



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

QUARTERLY STATEMENT

AS OF JUNE 30, 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
(Street and Number)
Cincinnati, OH, US 45202 513-361-9000
(City or Town, State, Country and Zip Code) (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
(Street and Number)
Cincinnati, OH, US 45202 513-361-9000
(City or Town, State, Country and Zip Code) (Area Code) (Telephone Number)

Internet Website Address www.massmutualascend.com

Statutory Statement Contact Robert Mayhew Earle II 513-361-9077
(Name) (Area Code) (Telephone Number)
rearle@mmascend.com 513-345-9484
(E-mail Address) (FAX Number)

OFFICERS

President Mark Francis Muething Treasurer Brian Patrick Sponaugle
Secretary John Paul Gruber Appointed Actuary Isaac Cezar Hall

OTHER

Donna Marie Carrelli Michael Harrison Haney Dominic Lusean Blue

DIRECTORS OR TRUSTEES

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

State of Ohio SS:
County of Hamilton

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 12th day of August 2024
Kelly Buller

- a. Is this an original filing? Yes [X] No []
b. If no,
1. State the amendment number.....
2. Date filed
3. Number of pages attached.....



Kelly Buller
Notary Public, State of Ohio
My Commission Expires:
October 14, 2028

ASSETS

	Current Statement Date			4 December 31 Prior Year Net Admitted Assets
	1 Assets	2 Nonadmitted Assets	3 Net Admitted Assets (Cols. 1 - 2)	
1. Bonds	35,781,191,716		35,781,191,716	34,972,253,060
2. Stocks:				
2.1 Preferred stocks	273,934,653		273,934,653	201,026,229
2.2 Common stocks	778,647,734		778,647,734	716,418,595
3. Mortgage loans on real estate:				
3.1 First liens	4,690,293,526		4,690,293,526	4,256,509,561
3.2 Other than first liens.....			0	0
4. Real estate:				
4.1 Properties occupied by the company (less \$ encumbrances)			0	0
4.2 Properties held for the production of income (less \$ encumbrances)			0	0
4.3 Properties held for sale (less \$ encumbrances)			0	0
5. Cash (\$ (139,105,418)), cash equivalents (\$ 2,775,417,122) and short-term investments (\$506,457,996)	3,142,769,700		3,142,769,700	2,211,326,604
6. Contract loans (including \$ premium notes)	28,810,934		28,810,934	29,952,551
7. Derivatives	844,380,862		844,380,862	771,436,338
8. Other invested assets	1,557,693,028	10,530,524	1,547,162,504	1,407,752,675
9. Receivables for securities	101,380,520		101,380,520	165,416,503
10. Securities lending reinvested collateral assets			0	0
11. Aggregate write-ins for invested assets	0	0	0	0
12. Subtotals, cash and invested assets (Lines 1 to 11)	47,199,102,673	10,530,524	47,188,572,149	44,732,092,116
13. Title plants less \$ charged off (for Title insurers only)			0	0
14. Investment income due and accrued	594,052,640		594,052,640	528,460,439
15. Premiums and considerations:				
15.1 Uncollected premiums and agents' balances in the course of collection	803,649	13,707	789,942	1,059,361
15.2 Deferred premiums, agents' balances and installments booked but deferred and not yet due (including \$ earned but unbilled premiums)	7,169,343	3,161,511	4,007,832	4,562,423
15.3 Accrued retrospective premiums (\$) and contracts subject to redetermination (\$)			0	0
16. Reinsurance:				
16.1 Amounts recoverable from reinsurers	1,243,604		1,243,604	2,547,295
16.2 Funds held by or deposited with reinsured companies			0	0
16.3 Other amounts receivable under reinsurance contracts	106,206,570		106,206,570	451,644,041
17. Amounts receivable relating to uninsured plans			0	0
18.1 Current federal and foreign income tax recoverable and interest thereon	71,769,055		71,769,055	16,025,216
18.2 Net deferred tax asset	361,674,042	25,517,527	336,156,515	272,753,525
19. Guaranty funds receivable or on deposit	1,999,383		1,999,383	2,034,538
20. Electronic data processing equipment and software			0	0
21. Furniture and equipment, including health care delivery assets (\$)	4,928,355	4,928,355	0	0
22. Net adjustment in assets and liabilities due to foreign exchange rates			0	0
23. Receivables from parent, subsidiaries and affiliates	969,203		969,203	719,602
24. Health care (\$) and other amounts receivable			0	0
25. Aggregate write-ins for other than invested assets	623,346,415	112,020,523	511,325,892	533,545,687
26. Total assets excluding Separate Accounts, Segregated Accounts and Protected Cell Accounts (Lines 12 to 25)	48,973,264,932	156,172,147	48,817,092,785	46,545,444,243
27. From Separate Accounts, Segregated Accounts and Protected Cell Accounts	716,476,065		716,476,065	443,319,567
28. Total (Lines 26 and 27)	49,689,740,997	156,172,147	49,533,568,850	46,988,763,810
DETAILS OF WRITE-INS				
1101.				
1102.				
1103.				
1198. Summary of remaining write-ins for Line 11 from overflow page	0	0	0	0
1199. Totals (Lines 1101 through 1103 plus 1198)(Line 11 above)	0	0	0	0
2501. Admitted Disallowed IMR	349,912,042	105,772,456	244,139,586	271,533,895
2502. Company-owned life insurance	226,413,629		226,413,629	223,142,978
2503. Accrued contractual fee income	28,824,760		28,824,760	32,372,894
2598. Summary of remaining write-ins for Line 25 from overflow page	18,195,984	6,248,067	11,947,917	6,495,920
2599. Totals (Lines 2501 through 2503 plus 2598)(Line 25 above)	623,346,415	112,020,523	511,325,892	533,545,687

LIABILITIES, SURPLUS AND OTHER FUNDS

	1 Current Statement Date	2 December 31 Prior Year
1. Aggregate reserve for life contracts \$33,315,773,334 less \$ included in Line 6.3 (including \$ 528,685 Modco Reserve)	33,315,773,334	30,159,722,538
2. Aggregate reserve for accident and health contracts (including \$ Modco Reserve)	52,802,145	52,438,219
3. Liability for deposit-type contracts (including \$ Modco Reserve).....	793,300,037	787,970,274
4. Contract claims:		
4.1 Life	162,808,395	164,654,288
4.2 Accident and health	592,767	622,620
5. Policyholders' dividends/refunds to members \$ and coupons \$ due and unpaid		0
6. Provision for policyholders' dividends, refunds to members and coupons payable in following calendar year - estimated amounts:		
6.1 Policyholders' dividends and refunds to members apportioned for payment (including \$ Modco)		
6.2 Policyholders' dividends and refunds to members not yet apportioned (including \$ Modco)		
6.3 Coupons and similar benefits (including \$ Modco)		
7. Amount provisionally held for deferred dividend policies not included in Line 6		
8. Premiums and annuity considerations for life and accident and health contracts received in advance less \$ discount; including \$ 17,166 accident and health premiums	176,062	94,251
9. Contract liabilities not included elsewhere:		
9.1 Surrender values on canceled contracts		
9.2 Provision for experience rating refunds, including the liability of \$ accident and health experience rating refunds of which \$ 0 is for medical loss ratio rebate per the Public Health Service Act		
9.3 Other amounts payable on reinsurance, including \$ 430,872 assumed and \$ 70,587,937 ceded	71,018,809	684,959
9.4 Interest Maintenance Reserve		0
10. Commissions to agents due or accrued-life and annuity contracts \$ 4,144,054 , accident and health \$ and deposit-type contract funds \$	4,144,054	7,033,605
11. Commissions and expense allowances payable on reinsurance assumed		
12. General expenses due or accrued	50,218,420	56,305,815
13. Transfers to Separate Accounts due or accrued (net) (including \$ accrued for expense allowances recognized in reserves, net of reinsured allowances)		0
14. Taxes, licenses and fees due or accrued, excluding federal income taxes		0
15.1 Current federal and foreign income taxes, including \$ on realized capital gains (losses)		
15.2 Net deferred tax liability		
16. Unearned investment income	297,199	290,364
17. Amounts withheld or retained by reporting entity as agent or trustee	1,373,693	1,539,199
18. Amounts held for agents' account, including \$ 1,878,027 agents' credit balances	1,878,027	1,182,367
19. Remittances and items not allocated	80,292,419	109,425,533
20. Net adjustment in assets and liabilities due to foreign exchange rates		
21. Liability for benefits for employees and agents if not included above		
22. Borrowed money \$ and interest thereon \$		
23. Dividends to stockholders declared and unpaid		
24. Miscellaneous liabilities:		
24.01 Asset valuation reserve	579,109,853	528,429,311
24.02 Reinsurance in unauthorized and certified (\$) companies		0
24.03 Funds held under reinsurance treaties with unauthorized and certified (\$) reinsurers		
24.04 Payable to parent, subsidiaries and affiliates	1,384,876	771,693
24.05 Drafts outstanding		
24.06 Liability for amounts held under uninsured plans		
24.07 Funds held under coinsurance	8,455,551,559	9,967,999,333
24.08 Derivatives	514,078,334	528,221,597
24.09 Payable for securities	487,076,663	315,096,798
24.10 Payable for securities lending		
24.11 Capital notes \$ and interest thereon \$		
25. Aggregate write-ins for liabilities	1,157,496,964	812,010,876
26. Total liabilities excluding Separate Accounts business (Lines 1 to 25)	45,729,373,610	43,494,493,640
27. From Separate Accounts Statement	716,476,065	443,319,567
28. Total liabilities (Lines 26 and 27)	46,445,849,675	43,937,813,207
29. Common capital stock	1,507,500	1,507,500
30. Preferred capital stock		
31. Aggregate write-ins for other than special surplus funds	0	0
32. Surplus notes		
33. Gross paid in and contributed surplus	815,178,800	815,178,800
34. Aggregate write-ins for special surplus funds	244,139,586	271,533,895
35. Unassigned funds (surplus)	2,026,893,289	1,962,730,408
36. Less treasury stock, at cost:		
36.1 shares common (value included in Line 29 \$)		
36.2 shares preferred (value included in Line 30 \$)		
37. Surplus (Total Lines 31+32+33+34+35-36) (including \$ in Separate Accounts Statement)	3,086,211,675	3,049,443,103
38. Totals of Lines 29, 30 and 37	3,087,719,175	3,050,950,603
39. Totals of Lines 28 and 38 (Page 2, Line 28, Col. 3)	49,533,568,850	46,988,763,810
DETAILS OF WRITE-INS		
2501. Derivative collateral	1,087,171,106	763,875,478
2502. Unclaimed property	34,840,847	32,408,582
2503. Accounts payable	35,485,011	15,726,816
2598. Summary of remaining write-ins for Line 25 from overflow page	0	0
2599. Totals (Lines 2501 through 2503 plus 2598)(Line 25 above)	1,157,496,964	812,010,876
3101.		
3102.		
3103.		
3198. Summary of remaining write-ins for Line 31 from overflow page	0	0
3199. Totals (Lines 3101 through 3103 plus 3198)(Line 31 above)	0	0
3401. Admitted Disallowed IMR	244,139,586	271,533,895
3402.		
3403.		
3498. Summary of remaining write-ins for Line 34 from overflow page	0	0
3499. Totals (Lines 3401 through 3403 plus 3498)(Line 34 above)	244,139,586	271,533,895

