swaps													(340,432)	0	0	(13,112,692)	0	XXX	8,055,377	0	0	340,432	0	0	XXX
REC 1569654.78 USD PAY [1281000.00] GBP /177120	Asset Hedge	Schedule D	Currency.....	BANK OF AMERICA, N.A.	09/29/2023	01/05/2024	01/05/2024	Maturity	0	1,569,655	0.816102685	0	0	0	(60,162)	0		63,886	0	0	(60,162)	0	0	0	
REC 2519696.12 USD PAY [2369000.00] EUR /177145	Asset Hedge	Schedule D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE	09/29/2023	01/05/2024	01/05/2024	Maturity	0	2,519,696	0.940192476	0	0	0	(73,411)	0		95,664	0	0	(73,411)	0	0	0	
REC 4676101.54 USD PAY [4402000.00] EUR /177149	Asset Hedge	Schedule BA	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE	09/29/2023	01/05/2024	01/05/2024	Maturity	0	4,676,102	0.941382024	0	0	0	(142,328)	0		183,671	0	0	(142,328)	0	0	0	
REC 46771891.11 USD PAY [44297000.00] EUR /177437	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES	10/06/2023	01/08/2024	01/08/2024	Maturity	0	46,771,891	0.947086289	0	0	0	(1,737,754)	0		2,254,406	0	0	(1,737,754)	0	0	0	
REC 434580.20 USD PAY [410000.00] EUR /177795	Asset Hedge	Schedule BA	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE	10/17/2023	01/16/2024	01/16/2024	Maturity	0	434,580	0.943438948	0	0	0	(11,254)	0		18,219	0	0	(11,254)	0	0	0	
REC 5286780.14 USD PAY [5001000.00] EUR /177839	Asset Hedge	Schedule D	Currency.....	BANK OF AMERICA, N.A.	10/18/2023	01/05/2024	01/05/2024	Maturity	0	5,286,780	0.945944028	0	0	0	(187,314)	0		245,208	0	0	(187,314)	0	0	0	
REC 3508239.24 USD PAY [3291000.00] EUR /178050	Asset Hedge	Schedule D	Currency.....	ROYAL BANK OF CANADA	10/24/2023	01/24/2024	01/24/2024	Maturity	0	3,508,239	0.938077504	0	0	0	(73,685)	0		127,808	0	0	(73,685)	0	0	0	
REC 13077.11 USD PAY [18000.00] CAD /178090	Asset Hedge	Schedule BA	Currency.....	BARCLAYS BANK PLC.	10/25/2023	01/25/2024	01/25/2024	Maturity	0	13,077	1.376451	0	0	0	(281)	0		554	0	0	(281)	0	0	0	
REC 1996067.85 USD PAY [1887000.00] EUR /178238	Asset Hedge	Schedule D	Currency.....	ROYAL BANK OF CANADA	11/01/2023	01/24/2024	01/24/2024	Maturity	0	1,996,068	0.945358291	0	0	0	(57,743)	0		88,716	0	0	(57,743)	0	0	0	
REC 4139791.65 USD PAY [3874000.00] EUR /178313	Asset Hedge	Schedule D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE	11/02/2023	02/02/2024	02/02/2024	Maturity	0	4,139,792	0.935795974	0	0	0	(37,930)	0		141,207	0	0	(37,930)	0	0	0	
REC 1020758.85 USD PAY [950000.00] EUR /178594	Asset Hedge	Schedule D	Currency.....	ROYAL BANK OF CANADA	11/09/2023	01/05/2024	01/05/2024	Maturity	0	1,020,759	0.93068015	0	0	0	(19,111)	0		28,187	0	0	(19,111)	0	0	0	
REC 2685620.75 USD PAY [2500000.00] EUR /178602	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES	11/09/2023	01/05/2024	01/05/2024	Maturity	0	2,685,621	0.930838744	0	0	0	(50,879)	0		81,074	0	0	(50,879)	0	0	0	
REC 743543.62 USD PAY [694000.00] EUR /178683	Asset Hedge	Schedule D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE	11/13/2023	02/02/2024	02/02/2024	Maturity	0	743,544	0.933367806	0	0	0	(4,866)	0		23,377	0	0	(4,866)	0	0	0	
REC 52395.89 USD PAY [72000.00] CAD /178724	Asset Hedge	Schedule BA	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE	11/14/2023	02/14/2024	02/14/2024	Maturity	0	52,396	1.374154	0	0	0	(755)	0		1,961	0	0	(755)	0	0	0	
REC 327740.43 USD PAY [300000.00] EUR /178903	Asset Hedge	Schedule D	Currency.....	ROYAL BANK OF CANADA	11/16/2023	02/02/2024	02/02/2024	Maturity	0	327,740	0.915358619	0	0	0	4,220	0		3,858	0	0	4,220	0	0	0	
REC 281976.50 USD PAY [2264000.00] GBP /178812	Asset Hedge	Schedule BA	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE	11/16/2023	02/16/2024	02/16/2024	Maturity	0	2,819,177	0.803071588	0	0	0	(35,048)	0		66,816	0	0	(35,048)	0	0	0	

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SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
REC 15071660.03 USD PAY [12132000.00] GBP /178878 ...	Asset Hedge	Schedule D	Currency	BANK OF AMERICA, N.A.	11/17/2023	02/21/2024	02/21/2024	Maturity	0	15,071,660	0.804954657	0	0	(255,909)	0	0		400,509	0	0	(255,909)	0	0	
REC 9945875.78 USD PAY [9099000.00] EUR /179109 ...	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES	11/22/2023	02/26/2024	02/26/2024	Maturity	0	9,945,876	0.914851145	0	0	75,281	0	0		143,478	0	0	75,281	0	0	
REC 452519.31 USD PAY [414000.00] EUR /179110 ...	Asset Hedge	Schedule BA	Currency	BARCLAYS BANK PLC	11/22/2023	02/26/2024	02/26/2024	Maturity	0	452,519	0.914877928	0	0	3,412	0	0		6,487	0	0	3,412	0	0	
REC 1452651.12 USD PAY [2210000.00] AUD /179120 ...	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	11/22/2023	02/26/2024	02/26/2024	Maturity	0	1,452,651	1.521356807	0	0	7,311	0	0		55,373	0	0	7,311	0	0	
REC 1954000.00 EUR PAY [2112739.65] USD /179633 ...	Asset Hedge	Schedule BA	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	12/13/2023	01/16/2024	01/16/2024	Maturity	0	2,112,799	0.92483924	0	0	11,981	0	0		(45,288)	0	0	11,981	0	0	
REC 3670425.63 USD PAY [3347000.00] EUR /179716 ...	Asset Hedge	Schedule BA	Currency	MORGAN STANLEY CAPITAL SERVICES	12/15/2023	03/18/2024	03/18/2024	Maturity	0	3,670,426	0.911882929	0	0	31,233	0	0		43,957	0	0	31,233	0	0	
REC 830000.00 GBP PAY [1055819.93] USD /179729 ...	Asset Hedge	Schedule D	Currency	BARCLAYS BANK PLC	12/15/2023	03/18/2024	03/18/2024	Maturity	0	1,055,819	0.786119643	0	0	605	0	0		(3,866)	0	0	605	0	0	
REC 4195465.31 USD PAY [3811000.00] EUR /179603 ...	Asset Hedge	Schedule BA	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	12/19/2023	03/20/2024	03/20/2024	Maturity	0	4,195,465	0.908357617	0	0	33,111	0	0		24,338	0	0	33,111	0	0	
REC 33403427.77 USD PAY [30322000.00] EUR /179855 ...	Asset Hedge	Schedule D	Currency	ROYAL BANK OF CANADA	12/19/2023	03/20/2024	03/20/2024	Maturity	0	33,403,428	0.907750739	0	0	285,739	0	0		175,843	0	0	285,739	0	0	
REC 5632617.57 USD PAY [4444000.00] GBP /179906 ...	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES	12/20/2023	03/21/2024	03/21/2024	Maturity	0	5,632,618	0.788975799	0	0	8,736	0	0		41,031	0	0	8,736	0	0	
REC 538672.92 USD PAY [425000.00] GBP /179907 ...	Asset Hedge	Schedule BA	Currency	MORGAN STANLEY CAPITAL SERVICES	12/20/2023	03/21/2024	03/21/2024	Maturity	0	538,673	0.788975799	0	0	835	0	0		3,924	0	0	835	0	0	
REC 5025880.00 USD PAY [8000000.00] NZD /179980 ...	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES	12/21/2023	03/22/2024	03/22/2024	Maturity	0	5,025,880	1.591761045	0	0	228,280	0	0		48,981	0	0	228,280	0	0	
REC 273000.00 EUR PAY [303581.21] USD /180188 ...	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES	12/27/2023	02/02/2024	02/02/2024	Maturity	0	303,581	0.89926521	0	0	(9,178)	0	0		1,112	0	0	(9,178)	0	0	
REC 1281000.00 GBP PAY [1616852.58] USD /180294 ...	Asset Hedge	Schedule D	Currency	BANK OF AMERICA, N.A.	01/03/2024	01/05/2024	01/05/2024	Maturity	0	1,616,853	0.792280023	0	0	12,964	0	0		0	0	0	12,964	0	0	
REC 1670698.29 USD PAY [1323000.00] GBP /180295 ...	Asset Hedge	Schedule D	Currency	BANK OF AMERICA, N.A.	01/03/2024	04/04/2024	04/04/2024	Maturity	0	1,670,698	0.791884138	0	0	(1,177)	0	0		0	0	0	(1,177)	0	0	
REC 8820000.00 EUR PAY [9627912.00] USD /180326 ...	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	01/03/2024	01/05/2024	01/05/2024	Maturity	0	9,627,912	0.916086479	0	0	26,460	0	0		0	0	0	26,460	0	0	
REC 11852354.42 USD PAY [10818000.00] EUR /180336 ...	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	01/03/2024	04/04/2024	04/04/2024	Maturity	0	11,852,354	0.912730213	0	0	131,051	0	0		0	0	0	131,051	0	0	
REC 5101703.92 USD PAY [4657000.00] EUR /180340 ...	Asset Hedge	Schedule BA	Currency	BARCLAYS BANK PLC	01/03/2024	04/04/2024	04/04/2024	Maturity	0	5,101,704	0.91283186	0	0	55,844	0	0		0	0	0	55,844	0	0	
REC 4402000.00 EUR PAY [4804694.96] USD /180342 ...	Asset Hedge	Schedule BA	Currency	BARCLAYS BANK PLC	01/03/2024	01/05/2024	01/05/2024	Maturity	0	4,804,695	0.916187195	0	0	13,734	0	0		0	0	0	13,734	0	0	
REC 48733818.53 USD PAY [44297000.00] EUR /180391 ...	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	01/04/2024	04/05/2024	04/05/2024	Maturity	0	48,733,819	0.908957871	0	0	738,019	0	0		0	0	0	738,019	0	0	
REC 44297000.00 EUR PAY [48558814.37] USD /180401 ...	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	01/04/2024	01/08/2024	01/08/2024	Maturity	0	48,558,814	0.91223397	0	0	(49,170)	0	0		0	0	0	(49,170)	0	0	
REC 5182000.00 GBP PAY [6584223.29] USD /180444 ...	Asset Hedge	Schedule D	Currency	GOLDMAN SACHS INTERNATIONAL	01/04/2024	04/04/2024	04/04/2024	Maturity	0	6,584,223	0.787032847	0	0	(35,730)	0	0		0	0	0	(35,730)	0	0	
REC 1544000.00 EUR PAY [1686047.25] USD /180634 ...	Asset Hedge	Schedule BA	Currency	MORGAN STANLEY CAPITAL SERVICES	01/11/2024	04/12/2024	04/12/2024	Maturity	0	1,686,047	0.910352161	0	0	(52,922)	0	0		0	0	0	(52,922)	0	0	
REC 1690062.40 USD PAY [1544000.00] EUR /180655 ...	Asset Hedge	Schedule BA	Currency	MORGAN STANLEY CAPITAL SERVICES	01/11/2024	01/16/2024	01/16/2024	Maturity	0	1,690,062	0.913575735	0	0	11,117	0	0		0	0	0	11,117	0	0	
REC 5440000.00 EUR PAY [5969819.46] USD /180677 ...	Asset Hedge	Schedule BA	Currency	ROYAL BANK OF CANADA	01/12/2024	01/17/2024	01/17/2024	Maturity	0	5,969,818	0.911250573	0	0	(51,098)	0	0		0	0	0	(51,098)	0	0	
REC 5890621.02 USD PAY [5440000.00] EUR /180679 ...	Asset Hedge	Schedule BA	Currency	ROYAL BANK OF CANADA	01/12/2024	04/12/2024	04/12/2024	Maturity	0	5,990,621	0.908086236	0	0	201,373	0	0		0	0	0	201,373	0	0	
REC 256000.00 NZD PAY [157719.04] USD /180701 ...	Asset Hedge	Schedule D	Currency	BANK OF AMERICA, N.A.	01/16/2024	01/18/2024	01/18/2024	Maturity	0	157,719	1.623139476	0	0	(1,175)	0	0		0	0	0	(1,175)	0	0	
REC 209492.77 USD PAY [340000.00] NZD /180703 ...	Asset Hedge	Schedule D	Currency	BANK OF AMERICA, N.A.	01/16/2024	03/22/2024	03/22/2024	Maturity	0	209,493	1.622968247	0	0	5,595	0	0		0	0	0	5,595	0	0	
REC 5178000.00 EUR PAY [5641223.88] USD /180771 ...	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	01/22/2024	01/24/2024	01/24/2024	Maturity	0	5,641,224	0.917885925	0	0	(5,489)	0	0		0	0	0	(5,489)	0	0	
REC 5649226.65 USD PAY [5175000.00] EUR /180777 ...	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	01/22/2024	03/14/2024	03/14/2024	Maturity	0	5,649,227	0.91605459	0	0	16,757	0	0		0	0	0	16,757	0	0	
REC 355000.00 AUD PAY [234190.80] USD /180910 ...	Asset Hedge	Schedule BA	Currency	WELLS FARGO BANK, N.A.	01/23/2024	01/29/2024	01/29/2024	Maturity	0	234,191	1.515858916	0	0	358	0	0		0	0	0	358	0	0	

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Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
REC 234249.06 USD PAY [355000.00] AUD /180913	Asset Hedge	Schedule BA	Currency	WELLS FARGO BANK, N.A.	01/23/2024	02/06/2024	02/06/2024	Maturity	0	234,249	1.515479869	0	0	2,718	0	0		0	0	0	2,718	0	0	0
REC 2833000.00 EUR PAY [3094043.67] USD /180917	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE ...	01/24/2024	01/24/2024	01/24/2024	Maturity	0	3,094,044	0.915630173	0	0	(10,606)	0	0		0	0	0	(10,606)	0	0	0
REC 3104083.88 USD PAY [2834000.00] EUR /180921	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE ...	01/24/2024	04/04/2024	04/04/2024	Maturity	0	3,104,084	0.912991041	0	0	33,445	0	0		0	0	0	33,445	0	0	0
REC 18000.00 CAD PAY [13399.74] USD /180938	Asset Hedge	Schedule BA	Currency	CANADIAN IMPERIAL BANK OF COMMERCE ...	01/24/2024	01/25/2024	01/25/2024	Maturity	0	13,400	1.34331	0	0	(42)	0	0		0	0	0	(42)	0	0	0
REC 13415.33 USD PAY [18000.01] CAD /180939	Asset Hedge	Schedule BA	Currency	CANADIAN IMPERIAL BANK OF COMMERCE ...	01/24/2024	04/25/2024	04/25/2024	Maturity	0	13,415	1.341749	0	0	238	0	0		0	0	0	238	0	0	0
REC 5024557.90 USD PAY [4604000.00] EUR /181046	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ...	01/31/2024	05/02/2024	05/02/2024	Maturity	0	5,024,558	0.916296889	0	0	86,768	0	0		0	0	0	86,768	0	0	0
REC 4595000.00 EUR PAY [4996327.30] USD /181050	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ...	01/31/2024	02/02/2024	02/02/2024	Maturity	0	4,996,327	0.919675538	0	0	(41,079)	0	0		0	0	0	(41,079)	0	0	0
REC 286494.12 USD PAY [434000.00] AUD /181094	Asset Hedge	Schedule D	Currency	SOCIETE GENERAL	01/31/2024	02/26/2024	02/26/2024	Maturity	0	286,494	1.514864609	0	0	2,658	0	0		0	0	0	2,658	0	0	0
REC 434000.00 AUD PAY [286265.92] USD /181095	Asset Hedge	Schedule D	Currency	SOCIETE GENERAL	01/31/2024	02/01/2024	02/01/2024	Maturity	0	286,266	1.516072644	0	0	(1,041)	0	0		0	0	0	(1,041)	0	0	0
REC 355000.00 AUD PAY [231726.53] USD /181119	Asset Hedge	Schedule BA	Currency	CITIBANK N.A.	02/01/2024	02/06/2024	02/06/2024	Maturity	0	231,727	1.531977737	0	0	(196)	0	0		0	0	0	(196)	0	0	0
REC 254000.00 GBP PAY [321538.60] USD /181149	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ..	02/02/2024	02/06/2024	02/06/2024	Maturity	0	321,539	0.789951813	0	0	(1,676)	0	0		0	0	0	(1,676)	0	0	0
REC 321716.10 USD PAY [254000.00] GBP /181151	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ...	02/02/2024	05/07/2024	05/07/2024	Maturity	0	321,716	0.789515861	0	0	3,988	0	0		0	0	0	3,988	0	0	0
REC 700000.00 CAD PAY [517171.38] USD /181208	Asset Hedge	Schedule BA	Currency	CANADIAN IMPERIAL BANK OF COMMERCE ...	02/06/2024	02/06/2024	02/06/2024	Maturity	0	517,171	1.353517	0	0	1,529	0	0		0	0	0	1,529	0	0	0
REC 517262.41 USD PAY [690999.99] CAD /181210	Asset Hedge	Schedule BA	Currency	CANADIAN IMPERIAL BANK OF COMMERCE ...	02/06/2024	02/20/2024	02/20/2024	Maturity	0	517,262	1.353278	0	0	(318)	0	0		0	0	0	(318)	0	0	0
REC 238357.85 USD PAY [396999.99] CAD /181486	Asset Hedge	Schedule BA	Currency	N.A.	02/13/2024	05/15/2024	05/15/2024	Maturity	0	293,838	1.351096	0	0	2,043	0	0		0	0	0	2,043	0	0	0
REC 72000.01 CAD PAY [53226.49] USD /181487	Asset Hedge	Schedule BA	Currency	BANK OF AMERICA, N.A.	02/13/2024	02/14/2024	02/14/2024	Maturity	0	53,226	1.35271	0	0	(76)	0	0		0	0	0	(76)	0	0	0
REC 26794000.00 USD PAY [25000000.00] EUR /181516 ...	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE ...	02/14/2024	02/16/2024	02/16/2024	Maturity	0	26,794,000	0.933044712	0	0	(148,500)	0	0		0	0	0	(148,500)	0	0	0
REC 2264000.00 GBP PAY [2842814.24] USD /181517	Asset Hedge	Schedule BA	Currency	MORGAN STANLEY CAPITAL SERVICES ...	02/14/2024	02/16/2024	02/16/2024	Maturity	0	2,842,814	0.796393928	0	0	11,411	0	0		0	0	0	11,411	0	0	0
REC 2905842.95 USD PAY [2315000.00] GBP /181519	Asset Hedge	Schedule BA	Currency	MORGAN STANLEY CAPITAL SERVICES ...	02/14/2024	05/17/2024	05/17/2024	Maturity	0	2,905,843	0.795982517	0	0	(32,130)	0	0		0	0	0	(32,130)	0	0	0
REC 20367000.00 EUR PAY [21872538.82] USD /181544	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE ...	02/14/2024	04/05/2024	04/05/2024	Maturity	0	21,872,539	0.93116719	0	0	195,106	0	0		0	0	0	195,106	0	0	0
REC 15438096.02 USD PAY [12271000.00] GBP /181651	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ...	02/16/2024	05/07/2024	05/07/2024	Maturity	0	15,438,096	0.794851903	0	0	88,302	0	0		0	0	0	88,302	0	0	0
REC 12132000.00 GBP PAY [15256796.78] USD /181652 ...	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ..	02/16/2024	02/21/2024	02/21/2024	Maturity	0	15,256,797	0.79518626	0	0	70,772	0	0		0	0	0	70,772	0	0	0
REC 2644000.00 AUD PAY [1733325.76] USD /181752	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ...	02/21/2024	02/26/2024	02/26/2024	Maturity	0	1,733,326	1.525390119	0	0	(4,150)	0	0		0	0	0	(4,150)	0	0	0
REC 1789851.86 USD PAY [2723000.00] AUD /181754	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ...	02/21/2024	05/23/2024	05/23/2024	Maturity	0	1,789,852	1.521354492	0	0	(8,690)	0	0		0	0	0	(8,690)	0	0	0
REC 9099000.00 EUR PAY [9840659.49] USD /181894	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ...	02/22/2024	02/26/2024	02/26/2024	Maturity	0	9,840,659	0.924633152	0	0	29,936	0	0		0	0	0	29,936	0	0	0
REC 9958860.82 USD PAY [9175000.00] EUR /181907	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ...	02/22/2024	05/24/2024	05/24/2024	Maturity	0	9,958,861	0.92129047	0	0	6,738	0	0		0	0	0	6,738	0	0	0
REC 527000.00 AUD PAY [345068.80] USD /181908	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ...	02/22/2024	02/27/2024	02/27/2024	Maturity	0	345,069	1.52723052	0	0	(253)	0	0		0	0	0	(253)	0	0	0
REC 345968.54 USD PAY [527000.00] AUD /181909	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ...	02/22/2024	05/23/2024	05/23/2024	Maturity	0	345,969	1.52325941	0	0	(2,115)	0	0		0	0	0	(2,115)	0	0	0
REC 449017.98 USD PAY [414000.00] EUR /181911	Asset Hedge	Schedule BA	Currency	BARCLAYS BANK PLC .	02/22/2024	05/24/2024	05/24/2024	Maturity	0	449,018	0.922011645	0	0	(48)	0	0		0	0	0	(48)	0	0	0
REC 414000.00 EUR PAY [447393.24] USD /181913	Asset Hedge	Schedule BA	Currency	BARCLAYS BANK PLC .	02/22/2024	02/26/2024	02/26/2024	Maturity	0	447,393	0.925360428	0	0	1,714	0	0		0	0	0	1,714	0	0	0
REC 264000.00 NZD PAY [163379.57] USD /181943	Asset Hedge	Schedule D	Currency	WELLS FARGO BANK, N.A.	02/22/2024	02/23/2024	02/23/2024	Maturity	0	163,380	1.615869128	0	0	195	0	0		0	0	0	195	0	0	0
REC 248782.24 USD PAY [402000.00] NZD /181945	Asset Hedge	Schedule D	Currency	WELLS FARGO BANK, N.A.	02/22/2024	03/22/2024	03/22/2024	Maturity	0	248,782	1.615871739	0	0	7,703	0	0		0	0	0	7,703	0	0	0

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SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
REC 2165160.00 USD PAY [2000000.00] EUR /181946	Asset Hedge	Schedule BA	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ...	21G119DL770XOHC3ZE78	02/23/2024	02/27/2024	02/27/2024	Maturity	2,165,160	0.923719263	0	0	(3,840)	0	0		0	0	0	(3,840)	0	0	0
REC 4777000.00 EUR PAY [5181160.95] USD /181949	Asset Hedge	Schedule BA	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ...	21G119DL770XOHC3ZE78	02/23/2024	04/12/2024	04/12/2024	Maturity	5,181,161	0.921993793	0	0	(97,478)	0	0		0	0	0	(97,478)	0	0	0
REC 267000.00 GBP PAY [337818.47] USD /182042	Asset Hedge	Schedule D	Currency.....	BNP PARIBAS LONDON	ROMUSFPUBMPRO8K5P83	02/28/2024	05/07/2024	05/07/2024	Maturity	337,818	0.790365133	0	0	(3,828)	0	0		0	0	0	(3,828)	0	0	0
REC 73000.00 GBP PAY [92099.72] USD /182102	Asset Hedge	Schedule D	Currency.....	THE TORONTO-DOMINION BANK	PT3QB789TSUIDF371261	03/01/2024	03/05/2024	03/05/2024	Maturity	92,100	0.792619131	0	0	632	0	0		0	0	0	632	0	0	0
REC 92134.40 USD PAY [73000.00] GBP /182103	Asset Hedge	Schedule D	Currency.....	THE TORONTO-DOMINION BANK	PT3QB789TSUIDF371261	03/01/2024	05/07/2024	05/07/2024	Maturity	92,134	0.792320827	0	0	819	0	0		0	0	0	819	0	0	0
REC 5657025.48 USD PAY [5162000.00] EUR /182357	Asset Hedge	Schedule D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ...	21G119DL770XOHC3ZE78	03/12/2024	06/12/2024	06/12/2024	Maturity	5,657,025	0.912493681	0	0	76,903	0	0		0	0	0	76,903	0	0	0
REC 5175000.00 EUR PAY [5650427.25] USD /182359	Asset Hedge	Schedule D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ...	21G119DL770XOHC3ZE78	03/12/2024	03/14/2024	03/14/2024	Maturity	5,650,427	0.915859947	0	0	(17,957)	0	0		0	0	0	(17,957)	0	0	0
REC 1058515.60 USD PAY [830000.00] GBP /182436	Asset Hedge	Schedule D	Currency.....	THE TORONTO-DOMINION BANK	PT3QB789TSUIDF371261	03/14/2024	03/18/2024	03/18/2024	Maturity	1,058,516	0.784116928	0	0	2,092	0	0		0	0	0	2,092	0	0	0
REC 756000.00 GBP PAY [964646.02] USD /182437	Asset Hedge	Schedule D	Currency.....	THE TORONTO-DOMINION BANK	PT3QB789TSUIDF371261	03/14/2024	06/14/2024	06/14/2024	Maturity	964,646	0.783707044	0	0	(5,509)	0	0		0	0	0	(5,509)	0	0	0
REC 4441364.22 USD PAY [4061000.00] EUR /182439	Asset Hedge	Schedule BA	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ...	21G119DL770XOHC3ZE78	03/14/2024	06/14/2024	06/14/2024	Maturity	4,441,364	0.914358445	0	0	95,688	0	0		0	0	0	95,688	0	0	0
REC 3347000.00 EUR PAY [3647393.25] USD /182440	Asset Hedge	Schedule BA	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ...	21G119DL770XOHC3ZE78	03/14/2024	03/18/2024	03/18/2024	Maturity	3,647,393	0.917641661	0	0	(8,200)	0	0		0	0	0	(8,200)	0	0	0
REC 299344.39 USD PAY [491000.00] NZD /182492	Asset Hedge	Schedule D	Currency.....	GOLDMAN SACHS INTERNATIONAL	W22LR0IWP21HZNB6BK528	03/15/2024	03/22/2024	03/22/2024	Maturity	299,344	1.640250433	0	0	4,892	0	0		0	0	0	4,892	0	0	0
REC 491000.00 NZD PAY [293943.55] USD /182495	Asset Hedge	Schedule D	Currency.....	GOLDMAN SACHS INTERNATIONAL	W22LR0IWP21HZNB6BK528	03/15/2024	03/20/2024	03/20/2024	Maturity	299,344	1.640255814	0	0	(914)	0	0		0	0	0	(914)	0	0	0
REC 4400000.00 EUR PAY [4791716.16] USD /182526	Asset Hedge	Schedule D	Currency.....	BANK OF AMERICA, N.A.	B4TYDEB6KMZ0031MB27	03/18/2024	03/18/2024	03/18/2024	Maturity	4,791,716	0.918251722	0	0	(7,596)	0	0		0	0	0	(7,596)	0	0	0
REC 4803122.72 USD PAY [4400000.00] EUR /182527	Asset Hedge	Schedule D	Currency.....	BANK OF AMERICA, N.A.	B4TYDEB6KMZ0031MB27	03/18/2024	05/16/2024	05/16/2024	Maturity	4,803,123	0.916070534	0	0	22,083	0	0		0	0	0	22,083	0	0	0
REC 4164626.88 USD PAY [3811000.00] EUR /182530	Asset Hedge	Schedule BA	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ...	21G119DL770XOHC3ZE78	03/18/2024	06/18/2024	06/18/2024	Maturity	4,164,627	0.915088063	0	0	72,375	0	0		0	0	0	72,375	0	0	0
REC 27573305.04 USD PAY [25232000.00] EUR /182531	Asset Hedge	Schedule D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ...	21G119DL770XOHC3ZE78	03/18/2024	06/18/2024	06/18/2024	Maturity	27,573,305	0.915088063	0	0	479,183	0	0		0	0	0	479,183	0	0	0
REC 30322000.00 EUR PAY [33014896.82] USD /182532	Asset Hedge	Schedule D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ...	21G119DL770XOHC3ZE78	03/18/2024	03/20/2024	03/20/2024	Maturity	33,014,897	0.918433887	0	0	102,792	0	0		0	0	0	102,792	0	0	0
REC 3811000.00 EUR PAY [4149454.91] USD /182545	Asset Hedge	Schedule BA	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ...	21G119DL770XOHC3ZE78	03/18/2024	03/20/2024	03/20/2024	Maturity	4,149,455	0.918433887	0	0	12,919	0	0		0	0	0	12,919	0	0	0
REC 540586.78 USD PAY [425000.00] GBP /182572	Asset Hedge	Schedule BA	Currency.....	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	03/19/2024	06/21/2024	06/21/2024	Maturity	540,587	0.786182682	0	0	3,429	0	0		0	0	0	3,429	0	0	0
REC 8742000.00 NZD PAY [5291011.58] USD /182580	Asset Hedge	Schedule D	Currency.....	BANK OF AMERICA, N.A.	B4TYDEB6KMZ0031MB27	03/19/2024	03/22/2024	03/22/2024	Maturity	5,291,012	1.652237129	0	0	(48,434)	0	0		0	0	0	(48,434)	0	0	0
REC 5292636.92 USD PAY [8745000.00] NZD /182583	Asset Hedge	Schedule D	Currency.....	BANK OF AMERICA, N.A.	B4TYDEB6KMZ0031MB27	03/19/2024	06/21/2024	06/21/2024	Maturity	5,292,837	1.652231669	0	0	(57,354)	0	0		0	0	0	(57,354)	0	0	0
REC 425000.00 GBP PAY [540315.25] USD /182621	Asset Hedge	Schedule BA	Currency.....	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	03/19/2024	03/21/2024	03/21/2024	Maturity	540,315	0.786577836	0	0	(2,478)	0	0		0	0	0	(2,478)	0	0	0
REC 4444000.00 GBP PAY [5648812.84] USD /182651	Asset Hedge	Schedule D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ...	21G119DL770XOHC3ZE78	03/19/2024	03/21/2024	03/21/2024	Maturity	5,648,813	0.786713974	0	0	(24,931)	0	0		0	0	0	(24,931)	0	0	0
REC 5651594.78 USD PAY [4444000.00] GBP /182652	Asset Hedge	Schedule D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ...	21G119DL770XOHC3ZE78	03/19/2024	06/20/2024	06/20/2024	Maturity	5,651,595	0.786326722	0	0	26,824	0	0		0	0	0	26,824	0	0	0
REC 294833.72 USD PAY [491000.00] NZD /182658	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES	I7331LVCZKQKX57XV54	03/25/2024	06/21/2024	06/21/2024	Maturity	294,834	1.665345493	0	0	(5,560)	0	0		0	0	0	(5,560)	0	0	0
REC 491000.00 NZD PAY [294825.86] USD /182659	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES	I7331LVCZKQKX57XV54	03/25/2024	03/26/2024	03/26/2024	Maturity	294,826	1.665389868	0	0	(79)	0	0		0	0	0	(79)	0	0	0
REC 391234.90 USD PAY [360000.00] EUR /182683	Asset Hedge	Schedule BA	Currency.....	THE TORONTO-DOMINION BANK	PT3QB789TSUIDF371261	03/26/2024	05/24/2024	05/24/2024	Maturity	391,235	0.920162979	0	0	743	0	0		0	0	0	743	0	0	0
REC 69000.00 GBP PAY [87167.06] USD /182887	Asset Hedge	Schedule BA	Currency.....	THE TORONTO-DOMINION BANK	PT3QB789TSUIDF371261	03/26/2024	06/21/2024	06/21/2024	Maturity	87,167	0.791583254	0	0	42	0	0		0	0	0	42	0	0	0
REC 87127.68 USD PAY [69000.00] GBP /182888	Asset Hedge	Schedule BA	Currency.....	THE TORONTO-DOMINION BANK	PT3QB789TSUIDF371261	03/26/2024	03/28/2024	03/28/2024	Maturity	87,128	0.791941206	0	0	43	0	0		0	0	0	43	0	0	0
REC 718000.00 AUD PAY [467615.45] USD /182979	Asset Hedge	Schedule D	Currency.....	THE TORONTO-DOMINION BANK	PT3QB789TSUIDF371261	03/28/2024	04/04/2024	04/04/2024	Maturity	467,615	1.535449695	0	0	5,188	0	0		0	0	0	5,188	0	0	0