SUMMARY OF OPERATIONS

	1 Current Year To Date	2 Prior Year To Date	3 Prior Year Ended December 31
1. Premiums and annuity considerations for life and accident and health contracts	4,306,318,090	3,800,482,061	8,506,770,768
2. Considerations for supplementary contracts with life contingencies			0
3. Net investment income	1,269,609,531	649,793,549	1,918,445,895
4. Amortization of Interest Maintenance Reserve (IMR)	(13,420,200)	3,596,690	10,386,002
5. Separate Accounts net gain from operations excluding unrealized gains or losses			0
6. Commissions and expense allowances on reinsurance ceded	(17,178,528)	92,275,555	70,233,642
7. Reserve adjustments on reinsurance ceded			0
8. Miscellaneous Income:			
8.1 Income from fees associated with investment management, administration and contract guarantees from Separate Accounts.....			
8.2 Charges and fees for deposit-type contracts	5,912,368	7,004,491	11,936,497
8.3 Aggregate write-ins for miscellaneous income	23,456,659	20,283,057	47,277,222
9. Totals (Lines 1 to 8.3)	5,574,697,920	4,573,435,403	10,565,050,026
10. Death benefits	8,202,152	6,305,665	16,774,548
11. Matured endowments (excluding guaranteed annual pure endowments)	2,444,205	6,848,358	11,937,177
12. Annuity benefits	397,566,840	370,358,110	715,138,835
13. Disability benefits and benefits under accident and health contracts	2,221,378	2,116,766	4,296,617
14. Coupons, guaranteed annual pure endowments and similar benefits			0
15. Surrender benefits and withdrawals for life contracts	1,359,912,151	1,181,872,972	2,434,702,622
16. Group conversions			0
17. Interest and adjustments on contract or deposit-type contract funds	78,741,035	81,639,883	156,850,177
18. Payments on supplementary contracts with life contingencies			0
19. Increase in aggregate reserves for life and accident and health contracts	3,156,414,722	2,461,917,253	5,901,776,775
20. Totals (Lines 10 to 19)	5,005,502,483	4,111,059,007	9,241,476,751
21. Commissions on premiums, annuity considerations, and deposit-type contract funds (direct business only)	238,236,372	185,255,652	393,686,528
22. Commissions and expense allowances on reinsurance assumed	270,765	238,684	498,774
23. General insurance expenses and fraternal expenses	83,669,906	80,444,232	169,800,801
24. Insurance taxes, licenses and fees, excluding federal income taxes	8,851,240	6,863,942	12,712,335
25. Increase in loading on deferred and uncollected premiums	(276,953)	(460,142)	(372,198)
26. Net transfers to or (from) Separate Accounts net of reinsurance	272,826,159	207,438,502	356,807,133
27. Aggregate write-ins for deductions	0	0	0
28. Totals (Lines 20 to 27)	5,609,079,972	4,590,839,877	10,174,610,124
29. Net gain from operations before dividends to policyholders and federal income taxes (Line 9 minus Line 28)	(34,382,052)	(17,404,474)	390,439,902
30. Dividends to policyholders and refunds to members	4,827	4,496	8,940
31. Net gain from operations after dividends to policyholders, refunds to members and before federal income taxes (Line 29 minus Line 30)	(34,386,879)	(17,408,970)	390,430,962
32. Federal and foreign income taxes incurred (excluding tax on capital gains)	49,032,228	145,051,340	241,836,467
33. Net gain from operations after dividends to policyholders, refunds to members and federal income taxes and before realized capital gains or (losses) (Line 31 minus Line 32)	(83,419,107)	(162,460,310)	148,594,495
34. Net realized capital gains (losses) (excluding gains (losses) transferred to the IMR) less capital gains tax of \$ 42,069,522 (excluding taxes of \$ (17,511,441) transferred to the IMR)	(70,085,591)	(129,752,862)	(153,692,165)
35. Net income (Line 33 plus Line 34)	(153,504,698)	(292,213,172)	(5,097,670)
CAPITAL AND SURPLUS ACCOUNT			
36. Capital and surplus, December 31, prior year	3,050,950,603	2,832,582,838	2,832,582,838
37. Net income (Line 35)	(153,504,698)	(292,213,172)	(5,097,670)
38. Change in net unrealized capital gains (losses) less capital gains tax of \$ 82,634,905	230,758,443	104,447,854	165,317,385
39. Change in net unrealized foreign exchange capital gain (loss)	(17,269,783)	11,708,309	19,905,727
40. Change in net deferred income tax	135,425,658	190,690,666	214,574,463
41. Change in nonadmitted assets	(101,467,093)	(84,364,409)	(22,802,347)
42. Change in liability for reinsurance in unauthorized and certified companies			
43. Change in reserve on account of change in valuation basis, (increase) or decrease			0
44. Change in asset valuation reserve	(50,680,542)	25,002,288	48,634,331
45. Change in treasury stock			0
46. Surplus (contributed to) withdrawn from Separate Accounts during period			
47. Other changes in surplus in Separate Accounts Statement			
48. Change in surplus notes			
49. Cumulative effect of changes in accounting principles			
50. Capital changes:			
50.1 Paid in			
50.2 Transferred from surplus (Stock Dividend)			
50.3 Transferred to surplus			
51. Surplus adjustment:			
51.1 Paid in	0	0	0
51.2 Transferred to capital (Stock Dividend)			
51.3 Transferred from capital			
51.4 Change in surplus as a result of reinsurance			
52. Dividends to stockholders			(200,000,000)
53. Aggregate write-ins for gains and losses in surplus	(6,493,413)	0	(2,164,124)
54. Net change in capital and surplus for the year (Lines 37 through 53)	36,768,572	(44,728,464)	218,367,765
55. Capital and surplus, as of statement date (Lines 36 + 54)	3,087,719,175	2,787,854,374	3,050,950,603
DETAILS OF WRITE-INS			
08.301. Contractual rider fee income	19,121,657	16,629,602	37,552,904
08.302. Interest on company-owned life insurance	3,270,651	3,240,204	8,921,000
08.303. Reinsurance experience refund	274,592	362,956	748,500
08.398. Summary of remaining write-ins for Line 8.3 from overflow page	789,759	50,295	54,818
08.399. Totals (Lines 08.301 through 08.303 plus 08.398) (Line 8.3 above)	23,456,659	20,283,057	47,277,222
2701.			
2702.			
2703.			
2798. Summary of remaining write-ins for Line 27 from overflow page	0	0	0
2799. Totals (Lines 2701 through 2703 plus 2798)(Line 27 above)	0	0	0
5301. Correction of error, net of tax	(6,493,413)		(2,164,124)
5302.			
5303.			
5398. Summary of remaining write-ins for Line 53 from overflow page	0	0	0
5399. Totals (Lines 5301 through 5303 plus 5398)(Line 53 above)	(6,493,413)	0	(2,164,124)

CASH FLOW

	1 Current Year To Date	2 Prior Year To Date	3 Prior Year Ended December 31
Cash from Operations			
1. Premiums collected net of reinsurance	4,307,492,536	3,802,755,048	8,509,223,422
2. Net investment income	1,467,566,010	773,211,456	2,279,256,583
3. Miscellaneous income	9,551,667	115,808,181	119,187,230
4. Total (Lines 1 to 3)	5,784,610,213	4,691,774,685	10,907,667,235
5. Benefit and loss related payments	1,355,147,460	1,545,510,194	3,375,051,208
6. Net transfers to Separate Accounts, Segregated Accounts and Protected Cell Accounts	0	0	0
7. Commissions, expenses paid and aggregate write-ins for deductions	338,941,383	281,408,623	570,446,425
8. Dividends paid to policyholders	4,827	4,496	8,940
9. Federal and foreign income taxes paid (recovered) net of \$ 24,558,081 tax on capital gains (losses)	129,334,148	42,949,650	144,633,518
10. Total (Lines 5 through 9)	1,823,427,818	1,869,872,963	4,090,140,091
11. Net cash from operations (Line 4 minus Line 10)	3,961,182,395	2,821,901,722	6,817,527,144
Cash from Investments			
12. Proceeds from investments sold, matured or repaid:			
12.1 Bonds	3,276,382,135	4,141,441,282	8,045,962,540
12.2 Stocks	26,180,557	94,314,434	131,092,554
12.3 Mortgage loans	225,182,288	153,135,448	715,135,948
12.4 Real estate	0	0	0
12.5 Other invested assets	59,827,336	86,382,068	322,063,704
12.6 Net gains or (losses) on cash, cash equivalents and short-term investments	0	0	12,027
12.7 Miscellaneous proceeds	60,185,629	(7,590,850)	56,688,129
12.8 Total investment proceeds (Lines 12.1 to 12.7)	3,647,757,945	4,467,682,382	9,270,954,902
13. Cost of investments acquired (long-term only):			
13.1 Bonds	4,203,631,728	4,987,375,526	10,104,084,572
13.2 Stocks	92,823,104	33,968,192	128,658,375
13.3 Mortgage loans	666,452,074	711,618,012	1,881,105,539
13.4 Real estate	0	0	0
13.5 Other invested assets	190,348,860	144,474,847	339,973,269
13.6 Miscellaneous applications	399,692,264	(41,711,790)	796,679,588
13.7 Total investments acquired (Lines 13.1 to 13.6)	5,552,948,030	5,835,724,787	13,250,501,343
14. Net increase (or decrease) in contract loans and premium notes	(1,141,617)	(854,783)	(1,506,611)
15. Net cash from investments (Line 12.8 minus Line 13.7 and Line 14)	(1,904,048,468)	(1,367,187,622)	(3,978,039,830)
Cash from Financing and Miscellaneous Sources			
16. Cash provided (applied):			
16.1 Surplus notes, capital notes	0	0	0
16.2 Capital and paid in surplus, less treasury stock	0	0	0
16.3 Borrowed funds	0	0	0
16.4 Net deposits on deposit-type contracts and other insurance liabilities	(64,206,830)	(71,178,630)	(136,485,911)
16.5 Dividends to stockholders	0	0	200,000,000
16.6 Other cash provided (applied)	(1,061,484,001)	(1,074,444,249)	(2,282,911,755)
17. Net cash from financing and miscellaneous sources (Line 16.1 through Line 16.4 minus Line 16.5 plus Line 16.6)	(1,125,690,831)	(1,145,622,879)	(2,619,397,666)
RECONCILIATION OF CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS			
18. Net change in cash, cash equivalents and short-term investments (Line 11, plus Lines 15 and 17) ..	931,443,096	309,091,222	220,089,648
19. Cash, cash equivalents and short-term investments:			
19.1 Beginning of year	2,211,326,604	1,991,236,956	1,991,236,956
19.2 End of period (Line 18 plus Line 19.1)	3,142,769,700	2,300,328,178	2,211,326,604

Note: Supplemental disclosures of cash flow information for non-cash transactions:

20.0001. Bond conversions and refinancing	125,879,856	209,375,084	255,431,290
20.0002. Common stock conversions	2,671,391	14,370,960	34,388,517
20.0003. Net investment income payment-in-kind for bonds	1,155,915	14,223,996	0
20.0004. Bonds transferred to other invested assets		18,555,573	18,555,573
20.0005. Other invested assets transferred to common stocks			15,499,684
20.0006. Common stocks transferred to other invested assets			6,408,000
20.0007. Preferred stock conversions		442,451	442,451

EXHIBIT 1

DIRECT PREMIUMS AND DEPOSIT-TYPE CONTRACTS			
	1 Current Year To Date	2 Prior Year To Date	3 Prior Year Ended December 31
1. Individual life	8,795,576	8,811,838	18,599,421
2. Group life			0
3. Individual annuities	4,703,755,503	3,992,027,957	8,746,785,131
4. Group annuities	2,630,905	3,144,321	5,649,266
5. Accident & health	2,315,191	2,449,967	4,723,087
6. Fraternal			0
7. Other lines of business		0	0
8. Subtotal (Lines 1 through 7)	4,717,497,175	4,006,434,083	8,775,756,905
9. Deposit-type contracts	13,143,916	7,096,581	18,694,941
10. Total (Lines 8 and 9)	4,730,641,091	4,013,530,664	8,794,451,846

NOTES TO FINANCIAL STATEMENTS

Note 1 – Summary of Significant Accounting Policies

A. Accounting Practices

The financial statements of the MassMutual Ascend Life Insurance Company (“MMALIC” or “the Company”) are presented on the basis of accounting practices prescribed or permitted by the Ohio Department of Insurance. The Company was formerly known as Great American Life Insurance Company.

The Ohio Department of Insurance recognizes only statutory accounting practices prescribed or permitted by the State of Ohio for determining and reporting the financial condition and results of operations of an insurance company, for determining its solvency under the Ohio Insurance Law. The National Association of Insurance Commissioners’ (“NAIC”) *Accounting Practices and Procedures Manual* has been adopted as a component of prescribed or permitted practices by the State of Ohio.

In 2021 the Ohio Department of Insurance promulgated Ohio Administrative Code Section 3901-1-67, Alternative Derivative and Reserve Accounting Practices (OAC 3901-1-67), which constitutes a prescribed practice as contemplated by the NAIC SAP. The prescribed practice allows Ohio-domiciled insurance companies to utilize certain alternative derivative and reserve accounting practices for eligible derivative instruments and indexed products, respectively, in order to better align the measurement of indexed product reserves and the derivatives that hedge them. Effective January 1, 2022, the Company elected to apply OAC 3901-1-67 to its derivative instruments hedging equity indexed annuity products and equity indexed reserve liabilities.

A reconciliation of the Company’s net income and capital and surplus between NAIC SAP and practices prescribed and permitted by the State of Ohio is shown below:

Net Income	SSAP #	F/S Page	F/S Line #	06/30/2024	12/31/2023
(1) State basis	XXX	XXX	XXX	\$ (153,504,698)	\$ (5,097,670)
(2) State prescribed practices that increase/(decrease) NAIC SAP	XXX	XXX	XXX		
OAC 3901-1-67:					
Derivative instruments	86	4	7, 3	(18,624,771)	(49,286,793)
Reserves for fixed indexed annuities	51	4	1, 19	167,325,684	306,594,598
Tax impact	101	4	18.2, 32	4,494,723	686,970
(3) State permitted practices that increase/(decrease) NAIC SAP	XXX	XXX	XXX	-	-
(4) NAIC SAP (1-2-3=4)	XXX	XXX	XXX	\$ (306,700,334)	\$ (263,092,445)
Surplus					
(5) Statutory surplus state basis	XXX	XXX	XXX	\$ 3,087,719,175	\$ 3,050,950,603
(6) State prescribed practices that increase/(decrease) NAIC SAP					
OAC 3901-1-67:					
Derivative instruments	86	2, 4	7, 3	(629,505,904)	(525,349,344)
Reserves for fixed indexed annuities	51	3, 4	1, 19	522,120,619	354,794,935
Tax impact	101	2, 4	18.2, 32	37,531,080	50,796,596
(7) State permitted practices that increase/(decrease) NAIC SAP	XXX	XXX	XXX	-	-
(8) NAIC SAP (5-6-7=8)	XXX	XXX	XXX	\$ 3,157,573,381	\$ 3,170,708,417

B, C & D – No significant changes.

Note 2 – Accounting Changes and Corrections of Errors

In 2024, the Company recorded a correction of error related to prior years, net of tax, which resulted in a decrease of statutory capital and surplus of \$6,493,413. The correction of error resulted in adjustments to investment activity related to prior years.

In 2023, the Company recorded a correction of error related to prior years, net of tax, which resulted in a decrease of statutory capital and surplus of \$2,164,124. The correction of error resulted in adjustments to Bonds, Mortgage loans, Other invested assets, Derivatives, Accrued investment income and Payable for securities.

Note 3 – Business Combinations and Goodwill

Not applicable.

Note 4 – Discontinued Operations

Not applicable.

Note 5 – Investments

A, B & C – No significant changes.

D. Loan-Backed Securities

- (1) The Company uses dealer-modeled prepayment assumptions for mortgage-backed and asset-backed securities at the date of purchase to determine the effective yields; significant changes in estimated cash flows from the original purchase assumptions are accounted for on a prospective basis.
- (2) The Company does not currently hold any aggregate loan-backed securities with a recognized other-than-temporary impairment (“OTTI”) in which the Company has the intent to sell or the inability or lack of intent to retain the investment in the security for a period of time to recover the amortized cost basis.

NOTES TO FINANCIAL STATEMENTS

(3) The following table shows each security with a credit-related OTTI charge recognized during the period:

CUSIP	Amortized Cost Before OTTI	Present Value of Projected Cash Flow s	OTTI Charge Recognized in Income Statement	Amortized Cost After OTTI	Fair Value at Time of OTTI	Date Reported
07325DAF1	\$ 188,446	\$ 183,894	\$ 4,552	\$ 183,894	\$ 173,542	03/31/2024
07389NAC9	252,999	244,622	8,378	244,622	249,997	03/31/2024
3622EAAA8	3,363,495	3,323,775	39,721	3,323,775	3,153,854	03/31/2024
61751DAE4	1,528,252	1,458,023	70,229	1,458,023	1,795,267	03/31/2024
86358RXY8	141,707	140,513	1,193	140,513	140,491	03/31/2024
86358RXZ5	221,359	218,722	2,638	218,722	201,247	03/31/2024
00703QAD4	3,309,564	3,330,880	(21,316)	3,330,880	2,331,478	03/31/2024
02147XAR8	569,821	568,694	1,127	568,694	462,724	03/31/2024
02152AAS8	1,681,039	1,680,195	844	1,680,195	1,709,668	03/31/2024
059522AU6	1,990,654	1,977,703	12,952	1,977,703	1,952,207	03/31/2024
05952GAT8	319,263	302,417	16,846	302,417	279,733	03/31/2024
05952GAV3	458,831	435,162	23,669	435,162	402,521	03/31/2024
07386XAH9	947,290	948,547	(1,257)	948,547	771,263	03/31/2024
12566UAN4	549,670	541,211	8,459	541,211	531,037	03/31/2024
12566XAM0	651,755	636,729	15,027	636,729	579,587	03/31/2024
12628LAD2	664,264	632,237	32,026	632,237	522,656	03/31/2024
12667F4N2	1,982,772	1,961,149	21,623	1,961,149	1,892,614	03/31/2024
17309BAB3	197,256	194,233	3,023	194,233	166,593	03/31/2024
32051GT70	601,477	580,656	20,821	580,656	513,722	03/31/2024
36244SAD0	2,013,709	2,018,709	(5,000)	2,018,709	2,114,288	03/31/2024
43739EAP2	555,880	552,194	3,685	552,194	523,782	03/31/2024
46627MCY1	3,736,516	3,706,574	29,942	3,706,574	3,728,355	03/31/2024
46627MEC7	346,366	345,013	1,353	345,013	316,216	03/31/2024
46627MEJ2	1,051,940	1,051,330	610	1,051,330	871,833	03/31/2024
47232CAH7	1,625,552	1,588,003	37,549	1,588,003	1,634,793	03/31/2024
643529AC4	499,851	483,505	16,346	483,505	541,706	03/31/2024
65535VMJ4	528,500	514,916	13,584	514,916	545,242	03/31/2024
65535VNL8	1,911,718	1,911,036	683	1,911,036	2,083,864	03/31/2024
65535VSJ8	1,249,637	1,197,771	51,865	1,197,771	1,003,257	03/31/2024
74928RAB0	215,991	215,991	(0)	215,991	236,763	03/31/2024
75115BAC3	932,748	928,740	4,009	928,740	1,022,173	03/31/2024
761118BU1	501,401	464,499	36,902	464,499	506,476	03/31/2024
761118GS1	1,045,906	1,039,755	6,151	1,039,755	922,272	03/31/2024
761118SC3	1,408,050	1,385,794	22,255	1,385,794	1,191,653	03/31/2024
855541AC2	727,538	712,958	14,579	712,958	653,434	03/31/2024
863579J90	310,964	284,727	26,237	284,727	287,552	03/31/2024
86360BAJ7	659,289	637,763	21,526	637,763	625,317	03/31/2024
87222EAB4	751,711	731,584	20,127	731,584	682,690	03/31/2024
87222EAC2	870,200	839,182	31,018	839,182	680,970	03/31/2024
93934NAC9	441,899	429,939	11,960	429,939	357,528	03/31/2024
45660LCK3	2,514,539	2,470,098	44,442	2,470,098	2,723,605	03/31/2024
058931AT3	1,087,439	1,038,180	49,259	1,038,180	879,088	03/31/2024
05949CKX3	1,152,881	1,152,938	(58)	1,152,938	1,158,454	03/31/2024
05990HAT0	835,338	815,604	19,735	815,604	806,647	03/31/2024
07386YAE4	2,127,460	1,872,598	254,863	1,872,598	1,732,749	03/31/2024
07401CAS2	2,546,303	2,534,503	11,800	2,534,503	2,518,043	03/31/2024
12638PAB5	666,442	630,577	35,865	630,577	479,103	03/31/2024
12669G4K4	2,465,908	2,448,797	17,111	2,448,797	2,303,793	03/31/2024
12669GR45	454,211	451,011	3,200	451,011	405,877	03/31/2024
170257AE9	1,986,016	1,903,375	82,642	1,903,375	1,421,183	03/31/2024
2254582Y3	1,063,127	1,052,270	10,856	1,052,270	941,835	03/31/2024
225458L55	477,807	465,565	12,242	465,565	402,724	03/31/2024
32052EAA7	42,488	41,783	704	41,783	39,155	03/31/2024
32056JAA2	1,021,287	994,518	26,768	994,518	1,080,580	03/31/2024
362341FN4	694,244	680,711	13,534	680,711	609,991	03/31/2024
362341XC8	809,401	777,534	31,867	777,534	695,392	03/31/2024
41161PCX9	153,937	153,895	42	153,895	157,664	03/31/2024
46630WAL4	438,439	438,782	(343)	438,782	293,935	03/31/2024
576433D52	471,876	409,240	62,636	409,240	430,054	03/31/2024
57643MLZ5	205,469	199,902	5,567	199,902	176,526	03/31/2024
59023PAB9	470,257	467,493	2,764	467,493	476,269	03/31/2024
74958YAE2	262,093	259,755	2,338	259,755	258,713	03/31/2024
863579RP5	618,742	604,955	13,787	604,955	564,247	03/31/2024
863579UL0	255,178	254,285	893	254,285	237,173	03/31/2024
863579UU0	939,669	934,433	5,236	934,433	960,949	03/31/2024
863579XR4	1,954,913	1,890,491	64,421	1,890,491	1,887,147	03/31/2024
885220KW2	1,741,141	1,720,731	20,410	1,720,731	1,602,474	03/31/2024
03235TAA5	2,269,468	89,151	2,180,317	89,151	91,091	06/30/2024
62878HAA9	77,803,827	67,655,502	10,148,325	67,655,502	37,210,526	06/30/2024
07325DAF1	178,481	176,126	2,355	176,126	166,148	06/30/2024
3622EAAA8	3,292,504	3,184,660	107,843	3,184,660	3,041,184	06/30/2024