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Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
REC 124567.45 USD PAY [191000.00] AUD /182984	Asset Hedge	Schedule D	Currency.....	THE TORONTO-DOMINION BANK	03/28/2024	05/23/2024	05/23/2024	Maturity	0	124,567	1.533304916	0	0	(1,588	0	0	.....	.....0	0	0	(1,588	0	0	0
REC 14914652.07 USD PAY [13823000.00] EUR /183035	Asset Hedge	Schedule D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE	04/02/2024	07/03/2024	07/03/2024	Maturity	0	14,914,652	0.926806392	0	0	7,929	0	0	.....	.....0	0	0	7,929	0	0	0
REC 13652000.00 EUR PAY [14675353.92] USD /183037	Asset Hedge	Schedule D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE	04/02/2024	04/04/2024	04/04/2024	Maturity	0	14,675,354	0.930267173	0	0	116,588	0	0	.....	.....0	0	0	116,588	0	0	0
REC 4657000.00 EUR PAY [5006088.72] USD /183038	Asset Hedge	Schedule BA	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE	04/02/2024	04/04/2024	04/04/2024	Maturity	0	5,006,089	0.930267173	0	0	39,771	0	0	.....	.....0	0	0	39,771	0	0	0
REC 5009674.42 USD PAY [4643000.00] EUR /183040	Asset Hedge	Schedule BA	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE	04/02/2024	07/03/2024	07/03/2024	Maturity	0	5,009,674	0.926806392	0	0	2,663	0	0	.....	.....0	0	0	2,663	0	0	0
REC 4845669.12 USD PAY [3859000.00] GBP /183055	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES	04/02/2024	04/04/2024	04/04/2024	Maturity	0	4,845,669	0.796381244	0	0	(30,949	0	0	.....	.....0	0	0	(30,949	0	0	0
REC 3833000.00 GBP PAY [4941116.79] USD /183056	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES	04/02/2024	07/03/2024	07/03/2024	Maturity	0	4,941,117	0.785973647	0	0	70,312	0	0	.....	.....0	0	0	70,312	0	0	0
REC 23930000.00 EUR PAY [25806112.00] USD /183143	Asset Hedge	Schedule D	Currency.....	BANK OF AMERICA, N.A.	04/03/2024	04/05/2024	04/05/2024	Maturity	0	25,806,112	0.927299703	0	0	122,043	0	0	.....	.....0	0	0	122,043	0	0	0
REC 25902710.23 USD PAY [23930000.00] EUR /183152	Asset Hedge	Schedule D	Currency.....	BANK OF AMERICA, N.A.	04/03/2024	07/05/2024	07/05/2024	Maturity	0	25,902,710	0.923841295	0	0	(3,908	0	0	.....	.....0	0	0	(3,908	0	0	0
REC 6699892.41 USD PAY [6150000.00] EUR /183235	Asset Hedge	Schedule D	Currency.....	WELLS FARGO BANK, N.A.	04/04/2024	07/08/2024	07/08/2024	Maturity	0	6,699,892	0.917925525	0	0	43,132	0	0	.....	.....0	0	0	43,132	0	0	0
REC 6150000.00 EUR PAY [6675148.50] USD /183236	Asset Hedge	Schedule D	Currency.....	WELLS FARGO BANK, N.A.	04/04/2024	04/08/2024	04/08/2024	Maturity	0	6,675,149	0.921327818	0	0	2,522	0	0	.....	.....0	0	0	2,522	0	0	0
REC 2163580.00 USD PAY [2000000.00] EUR /183259	Asset Hedge	Schedule D	Currency.....	THE TORONTO-DOMINION BANK	04/05/2024	04/09/2024	04/09/2024	Maturity	0	2,163,580	0.924393829	0	0	(7,820	0	0	.....	.....0	0	0	(7,820	0	0	0
REC 4281000.00 EUR PAY [4642994.51] USD /183260	Asset Hedge	Schedule D	Currency.....	THE TORONTO-DOMINION BANK	04/05/2024	06/12/2024	06/12/2024	Maturity	0	4,642,995	0.922034598	0	0	(15,234	0	0	.....	.....0	0	0	(15,234	0	0	0
REC 119941.52 USD PAY [163000.00] CAD /183316	Asset Hedge	Schedule BA	Currency.....	BNP PARIBAS LONDON	04/08/2024	04/25/2024	04/25/2024	Maturity	0	119,942	1.358996	0	0	609	0	0	.....	.....0	0	0	609	0	0	0
REC 503554.50 USD PAY [398000.00] GBP /183323	Asset Hedge	Schedule BA	Currency.....	MORGAN STANLEY CAPITAL SERVICES	04/08/2024	06/21/2024	06/21/2024	Maturity	0	503,555	0.790381375	0	0	522	0	0	.....	.....0	0	0	522	0	0	0
REC 949821.09 USD PAY [981000.00] EUR /183542	Asset Hedge	Schedule BA	Currency.....	BNP PARIBAS LONDON	04/10/2024	04/12/2024	04/12/2024	Maturity	0	949,821	0.927738452	0	0	12,061	0	0	.....	.....0	0	0	12,061	0	0	0
REC 677000.00 EUR PAY [732471.76] USD /183560	Asset Hedge	Schedule BA	Currency.....	BNP PARIBAS LONDON	04/10/2024	07/11/2024	07/11/2024	Maturity	0	732,472	0.924267379	0	0	3,156	0	0	.....	.....0	0	0	3,156	0	0	0
REC 10668784.00 USD PAY [10000000.00] EUR /183628	Asset Hedge	Schedule D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE	04/15/2024	07/08/2024	07/08/2024	Maturity	0	10,668,784	0.937314295	0	0	(155,216	0	0	.....	.....0	0	0	(155,216	0	0	0
REC 10000000.00 EUR PAY [10632100.00] USD /183629	Asset Hedge	Schedule D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE	04/15/2024	04/17/2024	04/17/2024	Maturity	0	10,632,100	0.940547963	0	0	36,900	0	0	.....	.....0	0	0	36,900	0	0	0
REC 856874.72 USD PAY [806000.00] EUR /183653	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES	04/16/2024	04/18/2024	04/18/2024	Maturity	0	856,875	0.940627587	0	0	(951	0	0	.....	.....0	0	0	(951	0	0	0
REC 806000.00 EUR PAY [859675.41] USD /183654	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES	04/16/2024	07/05/2024	07/05/2024	Maturity	0	859,675	0.937562993	0	0	12,900	0	0	.....	.....0	0	0	12,900	0	0	0
REC 704181.25 USD PAY [1191000.00] NZD /183687	Asset Hedge	Schedule D	Currency.....	BANK OF AMERICA, N.A.	04/17/2024	06/21/2024	06/21/2024	Maturity	0	704,181	1.691326203	0	0	(24,473	0	0	.....	.....0	0	0	(24,473	0	0	0
REC 427000.00 NZD PAY [252455.59] USD /183689	Asset Hedge	Schedule D	Currency.....	BANK OF AMERICA, N.A.	04/17/2024	04/22/2024	04/22/2024	Maturity	0	252,456	1.691386277	0	0	158	0	0	.....	.....0	0	0	158	0	0	0
REC 1457964.17 USD PAY [1169000.00] GBP /183705	Asset Hedge	Schedule D	Currency.....	BNP PARIBAS LONDON	04/17/2024	06/14/2024	06/14/2024	Maturity	0	1,457,964	0.801803095	0	0	(25,146	0	0	.....	.....0	0	0	(25,146	0	0	0
REC 5712490.60 USD PAY [5346000.00] EUR /183706	Asset Hedge	Schedule BA	Currency.....	BANK OF AMERICA, N.A.	04/17/2024	07/11/2024	07/11/2024	Maturity	0	5,712,491	0.935845892	0	0	(96,483	0	0	.....	.....0	0	0	(96,483	0	0	0
REC 118376.56 USD PAY [95000.00] GBP /183723	Asset Hedge	Schedule BA	Currency.....	BNP PARIBAS LONDON	04/17/2024	05/17/2024	05/17/2024	Maturity	0	118,377	0.802523777	0	0	(2,292	0	0	.....	.....0	0	0	(2,292	0	0	0
REC 416875.88 USD PAY [390000.00] EUR /183755	Asset Hedge	Schedule BA	Currency.....	BANK OF AMERICA, N.A.	04/19/2024	06/18/2024	06/18/2024	Maturity	0	416,876	0.935529833	0	0	(1,906	0	0	.....	.....0	0	0	(1,906	0	0	0
REC 390000.00 EUR PAY [415927.20] USD /183756	Asset Hedge	Schedule BA	Currency.....	BANK OF AMERICA, N.A.	04/19/2024	04/23/2024	04/23/2024	Maturity	0	415,927	0.937664091	0	0	1,451	0	0	.....	.....0	0	0	1,451	0	0	0
REC 6870000.00 AUD PAY [4411089.60] USD /183771	Asset Hedge	Schedule D	Currency.....	GOLDMAN SACHS INTERNATIONAL	04/19/2024	04/24/2024	04/24/2024	Maturity	0	4,411,090	1.557438325	0	0	49,601	0	0	.....	.....0	0	0	49,601	0	0	0
REC 4418522.94 USD PAY [6870000.00] AUD /183772	Asset Hedge	Schedule D	Currency.....	GOLDMAN SACHS INTERNATIONAL	04/19/2024	06/20/2024	06/20/2024	Maturity	0	4,418,523	1.554818226	0	0	(153,462	0	0	.....	.....0	0	0	(153,462	0	0	0
REC 2504830.66 USD PAY [2339000.00] EUR /183928	Asset Hedge	Schedule D	Currency.....	BANK OF AMERICA, N.A.	04/24/2024	06/12/2024	06/12/2024	Maturity	0	2,504,831	0.933795749	0	0	(23,628	0	0		0	0	0	(23,628	0	0	0

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SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
REC 2331000.00 EUR PAY [2491461.84] USD /183940	Asset Hedge	Schedule D	Currency.....	BANK OF AMERICA, N.A.	04/24/2024	04/25/2024	04/25/2024	Maturity	0	2,491,462	0.935595478	0	0	9,235	0	0		0	0	0	9,235	0	0	0
REC 132267.32 USD PAY [181000.00] CAD /183941	Asset Hedge	Schedule BA	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	04/24/2024	07/25/2024	07/25/2024	Maturity	0	132,267	1.368441	0	0	1,368	0	0		0	0	0	1,368	0	0	0
REC 181000.00 CAD PAY [132072.44] USD /183942	Asset Hedge	Schedule BA	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	04/24/2024	04/25/2024	04/25/2024	Maturity	0	132,072	1.37046	0	0	438	0	0		0	0	0	438	0	0	0
REC 652963.22 USD PAY [997000.00] AUD /184021	Asset Hedge	Schedule D	Currency.....	THE TORONTO-DOMINION BANK	04/26/2024	05/23/2024	05/23/2024	Maturity	0	652,963	1.526885398	0	0	(5,555)	0	0		0	0	0	(5,555)	0	0	0
REC 223000.00 AUD PAY [145953.39] USD /184022	Asset Hedge	Schedule D	Currency.....	THE TORONTO-DOMINION BANK	04/26/2024	05/01/2024	05/01/2024	Maturity	0	145,953	1.527883881	0	0	(580)	0	0		0	0	0	(580)	0	0	0
REC 4971948.33 USD PAY [4628000.00] EUR /184085	Asset Hedge	Schedule D	Currency.....	BANK OF AMERICA, N.A.	04/30/2024	07/31/2024	07/31/2024	Maturity	0	4,971,948	0.930822223	0	0	(38,324)	0	0		0	0	0	(38,324)	0	0	0
REC 3800000.00 EUR PAY [4066602.30] USD /184086	Asset Hedge	Schedule D	Currency.....	BANK OF AMERICA, N.A.	04/30/2024	05/02/2024	05/02/2024	Maturity	0	4,066,602	0.934440583	0	0	8,898	0	0		0	0	0	8,898	0	0	0
REC 12331000.00 GBP PAY [15506832.02] USD /184206	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	05/03/2024	05/07/2024	05/07/2024	Maturity	0	15,506,632	0.795208392	0	0	(81,784)	0	0		0	0	0	(81,784)	0	0	0
REC 15606095.84 USD PAY [12403000.00] GBP /184208	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	05/03/2024	08/05/2024	08/05/2024	Maturity	0	15,606,096	0.794753356	0	0	(233,775)	0	0		0	0	0	(233,775)	0	0	0
REC 2153147.60 USD PAY [2000000.00] EUR /184444	Asset Hedge	Schedule D	Currency.....	CITIBANK N.A.	05/08/2024	06/12/2024	06/12/2024	Maturity	0	2,153,148	0.928872516	0	0	(8,852)	0	0		0	0	0	(8,852)	0	0	0
REC 1800000.00 EUR PAY [1935270.00] USD /184446	Asset Hedge	Schedule D	Currency.....	CITIBANK N.A.	05/08/2024	05/10/2024	05/10/2024	Maturity	0	1,935,270	0.930102776	0	0	4,410	0	0		0	0	0	4,410	0	0	0
REC 397000.00 CAD PAY [291068.39] USD /184517	Asset Hedge	Schedule BA	Currency.....	CITIBANK N.A.	05/14/2024	05/15/2024	05/15/2024	Maturity	0	291,066	1.36395	0	0	729	0	0		0	0	0	729	0	0	0
REC 297380.21 USD PAY [405000.00] CAD /184529	Asset Hedge	Schedule BA	Currency.....	CITIBANK N.A.	05/14/2024	08/14/2024	08/14/2024	Maturity	0	297,380	1.361893	0	0	2,176	0	0		0	0	0	2,176	0	0	0
REC 4400000.00 EUR PAY [4759598.36] USD /184530	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	05/14/2024	05/15/2024	05/15/2024	Maturity	0	4,759,598	0.924447666	0	0	27,162	0	0		0	0	0	27,162	0	0	0
REC 5106742.36 USD PAY [4701844.00] EUR /184541	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	05/14/2024	08/14/2024	08/14/2024	Maturity	0	5,106,742	0.920712816	0	0	(70,928)	0	0		0	0	0	(70,928)	0	0	0
REC 3018717.13 USD PAY [2388000.00] GBP /184608	Asset Hedge	Schedule BA	Currency.....	ROYAL BANK OF CANADA	05/15/2024	08/15/2024	08/15/2024	Maturity	0	3,018,717	0.791064765	0	0	(49,863)	0	0		0	0	0	(49,863)	0	0	0
REC 2408000.00 GBP PAY [3042050.48] USD /184609	Asset Hedge	Schedule BA	Currency.....	ROYAL BANK OF CANADA	05/15/2024	05/17/2024	05/17/2024	Maturity	0	3,042,050	0.791571348	0	0	16,591	0	0		0	0	0	16,591	0	0	0
REC 307000.00 NZD PAY [186593.68] USD /184622	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	05/15/2024	05/20/2024	05/20/2024	Maturity	0	186,594	1.645286173	0	0	861	0	0		0	0	0	861	0	0	0
REC 189630.17 USD PAY [312000.00] NZD /184624	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	05/15/2024	06/21/2024	06/21/2024	Maturity	0	189,630	1.645307829	0	0	(1,251)	0	0		0	0	0	(1,251)	0	0	0
REC 100000.00 GBP PAY [126495.38] USD /184665	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	05/16/2024	05/17/2024	05/17/2024	Maturity	0	126,495	0.790542581	0	0	525	0	0		0	0	0	525	0	0	0
REC 126562.29 USD PAY [100000.00] GBP /184671	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	05/16/2024	08/05/2024	08/05/2024	Maturity	0	126,562	0.790124705	0	0	(1,148)	0	0		0	0	0	(1,148)	0	0	0
REC 2969893.80 USD PAY [4440000.00] AUD /184730	Asset Hedge	Schedule D	Currency.....	THE TORONTO-DOMINION BANK	05/20/2024	08/20/2024	08/20/2024	Maturity	0	2,969,894	1.495002953	0	0	(24,442)	0	0		0	0	0	(24,442)	0	0	0
REC 4438000.00 AUD PAY [2961034.33] USD /184732	Asset Hedge	Schedule D	Currency.....	THE TORONTO-DOMINION BANK	05/20/2024	05/23/2024	05/23/2024	Maturity	0	2,961,035	1.498800959	0	0	(29,736)	0	0		0	0	0	(29,736)	0	0	0
REC 9900000.00 EUR PAY [10756310.40] USD /184746	Asset Hedge	Schedule D	Currency.....	BNP PARIBAS LONDON ROMJUSFPUBMIPR08K5P83	05/20/2024	05/20/2024	05/20/2024	Maturity	0	10,756,310	0.920389951	0	0	(9,860)	0	0		0	0	0	(9,860)	0	0	0
REC 10797736.95 USD PAY [9900000.00] EUR /184747	Asset Hedge	Schedule D	Currency.....	BNP PARIBAS LONDON ROMJUSFPUBMIPR08K5P83	05/20/2024	08/14/2024	08/14/2024	Maturity	0	10,797,737	0.916858366	0	0	(104,143)	0	0		0	0	0	(104,143)	0	0	0
REC 326717000.01 SEK PAY [30622445.92] USD /184833	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	05/21/2024	05/23/2024	05/23/2024	Maturity	0	30,622,446	10.6692	0	0	(237,765)	0	0		0	0	0	(237,765)	0	0	0
REC 30687277.73 USD PAY [326717000.04] SEK /184834 ..	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	05/21/2024	07/05/2024	07/05/2024	Maturity	0	30,687,278	10.64666	0	0	(481,524)	0	0		0	0	0	(481,524)	0	0	0
REC 10438804.69 USD PAY [9597000.00] EUR /184937	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	05/22/2024	08/22/2024	08/22/2024	Maturity	0	10,438,805	0.919358472	0	0	(223,462)	0	0		0	0	0	(223,462)	0	0	0
REC 9175000.00 EUR PAY [9839461.00] USD /184940	Asset Hedge	Schedule D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	05/22/2024	05/24/2024	05/24/2024	Maturity	0	9,939,461	0.923088284	0	0	12,662	0	0		0	0	0	12,662	0	0	0
REC 774000.00 EUR PAY [838489.68] USD /184945	Asset Hedge	Schedule BA	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	05/22/2024	05/24/2024	05/24/2024	Maturity	0	838,490	0.923088284	0	0	1,068	0	0		0	0	0	1,068	0	0	0
REC 913680.94 USD PAY [840000.00] EUR /184946	Asset Hedge	Schedule BA	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	05/22/2024	08/22/2024	08/22/2024	Maturity	0	913,681	0.919358472	0	0	(19,559)	0	0		0	0	0	(19,559)	0	0	0

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Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
REC 642637.75 USD PAY [505000.00] GBP /184973	Asset Hedge	Schedule D	Currency	BNP PARIBAS LONDON	05/22/2024	05/24/2024	05/24/2024	Maturity	0	642,638	0.78582374	0	0	(429)	0	0		0	0	0	(429)	0	0	0
REC 505000.00 GBP PAY [642716.33] USD /184974	Asset Hedge	Schedule D	Currency	BNP PARIBAS LONDON	05/22/2024	06/20/2024	06/20/2024	Maturity	0	642,716	0.785727419	0	0	(3,538)	0	0		0	0	0	(3,538)	0	0	0
REC 142714.88 USD PAY [112000.00] GBP /184984	Asset Hedge	Schedule D	Currency	WELLS FARGO BANK, N.A.	05/23/2024	05/28/2024	05/28/2024	Maturity	0	142,715	0.784781517	0	0	(164)	0	0		0	0	0	(164)	0	0	0
REC 112000.00 GBP PAY [142761.66] USD /184986	Asset Hedge	Schedule D	Currency	WELLS FARGO BANK, N.A.	05/23/2024	08/05/2024	08/05/2024	Maturity	0	142,762	0.784524163	0	0	274	0	0		0	0	0	274	0	0	0
REC 500000.00 AUD PAY [331096.65] USD /185127	Asset Hedge	Schedule BA	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	05/24/2024	05/29/2024	05/29/2024	Maturity	0	331,097	1.510133753	0	0	(647)	0	0		0	0	0	(647)	0	0	0
REC 2613803.76 USD PAY [2400000.00] EUR /185143	Asset Hedge	Schedule D	Currency	CITIBANK N.A.	05/24/2024	08/14/2024	08/14/2024	Maturity	0	2,613,804	0.918201977	0	0	(29,076)	0	0		0	0	0	(29,076)	0	0	0
REC 2400000.00 EUR PAY [2605597.44] USD /185144	Asset Hedge	Schedule D	Currency	CITIBANK N.A.	05/24/2024	06/06/2024	06/06/2024	Maturity	0	2,605,597	0.921093596	0	0	8,003	0	0		0	0	0	8,003	0	0	0
REC 50000.02 SEK PAY [4728.49] USD /185221	Asset Hedge	Schedule BA	Currency	BNP PARIBAS LONDON	05/28/2024	05/29/2024	05/29/2024	Maturity	0	4,728	10.574205	0	0	(48)	0	0		0	0	0	(48)	0	0	0
REC 5220000.00 EUR PAY [5607689.40] USD /185470	Asset Hedge	Schedule D	Currency	WELLS FARGO BANK, N.A.	06/10/2024	06/12/2024	06/12/2024	Maturity	0	5,607,689	0.93086468	0	0	35,131	0	0		0	0	0	35,131	0	0	0
REC 3400379.18 USD PAY [3152000.00] EUR /185475	Asset Hedge	Schedule D	Currency	WELLS FARGO BANK, N.A.	06/10/2024	09/10/2024	09/10/2024	Maturity	0	3,400,379	0.926955018	0	0	(72,494)	0	0		0	0	0	(72,494)	0	0	0
REC 1034673.32 USD PAY [10903999.97] SEK /185476	Asset Hedge	Schedule D	Currency	CITIBANK N.A.	06/10/2024	07/05/2024	07/05/2024	Maturity	0	1,034,673	10.538592	0	0	(5,568)	0	0		0	0	0	(5,568)	0	0	0
REC 864417.05 USD PAY [805000.00] EUR /185479	Asset Hedge	Schedule D	Currency	BNP PARIBAS LONDON	06/10/2024	06/12/2024	06/12/2024	Maturity	0	864,417	0.931263445	0	0	(5,788)	0	0		0	0	0	(5,788)	0	0	0
REC 805000.00 EUR PAY [865342.16] USD /185505	Asset Hedge	Schedule D	Currency	BNP PARIBAS LONDON	06/10/2024	07/05/2024	07/05/2024	Maturity	0	865,342	0.930268038	0	0	6,151	0	0		0	0	0	6,151	0	0	0
REC 530697.11 USD PAY [413000.00] GBP /185530	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	06/12/2024	09/12/2024	09/12/2024	Maturity	0	530,697	0.778221624	0	0	(11,241)	0	0		0	0	0	(11,241)	0	0	0
REC 4268574.04 USD PAY [3929000.00] EUR /185534	Asset Hedge	Schedule BA	Currency	CITIBANK N.A.	06/12/2024	09/12/2024	09/12/2024	Maturity	0	4,268,574	0.920447558	0	0	(81,615)	0	0		0	0	0	(81,615)	0	0	0
REC 4061000.00 EUR PAY [4393433.46] USD /185535	Asset Hedge	Schedule BA	Currency	CITIBANK N.A.	06/12/2024	06/14/2024	06/14/2024	Maturity	0	4,393,433	0.924334017	0	0	(47,757)	0	0		0	0	0	(47,757)	0	0	0
REC 413000.00 GBP PAY [530407.64] USD /185536	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	06/12/2024	06/14/2024	06/14/2024	Maturity	0	530,408	0.778646401	0	0	(6,435)	0	0		0	0	0	(6,435)	0	0	0
REC 2439686.54 USD PAY [2247000.00] EUR /185566	Asset Hedge	Schedule D	Currency	ROYAL BANK OF CANADA	06/12/2024	07/31/2024	07/31/2024	Maturity	0	2,439,687	0.92101979	0	0	7,084	0	0		0	0	0	7,084	0	0	0
REC 2248000.00 EUR PAY [2435438.24] USD /185567	Asset Hedge	Schedule D	Currency	ROYAL BANK OF CANADA	06/12/2024	06/14/2024	06/14/2024	Maturity	0	2,435,438	0.923037161	0	0	(29,853)	0	0		0	0	0	(29,853)	0	0	0
REC 1455000.00 GBP PAY [1868787.45] USD /185600	Asset Hedge	Schedule D	Currency	ROYAL BANK OF CANADA	06/12/2024	06/14/2024	06/14/2024	Maturity	0	1,868,787	0.778579715	0	0	(22,829)	0	0		0	0	0	(22,829)	0	0	0
REC 1869356.50 USD PAY [1455000.00] GBP /185630	Asset Hedge	Schedule D	Currency	ROYAL BANK OF CANADA	06/12/2024	08/08/2024	08/08/2024	Maturity	0	1,869,357	0.778342768	0	0	15,687	0	0		0	0	0	15,687	0	0	0
REC 27086728.62 USD PAY [25232000.00] EUR /185687	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	06/14/2024	09/16/2024	09/16/2024	Maturity	0	27,086,729	0.931526297	0	0	(999,011)	0	0		0	0	0	(999,011)	0	0	0
REC 25232000.00 EUR PAY [26969475.52] USD /185688	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	06/14/2024	06/18/2024	06/18/2024	Maturity	0	26,969,476	0.935576221	0	0	124,646	0	0		0	0	0	124,646	0	0	0
REC 6870000.00 AUD PAY [4534527.70] USD /185694	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	06/14/2024	06/20/2024	06/20/2024	Maturity	0	4,534,528	1.51504133	0	0	37,457	0	0		0	0	0	37,457	0	0	0
REC 4721039.71 USD PAY [7195000.00] AUD /185709	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	06/14/2024	09/16/2024	09/16/2024	Maturity	0	4,721,040	1.511320547	0	0	(95,799)	0	0		0	0	0	(95,799)	0	0	0
REC 4504731.46 USD PAY [4201000.00] EUR /185717	Asset Hedge	Schedule BA	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	06/14/2024	09/16/2024	09/16/2024	Maturity	0	4,504,731	0.932574839	0	0	(171,402)	0	0		0	0	0	(171,402)	0	0	0
REC 3982000.00 EUR PAY [4251422.12] USD /185718	Asset Hedge	Schedule BA	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	06/14/2024	06/18/2024	06/18/2024	Maturity	0	4,251,422	0.936627765	0	0	24,449	0	0		0	0	0	24,449	0	0	0
REC 1469408.42 USD PAY [1160000.00] GBP /185719	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES	06/14/2024	08/05/2024	08/05/2024	Maturity	0	1,469,408	0.789433589	0	0	(12,028)	0	0		0	0	0	(12,028)	0	0	0
REC 1160000.00 GBP PAY [1468989.20] USD /185720	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES	06/14/2024	06/18/2024	06/18/2024	Maturity	0	1,468,989	0.789658631	0	0	4,907	0	0		0	0	0	4,907	0	0	0
REC 4912911.28 USD PAY [4591000.00] EUR /185722	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	06/14/2024	08/14/2024	08/14/2024	Maturity	0	4,912,911	0.934476385	0	0	(142,698)	0	0		0	0	0	(142,698)	0	0	0
REC 4591000.00 EUR PAY [4899469.29] USD /185723	Asset Hedge	Schedule D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	06/14/2024	06/18/2024	06/18/2024	Maturity	0	4,899,469	0.937040265	0	0	30,347	0	0		0	0	0	30,347	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
REC 1469846.66 USD PAY [1160000.00] GBP /185768	Asset Hedge	Schedule BA, D	Currency.....	BARCLAYS BANK PLC .. G5GSEF7VJP5170UK5573	06/17/2024	06/18/2024	06/18/2024	Maturity	0	1,469,947	0.789144528	0	0	(3,949)	0	0	.....	.....0	0	0	(3,949)	0	0	.....
REC 1160000.00 GBP PAY [1470020.80] USD /185770	Asset Hedge	Schedule BA, D	Currency.....	BARCLAYS BANK PLC .. G5GSEF7VJP5170UK5573	06/17/2024	06/27/2024	06/27/2024	Maturity	0	1,470,021	0.789104674	0	0	(4,129)	0	0	.....	.....0	0	0	(4,129)	0	0	.....
REC 3939000.00 GBP PAY [4991146.29] USD /185792	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. I7331LVCZKQKX57XV54	06/17/2024	06/20/2024	06/20/2024	Maturity	0	4,991,146	0.789197465	0	0	(5,554)	0	0	.....	.....0	0	0	(5,554)	0	0	.....
REC 4994108.81 USD PAY [3939000.00] GBP /185810	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. I7331LVCZKQKX57XV54	06/17/2024	09/17/2024	09/17/2024	Maturity	0	4,994,109	0.788729373	0	0	(188,040)	0	0	.....	.....0	0	0	(188,040)	0	0	.....
REC 6227465.94 USD PAY [10188000.00] NZD /185816	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIZ7FF32TIEFA76	06/17/2024	09/17/2024	09/17/2024	Maturity	0	6,227,466	1.635978438	0	0	(69,737)	0	0	.....	.....0	0	0	(69,737)	0	0	.....
REC 10739000.00 NZD PAY [6564425.31] USD /185817	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIZ7FF32TIEFA76	06/17/2024	06/21/2024	06/21/2024	Maturity	0	6,564,425	1.635938292	0	0	5,695	0	0	.....	.....0	0	0	5,695	0	0	.....
REC 754000.00 GBP PAY [957155.42] USD /185913	Asset Hedge	Schedule BA, D	Currency.....	BARCLAYS BANK PLC .. G5GSEF7VJP5170UK5573	06/18/2024	06/21/2024	06/21/2024	Maturity	0	957,155	0.78775079	0	0	(4,175)	0	0	.....	.....0	0	0	(4,175)	0	0	.....
REC 928500.92 USD PAY [731000.00] GBP /185914	Asset Hedge	Schedule BA, D	Currency.....	BARCLAYS BANK PLC .. G5GSEF7VJP5170UK5573	06/18/2024	09/19/2024	09/19/2024	Maturity	0	928,501	0.78729061	0	0	(42,413)	0	0	.....	.....0	0	0	(42,413)	0	0	.....
REC 43053028.44 USD PAY [39907000.00] EUR /185932	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIZ7FF32TIEFA76	06/18/2024	09/19/2024	09/19/2024	Maturity	0	43,053,028	0.926926663	0	0	(1,479,193)	0	0	.....	.....0	0	0	(1,479,193)	0	0	.....
REC 40000000.00 EUR PAY [42969128.00] USD /185934	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIZ7FF32TIEFA76	06/18/2024	06/21/2024	06/21/2024	Maturity	0	42,969,128	0.930901075	0	0	(197,128)	0	0	.....	.....0	0	0	(197,128)	0	0	.....
REC 261000.00 AUD PAY [173567.69] USD /185957	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO-DOMINION BANK PT30B789TSU1DF371261	06/18/2024	06/24/2024	06/24/2024	Maturity	0	173,568	1.503736786	0	0	154	0	0	.....	.....0	0	0	154	0	0	.....
REC 538860.01 USD PAY [809000.00] AUD /185958	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO-DOMINION BANK PT30B789TSU1DF371261	06/18/2024	08/20/2024	08/20/2024	Maturity	0	538,860	1.501316655	0	0	(6,730)	0	0	.....	.....0	0	0	(6,730)	0	0	.....
REC 1162525.00 USD PAY [1898000.00] NZD /186014	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. I7331LVCZKQKX57XV54	06/20/2024	06/25/2024	06/25/2024	Maturity	0	1,162,525	1.632653061	0	0	1,329	0	0	.....	.....0	0	0	1,329	0	0	.....
REC 1899000.00 NZD PAY [1163139.40] USD /186019	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. I7331LVCZKQKX57XV54	06/20/2024	09/17/2024	09/17/2024	Maturity	0	1,163,139	1.632650396	0	0	10,633	0	0	.....	.....0	0	0	10,633	0	0	.....
REC 2924000.00 AUD PAY [1951030.23] USD /186035	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIZ7FF32TIEFA76	06/20/2024	06/25/2024	06/25/2024	Maturity	0	1,951,030	1.498695386	0	0	(9,202)	0	0	.....	.....0	0	0	(9,202)	0	0	.....
REC 1955527.34 USD PAY [2924000.00] AUD /186036	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIZ7FF32TIEFA76	06/20/2024	09/16/2024	09/16/2024	Maturity	0	1,955,527	1.495248847	0	0	(18,465)	0	0	.....	.....0	0	0	(18,465)	0	0	.....
REC 336600.00 AUD PAY [237465.14] USD /186046	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO-DOMINION BANK PT30B789TSU1DF371261	06/20/2024	06/25/2024	06/25/2024	Maturity	0	237,465	1.499167213	0	0	(1,046)	0	0	.....	.....0	0	0	(1,046)	0	0	.....
REC 237720.96 USD PAY [356000.00] AUD /186047	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO-DOMINION BANK PT30B789TSU1DF371261	06/20/2024	08/02/2024	08/02/2024	Maturity	0	237,721	1.497552998	0	0	5,751	0	0	.....	.....0	0	0	5,751	0	0	.....
REC 50000000.00 EUR PAY [5369000.00] USD /186057	Asset Hedge	Schedule BA, D	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPPRMMJCUFX09	06/20/2024	06/24/2024	06/24/2024	Maturity	0	5,359,000	0.93300989	0	0	7,000	0	0	.....	.....0	0	0	7,000	0	0	.....
REC 5362575.50 USD PAY [5000000.00] EUR /186058	Asset Hedge	Schedule BA, D	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPPRMMJCUFX09	06/20/2024	07/08/2024	07/08/2024	Maturity	0	5,362,576	0.932387892	0	0	(49,425)	0	0	.....	.....0	0	0	(49,425)	0	0	.....
REC 1900000.00 NZD PAY [1160410.56] USD /186340	Asset Hedge	Schedule BA, D	Currency.....	BARCLAYS BANK PLC .. G5GSEF7VJP5170UK5573	06/27/2024	07/01/2024	07/01/2024	Maturity	0	1,160,411	1.637352597	0	0	(6,351)	0	0	.....	.....0	0	0	(6,351)	0	0	.....
REC 1160000.00 GBP PAY [1468633.20] USD /186341	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. I7331LVCZKQKX57XV54	06/27/2024	08/05/2024	08/05/2024	Maturity	0	1,468,633	0.78985011	0	0	12,803	0	0	.....	.....0	0	0	12,803	0	0	.....
REC 1468319.07 USD PAY [1160000.00] GBP /186342	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. I7331LVCZKQKX57XV54	06/27/2024	06/27/2024	06/27/2024	Maturity	0	1,468,319	0.790019213	0	0	2,427	0	0	.....	.....0	0	0	2,427	0	0	.....
REC 4727439.86 USD PAY [4402000.00] EUR /186349	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. I7331LVCZKQKX57XV54	06/27/2024	07/31/2024	07/31/2024	Maturity	0	4,727,440	0.931159387	0	0	(38,165)	0	0	.....	.....0	0	0	(38,165)	0	0	.....
REC 4333000.00 EUR PAY [4646839.19] USD /186350	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. I7331LVCZKQKX57XV54	06/27/2024	07/01/2024	07/01/2024	Maturity	0	4,646,839	0.932461792	0	0	5,936	0	0	.....	.....0	0	0	5,936	0	0	.....
REC 4963661.62 USD PAY [3933000.00] GBP /186363	Asset Hedge	Schedule BA, D	Currency.....	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	07/01/2024	07/03/2024	07/03/2024	Maturity	0	4,983,662	0.789178781	0	0	(27,767)	0	0	.....	.....0	0	0	(27,767)	0	0	.....
REC 3915000.00 GBP PAY [4837269.31] USD /186395	Asset Hedge	Schedule BA, D	Currency.....	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	07/01/2024	10/02/2024	10/02/2024	Maturity	0	4,837,269	0.78866779	0	0	221,802	0	0	.....	.....0	0	0	221,802	0	0	.....
REC 19823000.00 EUR PAY [14869539.33] USD /186411	Asset Hedge	Schedule BA, D	Currency.....	BARCLAYS BANK PLC .. G5GSEF7VJP5170UK5573	07/01/2024	07/03/2024	07/03/2024	Maturity	0	14,869,539	0.929618577	0	0	37,184	0	0	.....	.....0	0	0	37,184	0	0	.....
REC 15817205.23 USD PAY [14641000.00] EUR /186413	Asset Hedge	Schedule BA, D	Currency.....	BARCLAYS BANK PLC .. G5GSEF7VJP5170UK5573	07/01/2024	10/02/2024	10/02/2024	Maturity	0	15,817,205	0.92563795	0	0	(355,243)	0	0	.....	.....0	0	0	(355,243)	0	0	.....
REC 4643000.00 EUR PAY [4980435.69] USD /186441	Asset Hedge	Schedule BA, D	Currency.....	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	07/01/2024	07/03/2024	07/03/2024	Maturity	0	4,990,436	0.930379688	0	0	16,576	0	0	.....	.....0	0	0	16,576	0	0	.....
REC 5524641.48 USD PAY [5180000.00] EUR /186442	Asset Hedge	Schedule BA, D	Currency.....	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	07/01/2024	10/02/2024	10/02/2024	Maturity	0	5,524,641	0.926395128	0	0	(128,701)	0	0	.....	.....0	0	0	(128,701)	0	0	.....
REC 22319000.00 EUR PAY [23956768.22] USD /186489	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. I7331LVCZKQKX57XV54	07/02/2024	07/05/2024	07/05/2024	Maturity	0	23,956,768	0.931636513	0	0	205,781	0	0	.....	.....0	0	0	205,781	0	0	.....
REC 24058598.66 USD PAY [22319000.00] EUR /186490	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. I7331LVCZKQKX57XV54	07/02/2024	10/03/2024	10/03/2024	Maturity	0	24,058,599	0.927689287	0	0	(559,258)	0	0	.....	.....0	0	0	(559,258)	0	0	.....
REC 31865448.73 USD PAY [33761000.00] SEK /186509	Asset Hedge	Schedule BA, D	Currency.....	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	07/02/2024	10/03/2024	10/03/2024	Maturity	0	31,865,449	0.10594861	0	0	(882,721)	0	0	.....	.....0	0	0	(882,721)	0	0	.....
REC 337621000.00 SEK PAY [31723664.23] USD /186513	Asset Hedge	Schedule BA, D	Currency.....	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	07/02/2024	07/05/2024	07/05/2024	Maturity	0	31,723,664	10.64256	0	0	485,379	0	0		0	0	0	485,379	0	0	