NOTES TO FINANCIAL STATEMENTS

CUSIP	Amortized Cost Before OTTI	Present Value of Projected Cash Flow s	OTTI Charge Recognized in Income Statement	Amortized Cost After OTTI	Fair Value at Time of OTTI	Date Reported
86358RXY8	123,852	123,852	0	123,852	123,889	06/30/2024
86358RXZ5	372,918	188,377	184,541	188,377	171,206	06/30/2024
00703QAD4	3,296,107	3,259,847	36,260	3,259,847	2,386,522	06/30/2024
02152AAS8	1,650,275	1,657,538	(7,263)	1,657,538	1,694,329	06/30/2024
05532TAF9	1,330,063	1,000,180	329,883	1,000,180	1,320,833	06/30/2024
059522AU6	2,241,312	1,925,540	315,772	1,925,540	1,895,287	06/30/2024
05952GAV3	459,594	459,364	231	459,364	396,506	06/30/2024
07384YKF2	1,676,124	1,597,771	78,353	1,597,771	1,509,395	06/30/2024
12566UAE4	391,661	388,055	3,606	388,055	342,216	06/30/2024
12566UAN4	537,632	510,793	26,839	510,793	530,113	06/30/2024
12628LAD2	642,284	622,397	19,887	622,397	514,736	06/30/2024
12667F4N2	1,914,833	1,908,135	6,698	1,908,135	1,810,552	06/30/2024
12667GAC7	587,654	584,787	2,867	584,787	567,539	06/30/2024
12668APC3	769,291	754,235	15,056	754,235	708,505	06/30/2024
17307GED6	1,262,267	1,251,250	11,017	1,251,250	1,309,786	06/30/2024
17309BAB3	194,329	190,609	3,721	190,609	163,894	06/30/2024
25150NAB0	1,429,029	1,411,817	17,212	1,411,817	1,189,708	06/30/2024
45254NNT0	86,269	46,530	39,739	46,530	37,525	06/30/2024
46627MAD9	497,454	495,061	2,393	495,061	429,325	06/30/2024
46627MCY1	3,504,842	3,460,914	43,928	3,460,914	3,510,994	06/30/2024
46627MEJ2	1,029,088	1,028,470	619	1,028,470	850,323	06/30/2024
61748HUF6	444,541	437,080	7,462	437,080	394,526	06/30/2024
643529AC4	488,451	472,942	15,509	472,942	512,282	06/30/2024
65535VSJ8	1,198,546	1,139,006	59,540	1,139,006	965,916	06/30/2024
75115DAA3	176,480	172,897	3,583	172,897	155,478	06/30/2024
75116FBH1	1,316,094	1,293,501	22,593	1,293,501	1,096,145	06/30/2024
76110HH85	209,667	196,650	13,018	196,650	207,840	06/30/2024
761118BU1	356,973	358,468	(1,495)	358,468	390,598	06/30/2024
761118FM5	1,654,272	1,550,452	103,819	1,550,452	1,634,697	06/30/2024
761118GS1	577,336	578,234	(897)	578,234	519,129	06/30/2024
761118SC3	1,347,876	1,353,200	(5,324)	1,353,200	1,178,737	06/30/2024
855541AC2	681,799	664,359	17,440	664,359	610,581	06/30/2024
863579J90	281,218	263,740	17,478	263,740	257,606	06/30/2024
86360BAG3	1,593,226	1,526,542	66,684	1,526,542	1,446,404	06/30/2024
86360BAJ7	732,362	624,365	107,997	624,365	608,246	06/30/2024
87222EAB4	737,391	714,622	22,770	714,622	678,658	06/30/2024
87222EAC2	854,908	824,739	30,169	824,739	673,478	06/30/2024
93934NAC9	212,897	212,897	0	212,897	177,003	06/30/2024
45660LCK3	2,492,599	2,447,687	44,912	2,447,687	2,730,961	06/30/2024
058931AT3	849,462	844,051	5,410	844,051	736,680	06/30/2024
05946XY72	969,731	968,019	1,712	968,019	907,973	06/30/2024
05990HAT0	797,257	776,355	20,901	776,355	770,842	06/30/2024
073880AD8	1,041,747	980,882	60,865	980,882	884,127	06/30/2024
07401CAS2	2,149,928	1,800,366	349,563	1,800,366	1,769,018	06/30/2024
12544DAG4	76,422	76,273	149	76,273	63,205	06/30/2024
1266942H0	487,696	485,711	1,985	485,711	402,837	06/30/2024
126694HP6	424,687	418,006	6,681	418,006	407,545	06/30/2024
12669G3S8	1,109,352	1,086,152	23,199	1,086,152	970,937	06/30/2024
12669G4K4	2,416,802	2,413,996	2,805	2,413,996	2,282,559	06/30/2024
12669GR45	488,586	443,234	45,352	443,234	418,915	06/30/2024
2254582Y3	1,038,258	1,042,487	(4,229)	1,042,487	922,895	06/30/2024
225470VF7	1,214,433	1,144,277	70,156	1,144,277	1,034,928	06/30/2024
32052EAA7	41,561	40,891	670	40,891	38,638	06/30/2024
32056JAA2	946,028	935,645	10,383	935,645	957,523	06/30/2024
362341FN4	682,514	656,914	25,600	656,914	596,198	06/30/2024
362341XC8	753,782	753,720	62	753,720	684,524	06/30/2024
466247UG6	396,801	389,244	7,556	389,244	391,491	06/30/2024
46630WAL4	429,077	428,735	343	428,735	286,999	06/30/2024
46631NAA7	629,936	624,489	5,447	624,489	490,712	06/30/2024
46631NDT3	5,702,643	5,440,665	261,978	5,440,665	5,514,444	06/30/2024
52520MCE1	192,541	190,485	2,057	190,485	182,118	06/30/2024
57643MLZ5	197,781	191,438	6,343	191,438	175,020	06/30/2024
59023PAB9	459,882	457,928	1,954	457,928	464,081	06/30/2024
61758VAQ0	2,524,715	2,424,826	99,890	2,424,826	2,004,345	06/30/2024
74958YAE2	259,088	254,354	4,734	254,354	256,384	06/30/2024
863579RP5	601,854	558,618	43,237	558,618	556,863	06/30/2024
863579UL0	255,370	250,985	4,385	250,985	234,764	06/30/2024
863579UU0	1,012,782	885,453	127,329	885,453	919,353	06/30/2024
863579XR4	1,816,437	1,747,652	68,785	1,747,652	1,724,184	06/30/2024
92925VAF7	1,963,141	1,392,435	570,706	1,392,435	1,835,677	06/30/2024
92979DAC9	2,345,113	2,281,758	63,356	2,281,758	2,403,743	06/30/2024
94985AAA7	172,846	172,336	510	172,336	162,836	06/30/2024
94986CAA2	160,856	162,103	(1,247)	162,103	209,862	06/30/2024
			17,382,593			

NOTES TO FINANCIAL STATEMENTS

- (4) The following table shows all loan-backed securities with an unrealized loss:
- a. The aggregate amount of unrealized losses:

1. Less than 12 Months	\$	17,500,205
2. 12 Months or Longer		528,726,557

b. The aggregate related fair value of securities with unrealized losses:

1. Less than 12 Months	\$	846,277,333
2. 12 Months or Longer		5,642,033,322
- (5) Based on cash flow projections received from independent sources (which reflect loan to collateral values, subordination, vintage and geographic concentration), implied cash flows inherent in security ratings and analysis of historical payment data, management believes that the Company will recover its cost basis in all securities with unrealized losses. The Company has the intent to hold securities in an unrealized loss position until they recover in value or mature.
- E. Dollar Repurchase Agreements and/or Securities Lending Transactions – Not applicable.
- F. Repurchase Agreements Transactions Accounted for as Secured Borrowing – Not applicable.
- G. Reverse Repurchase Agreements Transactions Accounted for as Secured Borrowing – Not applicable.
- H. Repurchase Agreements Transactions Accounted for as a Sale – Not applicable.
- I. Reverse Repurchase Agreements Transactions Accounted for as a Sale – Not applicable.
- J. Real Estate – Not applicable.
- K. Low Income Housing Tax Credits – Not applicable.
- L. Restricted Assets – No significant change.
- M. Working Capital Finance Investments – Not applicable.
- N. Offsetting and Netting of Assets and Liabilities – Not applicable.
- O. 5GI Securities

Investment	Number of 5GI Securities		Aggregate BACV		Aggregate Fair Value	
	Current Year	Prior Year	Current Year	Prior Year	Current Year	Prior Year
(1) Bonds - AC	32	45	\$ 120,204,355	\$ 135,589,812	\$ 117,843,529	\$ 122,893,073
(2) LB&SS - AC	-	-	-	-	-	-
(3) Preferred Stock - AC	-	1	-	3,499,929	-	5,406,921
(4) Preferred Stock - FV	12	13	27,771,200	26,988,109	27,771,200	26,988,109
(5) Total (1+2+3+4)	44	59	\$ 147,975,555	\$ 166,077,851	\$ 145,614,729	\$ 155,288,103

AC - Amortized Cost FV - Fair Value

- P. Short Sales – Not applicable.
- Q. Prepayment Penalties and Acceleration Fees – No significant change.
- R. Share of Cash Pool by Asset Type – Not applicable.

Note 6 – Joint Ventures, Partnerships and Limited Liability Companies

No significant change.

Note 7 – Investment Income

No significant change.

Note 8 – Derivative Instruments

No significant change.

Note 9 – Income Taxes

No significant change.

NOTES TO FINANCIAL STATEMENTS

Note 10 – Information Concerning Parent, Subsidiaries, Affiliates and Other Related Parties

A., B. & C.

The Company is a wholly-owned subsidiary of Glidepath Holdings Inc. which is a subsidiary of Massachusetts Mutual Life Insurance Company ("MMLIC"); 100% of the Company's outstanding common stock is directly owned by Glidepath Holdings Inc. See Schedule Y, Part 1, Organizational Chart.

The Company did not pay or receive federal income tax payments in cash to (from) parent during the period.

The Company did not pay dividends to parent during the period.

The Company did not receive capital contributions during the period.

- D. The Company reported \$969,203 due from and \$1,384,876 due to the parent and affiliated companies. The terms of the agreement require that these amounts are settled within 90 days.
- E. Management or service contracts and all cost sharing arrangements involving the Company:
 - (1) The Company has an agreement with Barings (an affiliate) which provides investment advisory services to the Company.
 - (2) Certain administrative, management, underwriting, claims, accounting, data processing, collection, and investment services are provided under agreements between the Company and affiliates at charges not unfavorable to the Company or the affiliate.
- F. The Company has no material guarantees or undertakings for the benefit of an affiliate.
- G. The Company's outstanding shares are 100% owned by Glidepath Holdings Inc., a subsidiary of MMLIC.
- H. The Company does not own shares of any upstream intermediate entity or its ultimate parent.
- I. The Company has no investment in a subsidiary that exceeds 10% of admitted assets.
- J. The Company did not recognize any impairment or write down for its investments in subsidiary, controlled or affiliated companies during the statement period.
- K. The Company has no investment in a foreign insurance subsidiary.
- L. The Company owns 100% of the outstanding stock of Manhattan National Holding, LLC ("MNH"), a wholly-owned non-insurance subsidiary. MNH owns 100% of the stock of Manhattan National Life Insurance Company ("MNLIC"), a stock life insurance company domiciled in Ohio. The Company utilizes the look-through approach for the valuation of MNH instead of obtaining audited financial statements for MNH. The Company's carrying value in MNH is \$17,071,305, and represents the carrying value of MNLIC, which is presented on the basis of accounting practices prescribed or permitted by the Ohio Department of Insurance.
- M. All SCA Investments – No significant change.
- N. Investment in Insurance SCAs

All U.S insurance subsidiaries owned by the Company prepare their statutory financial statement in compliance with NAIC statutory accounting practices and procedures.
- O. SCA and SSAP No. 48 Entity Loss Tracking – Not applicable.

Note 11 – Debt

- A. The Company has no capital notes or reverse repurchase agreements outstanding.
- B. Federal Home Loan Bank Agreements
 - (1) The Company became a member of the Federal Home Loan Bank ("FHLB") on August 14, 2009. Through its association with the FHLB and by purchasing a set amount of FHLB stock, the Company can enter into deposit contracts. The Company owned \$41,525,200 of FHLB stock at June 30, 2024 and December 31, 2023. The Company also posted collateral to the FHLB of assets with a fair value of approximately \$1,533,049,464 as of June 30, 2024. The Company's FHLB borrowing capacity is based on the Company's estimate of collateral eligible to be pledged with the FHLB. The deposit-type contract liabilities and related assets are accounted for in the Company's general account.
 - (2) FHLB Capital Stock
 - a. The Company held 200,000 shares of Class B membership stock at June 30, 2024 and December 31, 2023. The Company held 215,252 shares of activity and excess stock at June 30, 2024 and December 31, 2023.
 - b. The Company has no membership stock eligible for redemption.
 - (3) Collateral Pledged to FHLB
 - a. The amount of collateral pledged to the FHLB at June 30, 2024 was \$1,533,049,464 (fair value) and \$1,615,822,408 (carrying value). The total aggregate borrowing from the FHLB at June 30, 2024 was \$500,000,000.
 - b. The maximum amount of collateral pledged to the FHLB during the period was \$1,590,851,496 (fair value) and \$1,671,355,293 (carrying value) at March 31, 2024. The amount borrowed from the FHLB at the time of maximum collateral was \$500,000,000.
 - (4) Borrowing from FHLB
 - a. The Company has accessed a total of \$500,000,000 as part of the funding agreement with the FHLB.
 - b. The maximum amount of borrowings from the FHLB during the period was \$500,000,000.
 - c. The current borrowings related to fixed rate funding agreements are subject to prepayment penalties.

NOTES TO FINANCIAL STATEMENTS

Note 12 - Retirement Plans, Deferred Compensation, Postemployment Benefits and Compensated Absences and Other Postretirement Benefit Plans

A., B., C. & D.

The Company did not participate in a defined benefit plan.

E. Defined Contribution Plan

The Company participates in the retirement plans of MMALIC. MMALIC sponsors funded (qualified 401(k) thrift savings) and unfunded (nonqualified deferred compensation thrift savings) defined contribution plans for its employees and retirees. The qualified 401(k) thrift savings plan's net assets available for benefits were \$68,770,381 as of June 30, 2024 and \$58,683,564 as of December 31, 2023. The Company matches a percentage of employee contributions to the qualified 401(k) thrift savings plan. The Company's total matching thrift savings contributions included in general insurance expenses were \$2,561,910 for the six months ended June 30, 2024 and \$4,458,732 for the year ended December 31, 2023.

F. The Company did not participate in multiemployer plans.

G. The Company did not participate in consolidated or holding company plans.

H. The Company does not accrue for postemployment benefits and compensated absences.

I. The Company does not apply for a subsidy under the Medicare Part D under the Medicare Modernization Act.

Note 13 – Capital and Surplus, Shareholders' Dividend Restrictions and Quasi-Reorganizations

No significant change.

Note 14 – Contingencies

No significant change.

Note 15 – Leases

No significant change.

Note 16 – Information About Financial Instruments With Off-Balance Sheet Risk and Financial Instruments With Concentrations of Credit Risk

No significant change.

Note 17 – Sale, Transfer and Servicing of Financial Assets and Extinguishments of Liabilities

The Company has no reportable transactions.

Note 18 – Gain or Loss to the Reporting Entity from Uninsured Plans and the Uninsured Portion of Partially Insured Plans

Not applicable.

Note 19 – Direct Premium Written/Produced by Managing General Agents/Third Party Administrators

Not applicable.

NOTES TO FINANCIAL STATEMENTS

Note 20 – Fair Value Measurements

A.