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SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
REC 22912481.16 USD PAY [21153000.00] EUR /186572 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA	07/03/2024	10/04/2024	10/04/2024	Maturity	0	22,912,481	0.923208445	0	0	(271,207)	0	0		0	0	0	(271,207)	0	0	0
REC 21153000.00 EUR PAY [22817884.94] USD /186573 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA	07/03/2024	07/08/2024	07/08/2024	Maturity	0	22,817,885	0.927035794	0	0	78,122	0	0		0	0	0	78,122	0	0	0
REC 16988858.02 USD PAY [15643000.00] EUR /186618 ...	Asset Hedge	Schedule BA, D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	07/08/2024	08/14/2024	08/14/2024	Maturity	0	16,988,858	0.92077979	0	0	(237,214)	0	0		0	0	0	(237,214)	0	0	0
REC 15600000.00 EUR PAY [16914768.00] USD /186619 ...	Asset Hedge	Schedule BA, D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	07/08/2024	07/10/2024	07/10/2024	Maturity	0	16,914,768	0.922271	0	0	(24,648)	0	0		0	0	0	(24,648)	0	0	0
REC 5072805.47 USD PAY [4669000.00] EUR /186778 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK	07/09/2024	10/10/2024	10/10/2024	Maturity	0	5,072,805	0.920397575	0	0	(31,812)	0	0		0	0	0	(31,812)	0	0	0
REC 4669000.00 EUR PAY [5051297.72] USD /186781 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK	07/09/2024	07/11/2024	07/11/2024	Maturity	0	5,051,298	0.92431693	0	0	22,038	0	0		0	0	0	22,038	0	0	0
REC 4838977.00 EUR PAY [5285077.93] USD /186855 ...	Asset Hedge	Schedule BA, D	Currency	BANK OF AMERICA,	07/11/2024	10/04/2024	10/04/2024	Maturity	0	5,285,078	0.915592448	0	0	18,441	0	0		0	0	0	18,441	0	0	0
REC 4838977.44 EUR PAY [5264554.38] USD /186856 ...	Asset Hedge	Schedule BA, D	Currency	BANK OF AMERICA,	07/11/2024	07/12/2024	07/12/2024	Maturity	0	5,264,554	0.919161578	0	0	11,867	0	0		0	0	0	11,867	0	0	0
REC 317000.00 EUR PAY [344813.58] USD /186868 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK	07/16/2024	07/18/2024	07/18/2024	Maturity	0	344,814	0.919337342	0	0	590	0	0		0	0	0	590	0	0	0
REC 346166.54 USD PAY [317000.00] EUR /186869 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK	07/16/2024	10/10/2024	10/10/2024	Maturity	0	346,167	0.915744207	0	0	(410)	0	0		0	0	0	(410)	0	0	0
REC 204000.00 NZD PAY [123872.84] USD /187014 ...	Asset Hedge	Schedule BA, D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	07/17/2024	07/22/2024	07/22/2024	Maturity	0	123,873	1.646849577	0	0	(1,901)	0	0		0	0	0	(1,901)	0	0	0
REC 129284.39 USD PAY [192000.00] AUD /187015 ...	Asset Hedge	Schedule BA, D	Currency	MORGAN STANLEY CAPITAL SERVICES	07/17/2024	08/20/2024	08/20/2024	Maturity	0	129,284	1.485098521	0	0	(200)	0	0		0	0	0	(200)	0	0	0
REC 111735.66 USD PAY [184000.00] NZD /187021 ...	Asset Hedge	Schedule BA, D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	07/17/2024	09/17/2024	09/17/2024	Maturity	0	111,736	1.646743811	0	0	(1,995)	0	0		0	0	0	(1,995)	0	0	0
REC 192000.00 AUD PAY [129183.59] USD /187023 ...	Asset Hedge	Schedule BA, D	Currency	MORGAN STANLEY CAPITAL SERVICES	07/17/2024	07/22/2024	07/22/2024	Maturity	0	129,184	1.486257322	0	0	(1,657)	0	0		0	0	0	(1,657)	0	0	0
REC 131633.54 USD PAY [181000.00] CAD /187237 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK	07/24/2024	10/25/2024	10/25/2024	Maturity	0	131,634	1.375029	0	0	1,422	0	0		0	0	0	1,422	0	0	0
REC 181000.00 CAD PAY [131317.38] USD /187238 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK	07/24/2024	07/25/2024	07/25/2024	Maturity	0	131,317	1.37834	0	0	(418)	0	0		0	0	0	(418)	0	0	0
REC 11277000.00 EUR PAY [12200135.22] USD /187333 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA	07/29/2024	07/31/2024	07/31/2024	Maturity	0	12,200,135	0.924334017	0	0	8,345	0	0		0	0	0	8,345	0	0	0
REC 12252225.94 USD PAY [11277000.00] EUR /187334 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA	07/29/2024	10/30/2024	10/30/2024	Maturity	0	12,252,226	0.920404352	0	0	8,787	0	0		0	0	0	8,787	0	0	0
REC 233117.42 USD PAY [356000.00] AUD /187359 ...	Asset Hedge	Schedule BA, D	Currency	WELLS FARGO BANK, N.A.	07/30/2024	10/31/2024	10/31/2024	Maturity	0	233,117	1.5271279	0	0	(1,131)	0	0		0	0	0	(1,131)	0	0	0
REC 356000.00 AUD PAY [232680.32] USD /187401 ...	Asset Hedge	Schedule BA, D	Currency	WELLS FARGO BANK, N.A.	07/30/2024	08/02/2024	08/02/2024	Maturity	0	232,680	1.529997124	0	0	(711)	0	0		0	0	0	(711)	0	0	0
REC 1500000.00 CAD PAY [1086212.78] USD /187412 ...	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A.	07/31/2024	07/31/2024	07/31/2024	Maturity	0	1,086,213	1.380945	0	0	237	0	0		0	0	0	237	0	0	0
REC 1086419.69 USD PAY [1500000.00] CAD /187413 ...	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A.	07/31/2024	08/07/2024	08/07/2024	Maturity	0	1,086,420	1.380682	0	0	(3,480)	0	0		0	0	0	(3,480)	0	0	0
REC 15912147.99 USD PAY [12391000.00] GBP /187440 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA	08/01/2024	11/04/2024	11/04/2024	Maturity	0	15,912,148	0.778713099	0	0	(136,675)	0	0		0	0	0	(136,675)	0	0	0
REC 12391000.00 GBP PAY [15898520.37] USD /187445 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA	08/01/2024	08/05/2024	08/05/2024	Maturity	0	15,898,520	0.779380704	0	0	(73,974)	0	0		0	0	0	(73,974)	0	0	0
REC 1847922.75 USD PAY [1455000.00] GBP /187540 ...	Asset Hedge	Schedule BA, D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	08/06/2024	11/04/2024	11/04/2024	Maturity	0	1,847,923	0.787370576	0	0	(36,593)	0	0		0	0	0	(36,593)	0	0	0
REC 1085060.73 USD PAY [1500000.00] CAD /187545 ...	Asset Hedge	Schedule BA, D	Currency	GOLDMAN SACHS INTERNATIONAL	08/06/2024	08/13/2024	08/13/2024	Maturity	0	1,085,061	1.382411	0	0	(9,339)	0	0		0	0	0	(9,339)	0	0	0
REC 1500000.00 CAD PAY [1084881.10] USD /187547 ...	Asset Hedge	Schedule BA, D	Currency	GOLDMAN SACHS INTERNATIONAL	08/06/2024	08/07/2024	08/07/2024	Maturity	0	1,084,881	1.38264	0	0	5,019	0	0		0	0	0	5,019	0	0	0
REC 1455000.00 GBP PAY [1846715.10] USD /187548 ...	Asset Hedge	Schedule BA, D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	08/06/2024	08/08/2024	08/08/2024	Maturity	0	1,846,715	0.787885473	0	0	6,955	0	0		0	0	0	6,955	0	0	0
REC 253374.56 USD PAY [190000.00] GBP /187619 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK	08/07/2024	10/02/2024	10/02/2024	Maturity	0	253,375	0.785398499	0	0	(10,519)	0	0		0	0	0	(10,519)	0	0	0
REC 189000.00 GBP PAY [253239.44] USD /187621 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK	08/07/2024	08/09/2024	08/09/2024	Maturity	0	253,239	0.785817565	0	0	625	0	0		0	0	0	625	0	0	0
REC 38238000.00 EUR PAY [39592178.32] USD /187848 ...	Asset Hedge	Schedule BA, D	Currency	BNP PARIBAS LONDON	08/12/2024	08/14/2024	08/14/2024	Maturity	0	39,592,178	0.915231279	0	0	310,905	0	0		0	0	0	310,905	0	0	0
REC 36665247.11 USD PAY [33418000.00] EUR /187849 ...	Asset Hedge	Schedule BA, D	Currency	BNP PARIBAS LONDON	08/12/2024	11/13/2024	11/13/2024	Maturity	0	36,665,247	0.911434954	0	0	1,375,839	0	0		0	0	0	1,375,839	0	0	0
REC 322113.41 USD PAY [441000.00] CAD /187936 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK	08/13/2024	11/14/2024	11/14/2024	Maturity	0	322,113	1.369083	0	0	8,518	0	0		0	0	0	8,518	0	0	0
REC 405000.00 CAD PAY [295041.12] USD /187937 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK	08/13/2024	08/14/2024	08/14/2024	Maturity	0	295,041	1.37269	0	0	163	0	0		0	0	0	163	0	0	0
REC 3225513.94 USD PAY [2518000.00] GBP /187940 ...	Asset Hedge	Schedule BA, D	Currency	BNP PARIBAS LONDON	08/13/2024	11/14/2024	11/14/2024	Maturity	0	3,225,514	0.780650485	0	0	37,726	0	0		0	0	0	37,726	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
REC 2388000.00 GBP PAY [3057022.08] USD /187942	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	08/13/2024	08/15/2024	08/15/2024	Maturity	0	3,057,022	0.781152356	0	0	11,558	0	0		0	0	0	11,558	0	0	
REC 279100.43 USD PAY [217000.00] GBP /188029	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	08/14/2024	11/04/2024	11/04/2024	Maturity	0	279,100	0.777497965	0	0	(1,958)	0	0		0	0	0	(1,958)	0	0	
REC 1672000.00 GBP PAY [2149055.04] USD /188033	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	08/14/2024	08/16/2024	08/16/2024	Maturity	0	2,149,055	0.778016369	0	0	11,169	0	0		0	0	0	11,169	0	0	
REC 8200000.00 AUD PAY [5425772.72] USD /188056	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIZ7FF32TIEFA76	08/14/2024	08/15/2024	08/15/2024	Maturity	0	5,425,773	1.511304558	0	0	(5,573)	0	0		0	0	0	(5,573)	0	0	
REC 5435460.20 USD PAY [8200000.00] AUD /188057	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIZ7FF32TIEFA76	08/14/2024	10/28/2024	10/28/2024	Maturity	0	5,435,460	1.508611911	0	0	37,400	0	0		0	0	0	37,400	0	0	
REC 8000000.00 AUD PAY [5291162.40] USD /188062	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	08/15/2024	08/20/2024	08/20/2024	Maturity	0	5,291,162	1.51195579	0	0	104,038	0	0		0	0	0	104,038	0	0	
REC 5299902.40 USD PAY [8000000.00] AUD /188063	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	08/15/2024	10/28/2024	10/28/2024	Maturity	0	5,299,902	1.509461303	0	0	33,502	0	0		0	0	0	33,502	0	0	
REC 5441000.00 AUD PAY [3598651.83] USD /188065	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	08/15/2024	08/20/2024	08/20/2024	Maturity	0	3,598,652	1.51195579	0	0	70,759	0	0		0	0	0	70,759	0	0	
REC 3896708.93 USD PAY [5880000.00] AUD /188072	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	08/15/2024	11/15/2024	11/15/2024	Maturity	0	3,896,709	1.50896476	0	0	96,465	0	0		0	0	0	96,465	0	0	
REC 274000.00 NZD PAY [166531.72] USD /188120	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIZ7FF32TIEFA76	08/19/2024	08/21/2024	08/21/2024	Maturity	0	166,532	1.645332193	0	0	2,143	0	0		0	0	0	2,143	0	0	
REC 166562.27 USD PAY [274000.00] NZD /188122	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIZ7FF32TIEFA76	08/19/2024	09/17/2024	09/17/2024	Maturity	0	166,562	1.645029051	0	0	(2,797)	0	0		0	0	0	(2,797)	0	0	
REC 936159.08 USD PAY [840000.00] EUR /188143	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	08/20/2024	11/21/2024	11/21/2024	Maturity	0	936,159	0.897283474	0	0	56,175	0	0		0	0	0	56,175	0	0	
REC 9597000.00 EUR PAY [10650646.57] USD /188144	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	08/20/2024	08/22/2024	08/22/2024	Maturity	0	10,650,847	0.901055136	0	0	11,420	0	0		0	0	0	11,420	0	0	
REC 840000.00 EUR PAY [932240.40] USD /188147	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	08/20/2024	08/22/2024	08/22/2024	Maturity	0	932,240	0.901055136	0	0	1,000	0	0		0	0	0	1,000	0	0	
REC 1806404.09 USD PAY [14414000.00] EUR /188148	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	08/20/2024	11/21/2024	11/21/2024	Maturity	0	16,064,044	0.897283474	0	0	963,938	0	0		0	0	0	963,938	0	0	
REC 497000.00 EUR PAY [553046.54] USD /188199	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	08/21/2024	08/22/2024	08/22/2024	Maturity	0	553,047	0.896658303	0	0	(880)	0	0		0	0	0	(880)	0	0	
REC 558525.25 USD PAY [500000.00] EUR /188200	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	08/21/2024	11/13/2024	11/13/2024	Maturity	0	558,525	0.895214274	0	0	30,525	0	0		0	0	0	30,525	0	0	
REC 3066000.00 EUR PAY [3421809.30] USD /188374	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ... 17331LVCZKQKX577XV54	08/26/2024	08/28/2024	08/28/2024	Maturity	0	3,421,809	0.896017204	0	0	(12,724)	0	0		0	0	0	(12,724)	0	0	
REC 3437338.00 USD PAY [3069000.00] EUR /188375	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ... 17331LVCZKQKX577XV54	08/26/2024	11/13/2024	11/13/2024	Maturity	0	3,437,338	0.892841996	0	0	196,474	0	0		0	0	0	196,474	0	0	
REC 387834.52 USD PAY [358000.00] EUR /188468	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ... 17331LVCZKQKX577XV54	08/28/2024	08/29/2024	08/29/2024	Maturity	0	397,835	0.899871318	0	0	1,278	0	0		0	0	0	1,278	0	0	
REC 358000.00 EUR PAY [399226.35] USD /188469	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ... 17331LVCZKQKX577XV54	08/28/2024	11/13/2024	11/13/2024	Maturity	0	399,226	0.89673472	0	0	(21,178)	0	0		0	0	0	(21,178)	0	0	
REC 12266731.40 USD PAY [11000000.00] EUR /188470	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ... 17331LVCZKQKX577XV54	08/28/2024	11/13/2024	11/13/2024	Maturity	0	12,266,731	0.89673472	0	0	650,731	0	0		0	0	0	650,731	0	0	
REC 11000000.00 EUR PAY [12224520.00] USD /188471	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ... 17331LVCZKQKX577XV54	08/28/2024	08/30/2024	08/30/2024	Maturity	0	12,224,520	0.899830832	0	0	(69,520)	0	0		0	0	0	(69,520)	0	0	
REC 266856.29 USD PAY [203000.00] GBP /188594	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO-DOMINION BANK P130B789TSUIDF371261	09/03/2024	10/02/2024	10/02/2024	Maturity	0	266,856	0.760709072	0	0	(2,342)	0	0		0	0	0	(2,342)	0	0	
REC 201000.00 GBP PAY [264158.92] USD /188595	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO-DOMINION BANK P130B789TSUIDF371261	09/03/2024	09/04/2024	09/04/2024	Maturity	0	264,159	0.760905874	0	0	35	0	0		0	0	0	35	0	0	
REC 15000000.00 AUD PAY [10087678.50] USD /188614	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	09/04/2024	09/09/2024	09/09/2024	Maturity	0	10,087,679	1.486982314	0	0	(96,179)	0	0		0	0	0	(96,179)	0	0	
REC 10097940.00 USD PAY [15000000.00] AUD /188615	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	09/04/2024	10/28/2024	10/28/2024	Maturity	0	10,097,940	1.485451488	0	0	223,440	0	0		0	0	0	223,440	0	0	
REC 3152000.00 EUR PAY [3483992.00] USD /188680	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	09/06/2024	09/10/2024	09/10/2024	Maturity	0	3,493,992	0.902119982	0	0	(21,118)	0	0		0	0	0	(21,118)	0	0	
REC 2965513.40 USD PAY [2665000.00] EUR /188682	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	09/06/2024	12/09/2024	12/09/2024	Maturity	0	2,965,513	0.898663956	0	0	153,672	0	0		0	0	0	153,672	0	0	
REC 1949258.30 USD PAY [1761000.00] EUR /188729	Asset Hedge	Schedule BA, D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ... 21G119DL770XOHC3ZE78	09/09/2024	11/13/2024	11/13/2024	Maturity	0	1,949,258	0.903420712	0	0	89,642	0	0		0	0	0	89,642	0	0	
REC 1744000.00 EUR PAY [192487.68] USD /188731	Asset Hedge	Schedule BA, D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ... 21G119DL770XOHC3ZE78	09/09/2024	09/11/2024	09/11/2024	Maturity	0	1,924,888	0.906026891	0	0	(4,395)	0	0		0	0	0	(4,395)	0	0	
REC 5752535.75 USD PAY [5194000.00] EUR /188860	Asset Hedge	Schedule BA, D	Currency.....	ROYAL BANK OF CANADA ES71P3U3RH1GCT1XBUI11	09/10/2024	12/13/2024	12/13/2024	Maturity	0	5,752,536	0.902906003	0	0	300,913	0	0		0	0	0	300,913	0	0	
REC 807916.96 USD PAY [618000.00] GBP /188861	Asset Hedge	Schedule BA, D	Currency.....	BARCLAYS BANK PLC . G5GSEFF7VJP5170UK5573	09/10/2024	12/09/2024	12/09/2024	Maturity	0	807,917	0.764930097	0	0	20,338	0	0		0	0	0	20,338	0	0	
REC 413000.00 GBP PAY [539712.53] USD /188866	Asset Hedge	Schedule BA, D	Currency.....	BARCLAYS BANK PLC . G5GSEFF7VJP5170UK5573	09/10/2024	09/12/2024	09/12/2024	Maturity	0	539,713	0.765222182	0	0	2,226	0	0		0	0	0	2,226	0	0	
REC 3929000.00 EUR PAY [4394197.77] USD /188867	Asset Hedge	Schedule BA, D	Currency.....	ROYAL BANK OF CANADA ES71P3U3RH1GCT1XBUI11	09/10/2024	09/12/2024	09/12/2024	Maturity	0	4,394,198	0.906511472	0	0	15,991	0	0		0	0	0	15,991	0	0	

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
REC 6882326.48 USD PAY [10059000.00] AUD /188927 ...	Asset Hedge	Schedule BA, D	Currency	MORGAN STANLEY CAPITAL SERVICES ..	09/11/2024	12/16/2024	12/16/2024	Maturity	0	6,682,326	1.505314513	0	0	273,738	0	0	0	0	0	0	273,738	0	0	0
REC 10059000.00 AUD PAY [6672366.06] USD /188928 ...	Asset Hedge	Schedule BA, D	Currency	MORGAN STANLEY CAPITAL SERVICES ..	09/11/2024	09/16/2024	09/16/2024	Maturity	0	6,672,366	1.507561173	0	0	118,465	0	0	0	0	0	0	118,465	0	0	0
REC 25232000.00 EUR PAY [27850829.28] USD /188941 ...	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC .	09/12/2024	09/16/2024	09/16/2024	Maturity	0	27,850,829	0.905969433	0	0	234,910	0	0	0	0	0	0	234,910	0	0	0
REC 27941796.76 USD PAY [25214000.00] EUR /188943 ...	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC .	09/12/2024	12/16/2024	12/16/2024	Maturity	0	27,941,797	0.902375594	0	0	1,444,404	0	0	0	0	0	0	1,444,404	0	0	0
REC 4201000.00 EUR PAY [4637315.86] USD /188945 ...	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A.	09/12/2024	09/16/2024	09/16/2024	Maturity	0	4,637,316	0.905911982	0	0	38,817	0	0	0	0	0	0	38,817	0	0	0
REC 5253872.40 USD PAY [8550000.00] NZD /188946 ...	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A.	09/12/2024	12/16/2024	12/16/2024	Maturity	0	5,253,872	1.62737108	0	0	313,682	0	0	0	0	0	0	313,682	0	0	0
REC 8747000.00 NZD PAY [5372797.52] USD /188948 ...	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A.	09/12/2024	09/17/2024	09/17/2024	Maturity	0	5,372,798	1.62801488	0	0	33,723	0	0	0	0	0	0	33,723	0	0	0
REC 4655788.50 USD PAY [4201000.00] EUR /188949 ...	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A.	09/12/2024	12/16/2024	12/16/2024	Maturity	0	4,655,789	0.902317784	0	0	240,958	0	0	0	0	0	0	240,958	0	0	0
REC 4683944.33 USD PAY [6997000.00] AUD /188977 ...	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC .	09/12/2024	12/16/2024	12/16/2024	Maturity	0	4,683,944	1.493826017	0	0	226,156	0	0	0	0	0	0	226,156	0	0	0
REC 3939000.00 GBP PAY [5177776.11] USD /189012 ...	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A.	09/13/2024	09/17/2024	09/17/2024	Maturity	0	5,177,776	0.760751318	0	0	4,372	0	0	0	0	0	0	4,372	0	0	0
REC 5179085.83 USD PAY [3939000.00] GBP /189013 ...	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A.	09/13/2024	12/16/2024	12/16/2024	Maturity	0	5,179,086	0.760558646	0	0	184,828	0	0	0	0	0	0	184,828	0	0	0
REC 1060000.00 EUR PAY [1175423.40] USD /189049 ...	Asset Hedge	Schedule BA, D	Currency	BNP PARIBAS LONDON	09/13/2024	09/17/2024	09/17/2024	Maturity	0	1,175,423	0.901802704	0	0	2,661	0	0	0	0	0	0	2,661	0	0	0
REC 1744000.00 EUR PAY [1940886.30] USD /189110 ...	Asset Hedge	Schedule BA, D	Currency	BNP PARIBAS LONDON	09/16/2024	09/24/2024	09/24/2024	Maturity	0	1,940,897	0.896553329	0	0	8,372	0	0	0	0	0	0	8,372	0	0	0
REC 18409284.58 USD PAY [1744000.00] EUR /189111 ...	Asset Hedge	Schedule BA, D	Currency	BNP PARIBAS LONDON	09/16/2024	09/17/2024	09/17/2024	Maturity	0	1,940,285	0.898836815	0	0	2,003	0	0	0	0	0	0	2,003	0	0	0
REC 233000.00 NZD PAY [144091.93] USD /189145 ...	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC .	09/17/2024	09/20/2024	09/20/2024	Maturity	0	144,092	1.617024029	0	0	1,486	0	0	0	0	0	0	1,486	0	0	0
REC 731000.00 GBP PAY [964488.71] USD /189146 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK	09/17/2024	09/19/2024	09/19/2024	Maturity	0	964,489	0.757914522	0	0	6,425	0	0	0	0	0	0	6,425	0	0	0
REC 964684.98 USD PAY [731000.00] GBP /189148 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK	09/17/2024	12/18/2024	12/18/2024	Maturity	0	964,685	0.757760031	0	0	46,257	0	0	0	0	0	0	46,257	0	0	0
REC 144749.52 USD PAY [234000.00] NZD /189149 ...	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC .	09/17/2024	12/16/2024	12/16/2024	Maturity	0	144,750	1.616584867	0	0	9,544	0	0	0	0	0	0	9,544	0	0	0
REC 44510654.16 USD PAY [3989000.00] EUR /189150 ...	Asset Hedge	Schedule BA, D	Currency	MORGAN STANLEY CAPITAL SERVICES ..	09/17/2024	12/18/2024	12/18/2024	Maturity	0	44,510,654	0.896189849	0	0	3,228,493	0	0	0	0	0	0	3,228,493	0	0	0
REC 39807000.00 EUR PAY [44368602.60] USD /189151 ...	Asset Hedge	Schedule BA, D	Currency	MORGAN STANLEY CAPITAL SERVICES ..	09/17/2024	09/19/2024	09/19/2024	Maturity	0	44,368,603	0.899442346	0	0	163,619	0	0	0	0	0	0	163,619	0	0	0
REC 1307167.04 USD PAY [8731000.00] DKK /189229 ...	Asset Hedge	Schedule BA, D	Currency	BANK OF AMERICA, N.A.	09/17/2024	12/20/2024	12/20/2024	Maturity	0	1,307,167	6.67933	0	0	86,573	0	0	0	0	0	0	86,573	0	0	0
REC 634000.00 EUR PAY [706022.40] USD /189276 ...	Asset Hedge	Schedule BA, D	Currency	SOCIETE GENERAL	09/19/2024	09/23/2024	09/23/2024	Maturity	0	706,022	0.897988506	0	0	(1,522)	0	0	0	0	0	0	(1,522)	0	0	0
REC 4638218.66 USD PAY [4153000.00] EUR /189277 ...	Asset Hedge	Schedule BA, D	Currency	SOCIETE GENERAL	09/19/2024	12/09/2024	12/09/2024	Maturity	0	4,638,219	0.89538661	0	0	256,388	0	0	0	0	0	0	256,388	0	0	0
REC 5809000.00 EUR PAY [6473665.78] USD /189330 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA	09/20/2024	09/24/2024	09/24/2024	Maturity	0	6,473,666	0.897327758	0	0	19,054	0	0	0	0	0	0	19,054	0	0	0
REC 15828662.41 USD PAY [14158000.00] EUR /189331 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA	09/20/2024	12/20/2024	12/20/2024	Maturity	0	15,828,662	0.894453583	0	0	1,063,284	0	0	0	0	0	0	1,063,284	0	0	0
REC 14165000.00 EUR PAY [15785759.30] USD /189332 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA	09/20/2024	09/24/2024	09/24/2024	Maturity	0	15,785,759	0.897327758	0	0	46,461	0	0	0	0	0	0	46,461	0	0	0
REC 6495334.76 USD PAY [5820000.00] EUR /189333 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA	09/20/2024	10/30/2024	10/30/2024	Maturity	0	6,495,335	0.896027641	0	0	176,561	0	0	0	0	0	0	176,561	0	0	0
REC 750000.00 EUR PAY [834697.50] USD /189452 ...	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A.	09/23/2024	09/25/2024	09/25/2024	Maturity	0	834,698	0.898529108	0	0	53	0	0	0	0	0	0	53	0	0	0
REC 14641000.00 EUR PAY [16383279.00] USD /189594 ...	Asset Hedge	Schedule BA, D	Currency	BNP PARIBAS LONDON	09/30/2024	10/02/2024	10/02/2024	Maturity	0	16,383,279	0.893655049	0	0	(210,830)	0	0	0	0	0	0	(210,830)	0	0	0
REC 4552680.63 USD PAY [3401000.00] GBP /189621 ...	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC .	09/30/2024	10/02/2024	10/02/2024	Maturity	0	4,552,681	0.747032414	0	0	42,615	0	0	0	0	0	0	42,615	0	0	0
REC 5195000.00 EUR PAY [5801380.40] USD /189632 ...	Asset Hedge	Schedule BA, D	Currency	BNP PARIBAS LONDON	09/30/2024	10/02/2024	10/02/2024	Maturity	0	5,801,360	0.895479619	0	0	(62,963)	0	0	0	0	0	0	(62,963)	0	0	0
REC 9450000.00 AUD PAY [6547149.00] USD /189664 ...	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A.	09/30/2024	10/02/2024	10/02/2024	Maturity	0	6,547,149	1.443376346	0	0	(41,769)	0	0	0	0	0	0	(41,769)	0	0	0
REC 6549769.49 USD PAY [9450000.00] AUD /189665 ...	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A.	09/30/2024	10/28/2024	10/28/2024	Maturity	0	6,549,769	1.442799493	0	0	328,834	0	0	0	0	0	0	328,834	0	0	0
REC 33761000.00 SEK PAY [33060772.83] USD /189693 ...	Asset Hedge	Schedule BA, D	Currency	MORGAN STANLEY CAPITAL SERVICES ..	10/01/2024	10/03/2024	10/03/2024	Maturity	0	33,060,773	10.2118	0	0	(312,603)	0	0	0	0	0	0	(312,603)	0	0	0
REC 22319000.00 EUR PAY [24729898.38] USD /189696 ...	Asset Hedge	Schedule BA, D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	10/01/2024	10/03/2024	10/03/2024	Maturity	0	24,729,898	0.902510785	0	0	(112,041)	0	0	0	0	0	0	(112,041)	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
REC 3974073.51 USD PAY [3597000.00] EUR /189779	Asset Hedge	Schedule BA, D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ... 21G119DL770XOHC3ZE78	10/01/2024	10/03/2024	10/03/2024	Maturity	0	3,974,074	0.905116624	0	0	6,583	0	0		0	0	0	6,583	0	0	0
REC 3597000.00 EUR PAY [3984785.38] USD /189791	Asset Hedge	Schedule BA, D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ... 21G119DL770XOHC3ZE78	10/01/2024	12/09/2024	12/09/2024	Maturity	0	3,984,785	0.902683498	0	0	(189,591)	0	0		0	0	0	(189,591)	0	0	0
REC 16291000.00 EUR PAY [17998459.71] USD /189900	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ... I7331LVCZKQKX5T7XV54	10/04/2024	10/04/2024	10/04/2024	Maturity	0	17,998,460	0.905133009	0	0	(143,524)	0	0		0	0	0	(143,524)	0	0	0
REC 673972.32 USD PAY [609000.00] EUR /189901	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ... I7331LVCZKQKX5T7XV54	10/02/2024	11/13/2024	11/13/2024	Maturity	0	673,972	0.903597856	0	0	30,868	0	0		0	0	0	30,868	0	0	0
REC 609000.00 EUR PAY [672829.29] USD /189902	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ... I7331LVCZKQKX5T7XV54	10/02/2024	10/04/2024	10/04/2024	Maturity	0	672,829	0.905133009	0	0	(5,365)	0	0		0	0	0	(5,365)	0	0	0
REC 159000.00 GBP PAY [208463.69] USD /189856	Asset Hedge	Schedule BA, D	Currency.....	BARCLAYS BANK PLC ... G6S6E7FVJP5170UK5573	10/04/2024	10/07/2024	10/07/2024	Maturity	0	208,464	0.762722982	0	0	(492)	0	0		0	0	0	(492)	0	0	0
REC 6281877.58 USD PAY [9250000.00] AUD /189863	Asset Hedge	Schedule BA, D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ... 21G119DL770XOHC3ZE78	10/04/2024	10/28/2024	10/28/2024	Maturity	0	6,281,878	1.472489479	0	0	192,603	0	0		0	0	0	192,603	0	0	0
REC 9250000.00 AUD PAY [6280010.00] USD /189864	Asset Hedge	Schedule BA, D	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ... 21G119DL770XOHC3ZE78	10/04/2024	10/09/2024	10/09/2024	Maturity	0	6,280,010	1.472927591	0	0	(67,710)	0	0		0	0	0	(67,710)	0	0	0
REC 4986000.00 EUR PAY [5471636.40] USD /190036	Asset Hedge	Schedule BA, D	Currency.....	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBUI1	10/08/2024	10/10/2024	10/10/2024	Maturity	0	5,471,636	0.91124476	0	0	(20,443)	0	0		0	0	0	(20,443)	0	0	0
REC 3138871.81 USD PAY [2875000.00] EUR /190133	Asset Hedge	Schedule BA, D	Currency.....	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBUI1	10/10/2024	11/13/2024	11/13/2024	Maturity	0	3,138,872	0.915933767	0	0	102,872	0	0		0	0	0	102,872	0	0	0
REC 2348000.00 EUR PAY [2560282.68] USD /190135	Asset Hedge	Schedule BA, D	Currency.....	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBUI1	10/10/2024	10/15/2024	10/15/2024	Maturity	0	2,560,283	0.917086234	0	0	(3,076)	0	0		0	0	0	(3,076)	0	0	0
REC 1226000.00 GBP PAY [1598164.56] USD /190137	Asset Hedge	Schedule BA, D	Currency.....	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBUI1	10/10/2024	10/15/2024	10/15/2024	Maturity	0	1,598,165	0.767130013	0	0	4,217	0	0		0	0	0	4,217	0	0	0
REC 44000.00 AUD PAY [29866.85] USD /190169	Asset Hedge	Schedule BA, D	Currency.....	WELLS FARGO BANK, N.A. ... KB1H1DSPRFMMJCUFX09	10/11/2024	10/17/2024	10/17/2024	Maturity	0	29,687	1.482138014	0	0	(233)	0	0		0	0	0	(233)	0	0	0
REC 5734960.20 USD PAY [8500000.00] AUD /190170	Asset Hedge	Schedule BA, D	Currency.....	WELLS FARGO BANK, N.A. ... KB1H1DSPRFMMJCUFX09	10/11/2024	10/17/2024	10/17/2024	Maturity	0	5,734,960	1.482138014	0	0	45,060	0	0		0	0	0	45,060	0	0	0
REC 356387.70 USD PAY [528000.00] AUD /190178	Asset Hedge	Schedule BA, D	Currency.....	WELLS FARGO BANK, N.A. ... KB1H1DSPRFMMJCUFX09	10/11/2024	11/15/2024	11/15/2024	Maturity	0	356,388	1.481531963	0	0	15,141	0	0		0	0	0	15,141	0	0	0
REC 8500000.00 AUD PAY [5715400.00] USD /190207	Asset Hedge	Schedule BA, D	Currency.....	BANK OF AMERICA, B4TYDEB6GMZ0031MB27	10/15/2024	10/17/2024	10/17/2024	Maturity	0	5,715,400	1.487209994	0	0	(25,500)	0	0		0	0	0	(25,500)	0	0	0
REC 978000.00 AUD PAY [658095.12] USD /190210	Asset Hedge	Schedule BA, D	Currency.....	BANK OF AMERICA, B4TYDEB6GMZ0031MB27	10/15/2024	12/16/2024	12/16/2024	Maturity	0	658,095	1.486107128	0	0	(35,011)	0	0		0	0	0	(35,011)	0	0	0
REC 356000.00 AUD PAY [238032.14] USD /190239	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUJSPUBMFR08K5P83	10/15/2024	10/31/2024	10/31/2024	Maturity	0	239,032	1.48933857	0	0	(4,784)	0	0		0	0	0	(4,784)	0	0	0
REC 56284.07 USD PAY [43000.00] GBP /190241	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUJSPUBMFR08K5P83	10/15/2024	11/14/2024	11/14/2024	Maturity	0	56,284	0.76425313	0	0	1,826	0	0		0	0	0	1,826	0	0	0
REC 5148349.38 USD PAY [4722000.00] EUR /190268	Asset Hedge	Schedule BA, D	Currency.....	WELLS FARGO BANK, N.A. ... KB1H1DSPRFMMJCUFX09	10/15/2024	10/17/2024	10/17/2024	Maturity	0	5,148,349	0.91718717	0	0	35,368	0	0		0	0	0	35,368	0	0	0
REC 3338360.00 USD PAY [5000000.00] AUD /190278	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO-DOMINION BANK PT3Q8789TSUIDF371261	10/16/2024	10/28/2024	10/28/2024	Maturity	0	3,338,360	1.497741406	0	0	46,860	0	0		0	0	0	46,860	0	0	0
REC 5000000.00 AUD PAY [3337850.00] USD /190279	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO-DOMINION BANK PT3Q8789TSUIDF371261	10/16/2024	10/18/2024	10/18/2024	Maturity	0	3,337,850	1.49797025	0	0	16,650	0	0		0	0	0	16,650	0	0	0
REC 14429849.45 USD PAY [13220000.00] EUR /190280	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ... I7331LVCZKQKX5T7XV54	10/16/2024	12/20/2024	12/20/2024	Maturity	0	14,429,849	0.916156139	0	0	642,711	0	0		0	0	0	642,711	0	0	0
REC 13333000.00 EUR PAY [14515103.78] USD /190281	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ... I7331LVCZKQKX5T7XV54	10/16/2024	10/18/2024	10/18/2024	Maturity	0	14,515,104	0.918560432	0	0	(27,466)	0	0		0	0	0	(27,466)	0	0	0
REC 691669.08 USD PAY [636000.00] EUR /190293	Asset Hedge	Schedule BA, D	Currency.....	GOLDMAN SACHS INTERNATIONAL ... W22LROIIP21HZNB86K528	10/16/2024	10/18/2024	10/18/2024	Maturity	0	691,669	0.919514864	0	0	591	0	0		0	0	0	591	0	0	0
REC 636000.00 EUR PAY [693173.38] USD /190294	Asset Hedge	Schedule BA, D	Currency.....	GOLDMAN SACHS INTERNATIONAL ... W22LROIIP21HZNB86K528	10/16/2024	12/09/2024	12/09/2024	Maturity	0	693,175	0.917517052	0	0	(22,132)	0	0		0	0	0	(22,132)	0	0	0
REC 5000000.00 EUR PAY [5439650.00] USD /190331	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES ... I7331LVCZKQKX5T7XV54	10/16/2024	10/18/2024	10/18/2024	Maturity	0	5,439,650	0.919176785	0	0	(6,650)	0	0		0	0	0	(6,650)	0	0	0
REC 150414.53 USD PAY [248000.00] NZD /190356	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. ES70DZIZ7F32TIEFA76	10/17/2024	12/16/2024	12/16/2024	Maturity	0	150,415	1.648777432	0	0	7,120	0	0		0	0	0	7,120	0	0	0
REC 3061000.00 GBP PAY [3978044.99] USD /190360	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUJSPUBMFR08K5P83	10/17/2024	10/21/2024	10/21/2024	Maturity	0	3,978,045	0.769473449	0	0	(4,867)	0	0		0	0	0	(4,867)	0	0	0
REC 3977907.86 USD PAY [3061000.00] GBP /190362	Asset Hedge	Schedule BA, D	Currency.....	BNP PARIBAS LONDON ROMUJSPUBMFR08K5P83	10/17/2024	12/09/2024	12/09/2024	Maturity	0	3,977,908	0.769500094	0	0	76,969	0	0		0	0	0	76,969	0	0	0
REC 158000.00 NZD PAY [95781.18] USD /190363	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. ES70DZIZ7F32TIEFA76	10/17/2024	10/21/2024	10/21/2024	Maturity	0	95,781	1.649593375	0	0	(523)	0	0		0	0	0	(523)	0	0	0
REC 116312.64 USD PAY [107000.00] EUR /190369	Asset Hedge	Schedule BA, D	Currency.....	WELLS FARGO BANK, N.A. ... KB1H1DSPRFMMJCUFX09	10/18/2024	11/13/2024	11/13/2024	Maturity	0	116,313	0.919934427	0	0	3,321	0	0		0	0	0	3,321	0	0	0
REC 245400.00 EUR PAY [2684970.38] USD /190400	Asset Hedge	Schedule BA, D	Currency.....	WELLS FARGO BANK, N.A. ... KB1H1DSPRFMMJCUFX09	10/18/2024	10/22/2024	10/22/2024	Maturity	0	2,664,970	0.920835751	0	0	(15,632)	0	0		0	0	0	(15,632)	0	0	0
REC 1411000.00 GBP PAY [1840466.07] USD /190409	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO-DOMINION BANK PT3Q8789TSUIDF371261	10/18/2024	10/22/2024	10/22/2024	Maturity	0	1,840,466	0.766653634	0	0	(8,988)	0	0		0	0	0	(8,988)	0	0	0
REC 10530000.00 AUD PAY [7038992.26] USD /190582	Asset Hedge	Schedule BA, D	Currency.....	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBUI1	10/22/2024	10/25/2024	10/25/2024	Maturity	0	7,038,992	1.495953446	0	0	(76,556)	0	0		0	0	0	(76,556)	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
REC 54900000.00 AUD PAY [36407363.22] USD /190617 ...	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC . G5GSEF7VJP5170UK5573	10/23/2024	10/28/2024	10/28/2024	Maturity	0	36,407,363	1.507936269	0	0	(266,693)	0	0		0	0	0	(266,693)	0	0	0
REC 181000.00 CAD PAY [130980.98] USD /190654 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	10/24/2024	10/25/2024	10/25/2024	Maturity	0	130,981	1.38188	0	0	(770)	0	0		0	0	0	(770)	0	0	0
REC 3515385.66 USD PAY [3252000.00] EUR /190672 ...	Asset Hedge	Schedule BA, D	Currency	BNP PARIBAS LONDON ROMUNISFPUBMR08K5P83	10/24/2024	11/13/2024	11/13/2024	Maturity	0	3,515,386	0.925076226	0	0	81,274	0	0		0	0	0	81,274	0	0	0
REC 766000.00 EUR PAY [827448.52] USD /190673 ...	Asset Hedge	Schedule BA, D	Currency	BNP PARIBAS LONDON ROMUNISFPUBMR08K5P83	10/24/2024	10/28/2024	10/28/2024	Maturity	0	827,449	0.92573735	0	0	751	0	0		0	0	0	751	0	0	0
REC 6600000.00 AUD PAY [4380486.00] USD /190708 ...	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A. ES70DZIZ7FF32TIEFA76	10/25/2024	10/29/2024	10/29/2024	Maturity	0	4,380,486	1.506682135	0	0	(50,226)	0	0		0	0	0	(50,226)	0	0	0
REC 13333000.00 EUR PAY [14431216.54] USD /190719 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	10/25/2024	12/20/2024	12/20/2024	Maturity	0	14,431,217	0.923900189	0	0	(526,231)	0	0		0	0	0	(526,231)	0	0	0
REC 19799823.33 USD PAY [18333000.00] EUR /190720 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	10/25/2024	10/29/2024	10/29/2024	Maturity	0	19,799,823	0.925917353	0	0	(25,483)	0	0		0	0	0	(25,483)	0	0	0
REC 4500000.00 AUD PAY [2972744.10] USD /190728 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK PT3QB789TSUIDF371261	10/28/2024	10/31/2024	10/31/2024	Maturity	0	2,972,744	1.513752441	0	0	(11,744)	0	0		0	0	0	(11,744)	0	0	0
REC 17097000.00 EUR PAY [18501005.64] USD /190740 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK PT3QB789TSUIDF371261	10/28/2024	10/30/2024	10/30/2024	Maturity	0	18,501,006	0.924111928	0	0	61,207	0	0		0	0	0	61,207	0	0	0
REC 685341.46 USD PAY [1144000.00] NZD /190777 ...	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC . G5GSEF7VJP5170UK5573	10/28/2024	10/31/2024	10/31/2024	Maturity	0	685,341	1.669240078	0	0	1,573	0	0		0	0	0	1,573	0	0	0
REC 1143000.00 NZD PAY [685010.19] USD /190778 ...	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC . G5GSEF7VJP5170UK5573	10/28/2024	12/16/2024	12/16/2024	Maturity	0	685,010	1.668588324	0	0	(24,585)	0	0		0	0	0	(24,585)	0	0	0
REC 12391000.00 GBP PAY [16067801.76] USD /190913 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK PT3QB789TSUIDF371261	11/04/2024	11/04/2024	11/04/2024	Maturity	0	16,067,602	0.771178886	0	0	(18,779)	0	0		0	0	0	(18,779)	0	0	0
REC 1500000.00 NZD PAY [998076.75] USD /190927 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK PT3QB789TSUIDF371261	11/04/2024	11/07/2024	11/07/2024	Maturity	0	899,077	1.668376753	0	0	4,223	0	0		0	0	0	4,223	0	0	0
REC 685924.67 USD PAY [1144000.00] NZD /190928 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK PT3QB789TSUIDF371261	11/04/2024	12/16/2024	12/16/2024	Maturity	0	685,925	1.667820242	0	0	24,921	0	0		0	0	0	24,921	0	0	0
REC 56582000.00 EUR PAY [60871040.08] USD /191208 ...	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A. ES70DZIZ7FF32TIEFA76	11/08/2024	11/13/2024	11/13/2024	Maturity	0	60,871,040	0.929539079	0	0	(1,120,448)	0	0		0	0	0	(1,120,448)	0	0	0
REC 2087000.00 EUR PAY [2216493.87] USD /191275 ...	Asset Hedge	Schedule BA, D	Currency	BNP PARIBAS LONDON ROMUNISFPUBMR08K5P83	11/12/2024	11/13/2024	11/13/2024	Maturity	0	2,216,494	0.941577029	0	0	(12,622)	0	0		0	0	0	(12,622)	0	0	0
REC 6408000.00 AUD PAY [4190355.89] USD /191290 ...	Asset Hedge	Schedule BA, D	Currency	BNP PARIBAS LONDON ROMUNISFPUBMR08K5P83	11/12/2024	11/15/2024	11/15/2024	Maturity	0	4,190,356	1.529225019	0	0	(48,865)	0	0		0	0	0	(48,865)	0	0	0
REC 2561000.00 GBP PAY [3279334.89] USD /191328 ...	Asset Hedge	Schedule BA, D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE 21G119DL770X0HC3ZE78	11/12/2024	11/14/2024	11/14/2024	Maturity	0	3,279,335	0.780951042	0	0	(37,109)	0	0		0	0	0	(37,109)	0	0	0
REC 441000.00 CAD PAY [315437.11] USD /191386 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK PT3QB789TSUIDF371261	11/13/2024	11/14/2024	11/14/2024	Maturity	0	315,437	1.39806	0	0	(1,842)	0	0		0	0	0	(1,842)	0	0	0
REC 39820000.00 GBP PAY [50601663.20] USD /191413 ...	Asset Hedge	Schedule BA, D	Currency	BARCLAYS BANK PLC . G5GSEF7VJP5170UK5573	11/13/2024	11/15/2024	11/15/2024	Maturity	0	50,601,663	0.786930656	0	0	(316,967)	0	0		0	0	0	(316,967)	0	0	0
REC 681000.00 EUR PAY [719408.40] USD /191425 ...	Asset Hedge	Schedule BA, D	Currency	WELLS FARGO BANK, N.A. KB1H1DSPPRMYMCUFXT09	11/18/2024	11/20/2024	11/20/2024	Maturity	0	719,408	0.946611132	0	0	(1,566)	0	0		0	0	0	(1,566)	0	0	0
REC 321724.43 USD PAY [548000.00] NZD /191430 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	11/18/2024	12/16/2024	12/16/2024	Maturity	0	321,724	1.706429314	0	0	4,512	0	0		0	0	0	4,512	0	0	0
REC 549000.00 NZD PAY [321637.14] USD /191431 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	11/18/2024	11/20/2024	11/20/2024	Maturity	0	321,637	1.706892432	0	0	900	0	0		0	0	0	900	0	0	0
REC 137000.00 AUD PAY [88663.66] USD /191432 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK PT3QB789TSUIDF371261	11/18/2024	11/20/2024	11/20/2024	Maturity	0	88,664	1.545165178	0	0	427	0	0		0	0	0	427	0	0	0
REC 15265627.11 USD PAY [14404000.00] EUR /191464 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	11/19/2024	12/20/2024	12/20/2024	Maturity	0	15,265,627	0.943557343	0	0	243,696	0	0		0	0	0	243,696	0	0	0
REC 840000.00 EUR PAY [889215.60] USD /191467 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	11/19/2024	11/21/2024	11/21/2024	Maturity	0	889,216	0.944652793	0	0	(9,232)	0	0		0	0	0	(9,232)	0	0	0
REC 14404000.00 EUR PAY [15247830.36] USD /191524 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	11/19/2024	11/21/2024	11/21/2024	Maturity	0	15,247,830	0.944652793	0	0	(158,300)	0	0		0	0	0	(158,300)	0	0	0
REC 270000.00 EUR PAY [284245.20] USD /191685 ...	Asset Hedge	Schedule BA, D	Currency	WELLS FARGO BANK, N.A. KB1H1DSPPRMYMCUFXT09	11/21/2024	11/25/2024	11/25/2024	Maturity	0	284,245	0.949884114	0	0	(934)	0	0		0	0	0	(934)	0	0	0
REC 1255000.00 EUR PAY [1307421.35] USD /191697 ...	Asset Hedge	Schedule BA, D	Currency	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	11/22/2024	11/26/2024	11/26/2024	Maturity	0	1,307,421	0.959904777	0	0	8,446	0	0		0	0	0	8,446	0	0	0
REC 26250000.00 EUR PAY [27337158.88] USD /191714 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK PT3QB789TSUIDF371261	11/22/2024	12/16/2024	12/16/2024	Maturity	0	27,337,157	0.96023107	0	0	248,968	0	0		0	0	0	248,968	0	0	0
REC 409360.00 AUD PAY [268833.13] USD /191757 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK PT3QB789TSUIDF371261	11/25/2024	11/27/2024	11/27/2024	Maturity	0	266,833	1.534142338	0	0	(913)	0	0		0	0	0	(913)	0	0	0
REC 266892.25 USD PAY [408360.00] AUD /191758 ...	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK PT3QB789TSUIDF371261	11/25/2024	12/16/2024	12/16/2024	Maturity	0	266,862	1.533859959	0	0	6,079	0	0		0	0	0	6,079	0	0	0
REC 604000.00 EUR PAY [634266.44] USD /191760 ...	Asset Hedge	Schedule BA, D	Currency	SOCIETE GENERAL CQRNE81BXP4R0TB8PU41	11/25/2024	11/27/2024	11/27/2024	Maturity	0	634,266	0.95228119	0	0	3,799	0	0		0	0	0	3,799	0	0	0
REC 15000000.00 AUD PAY [9758000.00] USD /191761 ...	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A. ES70DZIZ7FF32TIEFA76	11/25/2024	11/27/2024	11/27/2024	Maturity	0	9,759,000	1.53704273	0	0	(15,000)	0	0		0	0	0	(15,000)	0	0	0

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
REC 3879000.00 GBP PAY [4655585.33] USD /191990 REC 2585000.00 EUR PAY [2730685.43] USD /191992	Asset Hedge	Schedule BA, D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE THE TORONTO-DOMINION	21G119D1770XOHC3ZE78	11/27/2024	12/09/2024	12/09/2024	Maturity	0	4,655,595	0.790232099	0	32,922	0	0		0	0	0	32,922	0	0	
REC 14006000.00 GBP PAY [17751532.14] USD /192013 REC 6900000.00 AUD PAY [4458061.02] USD /192045	Asset Hedge	Schedule BA, D	Currency	BANK THE TORONTO-DOMINION	PT3Q8789TSU1DF371261	11/27/2024	12/09/2024	12/09/2024	Maturity	0	2,730,685	0.946648769	0	(3,252)	0	0		0	0	0	(3,252)	0	0	
REC 26250000.00 EUR PAY [27764522.63] USD /192088 REC 8000000.00 GBP PAY [10211164.00] USD /192275	Asset Hedge	Schedule BA, D	Currency	BANK THE TORONTO-DOMINION	PT3Q8789TSU1DF371261	12/03/2024	12/04/2024	12/04/2024	Maturity	0	17,751,532	0.789002567	0	38,889	0	0		0	0	0	38,889	0	0	
REC 5194000.00 EUR PAY [5457647.44] USD /192278 REC 1088114.22 USD PAY [1036000.00] EUR /192295	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A.	E570DZIZ7FF32TWEFA76	12/09/2024	12/10/2024	12/10/2024	Maturity	0	4,458,061	1.547757609	0	(57,241)	0	0		0	0	0	(57,241)	0	0	
REC 3839000.00 GBP PAY [5028184.71] USD /192308 REC 6398454.46] USD /192324	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A.	E570DZIZ7FF32TWEFA76	12/09/2024	12/16/2024	12/16/2024	Maturity	0	27,764,523	0.945451245	0	(178,398)	0	0		0	0	0	(178,398)	0	0	
REC 4518000.00 EUR PAY [4738673.58] USD /192345 REC 9582000.00 NZD PAY [5545206.89] USD /192366	Asset Hedge	Schedule BA, D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	21G119D1770XOHC3ZE78	12/11/2024	12/11/2024	12/11/2024	Maturity	0	10,211,164	0.783455918	0	(11,964)	0	0		0	0	0	(11,964)	0	0	
REC 321000.00 GBP PAY [409711.56] USD /192406 REC 1986000.00 EUR PAY [2087629.38] USD /192407	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A.	E570DZIZ7FF32TWEFA76	12/11/2024	12/13/2024	12/13/2024	Maturity	0	5,457,647	0.951692109	0	(6,025)	0	0		0	0	0	(6,025)	0	0	
REC 45145000.00 SEK PAY [4115698.11] USD /192421 REC 26250000.00 EUR PAY [27539925.00] USD /192440	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A.	E570DZIZ7FF32TWEFA76	12/11/2024	12/16/2024	12/16/2024	Maturity	0	1,088,114	0.952106202	0	(618)	0	0		0	0	0	(618)	0	0	
REC 6428000.00 AUD PAY [4113598.60] USD /192442 REC 731000.00 GBP PAY [925467.93] USD /192549	Asset Hedge	Schedule BA, D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	21G119D1770XOHC3ZE78	12/11/2024	12/16/2024	12/16/2024	Maturity	0	5,028,185	0.783384111	0	(33,927)	0	0		0	0	0	(33,927)	0	0	
REC 28056000.00 EUR PAY [30517481.93] USD /192590 REC 38890000.00 EUR PAY [41898062.60] USD /192592	Asset Hedge	Schedule BA, D	Currency	BANK THE TORONTO-DOMINION	PT3Q8789TSU1DF371261	12/11/2024	12/16/2024	12/16/2024	Maturity	0	6,398,454	1.572097162	0	10,134	0	0		0	0	0	10,134	0	0	
REC 12145000.00 EUR PAY [12756865.10] USD /192627 REC 1302000.00 EUR PAY [1368374.14] USD /192656	Asset Hedge	Schedule BA, D	Currency	CANADIAN IMPERIAL BANK OF COMMERCE	21G119D1770XOHC3ZE78	12/11/2024	12/16/2024	12/16/2024	Maturity	0	4,738,674	0.953431543	0	9,293	0	0		0	0	0	9,293	0	0	
REC 415000.00 NZD PAY [239091.42] USD /192662 REC 1633115.36 USD PAY [1556000.00] EUR /192666	Asset Hedge	Schedule BA, D	Currency	BANK THE TORONTO-DOMINION	PT3Q8789TSU1DF371261	12/11/2024	12/16/2024	12/16/2024	Maturity	0	5,545,207	1.727978214	0	(8,727)	0	0		0	0	0	(8,727)	0	0	
REC 2852865.00 USD PAY [4500000.00] AUD /192702 REC 28449000.00 EUR PAY [29865475.71] USD /192789	Asset Hedge	Schedule BA, D	Currency	WELLS FARGO BANK, N.A.	KB1H1DSPPRFMMJCUFX09	12/11/2024	12/16/2024	12/16/2024	Maturity	0	2,087,629	0.951318194	0	(542)	0	0		0	0	0	(542)	0	0	
REC 8731000.00 DKK PAY [1228405.13] USD /192808 REC 326000.00 EUR PAY [341872.94] USD /192832	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK	PT3Q8789TSU1DF371261	12/11/2024	12/16/2024	12/16/2024	Maturity	0	4,115,698	10.968978	0	15,069	0	0		0	0	0	15,069	0	0	
REC 30000000.00 GBP PAY [37765458.00] USD /192877 REC 22690346.11 USD PAY [18041000.00] GBP /192894	Asset Hedge	Schedule BA, D	Currency	CITIBANK N.A.	E570DZIZ7FF32TWEFA76	12/12/2024	12/16/2024	12/16/2024	Maturity	0	27,539,925	0.953161637	0	46,200	0	0		0	0	0	46,200	0	0	
REC 1000000.00 AUD PAY [620470.00] USD /193087 REC 39608540.00 USD PAY [38000000.00] EUR /193093	Asset Hedge	Schedule BA, D	Currency	THE TORONTO-DOMINION BANK	PT3Q8789TSU1DF371261	12/12/2024	12/16/2024	12/16/2024	Maturity	0	4,113,599	1.56262208	0	(18,320)	0	0		0	0	0	(18,320)	0	0	
1439999999. Subtotal - Forwards - Hedging Other												0	0	3,118,644	0	0	XXX	4,320,492	0	0	3,118,644	0	0	XXX
1479999999. Subtotal - Forwards												0	0	3,118,644	0	0	XXX	4,320,492	0	0	3,118,644	0	0	XXX
1509999999. Subtotal - SSAP No. 108 Adjustments												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
1689999999. Subtotal - Hedging Effective Excluding Variable Annuity Guarantees Under SSAP No.108												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
1699999999. Subtotal - Hedging Effective Variable Annuity Guarantees Under SSAP No.108												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
1709999999. Subtotal - Hedging Other												531,165,309	0	994,549,506	717,469,177	0	XXX	12,795,957	0	(260,848,917)	994,889,862	0	0	XXX

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART A - SECTION 2

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Terminated During Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule / Exhibit Identifier	Type(s) of Risk(s) (a)	Exchange, Counterparty or Central Clearinghouse	Trade Date	Date of Maturity or Expiration	Termination Date	Indicate Exercise, Expiration, Maturity or Sale	Number of Contracts	Notional Amount	Strike Price, Rate or Index Received (Paid)	Cumulative Prior Year(s) Initial Cost of Un-discounted Premium (Received) Paid	Current Year Initial Cost of Un-discounted Premium (Received) Paid	Consideration Received (Paid) on Termination	Current Year Income	Book/ Adjusted Carrying Value	Code	Unrealized Valuation Increase/ (Decrease)	Total Foreign Exchange Change in B./A.C.V.	Current Year's (Amortization)/ Accretion	Gain (Loss) on Termination Recognized	Adjustment to Carrying Value of Hedged Item	Gain (Loss) on Termination Deferred	Hedge Effectiveness at Inception and at Termination (b)
1719999999. Subtotal - Replication												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
1729999999. Subtotal - Income Generation												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
1739999999. Subtotal - Other												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
1749999999. Subtotal - Adjustments for SSAP No. 108 Derivatives												0	0	0	0	0	XXX	0	0	0	0	0	0	XXX
1759999999 - Totals												531,165,309	0	994,549,506	717,469,177	0	XXX	12,795,957	0	(260,848,917)	994,889,862	0	0	XXX

(a)

Code	Description of Hedged Risk(s)
(BLANK)	

(b)

Code	Financial or Economic Impact of the Hedge at the End of the Reporting Period
.....	