(1) Fair Value Measurements at Reporting Date

The Company has categorized its assets and liabilities measured at fair value into the three-level fair value hierarchy as reflected in the following table. See item (4) below for a discussion of each of these three levels.

	Level 1	Level 2	Level 3	Net Asset Value (NAV)	Total
Assets at fair value					
Bonds:					
Special revenue	\$ -	\$ -	\$ -	\$ -	\$ -
Industrial and misc. (unaffiliated)	-	7,476,684	40,911,366	-	48,388,050
Hybrid securities	-	29,375	-	-	29,375
Total bonds	-	7,506,059	40,911,366	-	48,417,425
Non-affiliated preferred stock	59,179,672	-	72,691,385	-	131,871,057
Non-affiliated common stock	127,271,776	-	185,478,706	-	312,750,482
Currency sw aps	-	3,366,718	-	-	3,366,718
Currency forw ards	-	1,448,175	-	-	1,448,175
Interest rate sw aps	-	126,053,262	-	-	126,053,262
Financial Futures	11,952	-	-	-	11,952
Separate account assets	9,370,770	707,105,295	-	-	716,476,065
Total assets at fair value	\$ 195,834,170	\$ 845,479,509	\$ 299,081,457	\$ -	\$ 1,340,395,136
Liabilities at fair value					
Currency sw aps	\$ -	\$ 24,244,750	\$ -	\$ -	\$ 24,244,750
Currency forw ards	-	414,631	-	-	414,631
Interest rate sw aps	-	119,564,138	-	-	119,564,138
Financial Futures	673,758	-	-	-	673,758
Separate account liabilities	9,370,770	707,105,295	-	-	716,476,065
Total liabilities at fair value	\$ 10,044,528	\$ 851,328,814	\$ -	\$ -	\$ 861,373,342

(2) Fair Value Measurements in Level 3 of the Fair Value Hierarchy

	Beginning Balance at 3/31/2024	Transfers into Level 3	Transfers out of Level 3	Total Gains and (losses) included in Net Income	Total Gains and (losses) included in Surplus	Purchases	Issuances	Settlements	Other Adjustments	Ending Balance at 6/30/2024
Bonds: industrial and misc (unaffiliated)	\$ 7,493,094	\$ -	\$ -	\$ 160,725	\$ (11,255,087)	\$ -	\$ 6,439	\$ (770,335)	\$ 45,276,530	\$ 40,911,366
Non-affiliated preferred stock	70,283,612	-	-	2,388,800	(5,326,898)	-	-	-	5,345,871	72,691,385
Non-affiliated common stock	162,367,335	(83)	-	(577)	15,788,673	(537,352)	(7,846,815)	-	15,707,525	185,478,706
Total	\$ 240,144,041	\$ (83)	\$ -	\$ 2,548,948	\$ (793,312)	\$ (537,352)	\$ (7,840,376)	\$ (770,335)	\$ 66,329,926	\$ 299,081,457

(3) Fair Value Recognition of Transfers Between Levels

The Company recognizes and records the transfer of securities into and out of Level 3 due to changes in availability of market observable inputs. All transfers are reflected in the table above at fair value as of the end of the reporting period.

(4) Inputs and Techniques Used in Estimating Fair Value

Level 1 - Quoted prices for identical assets or liabilities in active markets (markets in which transactions occur with sufficient frequency and volume to provide pricing information on an ongoing basis). The Company's Level 1 financial instruments consist primarily of publicly traded equity securities for which quoted market prices in active markets are available.

Level 2 - Quoted prices for similar instruments in active markets; quoted prices for identical or similar assets or liabilities in inactive markets (markets in which there are few transactions, the prices are not current, price quotations vary substantially over time or among market makers, or in which little information is released publicly); and valuations based on other significant inputs that are observable in active markets. Level 2 inputs include benchmark yields, reported trades, corroborated broker/dealer quotes, issuer spreads and benchmark securities. When non-binding broker quotes can be corroborated by comparison to similar securities priced using observable inputs, they are classified as Level 2.

Level 3 - Valuations derived from market valuation techniques generally consistent with those used to estimate the fair value of Level 2 financial instruments in which one or more significant inputs are unobservable or when the market for a security exhibits significantly less liquidity relative to markets supporting Level 2 fair value measurements. The unobservable inputs may include management's own assumptions about the assumptions market participants would use based on the best information available in the circumstances. The Company's Level 3 is comprised of financial instruments whose fair value is estimated based on non-binding broker quotes or internally developed using significant inputs not based on, or corroborated by, observable market information.

The Company's investment manager, Barings LLC ("Barings") is responsible for the valuation process and uses data from outside sources (including nationally recognized pricing services and broker/dealers) in establishing fair value. Valuation techniques utilized by pricing services and prices obtained from external sources are reviewed by Barings internal investment professionals who are familiar with the securities being priced and the markets in which they trade to ensure the fair value determination is representative of an exit price. To validate the appropriateness of the prices obtained, the investment manager considers widely published indices (as benchmarks), recent trades, changes in interest rates, general economic conditions and the credit quality of the specific issuers. In addition, Barings communicates directly with the pricing service regarding the methods and assumptions used in pricing, including verifying, on a test basis, the inputs used by the service to value specific securities.

(5) Derivative Assets and Liabilities

- a. The Company's derivative assets/liabilities are reported on a gross basis (see 20-A-(1)).
- b. The Company has no gross or net derivative assets/liabilities measured at fair value in the Level 3 category.

B. The Company has no additional fair value disclosures.

NOTES TO FINANCIAL STATEMENTS

C. The Company has categorized all the financial assets in the financial statements into the three-level fair value hierarchy as reflected in the following table. See item (4) above for a discussion of each of these three levels.

Type of Financial Instrument	Aggregate Fair Value	Admitted Assets	Level 1	Level 2	Level 3	Net Asset Value (NAV)	Not Practicable (Carrying Value)
Financial assets:							
Bonds:							
U.S. Governments	\$ 146,057,328	\$ 180,399,515	\$ -	\$ 146,057,328	\$ -	\$ -	\$ -
All other government	8,983,772	10,141,135	-	8,983,772	-	-	-
States, territories and possessions	155,994,812	163,985,533	-	155,994,812	-	-	-
Political subdivisions of states, territories	223,256,623	228,002,766	-	223,256,623	-	-	-
Special revenue	1,705,255,043	1,850,593,521	-	1,690,227,086	15,027,957	-	-
Industrial and misc. (unaffiliated)	29,836,353,555	31,642,016,041	-	21,405,187,933	8,431,165,622	-	-
Hybrid securities	1,018,515,110	1,013,722,520	-	1,005,691,110	12,824,000	-	-
Parent, subs and affiliates	676,657,592	692,330,685	-	536,857,885	139,799,707	-	-
Total bonds	\$ 33,771,073,835	\$ 35,781,191,716	\$ -	\$ 25,172,256,549	\$ 8,598,817,286	\$ -	\$ -
Non affiliated preferred stock	280,402,621	273,934,653	154,944,944	3,000,000	122,457,677	-	-
Non affiliated common stock	312,750,482	312,750,482	127,271,776	-	185,478,706	-	-
Mortgage loans	4,501,693,383	4,690,293,526	-	-	4,501,693,383	-	-
Currency forw ards	1,448,175	1,448,175	-	1,448,175	-	-	-
Fixed-indexed annuity options	964,710,845	713,500,755	438,944,890	525,765,955	-	-	-
Interest rate sw aps	126,053,262	126,053,262	-	126,053,262	-	-	-
Currency sw aps	3,366,718	3,366,718	-	3,366,718	-	-	-
Financial Futures	11,952	11,952	11,952	-	-	-	-
Separate account assets	716,476,065	716,476,065	9,370,770	707,105,295	-	-	-
Cash, cash equivalents and short-term investments	3,142,769,700	3,142,769,700	3,142,769,700	-	-	-	-
Policy loans	28,810,934	28,810,934	-	-	28,810,934	-	-
Total financial assets	43,849,567,972	45,790,607,938	3,873,314,032	\$ 26,538,995,954	\$ 13,437,257,986	\$ -	\$ -
Financial liabilities:							
Currency sw aps	\$ 24,244,750	\$ 24,244,750	\$ -	\$ 24,244,750	\$ -	\$ -	\$ -
Currency forw ards	414,631	414,631	-	414,631	-	-	-
Interest rate sw aps	119,564,138	119,564,138	-	119,564,138	-	-	-
Fixed-indexed annuity options	-	369,181,057	-	-	-	-	-
Financial Futures	673,758	673,758	673,758	-	-	-	-
Separate account liabilities	716,476,065	716,476,065	9,370,770	707,105,295	-	-	-
Total financial liabilities	\$ 861,373,342	\$ 1,230,554,399	\$ 10,044,528	\$ 851,328,814	\$ -	\$ -	\$ -

D. Not Practicable to Estimate Fair Value – The Company has no financial instruments that fall under this classification.

E. NAV Practical Expedient Investments – The Company has no financial investments that fall under this classification.

Note 21 – Other Items

A. Unusual or Infrequent Items

Admitted disallowed Interest Maintenance Reserve (“IMR”):

As of June 30, 2024, the Company had \$244,139,586 of net negative (disallowed) IMR in aggregate and in the general account.

As of June 30, 2024, the Company had \$244,139,586 of negative IMR admitted in the general account.

As of June 30, 2024, the calculated adjusted capital and surplus was \$2,441,395,834.

As of June 30, 2024, the percentage of adjusted capital and surplus for which the admitted disallowed IMR represents was 10%.

The follow ing represents allocated gains (losses) previously deferred to the IMR from derivatives:

	June 30, 2024
Realized capital gains	2,365,471
Realized capital losses	(24,383,664)
Total allocated gains (losses) to IMR from derivatives	\$ (22,018,192)

When the Company sells bonds and recognizes losses due to interest-rate related factors, and the realized losses are transferred to the IMR, the sales proceeds are generally used for reinvestment as governed by prudent asset liability management (“ALM”) policies and procedures. Such sales of bonds are intermittently used to meet liquidity needs and managed within the ALM framework.

IMR losses for fixed income related derivatives were in accordance with documented risk management procedures, as well as the Company’s derivative use plans, and reflect the same historical treatment of derivative gains reversed to IMR and amortized rather than immediately recognized as realized gain upon termination.

As of the period ended June 30, 2024, the IMR asset of \$244,139,586 admitted under the currently adopted statutory accounting interpretation is primarily related to its Funds Withheld (FWH) reinsurance treaty. Included in the FWH assets are reimbursements of capital losses on the invested assets to back the ceded reinsurance liabilities and are recorded as an adjustment to the income statement. Both the IMR and FWH assets are admitted under statutory accounting guidance.

B. The Company had no troubled debt restructuring.

Note 22 – Events Subsequent/Other items

No significant change.

Note 23 – Reinsurance

No significant change.

Note 24 – Retrospectively Rated Contracts & Contracts Subject to Redetermination

Not applicable.

Note 25 – Change in Incurred Losses and Loss Adjustment Expenses

Reserves on accident and health contracts for incurred and loss adjustment expenses attributable to insured events of prior years developed as anticipated during the period. Original estimates are increased or decreased as additional information becomes known regarding individual claims. However, no significant trends or unanticipated events were noted. None of the Company’s accident and health contracts are subject to retrospective rating or experience refunds.

NOTES TO FINANCIAL STATEMENTS

Note 26 – Intercompany Pooling Arrangements

Not applicable.

Note 27 – Structured Settlements

Not applicable.

Note 28 – Health Care Receivables

Not applicable.

Note 29 – Participating Policies

No significant change.

Note 30 – Premium Deficiency Reserves

Not applicable.

Note 31 – Reserves for Life Contracts and Annuity Contracts

No significant change.

Note 32 – Analysis of Annuity Actuarial Reserves and Deposit Type Liabilities by Withdrawal Characteristics

No significant change.

Note 33 – Analysis of Life Actuarial Reserves by Withdrawal Characteristics

No significant change.

Note 34 – Premiums and Annuity Considerations Deferred and Uncollected

No significant change.

Note 35 – Separate Accounts

No significant change.

Note 36 – Loss/Claim Adjustment Expenses

No significant change.

GENERAL INTERROGATORIES

PART 1 - COMMON INTERROGATORIES

GENERAL

1.1

Did the reporting entity experience any material transactions requiring the filing of Disclosure of Material Transactions with the State of Domicile, as required by the Model Act?

Yes [] No [X]

1.2

If yes, has the report been filed with the domiciliary state?

Yes [] No []

2.1

Has any change been made during the year of this statement in the charter, by-laws, articles of incorporation, or deed of settlement of the reporting entity?