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART B - SECTION 1

Futures Contracts Open December 31 of Current Year																					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	Highly Effective Hedges			18	19	20	21	22
Ticker Symbol	Number of Contracts	Notional Amount	Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Date of Maturity or Expiration	Exchange	Trade Date	Transaction Price	Reporting Date Price	Fair Value	Book/ Adjusted Carrying Value	15 Cumulative Variation Margin	16 Deferred Variation Margin	17 Change in Variation Margin Gain (Loss) Used to Adjust Basis of Hedged Item	Cumulative Variation Margin for All Other Hedges	Change in Variation Margin Gain (Loss) Recognized in Current Year	Potential Exposure	Hedge Effectiveness at Inception and at Year-end (b)	Value of One (1) Point
NONE																				XXX	XXX
1759999999 - Totals																					

NONE														Beginning Cash Balance		Cumulative Cash Change		Ending Cash Balance	
Total Net Cash Deposits																			

(a)	Code	Description of Hedged Risk(s)																			

(b)	Code	Financial or Economic Impact of the Hedge at the End of the Reporting Period																			

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART B - SECTION 2

Future Contracts Terminated December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Change in Variation Margin			19	20
															16	17	18		
Ticker Symbol	Number of Contracts	Notional Amount	Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Date of Maturity or Expiration	Exchange	Trade Date	Transaction Price	Termination Date	Termination Price	Indicate Exercise, Expiration, Maturity or Sale	Cumulative Variation Margin at Termination	Gain (Loss) Recognized in Current Year	Gain (Loss) Used to Adjust Basis of Hedged Item	Deferred	Hedge Effective-ness at Inception and at Termination (b)	Value of One (1) Point
TYH4	120	12,000,000	Long /US 10Y NOTE FUTURE II /179247	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/27/2023	108.7751	.01/02/2024	112.3281	 Sale	425,707	(67,829)	0	0		1,000
TUH4	70	14,000,000	Long /US 2YR NOTE FUTURE II /179241	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/27/2023	101.8242	.01/02/2024	102.7969	 Sale	135,818	(22,598)	0	0		2,000
FVH4	257	25,700,000	Long /US 5YR NOTE FUTURE II /179236	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/27/2023	106.0703	.01/02/2024	108.3750	 Sale	590,987	(103,059)	0	0		1,000
TUH4	28	5,600,000	Long /US 2YR NOTE FUTURE II /179241	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/27/2023	101.8242	.01/08/2024	102.6523	 Sale	46,230	(17,137)	0	0		2,000
FVH4	195	19,500,000	Long /US 5YR NOTE FUTURE II /179236	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/27/2023	106.0703	.01/08/2024	107.9453	 Sale	364,623	(161,988)	0	0		1,000
TUH4	17	3,400,000	Long /US 2YR NOTE FUTURE II /179241	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/27/2023	101.8242	.01/09/2024	102.7070	 Sale	29,928	(8,545)	0	0		2,000
TUH4	53	10,600,000	Long /US 2YR NOTE FUTURE II /179269	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/29/2023	102.3711	.01/09/2024	102.7070	 Sale	35,333	(26,640)	0	0		2,000
TYH4	435	43,500,000	Long /US 10Y NOTE FUTURE II /179247	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/27/2023	108.7751	.01/10/2024	112.1094	 Sale	1,448,054	(341,016)	0	0		1,000
TUH4	34	6,800,000	Long /US 2YR NOTE FUTURE II /179269	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/29/2023	102.3711	.01/10/2024	102.7578	 Sale	26,121	(13,635)	0	0		2,000
TUH4	108	21,600,000	Long /US 2YR NOTE FUTURE II /179795	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.12/18/2023	102.6836	.01/10/2024	102.7578	 Sale	15,472	(43,312)	0	0		2,000
FVH4	155	15,500,000	Long /US 5YR NOTE FUTURE II /179236	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/27/2023	106.0703	.01/10/2024	108.2500	 Sale	337,057	(81,531)	0	0		1,000
TYH4	657	65,700,000	Long /US 10Y NOTE FUTURE II /179247	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/27/2023	108.7751	.01/16/2024	112.2188	 Sale	2,258,937	(443,176)	0	0		1,000
TUH4	24	4,800,000	Long /US 2YR NOTE FUTURE II /179795	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.12/18/2023	102.6836	.01/16/2024	103.0234	 Sale	16,187	3,124	0	0		2,000
TUH4	19	3,800,000	Long /US 2YR NOTE FUTURE II /179964	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.12/20/2023	102.8281	.01/16/2024	103.0234	 Sale	7,324	2,473	0	0		2,000
FVH4	329	32,900,000	Long /US 5YR NOTE FUTURE II /179236	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/27/2023	106.0703	.01/16/2024	108.5313	 Sale	807,978	(80,509)	0	0		1,000
TYH4	74	7,400,000	Long /US 10Y NOTE FUTURE II /179247	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/27/2023	108.7751	.01/17/2024	111.4844	 Sale	200,086	(104,262)	0	0		1,000
TUH4	29	5,800,000	Long /US 2YR NOTE FUTURE II /179964	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.12/20/2023	102.8281	.01/17/2024	102.7266	 Sale	(6,036)	(13,440)	0	0		2,000
TYH4	217	21,700,000	Long /US 10Y NOTE FUTURE II /179247	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/27/2023	108.7751	.01/18/2024	111.3125	 Sale	549,435	(343,043)	0	0		1,000
TYH4	365	36,500,000	Long /US 10Y NOTE FUTURE II /179270	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/29/2023	110.3281	.01/18/2024	111.3125	 Sale	357,320	(577,008)	0	0		1,000
FVH4	246	24,600,000	Long /US 5YR NOTE FUTURE II /179236	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/27/2023	106.0703	.01/18/2024	107.8359	 Sale	433,073	(231,266)	0	0		1,000
FVH4	175	17,500,000	Long /US 5YR NOTE FUTURE II /179236	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/27/2023	106.0703	.01/22/2024	107.8759	 Sale	315,081	(157,519)	0	0		1,000
TYH4	203	20,300,000	Long /US 10Y NOTE FUTURE II /179270	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/29/2023	110.3281	.01/24/2024	111.5781	 Sale	252,646	(266,995)	0	0		1,000
FVH4	103	10,300,000	Long /US 5YR NOTE FUTURE II /179236	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/27/2023	106.0703	.01/24/2024	107.9844	 Sale	196,623	(81,536)	0	0		1,000
TYH4	18	1,800,000	Long /US 10Y NOTE FUTURE II /179270	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/29/2023	110.3281	.01/25/2024	111.1563	 Sale	14,810	(31,267)	0	0		1,000
TUH4	35	7,000,000	Long /US 2YR NOTE FUTURE II /179964	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.12/20/2023	102.8281	.01/25/2024	102.5742	 Sale	(17,953)	(26,888)	0	0		2,000
TUH4	9	1,800,000	Long /US 2YR NOTE FUTURE II /180674	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.01/11/2024	102.8945	.01/25/2024	102.5742	 Sale	(5,812)	(5,812)	0	0		2,000
FVH4	68	6,800,000	Long /US 5YR NOTE FUTURE II /179236	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/27/2023	106.0703	.01/25/2024	107.6741	 Sale	108,709	(74,930)	0	0		1,000
FVH4	152	15,200,000	Long /US 5YR NOTE FUTURE II /179272	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/29/2023	107.2109	.01/25/2024	107.6741	 Sale	69,625	(167,490)	0	0		1,000
TYH4	122	12,200,000	Long /US 10Y NOTE FUTURE II /179270	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.11/29/2023	110.3281	.01/26/2024	111.4041	 Sale	130,608	(181,688)	0	0		1,000

SCHEDULE DB - PART B - SECTION 2

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Change in Variation Margin			19	20
															16	17	18		
Ticker Symbol	Number of Contracts	Notional Amount	Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Date of Maturity or Expiration	Exchange	Trade Date	Transaction Price	Termination Date	Termination Price	Indicate Exercise, Expiration, Maturity or Sale	Cumulative Variation Margin at Termination	Gain (Loss) Recognized in Current Year	Gain (Loss) Used to Adjust Basis of Hedged Item	Deferred	Hedge Effective-ness at Inception and at Termination (b)	Value of One (1) Point
TUH4	79	15,800,000	Long /US 2YR NOTE FUTURE II /180674 Long /US 5YR NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	01/11/2024	102.8945	01/26/2024	102.6875	Sale	(33,112)	(33,112)	0	0		2,000
FVH4	147	14,700,000	Long /US 1/179272 Long /US 10Y NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	11/29/2023	107.2109	01/26/2024	107.9141	Sale	102,615	(126,700)	0	0		1,000
TYH4	358	35,800,000	FUTURE II /179270 Long /US 5YR NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	11/29/2023	110.3281	01/29/2024	111.4375	Sale	395,218	(521,193)	0	0		1,000
FVH4	305	30,500,000	FUTURE II /179272 Long /US 10Y NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	11/29/2023	107.2109	01/29/2024	107.8906	Sale	205,741	(270,049)	0	0		1,000
TYH4	75	7,500,000	Long /US 10Y NOTE Long /US 5YR NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	11/29/2023	110.3281	01/30/2024	111.6250	Sale	96,860	(95,126)	0	0		1,000
FVH4	116	11,600,000	FUTURE II /179272 Long /US 10Y NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	11/29/2023	107.2109	01/30/2024	107.9531	Sale	85,499	(95,457)	0	0		1,000
TYH4	368	36,800,000	FUTURE II /179270 Long /US 5YR NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	11/29/2023	110.3281	01/31/2024	112.3594	Sale	745,516	(196,492)	0	0		1,000
FVH4	400	40,000,000	FUTURE II /179272 Long /US 10Y NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	11/29/2023	107.2109	01/31/2024	108.4453	Sale	491,704	(132,283)	0	0		1,000
TYH4	396	39,600,000	FUTURE II /179270 Long /US 5YR NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	11/29/2023	110.3281	02/01/2024	112.6719	Sale	925,991	(87,692)	0	0		1,000
FVH4	316	31,600,000	FUTURE II /179272 Long /US 5YR NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	11/29/2023	107.2109	02/01/2024	108.6094	Sale	440,302	(52,648)	0	0		1,000
FVH4	168	16,800,000	FUTURE II /179272 Long /US 5YR NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	11/29/2023	107.2109	02/02/2024	107.9609	Sale	125,136	(136,938)	0	0		1,000
FVH4	303	30,300,000	FUTURE II /179272 Long /US 5YR NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	11/29/2023	107.2109	02/07/2024	107.5547	Sale	102,614	(370,056)	0	0		1,000
FVH4	13	1,300,000	FUTURE II /179796 Long /US 10Y NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	12/18/2023	108.2785	02/07/2024	107.5547	Sale	(9,476)	(15,877)	0	0		1,000
TYH4	141	14,100,000	FUTURE II /179270 Long /US 5YR NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	11/29/2023	110.3281	02/09/2024	110.7656	Sale	60,920	(300,012)	0	0		1,000
FVH4	158	15,800,000	FUTURE II /179796 Long /US 10Y NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	12/18/2023	108.2785	02/09/2024	107.2656	Sale	(160,850)	(238,644)	0	0		1,000
TYH4	175	17,500,000	FUTURE II /179270 Long /US 10Y NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	11/29/2023	110.3281	02/14/2024	109.9351	Sale	(69,727)	(517,693)	0	0		1,000
TYH4	296	29,600,000	FUTURE II /179797 Long /US 5YR NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/28/2024	CBOT	12/18/2023	112.2813	02/14/2024	109.9351	Sale	(696,085)	(875,641)	0	0		1,000
FVH4	736	73,600,0																	

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART B - SECTION 2

Future Contracts Terminated December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Change in Variation Margin			19	20
															16	17	18		
Ticker Symbol	Number of Contracts	Notional Amount	Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Date of Maturity or Expiration	Exchange	Trade Date	Transaction Price	Termination Date	Termination Price	Indicate Exercise, Expiration, Maturity or Sale	Cumulative Variation Margin at Termination	Gain (Loss) Recognized in Current Year	Gain (Loss) Used to Adjust Basis of Hedged Item	Deferred	Hedge Effective-ness at Inception and at Termination (b)	Value of One (1) Point
FVH4	956	95,600,000	Long /US 5YR NOTE FUTURE II /180673	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT	.01/11/2024	108.4688	.02/26/2024	106.4766	 Sale	(1,909,457)	(1,909,457)	0	0	.....	1,000
FVH4	2,251	225,100,000	Long /US 5YR NOTE FUTURE II /181042	Portfolio Hedge	Schedule BA, D	Interest	.03/28/2024	CBOT	.01/30/2024	107.8800	.02/26/2024	106.4766	 Sale	(3,170,624)	(3,170,624)	0	0	.....	1,000
TYM4	89	8,900,000	Long /US 10Y NOTE FUTURE II /181890	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/21/2024	110.1989	.02/27/2024	110.1875	 Sale	(1,499)	(1,499)	0	0	.....	1,000
TUM4	126	25,200,000	Long /US 2YR NOTE FUTURE II /181892	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/21/2024	102.4414	.02/27/2024	102.3047	 Sale	(35,096)	(35,096)	0	0	.....	2,000
TUM4	171	34,200,000	Long /US 5YR NOTE FUTURE II /181979	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	102.3594	.02/27/2024	102.3047	 Sale	(19,586)	(19,586)	0	0	.....	2,000
FVM4	83	8,300,000	Long /US 10Y NOTE FUTURE II /181891	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/21/2024	106.8819	.02/27/2024	106.7578	 Sale	(10,727)	(10,727)	0	0	.....	1,000
TYM4	143	14,300,000	Long /US 10Y NOTE FUTURE II /181890	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/21/2024	110.1989	.03/01/2024	110.4063	 Sale	28,880	28,880	0	0	.....	1,000
TYM4	111	11,100,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.03/01/2024	110.4063	 Sale	(1,470)	(1,470)	0	0	.....	1,000
TUM4	33	6,600,000	Long /US 2YR NOTE FUTURE II /181979	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	102.3594	.03/01/2024	102.4141	 Sale	3,441	3,441	0	0	.....	2,000
FVM4	476	47,600,000	Long /US 5YR NOTE FUTURE II /181891	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/21/2024	106.8819	.03/01/2024	106.9565	 Sale	33,063	33,063	0	0	.....	1,000
TYM4	181	18,100,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.03/11/2024	111.7344	 Sale	237,990	237,990	0	0	.....	1,000
TUM4	87	17,400,000	Long /US 2YR NOTE FUTURE II /181979	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	102.3594	.03/11/2024	102.6055	 Sale	42,374	42,374	0	0	.....	2,000
TUM4	181	36,200,000	Long /US 2YR NOTE FUTURE II /182096	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	102.3750	.03/11/2024	102.6055	 Sale	82,511	82,511	0	0	.....	2,000
FVM4	135	13,500,000	Long /US 5YR NOTE FUTURE II /181891	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/21/2024	106.8819	.03/11/2024	107.7109	 Sale	111,221	111,221	0	0	.....	1,000
TYM4	472	47,200,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.03/14/2024	110.6563	 Sale	111,751	111,751	0	0	.....	1,000
TUM4	48	9,600,000	Long /US 2YR NOTE FUTURE II /182096	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	102.3750	.03/14/2024	102.2813	 Sale	(9,242)	(9,242)	0	0	.....	2,000
FVM4	156	15,600,000	Long /US 5YR NOTE FUTURE II /181891	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/21/2024	106.8819	.03/14/2024	106.9766	 Sale	13,971	13,971	0	0	.....	1,000
FVM4	341	34,100,000	Long /US 5YR NOTE FUTURE II /182002	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	106.8828	.03/14/2024	106.9766	 Sale	30,233	30,233	0	0	.....	1,000
TUM4	138	27,600,000	Long /US 2YR NOTE FUTURE II /182096	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	102.3750	.03/15/2024	102.1390	 Sale	(65,845)	(65,845)	0	0	.....	2,000
TUM4	53	10,600,000	Long /US 2YR NOTE FUTURE II /182096	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	102.3750	.03/19/2024	102.1719	 Sale	(21,801)	(21,801)	0	0	.....	2,000
TUM4	71	14,200,000	Long /US 2YR NOTE FUTURE II /182198	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/06/2024	102.5781	.03/19/2024	102.1719	 Sale	(58,045)	(58,045)	0	0	.....	2,000
TUM4	414	82,800,000	Long /US 2YR NOTE FUTURE II /182198	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/06/2024	102.5781	.03/20/2024	102.1875	 Sale	(325,545)	(325,545)	0	0	.....	2,000
TYM4	608	60,800,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.03/22/2024	110.8125	 Sale	238,920	238,920	0	0	.....	1,000
TUM4	24	4,800,000	Long /US 2YR NOTE FUTURE II /182198	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/06/2024	102.5781	.03/22/2024	102.3672	 Sale	(10,247)	(10,247)	0	0	.....	2,000
TUM4	371	74,200,000	Long /US 5YR NOTE FUTURE II /182431	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/13/2024	102.3516	.03/22/2024	102.3672	 Sale	9,668	9,668	0	0	.....	2,000
FVM4	342	34,200,000	Long /US 5YR NOTE FUTURE II /182002	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	106.8828	.03/22/2024	107.1250	 Sale	81,075	81,075	0	0	.....	1,000
TYM4	227	22,700,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.03/27/2024	110.8125	 Sale	89,202	89,202	0	0	.....	1,000
TYM4	635	63,500,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.03/27/2024	110.8750	 Sale	289,217	289,217	0	0	.....	1,000
TUM4	174	34,800,000	Long /US 2YR NOTE FUTURE II /182431	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/13/2024	102.3516	.03/27/2024	102.3477	 Sale	(2,252)	(2,252)	0	0	.....	2,000

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART B - SECTION 2

Future Contracts Terminated December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Change in Variation Margin			19	20
															16	17	18		
Ticker Symbol	Number of Contracts	Notional Amount	Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Date of Maturity or Expiration	Exchange	Trade Date	Transaction Price	Termination Date	Termination Price	Indicate Exercise, Expiration, Maturity or Sale	Cumulative Variation Margin at Termination	Gain (Loss) Recognized in Current Year	Gain (Loss) Used to Adjust Basis of Hedged Item	Deferred	Hedge Effective-ness at Inception and at Termination (b)	Value of One (1) Point
TUM4	414	82,800,000	Long /US 2YR NOTE FUTURE II /182680	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/20/2024	102.1914	.03/27/2024	102.3477	 Sale	127,288	127,288	0	0	.....	2,000
TUM4	217	43,400,000	Long /US 2YR NOTE FUTURE II /182854	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/22/2024	102.3828	.03/27/2024	102.3477	 Sale	(16,349)	(16,349)	0	0	.....	2,000
FVM4	105	10,500,000	Long /US 5YR NOTE FUTURE II /182002	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	106.8828	.03/27/2024	107.1094	 Sale	23,253	23,253	0	0	.....	1,000
FVM4	544	54,400,000	Long /US 5YR NOTE FUTURE II /182002	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	106.8828	.03/27/2024	107.1328	 Sale	133,204	133,204	0	0	.....	1,000
TYM4	91	9,100,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.03/28/2024	110.5938	 Sale	15,858	15,858	0	0	.....	1,000
TYM4	155	15,500,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.03/28/2024	110.8125	 Sale	60,909	60,909	0	0	.....	1,000
TUM4	42	8,400,000	Long /US 2YR NOTE FUTURE II /182854	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/22/2024	102.3828	.03/28/2024	102.2266	 Sale	(13,337)	(13,337)	0	0	.....	2,000
FVM4	157	15,700,000	Long /US 5YR NOTE FUTURE II /182002	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	106.8828	.03/28/2024	106.9063	 Sale	2,883	2,883	0	0	.....	1,000
FVM4	189	18,900,000	Long /US 5YR NOTE FUTURE II /182002	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	106.8828	.03/28/2024	107.0391	 Sale	28,569	28,569	0	0	.....	1,000
TYM4	73	7,300,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.04/02/2024	109.7500	 Sale	(48,876)	(48,876)	0	0	.....	1,000
TUM4	28	5,600,000	Long /US 2YR NOTE FUTURE II /182854	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/22/2024	102.3828	.04/02/2024	102.0898	 Sale	(16,552)	(16,552)	0	0	.....	2,000
TUM4	139	27,800,000	Long /US 2YR NOTE FUTURE II /182854	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/22/2024	102.3828	.04/08/2024	101.9336	 Sale	(125,582)	(125,582)	0	0	.....	2,000
TUM4	267	53,400,000	Long /US 2YR NOTE FUTURE II /182854	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/22/2024	102.3828	.04/09/2024	101.9570	 Sale	(228,750)	(228,750)	0	0	.....	2,000
TUM4	136	27,200,000	Long /US 2YR NOTE FUTURE II /183116	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	102.0803	.04/09/2024	101.9570	 Sale	(34,237)	(34,237)	0	0	.....	2,000
FVM4	105	10,500,000	Long /US 5YR NOTE FUTURE II /182002	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	106.8828	.04/09/2024	106.1953	 Sale	(72,727)	(72,727)	0	0	.....	1,000
TYM4	903	90,300,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.04/10/2024	109.7344	 Sale	(618,681)	(618,681)	0	0	.....	1,000
TUM4	107	21,400,000	Long /US 2YR NOTE FUTURE II /183116	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	102.0803	.04/10/2024	102.0156	 Sale	(14,396)	(14,396)	0	0	.....	2,000
FVM4	283	28,300,000	Long /US 5YR NOTE FUTURE II /182002	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	106.8828	.04/10/2024	105.4766	 Sale	(399,409)	(399,409)	0	0	.....	1,000
FVM4	954	95,400,000	Long /US 5YR NOTE FUTURE II /182002	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	106.8828	.04/10/2024	106.3281	 Sale	(534,087)	(534,087)	0	0	.....	1,000
TYM4	155	15,500,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.04/11/2024	108.4219	 Sale	(309,634)	(309,634)	0	0	.....	1,000
FVM4	293	29,300,000	Long /US 5YR NOTE FUTURE II /182002	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	106.8828	.04/11/2024	105.3984	 Sale	(436,435)	(436,435)	0	0	.....	1,000
TYM4	146	14,600,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.04/18/2024	107.8125	 Sale	(380,628)	(380,628)	0	0	.....	1,000
TUM4	165	33,000,000	Long /US 2YR NOTE FUTURE II /183116	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	102.0803	.04/18/2024	101.4961	 Sale	(193,634)	(193,634)	0	0	.....	2,000
FVM4	576	57,600,000	Long /US 5YR NOTE FUTURE II /182002	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	106.8828	.04/18/2024	105.0066	 Sale	(1,083,652)	(1,083,652)	0	0	.....	1,000
TYM4	137	13,700,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.04/19/2024	107.8438	 Sale	(352,876)	(352,876)	0	0	.....	1,000
TUM4	14	2,800,000	Long /US 2YR NOTE FUTURE II /183116	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	102.0803	.04/19/2024	101.4922	 Sale	(16,539)	(16,539)	0	0	.....	2,000
FVM4	168	16,800,000	Long /US 5YR NOTE FUTURE II /182002	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	106.8828	.04/19/2024	104.9922	 Sale	(318,484)	(318,484)	0	0	.....	1,000
TUM4	93	18,600,000	Long /US 2YR NOTE FUTURE II /183116	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	102.0803	.04/22/2024	101.5156	 Sale	(105,512)	(105,512)	0	0	.....	2,000
FVM4	220	22,000,000	Long /US 5YR NOTE FUTURE II /182002	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	106.8828	.04/22/2024	105.0000	 Sale	(415,347)	(415,347)	0	0	.....	1,000

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART B - SECTION 2

Future Contracts Terminated December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Change in Variation Margin			19	20
															16	17	18		
Ticker Symbol	Number of Contracts	Notional Amount	Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Date of Maturity or Expiration	Exchange	Trade Date	Transaction Price	Termination Date	Termination Price	Indicate Exercise, Expiration, Maturity or Sale	Cumulative Variation Margin at Termination	Gain (Loss) Recognized in Current Year	Gain (Loss) Used to Adjust Basis of Hedged Item	Deferred	Hedge Effective-ness at Inception and at Termination (b)	Value of One (1) Point
TYM4	502	50,200,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.04/23/2024	107.7188	 Sale	(1,355,771)	(1,355,771)	0	0	.....	1,000
FVM4	147	14,700,000	Long /US 5YR NOTE FUTURE II /182002	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	106.8828	.04/23/2024	104.9609	 Sale	(283,275)	(283,275)	0	0	.....	1,000
TYM4	420	42,000,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.04/24/2024	107.7813	 Sale	(1,108,061)	(1,108,061)	0	0	.....	1,000
TUM4	88	17,600,000	Long /US 2YR NOTE FUTURE II /183116	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	102.0803	.04/24/2024	101.5625	 Sale	(91,585)	(91,585)	0	0	.....	2,000
TUM4	358	71,600,000	Long /US 5YR NOTE FUTURE II /183221	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/03/2024	102.1211	.04/24/2024	101.5625	 Sale	(401,798)	(401,798)	0	0	.....	2,000
FVM4	482	48,200,000	Long /US 2YR NOTE FUTURE II /182002	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	106.8828	.04/24/2024	105.0703	 Sale	(876,102)	(876,102)	0	0	.....	1,000
TUM4	58	11,600,000	Long /US 5YR NOTE FUTURE II /183221	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/03/2024	102.1211	.04/25/2024	101.4258	 Sale	(80,953)	(80,953)	0	0	.....	2,000
FVM4	10	1,000,000	Long /US 5YR NOTE FUTURE II /182002	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	106.8828	.04/25/2024	104.7656	 Sale	(21,223)	(21,223)	0	0	.....	1,000
FVM4	97	9,700,000	Long /US 5YR NOTE FUTURE II /182094	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	106.9167	.04/25/2024	104.7656	 Sale	(209,155)	(209,155)	0	0	.....	1,000
TYM4	355	35,500,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.04/26/2024	107.5625	 Sale	(1,014,249)	(1,014,249)	0	0	.....	1,000
TYM4	112	11,200,000	Long /US 10Y NOTE FUTURE II /182001	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/26/2024	110.4141	.04/26/2024	107.6094	 Sale	(314,736)	(314,736)	0	0	.....	1,000
TYM4	1	100,000	Long /US 10Y NOTE FUTURE II /182095	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	110.4531	.04/26/2024	107.5625	 Sale	(2,896)	(2,896)	0	0	.....	1,000
FVM4	355	35,500,000	Long /US 5YR NOTE FUTURE II /182094	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	106.9167	.04/26/2024	104.9453	 Sale	(701,672)	(701,672)	0	0	.....	1,000
TYM4	169	16,900,000	Long /US 10Y NOTE FUTURE II /182095	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	110.4531	.04/30/2024	107.8594	 Sale	(439,255)	(439,255)	0	0	.....	1,000
TUM4	29	5,800,000	Long /US 2YR NOTE FUTURE II /183221	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/03/2024	102.1211	.04/30/2024	101.4570	 Sale	(38,667)	(38,667)	0	0	.....	2,000
FVM4	129	12,900,000	Long /US 5YR NOTE FUTURE II /182094	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	106.9167	.04/30/2024	105.0313	 Sale	(243,880)	(243,880)	0	0	.....	1,000
TYM4	122	12,200,000	Long /US 10Y NOTE FUTURE II /182095	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	110.4531	.05/02/2024	107.9063	 Sale	(311,373)	(311,373)	0	0	.....	1,000
TUM4	14	2,800,000	Long /US 2YR NOTE FUTURE II /183221	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/03/2024	102.1211	.05/02/2024	101.5234	 Sale	(16,808)	(16,808)	0	0	.....	2,000
TYM4	216	21,600,000	Long /US 10Y NOTE FUTURE II /182095	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	110.4531	.05/03/2024	108.6563	 Sale	(389,284)	(389,284)	0	0	.....	1,000
TUM4	7	1,400,000	Long /US 2YR NOTE FUTURE II /183221	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/03/2024	102.1211	.05/03/2024	101.7266	 Sale	(5,559)	(5,559)	0	0	.....	2,000
TUM4	254	50,800,000	Long /US 5YR NOTE FUTURE II /183221	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/03/2024	102.1211	.05/03/2024	101.7383	 Sale	(195,768)	(195,768)	0	0	.....	2,000
FVM4	32	3,200,000	Long /US 5YR NOTE FUTURE II /182094	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	106.9167	.05/03/2024	105.6406	 Sale	(41,000)	(41,000)	0	0	.....	1,000
FVM4	1,207	120,700,000	Long /US 5YR NOTE FUTURE II /182094	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	106.9167	.05/03/2024	105.6539	 Sale	(1,530,404)	(1,530,404)	0	0	.....	1,000
FVM4	250	25,000,000	Long /US 5YR NOTE FUTURE II /182429	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/13/2024	107.1641	.05/03/2024	105.6539	 Sale	(378,835)	(378,835)	0	0	.....	1,000
FVM4	162	16,200,000	Long /US 5YR NOTE FUTURE II /182429	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/13/2024	107.1641	.05/03/2024	105.7188	 Sale	(234,971)	(234,971)	0	0	.....	1,000
TYM4	37	3,700,000	Long /US 10Y NOTE FUTURE II /182095	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	110.4531	.05/06/2024	108.7813	 Sale	(62,058)	(62,058)	0	0	.....	1,000
FVM4	32	3,200,000	Long /US 5YR NOTE FUTURE II /182095	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/13/2024	107.1641	.05/06/2024	105.7031	 Sale	(46,916)	(46,916)	0	0	.....	1,000
TYM4	525	52,500,000	Long /US 10Y NOTE FUTURE II /182095	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	110.4531	.05/07/2024	109.1719	 Sale	(675,486)	(675,486)	0	0	.....	1,000
FVM4	43	4,300,000	Long /US 5YR NOTE FUTURE II /182429	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/13/2024	107.1641	.05/07/2024	105.8516	 Sale	(56,659)	(56,659)	0	0	.....	1,000

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART B - SECTION 2

Future Contracts Terminated December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Change in Variation Margin			19	20
															16	17	18		
Ticker Symbol	Number of Contracts	Notional Amount	Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Date of Maturity or Expiration	Exchange	Trade Date	Transaction Price	Termination Date	Termination Price	Indicate Exercise, Expiration, Maturity or Sale	Cumulative Variation Margin at Termination	Gain (Loss) Recognized in Current Year	Gain (Loss) Used to Adjust Basis of Hedged Item	Deferred	Hedge Effective-ness at Inception and at Termination (b)	Value of One (1) Point
TYM4	412	41,200,000	Long /US 10Y NOTE FUTURE II /182095	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	110.4531	.05/08/2024	108.8281	 Sale	(671,741)	(671,741)	0	0	.....	1,000
TUM4	82	16,400,000	Long /US 2YR NOTE FUTURE II /183221	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/03/2024	102.1211	.05/08/2024	101.6953	 Sale	(70,253)	(70,253)	0	0	.....	2,000
FVM4	434	43,400,000	Long /US 5YR NOTE FUTURE II /182429	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/13/2024	107.1641	.05/08/2024	105.6641	 Sale	(653,231)	(653,231)	0	0	.....	1,000
FVM4	73	7,300,000	Long /US 5YR NOTE FUTURE II /183118	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	106.3971	.05/08/2024	105.6641	 Sale	(53,884)	(53,884)	0	0	.....	1,000
TUM4	121	24,200,000	Long /US 2YR NOTE FUTURE II /183221	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/03/2024	102.1211	.05/09/2024	101.7188	 Sale	(97,979)	(97,979)	0	0	.....	2,000
TUM4	42	8,400,000	Long /US 2YR NOTE FUTURE II /183733	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/17/2024	101.5977	.05/09/2024	101.7188	 Sale	9,957	9,957	0	0	.....	2,000
FVM4	108	10,800,000	Long /US 5YR NOTE FUTURE II /183118	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	106.3971	.05/09/2024	105.6797	 Sale	(78,034)	(78,034)	0	0	.....	1,000
TUM4	8	1,600,000	Long /US 2YR NOTE FUTURE II /183733	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/17/2024	101.5977	.05/10/2024	101.6719	 Sale	1,146	1,146	0	0	.....	2,000
TUM4	215	43,000,000	Long /US 2YR NOTE FUTURE II /184460	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.05/08/2024	101.6914	.05/10/2024	101.6719	 Sale	(9,490)	(9,490)	0	0	.....	2,000
FVM4	128	12,800,000	Long /US 5YR NOTE FUTURE II /183118	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	106.3971	.05/10/2024	105.6016	 Sale	(102,482)	(102,482)	0	0	.....	1,000
FVM4	22	2,200,000	Long /US 5YR NOTE FUTURE II /183118	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	106.3971	.05/10/2024	105.6484	 Sale	(16,584)	(16,584)	0	0	.....	1,000
TYM4	141	14,100,000	Long /US 10Y NOTE FUTURE II /182095	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	110.4531	.05/14/2024	108.9375	 Sale	(214,467)	(214,467)	0	0	.....	1,000
TYM4	75	7,500,000	Long /US 10Y NOTE FUTURE II /182095	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	110.4531	.05/14/2024	109.0156	 Sale	(108,221)	(108,221)	0	0	.....	1,000
FVM4	486	48,600,000	Long /US 5YR NOTE FUTURE II /183118	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	106.3971	.05/14/2024	105.7545	 Sale	(314,802)	(314,802)	0	0	.....	1,000
TYM4	615	61,500,000	Long /US 10Y NOTE FUTURE II /182095	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.02/29/2024	110.4531	.05/15/2024	109.6250	 Sale	(512,627)	(512,627)	0	0	.....	1,000
TYM4	209	20,900,000	Long /US 10Y NOTE FUTURE II /182430	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/13/2024	110.9375	.05/15/2024	109.6250	 Sale	(275,449)	(275,449)	0	0	.....	1,000
TYM4	317	31,700,000	Long /US 10Y NOTE FUTURE II /182853	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.03/22/2024	110.7813	.05/15/2024	109.6250	 Sale	(368,272)	(368,272)	0	0	.....	1,000
TYM4	272	27,200,000	Long /US 10Y NOTE FUTURE II /183117	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	109.6719	.05/15/2024	109.6250	 Sale	(14,236)	(14,236)	0	0	.....	1,000
TYM4	413	41,300,000	Long /US 10Y NOTE FUTURE II /183117	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	109.6719	.05/15/2024	109.7500	 Sale	30,009	30,009	0	0	.....	1,000
FVM4	540	54,000,000	Long /US 5YR NOTE FUTURE II /183118	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	106.3971	.05/15/2024	106.1953	 Sale	(111,748)	(111,748)	0	0	.....	1,000
FVM4	22	2,200,000	Long /US 5YR NOTE FUTURE II /183118	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	106.3971	.05/15/2024	106.2813	 Sale	(2,661)	(2,661)	0	0	.....	1,000
TYM4	75	7,500,000	Long /US 10Y NOTE FUTURE II /183117	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	109.6719	.05/17/2024	109.3281	 Sale	(26,193)	(26,193)	0	0	.....	1,000
FVM4	108	10,800,000	Long /US 5YR NOTE FUTURE II /183118	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	106.3971	.05/17/2024	105.9766	 Sale	(45,969)	(45,969)	0	0	.....	1,000
TUM4	68	13,600,000	Long /US 2YR NOTE FUTURE II /184727	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.05/17/2024	101.7031	.05/20/2024	101.6680	 Sale	(5,123)	(5,123)	0	0	.....	2,000
TUM4	90	18,000,000	Long /US 2YR NOTE FUTURE II /184727	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.05/17/2024	101.7031	.05/20/2024	101.6797	 Sale	(4,675)	(4,675)	0	0	.....	2,000
FVM4	273	27,300,000	Long /US 5YR NOTE FUTURE II /183118	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	106.3971	.05/20/2024	105.7969	 Sale	(165,258)	(165,258)	0	0	.....	1,000
FVM4	73	7,300,000	Long /US 5YR NOTE FUTURE II /183220	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/03/2024	106.4766	.05/20/2024	105.7969	 Sale	(49,993)	(49,993)	0	0	.....	1,000
FVM4	465	46,500,000	Long /US 5YR NOTE FUTURE II /183220	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/03/2024	106.4766	.05/21/2024	105.8984	 Sale	(271,253)	(271,253)	0	0	.....	1,000
TYM4	169	16,900,000	Long /US 10Y NOTE FUTURE II /183117	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	109.6719	.05/22/2024	109.1719	 Sale	(85,419)	(85,419)	0	0	.....	1,000

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART B - SECTION 2

Future Contracts Terminated December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Change in Variation Margin			19	20
															16	17	18		
Ticker Symbol	Number of Contracts	Notional Amount	Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Date of Maturity or Expiration	Exchange	Trade Date	Transaction Price	Termination Date	Termination Price	Indicate Exercise, Expiration, Maturity or Sale	Cumulative Variation Margin at Termination	Gain (Loss) Recognized in Current Year	Gain (Loss) Used to Adjust Basis of Hedged Item	Deferred	Hedge Effective-ness at Inception and at Termination (b)	Value of One (1) Point
TUM4	90	18,000,000	Long /US 2YR NOTE FUTURE II /184727	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.05/17/2024	101.7031	.05/22/2024	101.6367	 Sale	(12,415)	(12,415)	0	0	.....	2,000
FVM4	238	23,800,000	Long /US 5YR NOTE FUTURE II /183220	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/03/2024	106.4766	.05/22/2024	105.8359	 Sale	(153,710)	(153,710)	0	0	.....	1,000
TYM4	422	42,200,000	Long /US 10Y NOTE FUTURE II /183117	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	109.6719	.05/23/2024	108.7813	 Sale	(378,129)	(378,129)	0	0	.....	1,000
TYM4	938	93,800,000	Long /US 2YR NOTE FUTURE II /183117	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	109.6719	.05/23/2024	109.0313	 Sale	(605,986)	(605,986)	0	0	.....	1,000
TUM4	89	17,800,000	Long /US 5YR NOTE FUTURE II /184727	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.05/17/2024	101.7031	.05/23/2024	101.5195	 Sale	(33,138)	(33,138)	0	0	.....	2,000
FVM4	586	58,600,000	Long /US 5YR NOTE FUTURE II /183220	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/03/2024	106.4766	.05/23/2024	105.7109	 Sale	(451,712)	(451,712)	0	0	.....	1,000
FVM4	233	23,300,000	Long /US 5YR NOTE FUTURE II /183734	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/17/2024	105.2562	.05/23/2024	105.4141	 Sale	35,593	35,593	0	0	.....	1,000
FVM4	183	18,300,000	Long /US 5YR NOTE FUTURE II /183734	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/17/2024	105.2562	.05/23/2024	105.5313	 Sale	49,403	49,403	0	0	.....	1,000
FVM4	495	49,500,000	Long /US 5YR NOTE FUTURE II /183734	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/17/2024	105.2562	.05/23/2024	105.7109	 Sale	222,532	222,532	0	0	.....	1,000
FVM4	189	18,900,000	Long /US 10Y NOTE FUTURE II /184068	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/26/2024	104.8672	.05/23/2024	105.4141	 Sale	102,393	102,393	0	0	.....	1,000
TYM4	384	38,400,000	Long /US 10Y NOTE FUTURE II /183117	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/02/2024	109.6719	.05/28/2024	108.7031	 Sale	(374,108)	(374,108)	0	0	.....	1,000
TYM4	292	29,200,000	Long /US 10Y NOTE FUTURE II /183218	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/03/2024	109.7813	.05/28/2024	108.7031	 Sale	(316,423)	(316,423)	0	0	.....	1,000
TYM4	1,423	142,300,000	Long /US 10Y NOTE FUTURE II /183735	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/17/2024	108.1580	.05/28/2024	108.7031	 Sale	767,936	767,936	0	0	.....	1,000
TYM4	356	35,600,000	Long /US 10Y NOTE FUTURE II /184067	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/26/2024	107.5625	.05/28/2024	108.7031	 Sale	404,117	404,117	0	0	.....	1,000
TYM4	94	9,400,000	Long /US 10Y NOTE FUTURE II /184458	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.05/08/2024	108.8125	.05/28/2024	108.7031	 Sale	(10,795)	(10,795)	0	0	.....	1,000
TYM4	1,932	193,200,000	Long /US 10Y NOTE FUTURE II /184729	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.05/17/2024	109.1719	.05/28/2024	108.7031	 Sale	(916,232)	(916,232)	0	0	.....	1,000
TYU4	695	69,500,000	Long /US 10Y NOTE FUTURE II /185199	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	109.0156	.05/28/2024	109.1406	 Sale	81,204	81,204	0	0	.....	1,000
FVM4	177	17,700,000	Long /US 5YR NOTE FUTURE II /184068	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.04/26/2024	104.8672	.05/28/2024	105.4453	 Sale	101,414	101,414	0	0	.....	1,000
FVM4	399	39,900,000	Long /US 5YR NOTE FUTURE II /184459	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.05/08/2024	105.6554	.05/28/2024	105.4453	 Sale	(85,881)	(85,881)	0	0	.....	1,000
FVM4	1,740	174,000,000	Long /US 5YR NOTE FUTURE II /184728	Portfolio Hedge	Schedule BA, D	Interest	.06/28/2024	CBOT	.05/17/2024	105.8750	.05/28/2024	105.4453	 Sale	(756,622)	(756,622)	0	0	.....	1,000
FVU4	9	900,000	Long /US 5YR NOTE FUTURE II /185204	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	105.8359	.05/28/2024	105.8438	 Sale	2	2	0	0	.....	1,000
FVU4	472	47,200,000	Long /US 5YR NOTE FUTURE II /185204	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	105.8359	.05/28/2024	105.8672	 Sale	11,134	11,134	0	0	.....	1,000
FVU4	770	77,000,000	Long /US 5YR NOTE FUTURE II /185204	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	105.8359	.05/28/2024	105.9609	 Sale	90,313	90,313	0	0	.....	1,000
TYU4	91	9,100,000	Long /US 10Y NOTE FUTURE II /185199	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	109.0156	.05/29/2024	108.0625	 Sale	(87,227)	(87,227)	0	0	.....	1,000
TYU4	702	70,200,000	Long /US 10Y NOTE FUTURE II /185199	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	109.0156	.05/30/2024	108.3906	 Sale	(442,569)	(442,569)	0	0	.....	1,000
FVU4	779	77,900,000	Long /US 5YR NOTE FUTURE II /185204	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	105.8359	.05/30/2024	105.5385	 Sale	(235,679)	(235,679)	0	0	.....	1,000
FVU4	286	28,600,000	Long /US 5YR NOTE FUTURE II /185204	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	105.8359	.05/30/2024	105.5983	 Sale	(69,424)	(69,424)	0	0	.....	1,000
FVU4	156	15,600,000	Long /US 10Y NOTE FUTURE II /185224	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	105.3785	.05/30/2024	105.5983	 Sale	33,487	33,487	0	0	.....	1,000
TYU4	140	14,000,000	Long /US 10Y NOTE FUTURE II /185199	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	109.0156	.05/31/2024	108.8438	 Sale	(24,814)	(24,814)	0	0	.....	1,000

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART B - SECTION 2

Future Contracts Terminated December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Change in Variation Margin			19	20
															16	17	18		
Ticker Symbol	Number of Contracts	Notional Amount	Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Date of Maturity or Expiration	Exchange	Trade Date	Transaction Price	Termination Date	Termination Price	Indicate Exercise, Expiration, Maturity or Sale	Cumulative Variation Margin at Termination	Gain (Loss) Recognized in Current Year	Gain (Loss) Used to Adjust Basis of Hedged Item	Deferred	Hedge Effective-ness at Inception and at Termination (b)	Value of One (1) Point
TYU4	702	70,200,000	Long /US 10Y NOTE FUTURE II /185199	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	109.0156	.05/31/2024	108.9219	 Sale	(69,596)	(69,596)	0	0	.....	1,000
FVU4	540	54,000,000	Long /US 5YR NOTE FUTURE II /185224	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	105.3785	.05/31/2024	105.8359	 Sale	244,220	244,220	0	0	.....	1,000
FVU4	779	77,900,000	Long /US 5YR NOTE FUTURE II /185224	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	105.3785	.05/31/2024	105.8828	 Sale	388,846	388,846	0	0	.....	1,000
FVU4	76	7,600,000	Long /US 5YR NOTE FUTURE II /185224	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	105.3785	.06/03/2024	106.2344	 Sale	64,658	64,658	0	0	.....	1,000
TYU4	328	32,800,000	Long /US 10Y NOTE FUTURE II /185199	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	109.0156	.06/04/2024	110.0156	 Sale	326,216	326,216	0	0	.....	1,000
TUJ4	40	8,000,000	Long /US 2YR NOTE FUTURE II /185225	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	101.7070	.06/04/2024	102.0938	 Sale	30,738	30,738	0	0	.....	2,000
FVU4	162	16,200,000	Long /US 5YR NOTE FUTURE II /185224	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	105.3785	.06/04/2024	106.5469	 Sale	188,448	188,448	0	0	.....	1,000
TUJ4	7	1,400,000	Long /US 2YR NOTE FUTURE II /185225	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	101.7070	.06/05/2024	102.1602	 Sale	6,309	6,309	0	0	.....	2,000
FVU4	165	16,500,000	Long /US 5YR NOTE FUTURE II /185224	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	105.3785	.06/05/2024	106.6875	 Sale	215,137	215,137	0	0	.....	1,000
TYU4	84	8,400,000	Long /US 10Y NOTE FUTURE II /185199	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	109.0156	.06/06/2024	110.2813	 Sale	105,862	105,862	0	0	.....	1,000
TYU4	253	25,300,000	Long /US 10Y NOTE FUTURE II /185199	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	109.0156	.06/10/2024	109.1406	 Sale	30,249	30,249	0	0	.....	1,000
TYU4	318	31,800,000	Long /US 10Y NOTE FUTURE II /185199	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	109.0156	.06/10/2024	109.1563	 Sale	43,013	43,013	0	0	.....	1,000
TUJ4	160	32,000,000	Long /US 2YR NOTE FUTURE II /185225	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	101.7070	.06/10/2024	101.8984	 Sale	60,426	60,426	0	0	.....	2,000
TYU4	131	13,100,000	Long /US 10Y NOTE FUTURE II /185199	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	109.0156	.06/11/2024	109.3750	 Sale	46,369	46,369	0	0	.....	1,000
TYU4	94	9,400,000	Long /US 10Y NOTE FUTURE II /185199	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	109.0156	.06/12/2024	110.5313	 Sale	141,964	141,964	0	0	.....	1,000
TYU4	244	24,400,000	Long /US 10Y NOTE FUTURE II /185199	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	109.0156	.06/13/2024	110.4688	 Sale	353,253	353,253	0	0	.....	1,000
TYU4	694	69,400,000	Long /US 10Y NOTE FUTURE II /185199	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	109.0156	.06/14/2024	110.8125	 Sale	1,243,273	1,243,273	0	0	.....	1,000
TYU4	5	500,000	Long /US 10Y NOTE FUTURE II /185199	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/28/2024	109.0156	.06/17/2024	110.4531	 Sale	7,160	7,160	0	0	.....	1,000
TYU4	60	6,000,000	Long /US 10Y NOTE FUTURE II /185226	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	108.1250	.06/17/2024	110.4531	 Sale	139,361	139,361	0	0	.....	1,000
TYU4	232	23,200,000	Long /US 10Y NOTE FUTURE II /185226	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	108.1250	.06/18/2024	110.5938	 Sale	571,488	571,488	0	0	.....	1,000
TYU4	612	61,200,000	Long /US 10Y NOTE FUTURE II /185226	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	108.1250	.06/18/2024	110.7656	 Sale	1,612,733	1,612,733	0	0	.....	1,000
TYU4	185	18,500,000	Long /US 10Y NOTE FUTURE II /185226	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	108.1250	.06/20/2024	110.3594	 Sale	412,353	412,353	0	0	.....	1,000
FVU4	10	1,000,000	Long /US 5YR NOTE FUTURE II /185974	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/18/2024	107.0156	.06/20/2024	106.7578	 Sale	(2,630)	(2,630)	0	0	.....	1,000
TYU4	120	12,000,000	Long /US 10Y NOTE FUTURE II /185226	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	108.1250	.06/21/2024	110.3906	 Sale	271,222	271,222	0	0	.....	1,000
TYU4	130	13,000,000	Long /US 10Y NOTE FUTURE II /185226	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	108.1250	.06/21/2024	110.5000	 Sale	308,043	308,043	0	0	.....	1,000
TUJ4	21	4,200,000	Long /US 2YR NOTE FUTURE II /185975	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/18/2024	102.2539	.06/21/2024	102.1641	 Sale	(3,881)	(3,881)	0	0	.....	2,000
TUJ4	14	2,800,000	Long /US 2YR NOTE FUTURE II /185975	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/18/2024	102.2539	.06/21/2024	102.1875	 Sale	(1,931)	(1,931)	0	0	.....	2,000
FVU4	63	6,300,000	Long /US 5YR NOTE FUTURE II /185974	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/18/2024	107.0156	.06/21/2024	106.7813	 Sale	(15,089)	(15,089)	0	0	.....	1,000
TYU4	167	16,700,000	Long /US 10Y NOTE FUTURE II /185226	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	108.1250	.06/24/2024	110.4219	 Sale	382,670	382,670	0	0	.....	1,000

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART B - SECTION 2

Future Contracts Terminated December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Change in Variation Margin			19	20
															16	17	18		
Ticker Symbol	Number of Contracts	Notional Amount	Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Date of Maturity or Expiration	Exchange	Trade Date	Transaction Price	Termination Date	Termination Price	Indicate Exercise, Expiration, Maturity or Sale	Cumulative Variation Margin at Termination	Gain (Loss) Recognized in Current Year	Gain (Loss) Used to Adjust Basis of Hedged Item	Deferred	Hedge Effective-ness at Inception and at Termination (b)	Value of One (1) Point
TU04	7	1,400,000	Long /US 2YR NOTE FUTURE II /185975	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/18/2024	102.2539	.06/24/2024	102.1563	Sale	(1,403)	(1,403)	0	0	.....	.....2,000
TYU4	205	20,500,000	Long /US 10Y NOTE FUTURE II /185226	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	108.1250	.06/25/2024	110.4844	Sale	482,557	482,557	0	0	.....	.....1,000
TYU4	187	18,700,000	Long /US 10Y NOTE FUTURE II /185226	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	108.1250	.06/25/2024	110.5313	Sale	448,951	448,951	0	0	.....	.....1,000
TYU4	76	7,600,000	Long /US 10Y NOTE FUTURE II /185226	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.05/29/2024	108.1250	.06/26/2024	110.0781	Sale	148,024	148,024	0	0	.....	.....1,000
TYU4	440	44,000,000	Long /US 5YR NOTE FUTURE II /186010	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/18/2024	110.7969	.06/26/2024	110.0781	Sale	(318,644)	(318,644)	0	0	.....	.....1,000
FVU4	210	21,000,000	Long /US 10Y NOTE FUTURE II /186339	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	106.4844	.06/28/2024	106.6016	Sale	23,530	23,530	0	0	.....	.....1,000
TYU4	131	13,100,000	Long /US 10Y NOTE FUTURE II /186010	Portfolio Hedge	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/18/2024	110.7969	.07/01/2024	109.2656	Sale	(201,306)	(201,306)	0	0	.....	.....1,000
TYU4	122	12,200,000	Long /US 10Y NOTE FUTURE II /186338	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	109.9688	.07/01/2024	109.2656	Sale	(86,445)	(86,445)	0	0	.....	.....1,000
TYU4	140	14,000,000	Long /US 10Y NOTE FUTURE II /186338	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	109.9688	.07/03/2024	110.0469	Sale	10,176	10,176	0	0	.....	.....1,000
TYU4	37	3,700,000	Long /US 10Y NOTE FUTURE II /186363	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	110.2500	.07/03/2024	110.0469	Sale	(7,717)	(7,717)	0	0	.....	.....1,000
TU04	21	4,200,000	Long /US 2YR NOTE FUTURE II /186362	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	102.1211	.07/03/2024	102.1641	Sale	1,697	1,697	0	0	.....	.....2,000
FVU4	28	2,800,000	Long /US 5YR NOTE FUTURE II /186339	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	106.4844	.07/03/2024	106.6484	Sale	4,450	4,450	0	0	.....	.....1,000
FVU4	3	300,000	Long /US 5YR NOTE FUTURE II /186339	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	106.4844	.07/03/2024	106.6563	Sale	500	500	0	0	.....	.....1,000
TYU4	131	13,100,000	Long /US 10Y NOTE FUTURE II /186363	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	110.2500	.07/08/2024	110.5313	Sale	36,131	36,131	0	0	.....	.....1,000
TU04	7	1,400,000	Long /US 2YR NOTE FUTURE II /186362	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	102.1211	.07/08/2024	102.2930	Sale	2,370	2,370	0	0	.....	.....2,000
FVU4	63	6,300,000	Long /US 5YR NOTE FUTURE II /186339	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	106.4844	.07/08/2024	106.9741	Sale	30,527	30,527	0	0	.....	.....1,000
FVU4	94	9,400,000	Long /US 5YR NOTE FUTURE II /186364	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	106.6875	.07/08/2024	106.9741	Sale	26,455	26,455	0	0	.....	.....1,000
TU04	98	19,600,000	Long /US 2YR NOTE FUTURE II /186362	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	102.1211	.07/10/2024	102.2734	Sale	29,356	29,356	0	0	.....	.....2,000
TU04	14	2,800,000	Long /US 2YR NOTE FUTURE II /186559	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/02/2024	102.0703	.07/10/2024	102.2734	Sale	5,616	5,616	0	0	.....	.....2,000
FVU4	304	30,400,000	Long /US 5YR NOTE FUTURE II /186364	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	106.6875	.07/11/2024	107.4219	Sale	221,687	221,687	0	0	.....	.....1,000
FVU4	136	13,600,000	Long /US 5YR NOTE FUTURE II /186364	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	106.6875	.07/12/2024	107.4531	Sale	103,426	103,426	0	0	.....	.....1,000
TU04	94	18,800,000	Long /US 2YR NOTE FUTURE II /186559	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/02/2024	102.0703	.07/15/2024	102.5820	Sale	95,720	95,720	0	0	.....	.....2,000
FVU4	21	2,100,000	Long /US 5YR NOTE FUTURE II /186364	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	106.6875	.07/15/2024	107.4219	Sale	15,314	15,314	0	0	.....	.....1,000
TU04	1	200,000	Long /US 2YR NOTE FUTURE II /186559	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/02/2024	102.0703	.07/18/2024	102.6016	Sale	1,057	1,057	0	0	.....	.....2,000
TU04	42	8,400,000	Long /US 2YR NOTE FUTURE II /186836	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/09/2024	102.2852	.07/18/2024	102.6016	Sale	26,362	26,362	0	0	.....	.....2,000
FVU4	157	15,700,000	Long /US 5YR NOTE FUTURE II /186364	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	106.6875	.07/18/2024	107.6016	Sale	142,701	142,701	0	0	.....	.....1,000
TYU4	206	20,600,000	Long /US 10Y NOTE FUTURE II /186363	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	110.2500	.07/19/2024	110.8750	Sale	127,629	127,629	0	0	.....	.....1,000
TU04	29	5,800,000	Long /US 2YR NOTE FUTURE II /186836	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/09/2024	102.2852	.07/22/2024	102.4414	Sale	8,913	8,913	0	0	.....	.....2,000
TU04	223	44,600,000	Long /US 2YR NOTE FUTURE II /187045	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/18/2024	102.5859	.07/22/2024	102.4414	Sale	(65,607)	(65,607)	0	0	.....	.....2,000

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART B - SECTION 2

Future Contracts Terminated December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Change in Variation Margin			19	20
															16	17	18		
Ticker Symbol	Number of Contracts	Notional Amount	Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Date of Maturity or Expiration	Exchange	Trade Date	Transaction Price	Termination Date	Termination Price	Indicate Exercise, Expiration, Maturity or Sale	Cumulative Variation Margin at Termination	Gain (Loss) Recognized in Current Year	Gain (Loss) Used to Adjust Basis of Hedged Item	Deferred	Hedge Effective-ness at Inception and at Termination (b)	Value of One (1) Point
FVU4	189	18,900,000	Long /US 5YR NOTE FUTURE II /186384	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	106.6875	.07/22/2024	107.1797	 Sale	92,052	92,052	0	0 .....	.....	1,000
FVU4	21	2,100,000	Long /US 5YR NOTE FUTURE II /186384	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	106.6875	.07/22/2024	107.2734	 Sale	12,197	12,197	0	0 .....	.....	1,000
TUJ4	79	15,800,000	Long /US 2YR NOTE FUTURE II /187045	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/18/2024	102.5859	.07/23/2024	102.4961	 Sale	(14,601)	(14,601)	0	0 .....	.....	2,000
FVU4	73	7,300,000	Long /US 5YR NOTE FUTURE II /186384	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	106.6875	.07/23/2024	107.3125	 Sale	45,250	45,250	0	0 .....	.....	1,000
TYU4	281	28,100,000	Long /US 10Y NOTE FUTURE II /186383	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	110.2500	.07/25/2024	110.9063	 Sale	182,878	182,878	0	0 .....	.....	1,000
FVU4	52	5,200,000	Long /US 5YR NOTE FUTURE II /186384	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	106.6875	.07/25/2024	107.3672	 Sale	35,076	35,076	0	0 .....	.....	1,000
TYU4	19	1,900,000	Long /US 10Y NOTE FUTURE II /186383	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	110.2500	.07/26/2024	111.1719	 Sale	17,412	17,412	0	0 .....	.....	1,000
TUJ4	59	11,800,000	Long /US 2YR NOTE FUTURE II /187045	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/18/2024	102.5859	.07/26/2024	102.5977	 Sale	1,080	1,080	0	0 .....	.....	2,000
FVU4	328	32,800,000	Long /US 5YR NOTE FUTURE II /186384	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	106.6875	.07/26/2024	107.5547	 Sale	282,752	282,752	0	0 .....	.....	1,000
FVU4	735	73,500,000	Long /US 5YR NOTE FUTURE II /186557	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/02/2024	106.2891	.07/26/2024	107.5547	 Sale	926,456	926,456	0	0 .....	.....	1,000
FVU4	549	54,900,000	Long /US 5YR NOTE FUTURE II /186834	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/09/2024	106.9375	.07/26/2024	107.5547	 Sale	336,014	336,014	0	0 .....	.....	1,000
FVU4	174	17,400,000	Long /US 5YR NOTE FUTURE II /186834	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/09/2024	106.9375	.07/29/2024	107.6172	 Sale	117,371	117,371	0	0 .....	.....	1,000
FVU4	137	13,700,000	Long /US 5YR NOTE FUTURE II /187043	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/18/2024	107.5859	.07/29/2024	107.6172	 Sale	3,577	3,577	0	0 .....	.....	1,000
FVU4	507	50,700,000	Long /US 5YR NOTE FUTURE II /187043	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/18/2024	107.5859	.07/30/2024	107.7422	 Sale	76,613	76,613	0	0 .....	.....	1,000
FVU4	213	21,300,000	Long /US 5YR NOTE FUTURE II /187043	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/18/2024	107.5859	.07/31/2024	107.7500	 Sale	33,850	33,850	0	0 .....	.....	1,000
FVU4	622	62,200,000	Long /US 5YR NOTE FUTURE II /187043	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/18/2024	107.5859	.08/01/2024	108.4531	 Sale	536,194	536,194	0	0 .....	.....	1,000
TYU4	853	85,300,000	Long /US 10Y NOTE FUTURE II /186383	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.06/27/2024	110.2500	.08/02/2024	113.8906	 Sale	3,100,813	3,100,813	0	0 .....	.....	1,000
TYU4	74	7,400,000	Long /US 10Y NOTE FUTURE II /186558	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/02/2024	109.3906	.08/02/2024	113.8906	 Sale	332,597	332,597	0	0 .....	.....	1,000
TYU4	932	93,200,000	Long /US 5YR NOTE FUTURE II /186835	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/09/2024	110.4375	.08/02/2024	113.8906	 Sale	3,213,242	3,213,242	0	0 .....	.....	1,000
FVU4	36	3,600,000	Long /US 5YR NOTE FUTURE II /187043	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/18/2024	107.5859	.08/02/2024	109.4141	 Sale	65,627	65,627	0	0 .....	.....	1,000
FVU4	308	30,800,000	Long /US 10Y NOTE FUTURE II /187398	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/30/2024	107.6641	.08/02/2024	109.4141	 Sale	537,417	537,417	0	0 .....	.....	1,000
TYU4	568	56,800,000	Long /US 10Y NOTE FUTURE II /186835	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/09/2024	110.4375	.08/05/2024	114.3750	 Sale	2,233,410	2,233,410	0	0 .....	.....	1,000
TUJ4	73	14,600,000	Long /US 2YR NOTE FUTURE II /187537	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.08/05/2024	103.5820	.08/06/2024	103.3438	 Sale	(35,164)	(35,164)	0	0 .....	.....	2,000
FVU4	75	7,500,000	Long /US 5YR NOTE FUTURE II /187539	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.08/05/2024	109.6054	.08/06/2024	109.0547	 Sale	(41,691)	(41,691)	0	0 .....	.....	1,000
TYU4	32	3,200,000	Long /US 10Y NOTE FUTURE II /186835	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/09/2024	110.4375	.08/07/2024	113.0156	 Sale	82,326	82,326	0	0 .....	.....	1,000
TYU4	157	15,700,000	Long /US 10Y NOTE FUTURE II /187044	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/18/2024	111.2813	.08/07/2024	113.0156	 Sale	271,443	271,443	0	0 .....	.....	1,000
TUJ4	468	93,600,000	Long /US 2YR NOTE FUTURE II /187537	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.08/05/2024	103.5820	.08/07/2024	103.2656	 Sale	(298,562)	(298,562)	0	0 .....	.....	2,000
FVU4	128	12,800,000	Long /US 5YR NOTE FUTURE II /187539	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.08/05/2024	109.6054	.08/07/2024	108.8228	 Sale	(100,832)	(100,832)	0	0 .....	.....	1,000
TYU4	204	20,400,000	Long /US 10Y NOTE FUTURE II /187044	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT	.07/18/2024	111.2813	.08/12/2024	113.1974	 Sale	389,789	389,789	0	0 .....	.....	1,000

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART B - SECTION 2

Future Contracts Terminated December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Change in Variation Margin			19	20
															16	17	18		
Ticker Symbol	Number of Contracts	Notional Amount	Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Date of Maturity or Expiration	Exchange	Trade Date	Transaction Price	Termination Date	Termination Price	Indicate Exercise, Expiration, Maturity or Sale	Cumulative Variation Margin at Termination	Gain (Loss) Recognized in Current Year	Gain (Loss) Used to Adjust Basis of Hedged Item	Deferred	Hedge Effective-ness at Inception and at Termination (b)	Value of One (1) Point
TYU4	260	26,000,000	Long /US 10Y NOTE FUTURE II /187393	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.07/30/2024	111.4688	.08/12/2024	113.1974	 Sale	448,040	448,040	0	0	.....	1,000
TYU4	273	27,300,000	Long /US 10Y NOTE FUTURE II /187538	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/05/2024	114.2500	.08/12/2024	113.1974	 Sale	(288,839)	(288,839)	0	0	.....	1,000
FVU4	948	94,800,000	Long /US 5YR NOTE FUTURE II /187539	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/05/2024	109.6054	.08/12/2024	108.9141	 Sale	(660,284)	(660,284)	0	0	.....	1,000
TYU4	94	9,400,000	Long /US 10Y NOTE FUTURE II /187902	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/12/2024	113.2344	.08/13/2024	113.5469	 Sale	28,864	28,864	0	0	.....	1,000
TU4	52	10,400,000	Long /US 2YR NOTE FUTURE II /187904	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/12/2024	103.2734	.08/13/2024	103.3672	 Sale	9,483	9,483	0	0	.....	2,000
FVU4	256	25,600,000	Long /US 5YR NOTE FUTURE II /187903	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/12/2024	108.9602	.08/13/2024	109.1719	 Sale	52,865	52,865	0	0	.....	1,000
TYU4	94	9,400,000	Long /US 10Y NOTE FUTURE II /187902	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/12/2024	113.2344	.08/14/2024	113.7031	 Sale	43,551	43,551	0	0	.....	1,000
FVU4	384	38,400,000	Long /US 5YR NOTE FUTURE II /187903	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/12/2024	108.9602	.08/14/2024	109.2188	 Sale	97,297	97,297	0	0	.....	1,000
FVU4	117	11,700,000	Long /US 5YR NOTE FUTURE II /187903	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/12/2024	108.9602	.08/15/2024	108.6738	 Sale	(34,113)	(34,113)	0	0	.....	1,000
TYU4	113	11,300,000	Long /US 10Y NOTE FUTURE II /187902	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/12/2024	113.2344	.08/16/2024	112.9219	 Sale	(35,927)	(35,927)	0	0	.....	1,000
FVU4	917	91,700,000	Long /US 5YR NOTE FUTURE II /187903	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/12/2024	108.9602	.08/16/2024	108.6186	 Sale	(318,005)	(318,005)	0	0	.....	1,000
TYU4	150	15,000,000	Long /US 10Y NOTE FUTURE II /187902	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/12/2024	113.2344	.08/19/2024	113.1719	 Sale	(10,191)	(10,191)	0	0	.....	1,000
TYU4	857	85,700,000	Long /US 10Y NOTE FUTURE II /187902	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/12/2024	113.2344	.08/20/2024	113.4063	 Sale	142,635	142,635	0	0	.....	1,000
TYU4	697	69,700,000	Long /US 10Y NOTE FUTURE II /187902	LIABILITY HEDGE	Schedule BA, D	Interest	.09/30/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/12/2024	113.2344	.08/21/2024	113.6875	 Sale	312,036	312,036	0	0	.....	1,000
TYZ4	256	25,600,000	Long /US 10Y NOTE FUTURE II /188506	liability hedging	Schedule BA, D	Interest	.12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/28/2024	114.0781	.08/29/2024	113.8594	 Sale	(57,393)	(57,393)	0	0	.....	1,000
TUZ4	113	22,600,000	Long /US 2YR NOTE FUTURE II /188504	liability hedging	Schedule BA, D	Interest	.12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/28/2024	103.9097	.08/29/2024	103.8477	 Sale	(14,612)	(14,612)	0	0	.....	2,000
FVZ4	727	72,700,000	Long /US 5YR NOTE FUTURE II /188505	liability hedging	Schedule BA, D	Interest	.12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/28/2024	109.7266	.08/29/2024	109.5687	 Sale	(118,495)	(118,495)	0	0	.....	1,000
FVZ4	253	25,300,000	Long /US 5YR NOTE FUTURE II /188505	liability hedging	Schedule BA, D	Interest	.12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.08/28/2024	109.7266	.08/30/2024	109.5625	 Sale	(42,808)	(42,808)	0	0	.....	1,000
FVZ4	61	6,100,000	Long /US 5YR NOTE FUTURE II /188935	LIABILITY HEDGE	Schedule BA, D	Interest	.12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.09/11/2024	110.5859	.09/12/2024	110.5391	 Sale	(3,173)	(3,173)	0	0	.....	1,000
TUZ4	43	8,600,000	Long /US 2YR NOTE FUTURE II /188936	LIABILITY HEDGE	Schedule BA, D	Interest	.12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.09/11/2024	104.3164	.09/13/2024	104.4180	 Sale	8,513	8,513	0	0	.....	2,000
FVZ4	122	12,200,000	Long /US 5YR NOTE FUTURE II /188935	LIABILITY HEDGE	Schedule BA, D	Interest	.12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.09/11/2024	110.5859	.09/13/2024	110.6406	 Sale	6,045	6,045	0	0	.....	1,000
TYZ4	191	19,100,000	Long /US 10Y NOTE FUTURE II /188934	LIABILITY HEDGE	Schedule BA, D	Interest	.12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.09/11/2024	115.3438	.09/16/2024	115.4688	 Sale	22,836	22,836	0	0	.....	1,000
FVZ4	41	4,100,000	Long /US 5YR NOTE FUTURE II /188935	LIABILITY HEDGE	Schedule BA, D	Interest	.12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.09/11/2024	110.5859	.09/16/2024	110.6875	 Sale	3,953	3,953	0	0	.....	1,000
FVZ4	132	13,200,000	Long /US 5YR NOTE FUTURE II /188935	LIABILITY HEDGE	Schedule BA, D	Interest	.12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.09/11/2024	110.5859	.09/17/2024	110.5469	 Sale	(5,835)	(5,835)	0	0	.....	1,000
TYZ4	200	20,000,000	Long /US 10Y NOTE FUTURE II /188934	LIABILITY HEDGE	Schedule BA, D	Interest	.12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.09/11/2024	115.3438	.09/18/2024	115.0938	 Sale	(51,088)	(51,088)	0	0	.....	1,000
FVZ4	102	10,200,000	Long /US 5YR NOTE FUTURE II /188935	LIABILITY HEDGE	Schedule BA, D	Interest	.12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.09/11/2024	110.5859	.09/18/2024	110.3750	 Sale	(22,040)	(22,040)	0	0	.....	1,000
TYZ4	91	9,100,000	Long /US 10Y NOTE FUTURE II /188934	LIABILITY HEDGE	Schedule BA, D	Interest	.12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.09/11/2024	115.3438	.09/20/2024	114.5781	 Sale	(70,167)	(70,167)	0	0	.....	1,000
FVZ4	173	17,300,000	Long /US 5YR NOTE FUTURE II /188935	LIABILITY HEDGE	Schedule BA, D	Interest	.12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.09/11/2024	110.5859	.09/20/2024	110.0939	 Sale	(86,014)	(86,014)	0	0	.....	1,000
FVZ4	173	17,300,000	Long /US 5YR NOTE FUTURE II /188935	LIABILITY HEDGE	Schedule BA, D	Interest	.12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	.09/11/2024	110.5859	.09/23/2024	110.0391	 Sale	(95,499)	(95,499)	0	0	.....	1,000