Yes [] No [X]

2.2

If yes, date of change:

3.1

Is the reporting entity a member of an Insurance Holding Company System consisting of two or more affiliated persons, one or more of which is an insurer?
If yes, complete Schedule Y, Parts 1 and 1A.

Yes [X] No []

3.2

Have there been any substantial changes in the organizational chart since the prior quarter end?

Yes [] No [X]

3.3

If the response to 3.2 is yes, provide a brief description of those changes.

3.4

Is the reporting entity publicly traded or a member of a publicly traded group?

Yes [] No [X]

3.5

If the response to 3.4 is yes, provide the CIK (Central Index Key) code issued by the SEC for the entity/group.

4.1

Has the reporting entity been a party to a merger or consolidation during the period covered by this statement?

Yes [] No [X]

4.2

If yes, provide the name of the entity, NAIC Company Code, and state of domicile (use two letter state abbreviation) for any entity that has ceased to exist as a result of the merger or consolidation.

1	2	3
Name of Entity	NAIC Company Code	State of Domicile

5.

If the reporting entity is subject to a management agreement, including third-party administrator(s), managing general agent(s), attorney-in-fact, or similar agreement, have there been any significant changes regarding the terms of the agreement or principals involved?
If yes, attach an explanation.

Yes [] No [X] N/A []

6.1

State as of what date the latest financial examination of the reporting entity was made or is being made.

12/31/2021

6.2

State the as of date that the latest financial examination report became available from either the state of domicile or the reporting entity. This date should be the date of the examined balance sheet and not the date the report was completed or released.

12/31/2021

6.3

State as of what date the latest financial examination report became available to other states or the public from either the state of domicile or the reporting entity. This is the release date or completion date of the examination report and not the date of the examination (balance sheet date).

05/23/2023

6.4

By what department or departments?
State of Ohio, Department of Insurance

6.5

Have all financial statement adjustments within the latest financial examination report been accounted for in a subsequent financial statement filed with Departments?

Yes [] No [] N/A [X]

6.6

Have all of the recommendations within the latest financial examination report been complied with?

Yes [] No [] N/A [X]

7.1

Has this reporting entity had any Certificates of Authority, licenses or registrations (including corporate registration, if applicable) suspended or revoked by any governmental entity during the reporting period?

Yes [] No [X]

7.2

If yes, give full information:

8.1

Is the company a subsidiary of a bank holding company regulated by the Federal Reserve Board?

Yes [] No [X]

8.2

If response to 8.1 is yes, please identify the name of the bank holding company.

8.3

Is the company affiliated with one or more banks, thrifts or securities firms?

Yes [X] No []

8.4

If response to 8.3 is yes, please provide below the names and location (city and state of the main office) of any affiliates regulated by a federal regulatory services agency [i.e. the Federal Reserve Board (FRB), the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC) and the Securities Exchange Commission (SEC)] and identify the affiliate's primary federal regulator.

1	2	3	4	5	6
Affiliate Name	Location (City, State)	FRB	OCC	FDIC	SEC
Barings LLC	Charlotte, NC	..NO..	..NO..	..NO..	..YES..
Baring International Investment Limited	London, UK	..NO..	..NO..	..NO..	..YES..
Baring Securities LLC	Charlotte, NC	..NO..	..NO..	..NO..	..YES..
Flourish Financial, LLC	New York, NY	..NO..	..NO..	..NO..	..YES..
IMM Ascend Life Investor Services, LLC	Cincinnati, OH	..NO..	..NO..	..NO..	..YES..
IML Distributors, LLC	Springfield, MA	..NO..	..NO..	..NO..	..YES..
IML Investment Advisers, LLC	Springfield, MA	..NO..	..NO..	..NO..	..YES..
IML Investors Services	Springfield, MA	..NO..	..NO..	..NO..	..YES..
IML Strategic Distributors, LLC	Springfield, MA	..NO..	..NO..	..NO..	..YES..
The MassMutual Trust Company, OCC	Enfield, CT	..NO..	..YES..	..NO..	..NO..

GENERAL INTERROGATORIES

- 9.1

Are the senior officers (principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions) of the reporting entity subject to a code of ethics, which includes the following standards?
(a) Honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;
(b) Full, fair, accurate, timely and understandable disclosure in the periodic reports required to be filed by the reporting entity;
(c) Compliance with applicable governmental laws, rules and regulations;
(d) The prompt internal reporting of violations to an appropriate person or persons identified in the code; and
(e) Accountability for adherence to the code.

Yes [X] No []
- 9.11

If the response to 9.1 is No, please explain:
.....
- 9.2

Has the code of ethics for senior managers been amended?

Yes [] No [X]
- 9.21

If the response to 9.2 is Yes, provide information related to amendment(s).
.....
- 9.3

Have any provisions of the code of ethics been waived for any of the specified officers?

Yes [] No [X]
- 9.31

If the response to 9.3 is Yes, provide the nature of any waiver(s).
.....

FINANCIAL

- 10.1

Does the reporting entity report any amounts due from parent, subsidiaries or affiliates on Page 2 of this statement?

Yes [X] No []
- 10.2

If yes, indicate any amounts receivable from parent included in the Page 2 amount:\$.....

0

INVESTMENT

- 11.1

Were any of the stocks, bonds, or other assets of the reporting entity loaned, placed under option agreement, or otherwise made available for use by another person? (Exclude securities under securities lending agreements.)

Yes [] No [X]
- 11.2

If yes, give full and complete information relating thereto:
.....
12.

Amount of real estate and mortgages held in other invested assets in Schedule BA:

\$.....

324,692,536
13.

Amount of real estate and mortgages held in short-term investments:

\$.....
- 14.1

Does the reporting entity have any investments in parent, subsidiaries and affiliates?

Yes [X] No []
- 14.2

If yes, please complete the following:

	1	2
	Prior Year-End Book/Adjusted Carrying Value	Current Quarter Book/Adjusted Carrying Value
14.21 Bonds	\$.....744,638,614	\$.....314,292,242
14.22 Preferred Stock	\$.....0	\$.....
14.23 Common Stock	\$.....445,210,536	\$.....465,897,252
14.24 Short-Term Investments	\$.....0	\$.....
14.25 Mortgage Loans on Real Estate	\$.....0	\$.....
14.26 All Other	\$.....237,992,753	\$.....292,185,755
14.27 Total Investment in Parent, Subsidiaries and Affiliates (Subtotal Lines 14.21 to 14.26)	\$.....1,427,841,903	\$.....1,072,375,249
14.28 Total Investment in Parent included in Lines 14.21 to 14.26 above	\$.....	\$.....
- 15.1

Has the reporting entity entered into any hedging transactions reported on Schedule DB?

Yes [X] No []
- 15.2

If yes, has a comprehensive description of the hedging program been made available to the domiciliary state?
If no, attach a description with this statement.
.....

Yes [X] No [] N/A []
16.

For the reporting entity's security lending program, state the amount of the following as of the current statement date:

16.1

Total fair value of reinvested collateral assets reported on Schedule DL, Parts 1 and 2.

\$.....

0

16.2

Total book/adjusted carrying value of reinvested collateral assets reported on Schedule DL, Parts 1 and 2

\$.....

0

16.3

Total payable for securities lending reported on the liability page.

\$.....

0

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

GENERAL INTERROGATORIES

17. Excluding items in Schedule E - Part 3 - Special Deposits, real estate, mortgage loans and investments held physically in the reporting entity's offices, vaults or safety deposit boxes, were all stocks, bonds and other securities, owned throughout the current year held pursuant to a custodial agreement with a qualified bank or trust company in accordance with Section 1, III - General Examination Considerations, F. Outsourcing of Critical Functions, Custodial or Safekeeping Agreements of the NAIC Financial Condition Examiners Handbook? Yes [X] No []
- 17.1 For all agreements that comply with the requirements of the NAIC Financial Condition Examiners Handbook, complete the following:

1 Name of Custodian(s)	2 Custodian Address
Bank of New York Mellon	1 Wall Street, New York, NY 10286
State Street Bank and Trust Company	JAB2NWN. Quincy, MA 02171

- 17.2 For all agreements that do not comply with the requirements of the NAIC Financial Condition Examiners Handbook, provide the name, location and a complete explanation:

1 Name(s)	2 Location(s)	3 Complete Explanation(s)

- 17.3 Have there been any changes, including name changes, in the custodian(s) identified in 17.1 during the current quarter? Yes [] No [X]
- 17.4 If yes, give full information relating thereto:

1 Old Custodian	2 New Custodian	3 Date of Change	4 Reason

- 17.5 Investment management – Identify all investment advisors, investment managers, broker/dealers, including individuals that have the authority to make investment decisions on behalf of the reporting entity. For assets that are managed internally by employees of the reporting entity, note as such. ["...that have access to the investment accounts"; "...handle securities"]

1 Name of Firm or Individual	2 Affiliation
ARES Capital Management LLC	U.....
Ares Management LLC	U.....
Barings LLC	A.....
Centerbridge Martello Advisors, LLC	U.....
Fractal Investments LLC	U.....
Western Asset Management Company	U.....
Angelo, Gordon & Co., L.P	U.....

- 17.5097 For those firms/individuals listed in the table for Question 17.5, do any firms/individuals unaffiliated with the reporting entity (i.e. designated with a "U") manage more than 10% of the reporting entity's invested assets?..... Yes [] No [X]

- 17.5098 For firms/individuals unaffiliated with the reporting entity (i.e. designated with a "U") listed in the table for Question 17.5, does the total assets under management aggregate to more than 50% of the reporting entity's invested assets?..... Yes [] No [X]

- 17.6 For those firms or individuals listed in the table for 17.5 with an affiliation code of "A" (affiliated) or "U" (unaffiliated), provide the information for the table below.

1 Central Registration Depository Number	2 Name of Firm or Individual	3 Legal Entity Identifier (LEI)	4 Registered With	5 Investment Management Agreement (IMA) Filed
130074	ARES Capital Management LLC	549300R4YHRZ8JUZU385	SEC	NO.....
130074	Ares Management LLC	549300JA9GMPFTSVQQ05	SEC	NO.....
106006	Barings LLC	ANDKRHQKPRRG4Q2KLR05	SEC	DS.....
131940	Angelo, Gordon & Co., L.P.	XXJ808RONB9FETFPGB63	SEC	NO.....
157359	Centerbridge Martello Advisors, LLC	549300F5X7LPP05D3544	SEC	NO.....
311767	Fractal Investments LLC	984500D14JFD006CBC96	SEC	NO.....
801-8162	Western Asset Management Company	549300C5A561UXU1CN46	SEC	NO.....

- 18.1 Have all the filing requirements of the Purposes and Procedures Manual of the NAIC Investment Analysis Office been followed? Yes [] No [X]

- 18.2 If no, list exceptions:
At 6/30/2024, 42 issues for 38 issuers did not meet the filing requirements of the Purposes and Procedures Manual. The majority of these issues currently lack one or more of the following: Valid cusip/PPN, audited financials and/or executed legal documentation.
Exceptions totaled \$114,791,181 or 0.31% of all assets.

19. By self-designating 5GI securities, the reporting entity is certifying the following elements for each self-designated 5GI security:
- a. Documentation necessary to permit a full credit analysis of the security does not exist or an NAIC CRP credit rating for an FE or PL security is not available.
- b. Issuer or obligor is current on all contracted interest and principal payments.
- c. The insurer has an actual expectation of ultimate payment of all contracted interest and principal.
- Has the reporting entity self-designated 5GI securities? Yes [X] No []

20. By self-designating PLGI securities, the reporting entity is certifying the following elements of each self-designated PLGI security:
- a. The security was purchased prior to January 1, 2018.
- b. The reporting entity is holding capital commensurate with the NAIC Designation reported for the security.
- c. The NAIC Designation was derived from the credit rating assigned by an NAIC CRP in its legal capacity as a NRSRO which is shown on a current private letter rating held by the insurer and available for examination by state insurance regulators.
- d. The reporting entity is not permitted to share this credit rating of the PL security with the SVO.
- Has the reporting entity self-designated PLGI securities? Yes [] No [X]

21. By assigning FE to a Schedule BA non-registered private fund, the reporting entity is certifying the following elements of each self-designated FE fund:
- a. The shares were purchased prior to January 1, 2019.
- b. The reporting entity is holding capital commensurate with the NAIC Designation reported for the security.
- c. The security had a public credit rating(s) with annual surveillance assigned by an NAIC CRP in its legal capacity as an NRSRO prior to January 1, 2019.
- d. The fund only or predominantly holds bonds in its portfolio.
- e. The current reported NAIC Designation was derived from the public credit rating(s) with annual surveillance assigned by an NAIC CRP in its legal capacity as an NRSRO.
- f. The public credit rating(s) with annual surveillance assigned by an NAIC CRP has not lapsed.
- Has the reporting entity assigned FE to Schedule BA non-registered private funds that complied with the above criteria? Yes [] No [X]

GENERAL INTERROGATORIES

PART 2 - LIFE AND ACCIDENT AND HEALTH COMPANIES/FRATERNAL BENEFIT SOCIETIES

Life and Accident Health Companies/Fraternal Benefit Societies:

1.

Report the statement value of mortgage loans at the end of this reporting period for the following categories:

1

Amount

1.1

Long-Term Mortgages In Good Standing

1.11

Farm Mortgages

\$

1.12

Residential Mortgages

\$

3,110,796,775

1.13

Commercial Mortgages

\$

1,579,496,751

1.14

Total Mortgages in Good Standing

\$

4,690,293,526

1.2

Long-Term Mortgages In Good Standing with Restructured Terms

1.21

Total Mortgages in Good Standing with Restructured Terms

\$

1.3

Long-Term Mortgage Loans Upon which Interest is Overdue more than Three Months

1.31

Farm Mortgages

\$

1.32

Residential Mortgages

\$

1.33

Commercial Mortgages

\$

1.34

Total Mortgages with Interest Overdue more than Three Months

\$

0

1.4

Long-Term Mortgage Loans in Process of Foreclosure

1.41

Farm Mortgages

\$

1.42

Residential Mortgages

\$

1.43

Commercial Mortgages

\$

1.44

Total Mortgages in Process of Foreclosure

\$

0

1.5

Total Mortgage Loans (Lines 1.14 + 1.21 + 1.34 + 1.44) (Page 2, Column 3, Lines 3.1 + 3.2)

\$

4,690,293,526

1.6

Long-Term Mortgages Foreclosed, Properties Transferred to Real Estate in Current Quarter

1.61

Farm Mortgages

\$

1.62

Residential Mortgages

\$

1.63

Commercial Mortgages

\$

1.64

Total Mortgages Foreclosed and Transferred to Real Estate

\$

0

2.

Operating Percentages:

2.1

A&H loss percent

%

2.2

A&H cost containment percent

%

2.3

A&H expense percent excluding cost containment expenses

%

3.1

Do you act as a custodian for health savings accounts?

Yes

[]

No

[X]

3.2

If yes, please provide the amount of custodial funds held as of the reporting date

\$

3.3

Do you act as an administrator for health savings accounts?

Yes

[]

No

[X]

3.4

If yes, please provide the balance of the funds administered as of the reporting date

\$

4.

Is the reporting entity licensed or chartered, registered, qualified, eligible or writing business in at least two states?

Yes

[X]

No

[]

4.1

If no, does the reporting entity assume reinsurance business that covers risks residing in at least one state other than the state of domicile of the reporting entity?

Yes

[]

No

[]

Fraternal Benefit Societies Only:

5.1

In all cases where the reporting entity has assumed accident and health risks from another company, provisions should be made in this statement on account of such reinsurances for reserve equal to that which the original company would have been required to establish had it retained the risks. Has this been done?

Yes

[]

No

[]

N/A

[]

5.2

If no, explain:

6.1

Does the reporting entity have outstanding assessments in the form of liens against policy benefits that have increased surplus?

Yes

[]

No

[]

6.2

If yes, what is the date(s) of the original lien and the total outstanding balance of liens that remain in surplus?

Date	Outstanding Lien Amount

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE S - CEDED REINSURANCE

Showing All New Reinsurance Treaties - Current Year to Date

1	2	3	4	5	6	7	8	9	10
NAIC Company Code	ID Number	Effective Date	Name of Reinsurer	Domiciliary Jurisdiction	Type of Reinsurance Ceded	Type of Business Ceded	Type of Reinsurer	Certified Reinsurer Rating (1 through 6)	Effective Date of Certified Reinsurer Rating
NONE									

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE T - PREMIUMS AND ANNUITY CONSIDERATIONS

Current Year To Date - Allocated by States and Territories

States, Etc.			1	Life Contracts		Direct Business Only			
				2	3	4 Accident and Health Insurance Premiums, Including Policy, Membership and Other Fees	5 Other Considerations	6 Total Columns 2 Through 5	7 Deposit-Type Contracts
1.	Alabama	AL	L	105,020	74,111,848	17,791		74,234,659	
2.	Alaska	AK	L	3,686	2,734,028			2,737,714	
3.	Arizona	AZ	L	221,130	89,801,759	8,600		90,031,489	250,334
4.	Arkansas	AR	L	71,554	32,293,252	674		32,365,480	387,860
5.	California	CA	L	2,100,150	514,828,497	7,422		516,936,069	1,330,431
6.	Colorado	CO	L	89,181	54,216,330	34,376		54,339,887	
7.	Connecticut	CT	L	156,365	85,895,191	2,672		86,054,228	
8.	Delaware	DE	L	17,839	16,910,128			16,927,967	
9.	District of Columbia	DC	L	10,870	4,551,441			4,562,311	
10.	Florida	FL	L	725,119	473,716,143	126,765		474,568,027	1,125,501
11.	Georgia	GA	L	294,729	132,236,729	36,301		132,567,759	290,816
12.	Hawaii	HI	L	109,265	45,137,198			45,246,463	47,025
13.	Idaho	ID	L	34,496	23,177,116	7,181		23,218,793	
14.	Illinois	IL	L	261,544	170,705,710	66,614		171,033,868	612,542
15.	Indiana	IN	L	70,355	107,585,800	46,833		107,702,988	195,835
16.	Iowa	IA	L	60,145	30,097,418	56,223		30,213,786	189,789
17.	Kansas	KS	L	47,737	27,958,401	65,044		28,071,182	
18.	Kentucky	KY	L	67,730	39,533,065	71,664		39,672,459	
19.	Louisiana	LA	L	97,075	81,466,053	3,866		81,566,994	
20.	Maine	ME	L	36,660	16,266,923	3,272		16,306,855	
21.	Maryland	MD	L	221,724	114,913,635	5,066		115,140,425	
22.	Massachusetts	MA	L	193,569	96,141,064			96,334,633	1,178,880
23.	Michigan	MI	L	102,315	177,961,447	1,619		178,065,381	
24.	Minnesota	MN	L	202,329	69,582,929	4,993		69,790,251	47,510
25.	Mississippi	MS	L	52,933	22,615,837	1,466		22,670,236	
26.	Missouri	MO	L	130,918	255,962,642	81,041		256,174,601	806,315
27.	Montana	MT	L	2,457	3,269,331			3,271,788	
28.	Nebraska	NE	L	61,981	13,557,485	35,683		13,655,149	
29.	Nevada	NV	L	126,553	34,875,375	7,303		35,009,231	
30.	New Hampshire	NH	L	25,686	17,946,562	20,751		17,992,999	661,590
31.	New Jersey	NJ	L	239,915	198,905,827	2,248		199,147,990	2,896,859
32.	New Mexico	NM	L	146,885	15,033,299			15,180,184	11,502
33.	New York	NY	N	52,805	17,232,337	9,270		17,294,412	
34.	North Carolina	NC	L	491,864	183,439,216	680,802		184,611,882	
35.	North Dakota	ND	L	22,873	12,856,650			12,879,523	
36.	Ohio	OH	L	153,738	209,979,079	23,348		210,156,165	118,574
37.	Oklahoma	OK	L	243,213	24,181,295	40,284		24,464,792	
38.	Oregon	OR	L	47,261	37,622,257	25,618		37,695,136	225,373
39.	Pennsylvania	PA	L	508,576	284,416,561	5,903		284,931,040	1,513,313
40.	Rhode Island	RI	L	21,126	26,266,990	2,020		26,290,136	
41.	South Carolina	SC	L	165,742	127,641,728	111,673		127,919,143	642,738
42.	South Dakota	SD	L	25,906	9,873,049	25		9,898,980	
43.	Tennessee	TN	L	200,565	113,392,290	98,337		113,691,192	
44.	Texas	TX	L	1,000,802	227,106,810	53,076		228,160,688	115,024
45.	Utah	UT	L	48,265	34,578,852	19,348		34,646,465	
46.	Vermont	VT	L	21,522	6,605,261	10,284		6,637,067	
47.	Virginia	VA	L	362,284	136,544,324	120,207		137,026,815	
48.	Washington	WA	L	144,080	85,251,156	85,412		85,480,648	295,382
49.	West Virginia	WV	L	54,325	21,551,608	3,074		21,609,007	97,202
50.	Wisconsin	WI	L	107,484	99,696,463	120,490		99,924,437	103,521
51.	Wyoming	WY	L	9,580	3,830,642			3,840,222	
52.	American Samoa	AS	N					0	
53.	Guam	GU	N	36,585				36,585	
54.	Puerto Rico	PR	N	217				217	
55.	U.S. Virgin Islands	VI	N	1,174				1,174	
56.	Northern Mariana Islands	MP	N					0	
57.	Canada	CAN	N					0	
58.	Aggregate Other Aliens	OT	XXX	42,018	331,382	625	0	374,025	0
59.	Subtotal	XXX		9,849,920	4,706,386,413	2,125,264	0	4,718,361,597	13,143,916
90.	Reporting entity contributions for employee benefits plans	XXX						0	
91.	Dividends or refunds applied to purchase paid-up additions and annuities	XXX						0	
92.	Dividends or refunds applied to shorten endowment or premium paying period	XXX						0	
93.	Premium or annuity considerations waived under disability or other contract provisions	XXX		140,365		168,792		309,157	
94.	Aggregate or other amounts not allocable by State	XXX		0	0	0	0	0	0
95.	Totals (Direct Business)	XXX		9,990,285	4,706,386,413	2,294,056	0	4,718,670,754	13,143,916
96.	Plus Reinsurance Assumed	XXX		1,368,741	49,766	1,512,593		2,931,100	
97.	Totals (All Business)	XXX		11,359,026	4,706,436,179	3,806,649	0	4,721,601,854	13,143,916
98.	Less Reinsurance Ceded	XXX		5,261,107	406,554,154	2,294,058		414,109,319	29,626
99.	Totals (All Business) less Reinsurance Ceded	XXX		6,097,919	4,299,882,025	1,512,591	0	4,307,492,535	13,114,290
DETAILS OF WRITE-INS									
58001.	Other Alien	XXX		42,018	331,382	625		374,025	
58002.		XXX							
58003.		XXX							
58998.	Summary of remaining write-ins for Line 58 from overflow page	XXX		0	0	0	0	0	0
58999.	Totals (Lines 58001 through 58003 plus 58998)(Line 58 above)	XXX		42,018	331,382	625	0	374,025	0
9401.		XXX							
9402.		XXX							
9403.		XXX							
9498.	Summary of remaining write-ins for Line 94 from overflow page	XXX		0	0	0	0	0	0
9499.	Totals (Lines 9401 through 9403 plus 9498)(Line 94 above)	XXX		0	0	0	0	0	0

(a) Active Status Counts:

1. L - Licensed or Chartered - Licensed insurance carrier or domiciled RRG	50	4. Q - Qualified - Qualified or accredited reinsurer	0
2. R - Registered - Non-domiciled RRGs	0	5. N - None of the above - Not allowed to write business in the state	7
3. E - Eligible - Reporting entities eligible or approved to write surplus lines in the state	0		

SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

The following entities are general partner level or above of **Massachusetts Mutual Life Insurance Company** (Parent)