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART B - SECTION 2

Future Contracts Terminated December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Change in Variation Margin			19	20
															16	17	18		
Ticker Symbol	Number of Contracts	Notional Amount	Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Date of Maturity or Expiration	Exchange	Trade Date	Transaction Price	Termination Date	Termination Price	Indicate Exercise, Expiration, Maturity or Sale	Cumulative Variation Margin at Termination	Gain (Loss) Recognized in Current Year	Gain (Loss) Used to Adjust Basis of Hedged Item	Deferred	Hedge Effective-ness at Inception and at Termination (b)	Value of One (1) Point
TYZ4	328	32,800,000	Long /US 10Y NOTE FUTURE II /188934	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/11/2024	115.3438	09/24/2024	114.7935	 Sale	(182,269)	(182,269)	0	0	.....	1,000
FVZ4	10	1,000,000	Long /US 5YR NOTE FUTURE II /188935	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/11/2024	110.5859	09/24/2024	110.3125	 Sale	(2,786)	(2,786)	0	0	.....	1,000
TYZ4	392	39,200,000	Long /US 10Y NOTE FUTURE II /188934	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/11/2024	115.3438	09/26/2024	114.3750	 Sale	(381,882)	(381,882)	0	0	.....	1,000
TUZ4	48	9,600,000	Long /US 2YR NOTE FUTURE II /189572	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	104.2070	09/30/2024	104.2227	 Sale	1,253	1,253	0	0	.....	2,000
FVZ4	134	13,400,000	Long /US 5YR NOTE FUTURE II /189574	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	110.0234	09/30/2024	110.1094	 Sale	10,827	10,827	0	0	.....	1,000
TYZ4	91	9,100,000	Long /US 10Y NOTE FUTURE II /188934	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/11/2024	115.3438	10/01/2024	114.8750	 Sale	(43,151)	(43,151)	0	0	.....	1,000
TYZ4	100	10,000,000	Long /US 10Y NOTE FUTURE II /189573	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	114.4531	10/01/2024	114.8750	 Sale	41,644	41,644	0	0	.....	1,000
TUZ4	21	4,200,000	Long /US 2YR NOTE FUTURE II /189572	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	104.2070	10/01/2024	104.2227	 Sale	548	548	0	0	.....	2,000
FVZ4	113	11,300,000	Long /US 5YR NOTE FUTURE II /189574	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	110.0234	10/01/2024	110.2578	 Sale	25,904	25,904	0	0	.....	1,000
TYZ4	27	2,700,000	Long /US 10Y NOTE FUTURE II /189573	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	114.4531	10/02/2024	114.3906	 Sale	(1,834)	(1,834)	0	0	.....	1,000
FVZ4	278	27,800,000	Long /US 5YR NOTE FUTURE II /189574	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	110.0234	10/02/2024	109.9766	 Sale	(14,460)	(14,460)	0	0	.....	1,000
TYZ4	55	5,500,000	Long /US 10Y NOTE FUTURE II /189573	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	114.4531	10/03/2024	114.0625	 Sale	(21,784)	(21,784)	0	0	.....	1,000
FVZ4	93	9,300,000	Long /US 5YR NOTE FUTURE II /189574	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	110.0234	10/03/2024	109.7109	 Sale	(29,541)	(29,541)	0	0	.....	1,000
TYZ4	45	4,500,000	Long /US 10Y NOTE FUTURE II /189573	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	114.4531	10/04/2024	112.8750	 Sale	(71,260)	(71,260)	0	0	.....	1,000
FVZ4	339	33,900,000	Long /US 5YR NOTE FUTURE II /189574	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	110.0234	10/04/2024	108.7969	 Sale	(417,547)	(417,547)	0	0	.....	1,000
TYZ4	55	5,500,000	Long /US 10Y NOTE FUTURE II /189573	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	114.4531	10/07/2024	112.4688	 Sale	(109,440)	(109,440)	0	0	.....	1,000
FVZ4	82	8,200,000	Long /US 5YR NOTE FUTURE II /189574	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	110.0234	10/07/2024	108.5156	 Sale	(124,062)	(124,062)	0	0	.....	1,000
TYZ4	446	44,600,000	Long /US 10Y NOTE FUTURE II /189573	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	114.4531	10/08/2024	112.4531	 Sale	(894,426)	(894,426)	0	0	.....	1,000
FVZ4	72	7,200,000	Long /US 5YR NOTE FUTURE II /189574	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	110.0234	10/08/2024	108.5469	 Sale	(106,683)	(106,683)	0	0	.....	1,000
TYZ4	327	32,700,000	Long /US 10Y NOTE FUTURE II /189573	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	114.4531	10/09/2024	112.3750	 Sale	(681,326)	(681,326)	0	0	.....	1,000
TYZ4	146	14,600,000	Long /US 10Y NOTE FUTURE II /189573	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	09/26/2024	114.4531	10/10/2024	112.1719	 Sale	(333,857)	(333,857)	0	0	.....	1,000
TYZ4	266	26,600,000	Long /US 10Y NOTE FUTURE II /190118	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/09/2024	112.2500	10/11/2024	112.1719	 Sale	(22,228)	(22,228)	0	0	.....	1,000
TUZ4	50	10,000,000	Long /US 2YR NOTE FUTURE II /190119	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/09/2024	103.3672	10/11/2024	103.4453	 Sale	7,556	7,556	0	0	.....	2,000
FVZ4	422	42,200,000	Long /US 5YR NOTE FUTURE II /190120	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/09/2024	108.3861	10/11/2024	108.4297	 Sale	16,221	16,221	0	0	.....	1,000
FVZ4	175	17,500,000	Long /US 5YR NOTE FUTURE II /190120	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/09/2024	108.3861	10/15/2024	108.5469	 Sale	27,234	27,234	0	0	.....	1,000
TYZ4	192	19,200,000	Long /US 10Y NOTE FUTURE II /190118	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/09/2024	112.2500	10/16/2024	112.5469	 Sale	55,956	55,956	0	0	.....	1,000
FVZ4	185	18,500,000	Long /US 5YR NOTE FUTURE II /190120	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/09/2024	108.3861	10/16/2024	108.6172	 Sale	41,798	41,798	0	0	.....	1,000
TYZ4	92	9,200,000	Long /US 10Y NOTE FUTURE II /190118	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/09/2024	112.2500	10/17/2024	112.0313	 Sale	(20,625)	(20,625)	0	0	.....	1,000
FVZ4	31	3,100,000	Long /US 5YR NOTE FUTURE II /190120	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/09/2024	108.3861	10/17/2024	108.3281	 Sale	(1,957)	(1,957)	0	0	.....	1,000

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART B - SECTION 2

Future Contracts Terminated December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Change in Variation Margin			19	20
															16	17	18		
Ticker Symbol	Number of Contracts	Notional Amount	Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Date of Maturity or Expiration	Exchange	Trade Date	Transaction Price	Termination Date	Termination Price	Indicate Exercise, Expiration, Maturity or Sale	Cumulative Variation Margin at Termination	Gain (Loss) Recognized in Current Year	Gain (Loss) Used to Adjust Basis of Hedged Item	Deferred	Hedge Effective-ness at Inception and at Termination (b)	Value of One (1) Point
TYZ4	183	18,300,000	Long /US 10Y NOTE FUTURE II /190118	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/09/2024	112.2500	10/22/2024	111.2969	 Sale	(175,417)	(175,417)	0	0	.....	1,000
TUZ4	256	51,200,000	Long /US 2YR NOTE FUTURE II /190348	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/16/2024	103.4865	10/22/2024	103.2070	 Sale	(144,428)	(144,428)	0	0	.....	2,000
FVZ4	227	22,700,000	Long /US 5YR NOTE FUTURE II /190120	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/09/2024	108.3861	10/22/2024	107.8750	 Sale	(117,189)	(117,189)	0	0	.....	1,000
FVZ4	134	13,400,000	Long /US 5YR NOTE FUTURE II /190147	Liability hedging	Schedule BA, D	Interest	12/31/2024	CBOT	10/10/2024	108.3438	10/22/2024	107.8750	 Sale	(63,501)	(63,501)	0	0	.....	1,000
FVZ4	216	21,600,000	Long /US 10Y NOTE FUTURE II /190347	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/16/2024	108.6042	10/22/2024	107.8750	 Sale	(158,612)	(158,612)	0	0	.....	1,000
TYZ4	73	7,300,000	Long /US 2YR NOTE FUTURE II /190118	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/09/2024	112.2500	10/23/2024	111.1563	 Sale	(80,241)	(80,241)	0	0	.....	1,000
TUZ4	28	5,600,000	Long /US 5YR NOTE FUTURE II /190348	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/16/2024	103.4865	10/23/2024	103.1875	 Sale	(16,891)	(16,891)	0	0	.....	2,000
FVZ4	412	41,200,000	Long /US 2YR NOTE FUTURE II /190347	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/16/2024	108.6042	10/23/2024	107.7656	 Sale	(347,600)	(347,600)	0	0	.....	1,000
TUZ4	20	4,000,000	Long /US 5YR NOTE FUTURE II /190348	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/16/2024	103.4865	10/24/2024	103.2422	 Sale	(9,877)	(9,877)	0	0	.....	2,000
FVZ4	180	18,000,000	Long /US 10Y NOTE FUTURE II /190347	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/16/2024	108.6042	10/24/2024	107.8906	 Sale	(129,364)	(129,364)	0	0	.....	1,000
TYZ4	156	15,600,000	Long /US 2YR NOTE FUTURE II /190118	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/09/2024	112.2500	10/28/2024	110.7969	 Sale	(227,536)	(227,536)	0	0	.....	1,000
TUZ4	94	18,800,000	Long /US 5YR NOTE FUTURE II /190348	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/16/2024	103.4865	10/28/2024	103.0742	 Sale	(78,001)	(78,001)	0	0	.....	2,000
FVZ4	294	29,400,000	Long /US 10Y NOTE FUTURE II /190347	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/16/2024	108.6042	10/28/2024	107.5156	 Sale	(321,544)	(321,544)	0	0	.....	1,000
TYZ4	64	6,400,000	Long /US 10Y NOTE FUTURE II /190118	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/09/2024	112.2500	10/30/2024	110.9844	 Sale	(81,348)	(81,348)	0	0	.....	1,000
TYZ4	73	7,300,000	Long /US 10Y NOTE FUTURE II /190146	Liability hedging	Schedule BA, D	Interest	12/31/2024	CBOT	10/10/2024	112.0938	10/30/2024	110.7344	 Sale	(99,632)	(99,632)	0	0	.....	1,000
TYZ4	46	4,600,000	Long /US 10Y NOTE FUTURE II /190146	Liability hedging	Schedule BA, D	Interest	12/31/2024	CBOT	10/10/2024	112.0938	10/30/2024	110.9844	 Sale	(51,281)	(51,281)	0	0	.....	1,000
TYZ4	136	13,600,000	Long /US 10Y NOTE FUTURE II /190349	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/16/2024	112.5313	10/30/2024	110.7344	 Sale	(245,115)	(245,115)	0	0	.....	1,000
TYZ4	47	4,700,000	Long /US 5YR NOTE FUTURE II /190829	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/30/2024	110.9688	10/30/2024	110.7344	 Sale	(11,399)	(11,399)	0	0	.....	1,000
FVZ4	1	100,000	Long /US 5YR NOTE FUTURE II /190347	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/16/2024	108.6042	10/30/2024	107.4141	 Sale	(1,195)	(1,195)	0	0	.....	1,000
FVZ4	82	8,200,000	Long /US 5YR NOTE FUTURE II /190347	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/16/2024	108.6042	10/30/2024	107.5703	 Sale	(85,198)	(85,198)	0	0	.....	1,000
FVZ4	127	12,700,000	Long /US 10Y NOTE FUTURE II /190828	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/30/2024	107.5547	10/30/2024	107.4141	 Sale	(18,839)	(18,839)	0	0	.....	1,000
TYZ4	64	6,400,000	Long /US 10Y NOTE FUTURE II /190829	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/30/2024	110.9688	10/31/2024	110.5938	 Sale	(24,348)	(24,348)	0	0	.....	1,000
TYZ4	28	2,800,000	Long /US 10Y NOTE FUTURE II /190861	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/30/2024	110.5625	10/31/2024	110.4219	 Sale	(4,090)	(4,090)	0	0	.....	1,000
TYZ4	58	5,800,000	Long /US 2YR NOTE FUTURE II /190861	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/30/2024	110.5625	10/31/2024	110.5938	 Sale	1,497	1,497	0	0	.....	1,000
TUZ4	14	2,800,000	Long /US 5YR NOTE FUTURE II /190348	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/16/2024	103.4865	10/31/2024	102.9844	 Sale	(14,133)	(14,133)	0	0	.....	2,000
FVZ4	1	100,000	Long /US 5YR NOTE FUTURE II /190828	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/30/2024	107.5547	10/31/2024	107.3047	 Sale	(255)	(255)	0	0	.....	1,000
FVZ4	265	26,500,000	Long /US 10Y NOTE FUTURE II /190863	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/30/2024	107.2891	10/31/2024	107.3047	 Sale	2,779	2,779	0	0	.....	1,000
TYZ4	95	9,500,000	Long /US 10Y NOTE FUTURE II /190861	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/30/2024	110.5625	11/04/2024	110.4063	 Sale	(15,361)	(15,361)	0	0	.....	1,000
TUZ4	11	2,200,000	Long /US 2YR NOTE FUTURE II /190348	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT	10/16/2024	103.4865	11/04/2024	102.9453	 Sale	(11,964)	(11,964)	0	0	.....	2,000

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART B - SECTION 2

Future Contracts Terminated December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Change in Variation Margin			19	20
															16	17	18		
Ticker Symbol	Number of Contracts	Notional Amount	Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Date of Maturity or Expiration	Exchange	Trade Date	Transaction Price	Termination Date	Termination Price	Indicate Exercise, Expiration, Maturity or Sale	Cumulative Variation Margin at Termination	Gain (Loss) Recognized in Current Year	Gain (Loss) Used to Adjust Basis of Hedged Item	Deferred	Hedge Effective-ness at Inception and at Termination (b)	Value of One (1) Point
FVZ4	69	6,900,000	Long /US 5YR NOTE FUTURE II /190863	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	10/30/2024	107.2891	11/04/2024	107.2031	 Sale	(6,284)	(6,284)	0	0 .....	.....	1,000
TYZ4	836	83,600,000	Long /US 10Y NOTE FUTURE II /190861	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	10/30/2024	110.5625	11/05/2024	110.2344	 Sale	(278,860)	(278,860)	0	0 .....	.....	1,000
TUZ4	32	6,400,000	Long /US 2YR NOTE FUTURE II /190348	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	10/16/2024	103.4865	11/05/2024	102.9063	 Sale	(37,303)	(37,303)	0	0 .....	.....	2,000
TUZ4	36	7,200,000	Long /US 5YR NOTE FUTURE II /190862	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	10/30/2024	102.9727	11/05/2024	102.9063	 Sale	(4,966)	(4,966)	0	0 .....	.....	2,000
FVZ4	666	66,600,000	FUTURE II /190863 Long /US 10Y NOTE	LIABILITY HEDGE	Schedule BA, D	Interest	12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	10/30/2024	107.2891	11/05/2024	107.0859	 Sale	(138,704)	(138,704)	0	0 .....	.....	1,000
TYZ4	484	48,400,000	FUTURE II /191363 Long /US 10Y NOTE	liability hedging	Schedule BA, D	Interest	12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	11/12/2024	109.4219	11/13/2024	109.3594	 Sale	(32,883)	(32,883)	0	0 .....	.....	1,000
TYZ4	558	55,800,000	FUTURE II /191363 Long /US 2YR NOTE	liability hedging	Schedule BA, D	Interest	12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	11/12/2024	109.4219	11/15/2024	109.3281	 Sale	(55,348)	(55,348)	0	0 .....	.....	1,000
TUZ4	37	7,400,000	FUTURE II /191364 Long /US 5YR NOTE	liability hedging	Schedule BA, D	Interest	12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	11/12/2024	102.5977	11/15/2024	102.6328	 Sale	2,411	2,411	0	0 .....	.....	2,000
FVZ4	957	95,700,000	FUTURE II /191362 Long /US 10Y NOTE	liability hedging	Schedule BA, D	Interest	12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	11/12/2024	106.5012	11/15/2024	106.4972	 Sale	(8,700)	(8,700)	0	0 .....	.....	1,000
TYZ4	177	17,700,000	FUTURE II /191363 Long /US 2YR NOTE	liability hedging	Schedule BA, D	Interest	12/31/2024	CBOT LCZ7XYGSLJUHFXXNXD88	11/12/2024	109.4219	11/18/2024	109.6250	 Sale	34,990	34,990	0	0 .....	.....	1,000
TUH5	247	49,400,000	FUTURE II /191918 Long /US 5YR NOTE	liability hedging	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	11/26/2024	102.8906	11/27/2024	102.9883	 Sale	46,973	46,973	0	0 .....	.....	2,000
FVH5	802	80,200,000	FUTURE II /191919 Long /US 10Y NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	11/26/2024	107.1569	11/27/2024	107.4844	 Sale	258,480	258,480	0	0 .....	.....	1,000
TYH5	610	61,000,000	FUTURE II /191917 Long /US 10Y NOTE	liability hedging	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	11/26/2024	110.4844	12/02/2024	111.1094	 Sale	377,932	377,932	0	0 .....	.....	1,000
TYH5	209	20,900,000	FUTURE II /191917 Long /US 5YR NOTE	liability hedging	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	11/26/2024	110.4844	12/02/2024	111.1250	 Sale	132,754	132,754	0	0 .....	.....	1,000
FVH5	589	58,900,000	FUTURE II /191919 Long /US 10Y NOTE	Portfolio Hedge	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	11/26/2024	107.1569	12/02/2024	107.5391	 Sale	222,042	222,042	0	0 .....	.....	1,000
TYH5	423	42,300,000	FUTURE II /191917 Long /US 10Y NOTE	liability hedging	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	11/26/2024	110.4844	12/04/2024	110.6563	 Sale	70,402	70,402	0	0 .....	.....	1,000
TYH5	189	18,900,000	FUTURE II /192428 Long /US 5YR NOTE	LIABILITY HEDGE	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	12/11/2024	110.7188	12/12/2024	110.5781	 Sale	(27,606)	(27,606)	0	0 .....	.....	1,000
FVH5	93	9,300,000	FUTURE II /192429 Long /US 10Y NOTE	LIABILITY HEDGE	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	12/11/2024	107.3594	12/12/2024	107.2969	 Sale	(6,291)	(6,291)	0	0 .....	.....	1,000
TYH5	117	11,700,000	FUTURE II /192474 Long /US 2YR NOTE	liability hedging	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	12/12/2024	110.4844	12/13/2024	110.0156	 Sale	(55,480)	(55,480)	0	0 .....	.....	1,000
TUH5	125	25,000,000	FUTURE II /192473 Long /US 5YR NOTE	liability hedging	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	12/12/2024	103.0273	12/13/2024	102.9141	 Sale	(28,963)	(28,963)	0	0 .....	.....	2,000
FVH5	124	12,400,000	FUTURE II /192429 Long /US 5YR NOTE	LIABILITY HEDGE	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	12/11/2024	107.3594	12/13/2024	106.9396	 Sale	(52,692)	(52,692)	0	0 .....	.....	1,000
FVH5	402	40,200,000	FUTURE II /192472 Long /US 10Y NOTE	liability hedging	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	12/12/2024	107.2442	12/13/2024	106.9396	 Sale	(124,530)	(124,530)	0	0 .....	.....	1,000
TYH5	468	46,800,000	FUTURE II /192474 Long /US 5YR NOTE	liability hedging	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	12/12/2024	110.4844	12/16/2024	109.8281	 Sale	(309,671)	(309,671)	0	0 .....	.....	1,000
FVH5	268	26,800,000	FUTURE II /192472 Long /US 10Y NOTE	liability hedging	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	12/12/2024	107.2442	12/16/2024	106.8281	 Sale	(112,890)	(112,890)	0	0 .....	.....	1,000
TYH5	113	11,300,000	FUTURE II /192474 Long /US 2YR NOTE	liability hedging	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	12/12/2024	110.4844	12/17/2024	109.9375	 Sale	(62,412)	(62,412)	0	0 .....	.....	1,000
TUH5	217	43,400,000	FUTURE II /192473 Long /US 5YR NOTE	liability hedging	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	12/12/2024	103.0273	12/17/2024	102.8711	 Sale	(68,928)	(68,928)	0	0 .....	.....	2,000
FVH5	206	20,600,000	FUTURE II /192472 Long /US 10Y NOTE	liability hedging	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	12/12/2024	107.2442	12/17/2024	106.8694	 Sale	(78,266)	(78,266)	0	0 .....	.....	1,000
TYH5	487	48,700,000	FUTURE II /192474 Long /US 5YR NOTE	liability hedging	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	12/12/2024	110.4844	12/18/2024	109.3281	 Sale	(565,743)	(565,743)	0	0 .....	.....	1,000
FVH5	52	5,200,000	FUTURE II /192472	liability hedging	Schedule BA, D	Interest	03/31/2025	CBOT LCZ7XYGSLJUHFXXNXD88	12/12/2024	107.2442	12/18/2024	106.4531	 Sale	(41,404)	(41,404)	0	0 .....	.....	1,000

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART B - SECTION 2

Future Contracts Terminated December 31 of Current Year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Change in Variation Margin			19	20
															16	17	18		
Ticker Symbol	Number of Contracts	Notional Amount	Description	Description of Item(s) Hedged, Used for Income Generation or Replicated	Schedule/ Exhibit Identifier	Type(s) of Risk(s) (a)	Date of Maturity or Expiration	Exchange	Trade Date	Transaction Price	Termination Date	Termination Price	Indicate Exercise, Expiration, Maturity or Sale	Cumulative Variation Margin at Termination	Gain (Loss) Recognized in Current Year	Gain (Loss) Used to Adjust Basis of Hedged Item	Deferred	Hedge Effective-ness at Inception and at Termination (b)	Value of One (1) Point
TYH5	 238	 23,800,000	Long /US 10Y NOTE FUTURE II /192474	liability hedging	Schedule BA, D	Interest	.03/31/2025	CBOT LCZ7XYGSLJUHFXNXND88	.12/12/2024	 110.4844	.12/19/2024	 108.7188	 Sale	 (421,513)	 (421,513)	 0	 0	.....	..... 1,000
FVH5	 217	 21,700,000	Long /US 5YR NOTE FUTURE II /192472	liability hedging	Schedule BA, D	Interest	.03/31/2025	CBOT LCZ7XYGSLJUHFXNXND88	.12/12/2024	 107.2442	.12/19/2024	 106.2188	 Sale	 (223,642)	 (223,642)	 0	 0	.....	..... 1,000
TYH5	 71	 7,100,000	Long /US 10Y NOTE FUTURE II /192474	liability hedging	Schedule BA, D	Interest	.03/31/2025	CBOT LCZ7XYGSLJUHFXNXND88	.12/12/2024	 110.4844	.12/20/2024	 109.0469	 Sale	 (102,449)	 (102,449)	 0	 0	.....	..... 1,000
FVH5	 434	 43,400,000	Long /US 5YR NOTE FUTURE II /192472	liability hedging	Schedule BA, D	Interest	.03/31/2025	CBOT LCZ7XYGSLJUHFXNXND88	.12/12/2024	 107.2442	.12/20/2024	 106.3750	 Sale	 (379,471)	 (379,471)	 0	 0	.....	..... 1,000
1539999999. Subtotal - Long Futures - Hedging Other														(21,878,446)	(42,852,151)	0	0	XXX	XXX
1579999999. Subtotal - Long Futures														(21,878,446)	(42,852,151)	0	0	XXX	XXX
1649999999. Subtotal - Short Futures														0	0	0	0	XXX	XXX
1679999999. Subtotal - SSAP No. 108 Adjustments														0	0	0	0	XXX	XXX
1689999999. Subtotal - Hedging Effective Excluding Variable Annuity Guarantees Under SSAP No.108														0	0	0	0	XXX	XXX
1699999999. Subtotal - Hedging Effective Variable Annuity Guarantees Under SSAP No.108														0	0	0	0	XXX	XXX
1709999999. Subtotal - Hedging Other														(21,878,446)	(42,852,151)	0	0	XXX	XXX
1719999999. Subtotal - Replication														0	0	0	0	XXX	XXX
1729999999. Subtotal - Income Generation														0	0	0	0	XXX	XXX
1739999999. Subtotal - Other														0	0	0	0	XXX	XXX
1749999999. Subtotal - Adjustments for SSAP No. 108 Derivatives														0	0	0	0	XXX	XXX
1759999999 - Totals														(21,878,446)	(42,852,151)	0	0	XXX	XXX

(a)	Code	Description of Hedged Risk(s)
	{BLANK} .....	.....

(b)	Code	Financial or Economic Impact of the Hedge at the End of the Reporting Period
		

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART D - SECTION 1

Counterparty Exposure for Derivative Instruments Open December 31 of Current Year

1	2	3	Counterparty Offset		Book/Adjusted Carrying Value			Fair Value			12	13
			4	5	6	7	8	9	10	11		
Description of Exchange, Counterparty or Central Clearinghouse	Master Agreement (Y or N)	Credit Support Annex (Y or N)	Fair Value of Acceptable Collateral	Present Value of Financing Premium	Contracts With Book/Adjusted Carrying Value >0	Contracts With Book/Adjusted Carrying Value <0	Exposure Net of Collateral	Contracts With Fair Value >0	Contracts With Fair Value <0	Exposure Net of Collateral	Potential Exposure	Off-Balance Sheet Exposure
0199999999 - Aggregate Sum of Exchange Traded Derivatives	XXX	XXX	XXX	0	382,372,066	(231,542,541)	382,372,066	403,856,811	0	403,856,811	0	0
Bank of America, N.A. B4TYDEB66KMZ0031MB27	Y	Y	194,780,000	0	31,535,713	(3,063,331)	0	56,267,118	0	0	120,254	0
Barclays Bank PLC G5GSEF7VJP5170UK5573	Y	Y	0	0	0	0	0	0	0	0	0	0
Barclays Bank PLC G5GSEF7VJP5170UK5573	Y	Y	92,740,000	0	26,302,939	(14,509,542)	0	29,270,786	(807,689)	0	324,015	0
BNP Paribas London ROMUWSFPUBMPROBK5P83	Y	Y	0	0	0	0	0	0	0	0	0	0
BNP Paribas London ROMUWSFPUBMPROBK5P83	Y	Y	144,580,000	0	55,324,845	(17,345,129)	0	82,478,292	(79,881)	0	230,974	0
Canadian Imperial Bank of Commerce 21G119DL770XOHC3ZE78	Y	Y	2,030,000	0	2,188,029	0	158,029	2,188,029	0	158,029	64,853	64,853
Citibank N.A. E570DZIWZ7FF32TWEFA76	Y	Y	163,200,081	0	70,362,378	(2,003,469)	0	163,857,034	(2,003,469)	0	1,377,644	0
Credit Agricole 1VUV7VQFKU00SJ21A208	Y	Y	6,040,000	0	5,554,943	0	0	5,554,943	0	0	2,451,890	1,966,833
Goldman Sachs International W22LROWP21HZNBB6K528	Y	Y	68,260,000	0	3,045,809	(747,292)	0	5,089,822	0	0	0	0
JPMorgan Chase Bank, N.A. 7H6GLXDRUGGFU57RNE97	Y	Y	113,910,000	0	32,128,539	(5,834,062)	0	96,721,047	(4,623,369)	0	3,136,161	0
Morgan Stanley & Co International PLC 4PQUHNGJPPGFNF3BB653	Y	Y	6,505,000	0	1,673,166	(783,623)	0	5,531,100	0	0	0	0
Morgan Stanley Capital Services 17331LVCZKQKX5T7XV54	Y	Y	0	0	0	0	0	0	0	0	0	0
Morgan Stanley Capital Services 17331LVCZKQKX5T7XV54	Y	Y	2,620,000	0	4,241,346	(1,169,685)	451,662	4,241,346	(1,169,685)	451,662	749,834	749,834
Royal Bank of Canada ES71P3UGRH1GC71XBU11	Y	Y	104,680,000	0	20,874,994	(13,042,754)	0	31,067,936	(5,061,523)	0	582,300	0
Societe General 02RNEB1BX4P4ROTDBPU41	Y	Y	493,530,000	0	26,162,312	(11,445,008)	0	23,792,829	0	0	827	0
State Street FX 571474TGEMMIANRLN572	Y	Y	0	0	42,741	(41,808)	933	42,741	(41,808)	933	30,038	30,038
The Toronto-Dominion Bank PT3QB789TSUI0F371261	Y	Y	0	0	0	0	0	0	0	0	0	0
The Toronto-Dominion Bank PT3QB789TSUI0F371261	Y	Y	1,450,000	0	3,806,887	(169,701)	2,187,186	3,806,887	(169,701)	2,187,186	483,612	483,612
UBS AG BFM8T61CT2L1QCEM1K50	Y	Y	45,530,000	0	14,810,945	(3,815,199)	0	20,552,192	0	0	0	0
Wells Fargo Bank, N.A. KB1H1DSPRFMYMCJFXT09	Y	Y	69,900,337	0	35,132,148	(17,560,002)	0	71,670,218	(4,541,777)	0	1,841,022	0
0299999999. Total NAIC 1 Designation			1,509,755,418	0	333,187,736	(91,530,605)	2,797,810	602,132,321	(17,287,920)	2,797,810	11,393,424	3,295,170
0899999999. Aggregate Sum of Central Clearinghouses (Excluding Exchange Traded)			56,553,475	0	160,083,201	(90,461,247)	13,068,479	160,083,201	(90,461,247)	13,068,479	71,271,400	71,271,400
0999999999 - Gross Totals			1,566,308,892	0	875,643,003	(413,534,393)	398,238,355	1,166,072,333	(107,749,167)	419,723,100	82,664,824	74,566,570
1. Offset per SSAP No. 64					0	0						
2. Net after right of offset per SSAP No. 64					875,643,003	(413,534,393)						

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE DB - PART D - SECTION 2

Collateral for Derivative Instruments Open December 31 of Current Year

Collateral Pledged by Reporting Entity

1	2	3	4	5	6	7	8	9
Exchange, Counterparty or Central Clearinghouse	Type of Asset Pledged	CUSIP Identification	Description	Fair Value	Par Value	Book/Adjusted Carrying Value	Maturity Date	Type of Margin (I, V or IV)
Morgan Stanley & Co. LLC	9R7GPTS07KV3UQJZ0078 ..	Corporate.....	05723K-AF-7	BAKER HUGHES LLC/CO-OBL	12,588,365	16,000,000	8,811,856	12/15/2047
Morgan Stanley & Co. LLC	9R7GPTS07KV3UQJZ0078 ..	Corporate.....	29379V-BA-0	ENTERPRISE PRODUCTS OPER	18,167,797	20,000,000	12,717,458	03/15/2044
Morgan Stanley & Co. LLC	9R7GPTS07KV3UQJZ0078 ..	Corporate.....	110122-DQ-8	BRISTOL-MYERS SQUIBB CO	12,456,937	15,000,000	8,719,856	11/13/2030
Morgan Stanley & Co. LLC	9R7GPTS07KV3UQJZ0078 ..	Corporate.....	115637-AU-4	BROWN-FORMAN CORP	14,765,158	15,000,000	10,335,611	04/15/2033
Morgan Stanley & Co. LLC	9R7GPTS07KV3UQJZ0078 ..	Corporate.....	30231G-BN-1	EXXON MOBIL CORPORATION	896,944	1,000,000	627,861	10/15/2030
Morgan Stanley & Co. LLC	9R7GPTS07KV3UQJZ0078 ..	Corporate.....	17275R-BS-0	CISCO SYSTEMS INC	10,211,888	10,000,000	7,658,916	02/26/2031
Morgan Stanley & Co. LLC	9R7GPTS07KV3UQJZ0078 ..	Corporate.....	20030N-DH-1	Comcast Corporation	30,776,656	38,000,000	21,543,659	04/01/2040
Morgan Stanley & Co. LLC	9R7GPTS07KV3UQJZ0078 ..	Corporate.....	04636N-AK-9	ASTRAZENECA FINANCE LLC	15,331,081	15,000,000	12,264,865	02/26/2027
Morgan Stanley & Co. LLC	9R7GPTS07KV3UQJZ0078 ..	Corporate.....	03524B-AF-3	ANHEUSER-BUSCH INBEV FIN	13,657,348	15,000,000	9,560,143	02/01/2044
Morgan Stanley & Co. LLC	9R7GPTS07KV3UQJZ0078 ..	Corporate.....	91324P-DX-7	UNITEDHEALTH GROUP INC	12,953,807	15,000,000	9,715,356	05/15/2030
Morgan Stanley & Co. LLC	9R7GPTS07KV3UQJZ0078 ..	Corporate.....	94106L-BT-5	WASTE MANAGEMENT INC	15,103,527	15,000,000	11,327,646	02/15/2030
Toronto Dominion Bank	PT3QB789TSUIDF371261 ..	Cash.....	Cash Collateral	900,000	900,000	900,000		V.....
0199999999 - Total				157,809,508	175,900,000	114,183,225	XXX	XXX

Collateral Pledged to Reporting Entity

1	2	3	4	5	6	7	8	9
Exchange, Counterparty or Central Clearinghouse	Type of Asset Pledged	CUSIP Identification	Description	Fair Value	Par Value	Book/Adjusted Carrying Value	Maturity Date	Type of Margin (I, V or IV)
Bank Of America NA	B4TYDEB66KMZ0031MB27 ..	Cash.....	Cash Collateral	194,780,000	194,780,000	XXX.....		V.....
Barclays Bank Plc	G5GSEF7VJP5170UK5573 ..	Cash.....	Cash Collateral	92,740,000	92,740,000	XXX.....		V.....
BNP Paribas	ROMUWSPUB8MPRO8K5P83 ..	Cash.....	Cash Collateral	144,580,000	144,580,000	XXX.....		V.....
Canadian Imperial Bank of Commerce	21G119DL770XOHC3ZE78 ..	Cash.....	Cash Collateral	2,030,000	2,030,000	XXX.....		V.....
Citibank NA	E570DZWNZ7FF32TWEFA76 ..	Cash.....	Cash Collateral	163,200,081	163,200,081	XXX.....		V.....
Credit Agricole Corporate and Investment Bank	1VUV7VQFKUOQSJ21A208 ..	Cash.....	Cash Collateral	6,040,000	6,040,000	XXX.....		V.....
Goldman Sachs International	W22LR0WP21HZNB6K528 ..	Cash.....	Cash Collateral	68,260,000	68,260,000	XXX.....		V.....
JPMorgan Chase Bank, N.A.	7H6GLXDRUGQFUS7RNE97 ..	Cash.....	Cash Collateral	113,910,000	113,910,000	XXX.....		V.....
Morgan Stanley & Co International PLC	4PQUHNGJPPFGFNF3BB653 ..	Cash.....	Cash Collateral	6,505,000	6,505,000	XXX.....		V.....
Morgan Stanley & Co. LLC CME	9R7GPTS07KV3UQJZ0078 ..	Cash.....	Cash Collateral	56,553,475	56,553,475	XXX.....		V.....
Morgan Stanley Capital Services	I7331LCZKQKXST7XV54 ..	Cash.....	Cash Collateral	2,620,000	2,620,000	XXX.....		V.....
Royal Bank of Canada	ES71P3U3RHI GC71XBU11 ..	Cash.....	Cash Collateral	104,680,000	104,680,000	XXX.....		V.....
Societe Generale	02RNE81BXP4ROTDBPU41 ..	Cash.....	Cash Collateral	493,530,000	493,530,000	XXX.....		V.....
Toronto Dominion Bank	PT3QB789TSUIDF371261 ..	Cash.....	Cash Collateral	1,450,000	1,450,000	XXX.....		V.....
UBS AG	BFM8T6TCT2L1QCENIK50 ..	Cash.....	Cash Collateral	45,530,000	45,530,000	XXX.....		V.....
Wells Fargo Bank NA	KB1H1DSPRFMYMCUFXT09 ..	Cash.....	Cash Collateral	69,900,337	69,900,337	XXX.....		V.....
0299999999 - Total				1,566,308,892	1,566,308,892	XXX	XXX	XXX

Schedule DB - Part E - Derivatives Hedging Variable Annuity Guarantees as of December 31 of
Current Year

N O N E

Schedule DL - Part 1 - Reinvested Collateral Assets Owned

N O N E

Schedule DL - Part 2 - Reinvested Collateral Assets Owned

N O N E

SCHEDULE E - PART 1 - CASH

1	2	3	4	5	6	7
Depository	Code	Rate of Interest	Amount of Interest Received During Year	Amount of Interest Accrued December 31 of Current Year	Balance	*
Bank of New York Mellon New York, NY .....	.....	.....	.....	.....	..... 88,507,507	..XXX.
PNC Bank Pittsburgh, PA .....	.....	.....	.....	.....	..... ( 129,576,646)	..XXX.
Wells Fargo Bank / Norwest Bank Phoenix, AZ .....	.....	.....	.....	.....	..... 145,805	..XXX.
FHLB Cincinnati, OH .....	.....	..... 3.800	 1,220,956	.....	..... 85,480,055	..XXX.
State Street Global Services Kansas City, MO .....	.....	.....	.....	.....	..... 17,181,629	..XXX.
0199998 Deposits in ... depositories which do not exceed the allowable limit in any one depository (See instructions) - open depositories	XXX	XXX	.....	.....	.....	XXX
0199999. Totals - Open Depositories	XXX	XXX	1,220,956	0	61,738,350	XXX
0299998 Deposits in ... depositories which do not exceed the allowable limit in any one depository (See instructions) - suspended depositories	XXX	XXX	.....	.....	.....	XXX
0299999. Totals - Suspended Depositories	XXX	XXX	0	0	0	XXX
0399999. Total Cash on Deposit	XXX	XXX	1,220,956	0	61,738,350	XXX
0499999. Cash in Company's Office	XXX	XXX	XXX	XXX	.....	XXX
.....						
.....						
.....						
.....						
.....						
.....						
.....						
0599999 Total - Cash	XXX	XXX	1,220,956	0	61,738,350	XXX

TOTALS OF DEPOSITORY BALANCES ON THE LAST DAY OF EACH MONTH DURING THE CURRENT YEAR

1. January..... (130,462,343)	4. April..... (98,157,364)	7. July..... (92,951,719)	10. October..... 862,843
2. February.... (85,478,196)	5. May..... (74,600,145)	8. August..... (65,623,953)	11. November... 14,906,206
3. March..... (54,923,692)	6. June..... (139,105,418)	9. September..... (36,065,197)	12. December..... 61,738,350

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE E - PART 2 - CASH EQUIVALENTS

Show Investments Owned December 31 of Current Year

1	2	3	4	5	6	7	8	9
CUSIP	Description	Code	Date Acquired	Rate of Interest	Maturity Date	Book/Adjusted Carrying Value	Amount of Interest Due and Accrued	Amount Received During Year
0109999999	Total - U.S. Government Bonds					0	0	0
0309999999	Total - All Other Government Bonds					0	0	0
0509999999	Total - U.S. States, Territories and Possessions Bonds					0	0	0
0709999999	Total - U.S. Political Subdivisions Bonds					0	0	0
0909999999	Total - U.S. Special Revenues Bonds					0	0	0
.....	ALIMENTATION COUCHE-TARD INC COMMERCIAL .....	.....	12/02/2024	0.000	01/03/2025	37,590,059	0	148,481
.....	ALIMENTATION COUCHE-TARD INC COMMERCIAL .....	.....	12/13/2024	0.000	01/22/2025	16,953,276	0	42,054
.....	ALPHABET INC COMMERCIAL PAPER .....	.....	12/19/2024	0.000	01/06/2025	1,998,798	0	3,118
.....	AMCOR FLEXIBLES NORTH AMERICA INC COMMER .....	.....	12/17/2024	0.000	01/16/2025	14,970,379	0	29,504
.....	AMCOR FINANCE (USA) INC COMMERCIAL PAPER .....	.....	12/09/2024	0.000	01/16/2025	24,950,894	0	74,922
.....	AMEREN CORPORATION COMMERCIAL PAPER .....	.....	12/19/2024	0.000	01/06/2025	29,980,381	0	54,797
.....	AMEREN CORPORATION COMMERCIAL PAPER .....	.....	12/19/2024	0.000	01/10/2025	19,976,711	0	33,544
.....	AMERICAN ELECTRIC POWER COMPANY INC COMM .....	.....	12/10/2024	0.000	01/14/2025	9,983,160	0	28,369
.....	AMERICAN ELECTRIC POWER COMPANY INC COMM .....	.....	10/17/2024	0.000	01/15/2025	21,958,949	0	220,199
.....	AMERICAN ELECTRIC POWER COMPANY INC COMM .....	.....	12/11/2024	0.000	02/13/2025	9,944,908	0	26,686
.....	AMERICAN HONDA FINANCE CORPORATION COMME .....	.....	12/12/2024	0.000	03/11/2025	9,910,463	0	24,374
.....	AMERICAN HONDA FINANCE CORPORATION COMME .....	.....	12/12/2024	0.000	03/12/2025	17,638,294	0	45,664
.....	AUTOZONE INC COMMERCIAL PAPER .....	.....	12/26/2024	0.000	01/02/2025	20,997,373	0	15,748
.....	AUTOZONE INC COMMERCIAL PAPER .....	.....	12/27/2024	0.000	01/06/2025	8,994,359	0	5,634
.....	AVANGRID INC COMMERCIAL PAPER .....	.....	12/27/2024	0.000	01/03/2025	39,989,927	0	25,160
.....	AVANGRID INC COMMERCIAL PAPER .....	.....	12/11/2024	0.000	02/13/2025	24,862,074	0	80,229
.....	BECTON DICKINSON AND COMPANY COMMERCIAL .....	.....	12/17/2024	0.000	02/20/2025	24,837,204	0	45,204
.....	BECTON DICKINSON AND COMPANY COMMERCIAL .....	.....	12/18/2024	0.000	02/21/2025	24,837,523	0	41,079
.....	BELL TELEPHONE COMPANY OF CANADA OR BELL .....	.....	11/26/2024	0.000	01/27/2025	24,914,203	0	114,571
.....	BELL TELEPHONE COMPANY OF CANADA OR BELL .....	.....	12/04/2024	0.000	02/07/2025	24,877,774	0	88,440
.....	BOSTON SCIENTIFIC CORPORATION COMMERCIAL .....	.....	12/17/2024	0.000	01/08/2025	24,976,913	0	49,329
.....	CIGNA GROUP COMMERCIAL PAPER .....	.....	12/11/2024	0.000	01/08/2025	14,966,314	0	38,964
.....	CIGNA GROUP COMMERCIAL PAPER .....	.....	12/03/2024	0.000	01/09/2025	9,989,516	0	37,821
.....	CIGNA GROUP COMMERCIAL PAPER .....	.....	12/09/2024	0.000	01/10/2025	24,970,729	0	71,264
.....	CRH AMERICA FINANCE INC COMMERCIAL PAPER .....	.....	12/13/2024	0.000	01/30/2025	19,924,119	0	41,619
.....	CRH AMERICA FINANCE INC COMMERCIAL PAPER .....	.....	12/13/2024	0.000	01/31/2025	29,883,459	0	74,626
.....	CANADIAN PACIFIC RAILWAY COMPANY COMMER .....	.....	12/05/2024	0.000	01/02/2025	9,998,684	0	35,395
.....	CANADIAN PACIFIC RAILWAY COMPANY COMMER .....	.....	12/12/2024	0.000	01/13/2025	36,442,839	0	90,140
.....	CANADIAN PACIFIC RAILWAY COMPANY COMMER .....	.....	12/17/2024	0.000	01/15/2025	9,981,686	0	19,547
.....	CINTAS NO 2 CORP COMMERCIAL PAPER .....	.....	12/04/2024	0.000	01/06/2025	9,993,463	0	35,152
.....	CLOROX COMPANY COMMERCIAL PAPER .....	.....	12/18/2024	0.000	01/29/2025	9,963,768	0	18,018
.....	CLOROX COMPANY COMMERCIAL PAPER .....	.....	12/17/2024	0.000	02/18/2025	19,874,989	0	33,589
.....	DNB BANK ASA COMMERCIAL PAPER .....	.....	12/31/2024	0.000	01/07/2025	90,935,837	0	10,685
.....	DTE ENERGY COMPANY COMMERCIAL PAPER .....	.....	12/11/2024	0.000	01/07/2025	17,986,012	0	48,787
.....	DTE ENERGY COMPANY COMMERCIAL PAPER .....	.....	12/26/2024	0.000	01/21/2025	11,969,310	0	9,176
.....	DTE ELECTRIC COMPANY COMMERCIAL PAPER .....	.....	12/17/2024	0.000	01/22/2025	15,457,239	0	30,399
.....	DAIMLER TRUCK FINANCE NORTH AMERICA LLC .....	.....	12/02/2024	0.000	01/02/2025	24,996,689	0	95,647
.....	DAIMLER TRUCK FINANCE NORTH AMERICA LLC .....	.....	12/17/2024	0.000	02/14/2025	24,856,107	0	48,677
.....	DOMINION ENERGY SOUTH CAROLINA INC COMME .....	.....	12/02/2024	0.000	01/15/2025	14,972,299	0	59,016
.....	DOMINION ENERGY SOUTH CAROLINA INC COMME .....	.....	12/11/2024	0.000	01/16/2025	24,950,809	0	65,288
.....	DUKE ENERGY CORP COMMERCIAL PAPER .....	.....	12/11/2024	0.000	02/10/2025	24,872,996	0	66,162
.....	ENBRIDGE (US) INC COMMERCIAL PAPER .....	.....	12/04/2024	0.000	01/02/2025	19,997,351	0	73,879
.....	ENBRIDGE (US) INC COMMERCIAL PAPER .....	.....	12/06/2024	0.000	01/06/2025	29,980,224	0	102,416
.....	ENTERGY CORPORATION COMMERCIAL PAPER .....	.....	10/30/2024	0.000	01/08/2025	22,978,127	0	191,931
.....	ENTERGY CORPORATION COMMERCIAL PAPER .....	.....	10/25/2024	0.000	01/15/2025	14,972,041	0	134,332
.....	EQUIFAX INC COMMERCIAL PAPER .....	.....	12/11/2024	0.000	01/08/2025	4,995,448	0	12,960
.....	EQUIFAX INC COMMERCIAL PAPER .....	.....	11/22/2024	0.000	02/05/2025	19,906,989	0	97,389
.....	EQUIFAX INC COMMERCIAL PAPER .....	.....	11/22/2024	0.000	02/06/2025	24,880,431	0	118,431
.....	EVERGY KANSAS CENTRAL INC COMMERCIAL PAP .....	.....	11/18/2024	0.000	01/15/2025	19,963,238	0	112,071
.....	EVERGY KANSAS CENTRAL INC COMMERCIAL PAP .....	.....	12/09/2024	0.000	01/23/2025	13,959,071	0	40,691
.....	EVERSOURCE ENERGY COMMERCIAL PAPER .....	.....	12/30/2024	0.000	01/21/2025	19,948,542	0	5,131

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE E - PART 2 - CASH EQUIVALENTS

Show Investments Owned December 31 of Current Year

1	2	3	4	5	6	7	8	9
CUSIP	Description	Code	Date Acquired	Rate of Interest	Maturity Date	Book/Adjusted Carrying Value	Amount of Interest Due and Accrued	Amount Received During Year
	EVERSOURCE ENERGY COMMERCIAL PAPER		12/26/2024	0.000	01/27/2025	21,926,059	0	16,993
	EXPERIAN FINANCE PLC COMMERCIAL PAPER		12/03/2024	0.000	01/21/2025	8,976,209	0	34,274
	EXPERIAN FINANCE PLC COMMERCIAL PAPER		12/18/2024	0.000	02/11/2025	5,968,510	0	10,677
	EXPERIAN FINANCE PLC COMMERCIAL PAPER		12/17/2024	0.000	02/14/2025	12,925,973	0	25,044
	EXPERIAN FINANCE PLC COMMERCIAL PAPER		12/18/2024	0.000	02/20/2025	19,869,763	0	36,163
	FIDELITY NATIONAL INFORMATION SERVICES I		12/19/2024	0.000	01/13/2025	49,923,206	0	82,928
	FISERV INC COMMERCIAL PAPER		12/26/2024	0.000	01/02/2025	14,998,132	0	11,199
	FLORIDA POWER & LIGHT CO COMMERCIAL PAPE		12/02/2024	0.000	01/07/2025	6,295,162	0	24,079
	FORTIVE CORP COMMERCIAL PAPER		12/04/2024	0.000	01/08/2025	9,990,867	0	36,367
	FORTIVE CORP COMMERCIAL PAPER		12/09/2024	0.000	01/09/2025	27,970,793	0	83,633
	FORTIVE CORP COMMERCIAL PAPER		12/04/2024	0.000	01/13/2025	13,978,033	0	50,989
	HYUNDAI CAPITAL AMERICA COMMERCIAL PAPER		12/11/2024	0.000	01/22/2025	39,890,501	0	108,901
	KEURIG DR PEPPER INC COMMERCIAL PAPER		12/17/2024	0.000	01/10/2025	49,941,142	0	91,281
	L3HARRIS TECHNOLOGIES INC COMMERCIAL PAP		12/26/2024	0.000	01/02/2025	44,994,229	0	64,914
	L3HARRIS TECHNOLOGIES INC COMMERCIAL PAP		12/05/2024	0.000	01/03/2025	14,996,028	0	53,423
	MARRIOTT INTERNATIONAL INC COMMERCIAL PA		12/05/2024	0.000	01/22/2025	20,942,468	0	73,508
	MARRIOTT INTERNATIONAL INC COMMERCIAL PA		12/11/2024	0.000	02/06/2025	9,953,581	0	25,603
	MCKESSON CORP COMMERCIAL PAPER		12/31/2024	0.000	01/02/2025	306,961,313	0	50,050
	MCKESSON CORP COMMERCIAL PAPER		12/17/2024	0.000	01/03/2025	10,997,091	0	21,765
	MICROCHIP TECHNOLOGY INCORPORATED COMMER		12/10/2024	0.000	01/30/2025	18,928,318	0	54,019
	MICROCHIP TECHNOLOGY INCORPORATED COMMER		12/04/2024	0.000	02/07/2025	14,927,130	0	52,730
	MOHAWK INDUSTRIES INC COMMERCIAL PAPER		12/18/2024	0.000	01/08/2025	9,990,844	0	18,261
	MOHAWK INDUSTRIES INC COMMERCIAL PAPER		12/17/2024	0.000	01/14/2025	21,962,987	0	42,553
	MOHAWK INDUSTRIES INC COMMERCIAL PAPER		12/17/2024	0.000	01/21/2025	20,945,176	0	40,930
	MOSAIC CO/THE COMMERCIAL PAPER		12/18/2024	0.000	01/09/2025	19,979,432	0	33,332
	MOSAIC CO/THE COMMERCIAL PAPER		12/17/2024	0.000	01/14/2025	39,931,253	0	79,031
	NATIONAL RURAL UTILITIES COOPERATIVE FIN		12/18/2024	0.000	01/13/2025	8,986,476	0	15,726
	NISOURCE INC COMMERCIAL PAPER		12/12/2024	0.000	01/07/2025	14,988,219	0	39,136
	NISOURCE INC COMMERCIAL PAPER		12/17/2024	0.000	01/14/2025	34,940,235	0	64,135
	OGE ENERGY CORPORATION COMMERCIAL PAPER		11/19/2024	0.000	01/07/2025	24,979,969	0	142,622
	OGE ENERGY CORPORATION COMMERCIAL PAPER		12/05/2024	0.000	01/14/2025	14,974,015	0	53,682
	OREILLY AUTOMOTIVE INC COMMERCIAL PAPER		12/12/2024	0.000	01/16/2025	27,945,023	0	72,968
	PARKER HANNUFIN CORPORATION COMMERCIAL P		12/02/2024	0.000	02/06/2025	29,858,446	0	116,946
	PARKER HANNUFIN CORPORATION COMMERCIAL P		12/11/2024	0.000	02/14/2025	10,067,424	0	27,249
	PARKER HANNUFIN CORPORATION COMMERCIAL P		12/11/2024	0.000	02/19/2025	4,670,236	0	12,641
	PHILLIPS 66 COMMERCIAL PAPER		12/20/2024	0.000	01/03/2025	14,996,161	0	22,994
	PHILLIPS 66 COMMERCIAL PAPER		12/19/2024	0.000	01/06/2025	19,987,201	0	33,201
	PHILLIPS 66 COMMERCIAL PAPER		12/20/2024	0.000	01/07/2025	15,987,715	0	24,515
	PUBLIC SERVICE ENTERPRISE GROUP INCORPOR		12/09/2024	0.000	01/08/2025	49,953,679	0	151,596
	RELX INC(PRE-REINCORPORATION) COMMERCIAL		12/20/2024	0.000	01/03/2025	39,989,762	0	61,318
	RELX INC(PRE-REINCORPORATION) COMMERCIAL		12/19/2024	0.000	01/22/2025	9,973,298	0	16,459
	ROCKWELL AUTOMATION INC COMMERCIAL PAPER		12/09/2024	0.000	01/06/2025	24,983,806	0	74,223
	RYDER SYSTEM INC COMMERCIAL PAPER		12/17/2024	0.000	01/03/2025	34,990,804	0	68,815
	RYDER SYSTEM INC COMMERCIAL PAPER		12/18/2024	0.000	01/08/2025	14,986,179	0	27,566
	SHERWIN-WILLIAMS COMPANY (THE) COMMERCIA		12/05/2024	0.000	01/14/2025	13,077,881	0	44,014
	SOUTHERN COMPANY (THE) COMMERCIAL PAPER		12/17/2024	0.000	01/17/2025	49,894,695	0	91,779
	SPIRE INC COMMERCIAL PAPER		11/29/2024	0.001	01/02/2025	10,212,644	0	44,561
	SPIRE INC COMMERCIAL PAPER		12/03/2024	0.000	01/03/2025	4,998,673	0	18,506
	SPIRE INC COMMERCIAL PAPER		11/18/2024	0.000	01/06/2025	29,980,135	0	173,685
	SPIRE INC COMMERCIAL PAPER		12/12/2024	0.000	01/29/2025	9,963,349	0	26,015
	SYSCO CORPORATION COMMERCIAL PAPER		12/17/2024	0.000	03/17/2025	49,516,776	0	95,526
	TAMPA ELECTRIC COMPANY COMMERCIAL PAPER		12/05/2024	0.000	01/06/2025	20,986,008	0	75,235
	TAMPA ELECTRIC COMPANY COMMERCIAL PAPER		12/16/2024	0.000	01/13/2025	33,946,053	0	71,664
	VW CREDIT INC COMMERCIAL PAPER		12/09/2024	0.000	01/07/2025	24,980,360	0	71,749
	VW CREDIT INC COMMERCIAL PAPER		12/17/2024	0.000	02/18/2025	13,912,095	0	27,245
	VOLVO TREASURY NORTH AMERICA LP COMMERCI		12/12/2024	0.000	01/15/2025	1,796,821	0	4,522

ANNUAL STATEMENT FOR THE YEAR 2024 OF THE MASSMUTUAL ASCEND LIFE INSURANCE COMPANY

SCHEDULE E - PART 2 - CASH EQUIVALENTS

Show Investments Owned December 31 of Current Year

1	2	3	4	5	6	7	8	9
CUSIP	Description	Code	Date Acquired	Rate of Interest	Maturity Date	Book/Adjusted Carrying Value	Amount of Interest Due and Accrued	Amount Received During Year
.....	VULCAN MATERIALS COMPANY COMMERCIAL PAPE .....	.....	12/20/2024	0.000	01/15/2025	80,854,562	0	124,247
.....	WRKCO INC COMMERCIAL PAPER .....	.....	12/11/2024	0.000	01/07/2025	29,976,385	0	82,360
.....	WASTE MANAGEMENT INC COMMERCIAL PAPER .....	.....	12/10/2024	0.000	01/06/2025	47,968,778	0	136,898
.....	WISCONSIN ELECTRIC POWER COMPANY COMMERC .....	.....	12/30/2024	0.000	01/07/2025	23,981,795	0	6,062
1019999999. Subtotal - Bonds - Industrial and Miscellaneous (Unaffiliated) - Issuer Obligations						2,755,201,806	0	6,358,816
1109999999. Total - Industrial and Miscellaneous (Unaffiliated) Bonds						2,755,201,806	0	6,358,816
1309999999. Total - Hybrid Securities						0	0	0
1509999999. Total - Parent, Subsidiaries and Affiliates Bonds						0	0	0
1909999999. Subtotal - Unaffiliated Bank Loans						0	0	0
2419999999. Total - Issuer Obligations						2,755,201,806	0	6,358,816
2429999999. Total - Residential Mortgage-Backed Securities						0	0	0
2439999999. Total - Commercial Mortgage-Backed Securities						0	0	0
2449999999. Total - Other Loan-Backed and Structured Securities						0	0	0
2459999999. Total - SVO Identified Funds						0	0	0
2469999999. Total - Affiliated Bank Loans						0	0	0
2479999999. Total - Unaffiliated Bank Loans						0	0	0
2509999999. Total Bonds						2,755,201,806	0	6,358,816
09248U-71-8	BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA .....	.....	12/31/2024	0.000 .....	.....	215,000,000	0	0
825252-40-6	INVESCO ADVISERS TREASURY PORT INSTL CL .....	.....	12/31/2024	0.000 .....	.....	3,338,143	0	9,280
8209999999. Subtotal - Exempt Money Market Mutual Funds - as Identified by the SVO						218,338,143	0	9,280
8609999999 - Total Cash Equivalents						2,973,539,949	0	6,368,096

1.

Line Number	Book/Adjusted Carrying Value by NAIC Designation Category Footnote:									
1A	1A ..\$	0	1B ..\$	0	1C ..\$	0	1D ..\$	284,284,587	1E ..\$	0
1B	2A ..\$	2,094,044,304	2B ..\$	0	2C ..\$	0				
1C	3A ..\$	0	3B ..\$	0	3C ..\$	0				
1D	4A ..\$	0	4B ..\$	0	4C ..\$	0				
1E	5A ..\$	0	5B ..\$	0	5C ..\$	0				
1F	6	0								

SCHEDULE E - PART 3 - SPECIAL DEPOSITS

States, Etc.	1	2	Deposits For the Benefit of All Policyholders		All Other Special Deposits	
			3	4	5	6
	Type of Deposit	Purpose of Deposit	Book/Adjusted Carrying Value	Fair Value	Book/Adjusted Carrying Value	Fair Value
1. Alabama	AL		0	0	0	0
2. Alaska	AK		0	0	0	0
3. Arizona	AZ		0	0	0	0
4. Arkansas	AR	B. LIFE INSURANCE	124,614	120,974	0	0
5. California	CA		0	0	0	0
6. Colorado	CO		0	0	0	0
7. Connecticut	CT		0	0	0	0
8. Delaware	DE		0	0	0	0
9. District of Columbia	DC		0	0	0	0
10. Florida	FL	B. LIFE INSURANCE	2,219,205	2,328,083	0	0
11. Georgia	GA	B. LIFE INSURANCE	119,420	116,875	0	0
12. Hawaii	HI		0	0	0	0
13. Idaho	ID		0	0	0	0
14. Illinois	IL		0	0	0	0
15. Indiana	IN		0	0	0	0
16. Iowa	IA		0	0	0	0
17. Kansas	KS		0	0	0	0
18. Kentucky	KY		0	0	0	0
19. Louisiana	LA		0	0	0	0
20. Maine	ME		0	0	0	0
21. Maryland	MD		0	0	0	0
22. Massachusetts	MA	B. LIFE INSURANCE	174,460	169,364	0	0
23. Michigan	MI		0	0	0	0
24. Minnesota	MN		0	0	0	0
25. Mississippi	MS		0	0	0	0
26. Missouri	MO		0	0	0	0
27. Montana	MT		0	0	0	0
28. Nebraska	NE		0	0	0	0
29. Nevada	NV	B. LIFE INSURANCE	237,051	207,908	0	0
30. New Hampshire	NH		0	0	0	0
31. New Jersey	NJ	B. LIFE INSURANCE	693,771	727,809	0	0
32. New Mexico	NM	B. LIFE INSURANCE	215,000	215,495	0	0
33. New York	NY		0	0	0	0
34. North Carolina	NC	B. LIFE INSURANCE	415,586	410,427	0	0
35. North Dakota	ND		0	0	0	0
36. Ohio	OH	B. LIFE INSURANCE	3,099,687	2,624,369	0	0
37. Oklahoma	OK		0	0	0	0
38. Oregon	OR		0	0	0	0
39. Pennsylvania	PA		0	0	0	0
40. Rhode Island	RI		0	0	0	0
41. South Carolina	SC		0	0	0	0
42. South Dakota	SD		0	0	0	0
43. Tennessee	TN		0	0	0	0
44. Texas	TX		0	0	0	0
45. Utah	UT		0	0	0	0
46. Vermont	VT		0	0	0	0
47. Virginia	VA	B. LIFE INSURANCE	100,141	98,898	0	0
48. Washington	WA		0	0	0	0
49. West Virginia	WV		0	0	0	0
50. Wisconsin	WI		0	0	0	0
51. Wyoming	WY		0	0	0	0
52. American Samoa	AS		0	0	0	0
53. Guam	GU		0	0	0	0
54. Puerto Rico	PR		0	0	0	0
55. U.S. Virgin Islands	VI		0	0	0	0
56. Northern Mariana Islands	MP		0	0	0	0
57. Canada	CAN		0	0	0	0
58. Aggregate Alien and Other	OT	XXX	0	0	0	0
59. Subtotal	XXX	XXX	7,398,935	7,020,202	0	0
DETAILS OF WRITE-INS						
5801.						
5802.						
5803.						
5898. Summary of remaining write-ins for Line 58 from overflow page	XXX	XXX	0	0	0	0
5899. Totals (Lines 5801 through 5803 plus 5898)(Line 58 above)	XXX	XXX	0	0	0	0