	<u>Federal Tax ID</u>	<u>NAIC Co Code</u>	<u>State of Domicile</u>
MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY	04-1590850	65935	Massachusetts
Direct & Indirect Owned Subsidiaries:			
C.M. Life Insurance Company	06-1041383	93432	Connecticut
MML Bay State Life Insurance Company	43-0581430	70416	Connecticut
CML Special Situations Investor LLC	None		Delaware
CM Life Mortgage Lending LLC	None		Delaware
CML Mezzanine Investor III, LLC	None		Delaware
CML Global Capabilities LLC	None		Delaware
MM Global Capabilities I LLC	None		Delaware
MassMutual Global Business Services India LLP	None		India
MM Global Capabilities (Netherlands) B.V.	None		Netherlands
MassMutual Global Business Services Romania S.R.L.	None		Romania
MM Global Capabilities II LLC	None		Delaware
MM Global Capabilities III LLC	None		Delaware
MM/Barings Multifamily TEBS 2020 LLC	None		Delaware
Berkshire Way LLC	04-1590850		Delaware
MML Special Situations Investor LLC	None		Delaware
Timberland Forest Holding LLC	47-5322979		Delaware
Lyme Adirondack Forest Company, LLC	None		Delaware
Lyme Adirondack Timberlands I, LLC	None		Delaware
Lyme Adirondack Timberlands II, LLC	None		Delaware
Lyme Adirondack Timber Sales, LLC	None		Delaware
MSP-SC, LLC	04-1590850		Delaware
Insurance Road LLC	04-1590850		Delaware
MassMutual Trad Private Equity LLC	04-1590850		Delaware
MassMutual Intellectual Property LLC	04-1590850		Delaware
Trad Investments I LLC	None		Delaware
ITPS Holding LLC	None		Delaware
HITPS LLC	None		Delaware
EM Opportunities LLC	None		Delaware
MassMutual MCAM Insurance Company, Inc.	None		Vermont
MassMutual Ventures US IV GP, LLC*	None		Delaware
MassMutual Ventures US IV, L.P.	None		Delaware
MassMutual Ventures US IV, LLC	None		Delaware
MassMutual Ventures Europe/APAC I GP, LLC	None		Delaware
MassMutual Ventures Europe/APAC I GP, L.P.	None		Cayman Islands
MassMutual Ventures Europe/APAC I L.P.	None		Cayman Islands
MassMutual Ventures Southeast Asia III LLC	None		Delaware
MMV Digital I LLC	None		Cayman Islands

*This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	Federal Tax ID	NAIC Co Code	State of Domicile
Counterpointe Sustainable Advisors LLC	None		Delaware
CSA Intermediate Holdco LLC	None		Delaware
Counterpointe Trust Services LLC	None		Delaware
CP PACE LLC	None		Delaware
CSA Employee Services Company LLC	None		Delaware
Counterpointe Sustainable Real Estate II LLC	None		Delaware
Counterpointe Energy Solutions II LLC	None		Delaware
Counterpointe Energy Solutions (CA) II LLC	27-0105644		Delaware
Counterpointe Energy Solutions (FL) II LLC	None		Delaware
Counterpointe Energy Solutions (IL) LLC	None		Delaware
Loop-Counterpointe PACE LLC	None		Delaware
Counterpointe Energy Services LLC	None		Delaware
JFIN Parent LLC	None		Delaware
Jefferies Finance LLC	27-0105644		Delaware
JFIN GP Adviser LLC	None		Delaware
Jefferies MM Lending LLC	None		Delaware
Green SPE LLC	None		Delaware
Apex Credit Partners LLC	None		Delaware
Apex GP I LLC	None		Delaware
Apex Securitized Income Fund LP	None		Delaware
Jefferies Credit Partners LLC	None		Delaware
Jefferies Credit Management LLC	None		Delaware
JCM GP I LLC	None		Delaware
JCM H-2 Credit Fund GP LLC	None		Delaware
JCP Direct Lending CLO 2022 LLC	None		Delaware
Jefferies Direct Lending Europe SCSp SICAV-RAIF	None		Luxembourg
Jefferies Credit Management Holdings LLC	None		Delaware
JDLF GP (Europe) S.a.r.l	None		Luxembourg
JFAM GP LLC	None		Delaware
JFAM GP LP	None		Delaware
Jefferies Direct Lending Fund C LP	None		Delaware
Jefferies DLF C Holdings LLC	None		Delaware
Jefferies Direct Lending Fund C SPE LLC	None		Delaware
JDLF II GP LLC	None		Delaware
JDLF II GP LP	None		Delaware
Jefferies Direct Lending Fund II C LP	None		Delaware
Jefferies DLF 2 C Holdings LLC	None		Delaware
Jefferies Direct Lending Fund II C SPE LLC	None		Delaware
JDLF III GP LLC*	None		Delaware
JDLF III GP LP*	None		Delaware
Jefferies Direct Lending Fund III C LP	None		Delaware
JCP Direct Lending CLO 2023-1 LLC	None		Delaware
JCP Direct Lending CLO 2023 Ltd.	None		Jersey Channel Islands

*This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	Federal Tax ID	NAIC Co Code	State of Domicile
JCP GP I LLC	None		Delaware
Jefferies M Super Private Credit Fund GP LLC	None		Delaware
Jefferies Private Credit BDC Inc.	None		Maryland
JCP Funding 2024 LLC	None		Delaware
Jefferies Senior Lending LLC	None		Delaware
JFIN Revolver Holdings LLC	None		Delaware
JFIN Revolver Holdings II LLC	None		Delaware
JFIN Co-Issuer Corporation	None		Delaware
JFIN Europe GP, S.a.r.l.	None		Luxembourg
Jefferies Finance Europe, S.L.P.	None		Luxembourg
Jefferies Finance Europe, SCSp	None		Luxembourg
Jefferies Finance Business Credit LLC	None		Delaware
JFIN Business Credit Fund I LLC	None		Delaware
JFIN Funding 2021 LLC	None		Delaware
JFIN LC Fund LLC	None		Delaware
JFIN Revolver CLO 2017 Ltd.	None		Cayman Islands
JFIN Revolver CLO 2017-II Ltd.	None		Cayman Islands
JFIN Revolver CLO 2017-III Ltd.	None		Cayman Islands
JFIN Revolver CLO 2018 Ltd.	None		Cayman Islands
JFIN Revolver CLO 2019 Ltd.	None		Cayman Islands
JFIN Revolver CLO 2019-II Ltd.	None		Cayman Islands
JFIN Revolver CLO 2020 Ltd.	None		Cayman Islands
JFIN Revolver CLO 2021-II Ltd.	None		Cayman Islands
JFIN Revolver CLO 2021-V Ltd.	None		Cayman Islands
JFIN Revolver CLO 2022-II Ltd.	None		Cayman Islands
JFIN Revolver CLO 2022-III Ltd.	None		Cayman Islands
JFIN Revolver CLO 2022-IV Ltd.	None		Cayman Islands
JFIN Revolver CLO 2024-I Ltd.	None		Delaware
JFIN Revolver CLO 2022-IV LLC	None		Cayman Islands
JFIN Revolver Fund, L.P.	None		Delaware
JFIN Revolver Funding 2021 Ltd.	None		Delaware
JFIN Revolver Funding 2021-III Ltd.	None		Delaware
JFIN Revolver Funding 2021-IV Ltd.	None		Delaware
JFIN Revolver Funding 2022-I Ltd.	None		Bermuda
JFIN Revolver SPE1 2022 LLC	None		Delaware
JFIN Revolver SPE3 2022 LLC	None		Delaware
JFIN Revolver SPE4 2022 LLC	None		Delaware
JFIN Revolver SPE4 2022 Ltd.	None		Delaware
JCP Private Loan Management GP LLC	None		Delaware
JCP Private Loan Management LP	None		Delaware
Apex Credit Holdings LLC	None		Delaware

*This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	Federal Tax ID	NAIC Co Code	State of Domicile
JFIN CLO 2012 Ltd.	None		Cayman Islands
JFIN CLO 2013 Ltd.	None		Cayman Islands
JFIN CLO 2014 Ltd.	None		Cayman Islands
JFIN CLO 2014-II Ltd.	None		Cayman Islands
JFIN CLO 2015 Ltd.	None		Cayman Islands
JFIN CLO 2015-II Ltd.	None		Cayman Islands
JFIN CLO 2016 Ltd.	None		Cayman Islands
JFIN CLO 2017 Ltd.	None		Cayman Islands
JFIN CLO 2017 II Ltd.	None		Cayman Islands
Tomorrow Parent, LLC	None		Delaware
Custom Ecology Holdco, LLC	None		Delaware
Glidepath Holdings Inc.	86-2294635		Delaware
MassMutual Ascend Life Insurance Company	13-1935920	63312	Ohio
AAG Insurance Agency, LLC	31-1422717		Kentucky
Annuity Investors Life Insurance Company	31-1021738	93661	Ohio
MM Ascend Life Investor Services, LLC	31-1395344		Ohio
MM Ascend Mortgage Lending LLC	None		Ohio
Manhattan National Holding, LLC	26-3260520		Ohio
Manhattan National Life Insurance Company	45-0252531	67083	Ohio
MassMutual Mortgage Lending LLC	None		Delaware
MM Copper Hill Road LLC	04-1590850		Delaware
MMV CTF I GP LLC	None		Delaware
MassMutual Ventures Climate Technology Fund I LP	None		Delaware
MM Direct Private Investments Holding LLC	None		Delaware
MM Direct Private Investments UK Limited	None		England & Wales
DPI-ACRES Capital LLC	None		Delaware
DPI-ARES Mortgage Lending LLC	None		Delaware
MM Investment Holding	None		Cayman Islands
MMIH Bond Holdings LLC	None		Delaware
MassMutual Asset Finance LLC*	26-0073611		Delaware
MMAF Equipment Finance LLC 2017-B	32-0546197		Delaware
MMAF Equipment Finance LLC 2019-A	83-3722640		Delaware
MMAF Equipment Finance LLC 2019-B	None		Delaware
MMAF Equipment Finance LLC 2020–A	None		Delaware
MMAF Equipment Finance LLC 2020–B	None		Delaware
MMAF Equipment Finance LLC 2021-A	None		Delaware
MMAF Equipment Finance LLC 2022–A	None		Delaware
MMAF Equipment Finance LLC 2022–B	None		Delaware
MMAF Equipment Finance LLC 2023-A	None		Delaware
MMAF Equipment Finance LLC 2024-A	None		Delaware
MML Management Corporation	04-2443240		Massachusetts
MassMutual International Holding MSC, Inc.	04-3548444		Massachusetts
MassMutual Holding MSC, Inc.	04-3341767		Massachusetts

*This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	Federal Tax ID	NAIC Co Code	State of Domicile
MML CM LLC	None		Delaware
Blueprint Income LLC	None		New York
Flourish Holding Company LLC	None		Delaware
Flourish Insurance Agency LLC	None		Delaware
Flourish Digital Assets LLC	None		Delaware
Flourish Financial LLC	None		Delaware
Flourish Technologies LLC	None		Delaware
MML Distributors LLC*	04-3356880		Massachusetts
MML Investment Advisers, LLC	None		Delaware
MML Strategic Distributors, LLC	46-3238013		Delaware
The MassMutual Trust Company, FSB	06-1563535		Connecticut
MML Private Placement Investment Company I, LLC	04-1590850		Delaware
MML Private Equity Fund Investor LLC	04-1590850		Delaware
MM Private Equity Intercontinental LLC	04-1590850		Delaware
Pioneers Gate LLC	45-2738137		Delaware
MassMutual Holding LLC	04-2854319		Delaware
Fern Street LLC	37-1732913		Delaware
Low Carbon Energy Holding	None		United Kingdom
Sleeper Street LLC	None		Delaware
Haven Life Insurance Agency, LLC	46-2252944		Delaware
GASL Holdings LLC	None		Delaware
Barings Asset-Based Income Fund (US) LP*	None		Delaware
Barings Perpetual European Direct Lending Fund	None		Luxembourg
Barings Emerging Generation Fund II	88-0916548		Delaware
Babson Capital Global Special Situation Credit Fund 2*	98-1206017		Delaware
Barings Global Real Assets Fund LP*	82-3867745		Delaware
Barings Global Special Situations Credit Fund 3	None		Luxembourg
MassMutual Assignment Company	06-1597528		North Carolina
MassMutual Capital Partners LLC	04-1590850		Delaware
Marco Hotel LLC	46-4255307		Delaware
HB Naples Golf Owner LLC	45-3623262		Delaware
RB Apartments LLC	82-4411267		Delaware
Intermodal Holding II LLC	None		Delaware
MassMutual Ventures Holding LLC	None		Delaware
Crane Venture Partners LLP	None		United Kingdom
MassMutual Ventures Management LLC	None		Delaware
MassMutual Ventures SEA Management Private Limited	None		Singapore
MMV UK/SEA Limited	None		England & Wales
MassMutual Ventures India Private Limited	None		India
MassMutual Ventures Southeast Asia I LLC	None		Delaware
MassMutual Ventures Southeast Asia II LLC	None		Delaware
MassMutual Ventures UK LLC	None		Delaware
MassMutual Ventures US I LLC	47-1296410		Delaware

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	Federal Tax ID	NAIC Co Code	State of Domicile
MassMutual Ventures US II LLC	None		Delaware
MassMutual Ventures US III LLC	None		Delaware
MM Catalyst Fund LLC	None		Delaware
MM Catalyst Fund II LLC	None		Delaware
MM Rothesay Holdco US LLC	04-1590850		Delaware
Rothesay Limited	None		United Kingdom
Rothesay Mortgages Limited	None		United Kingdom
Rothesay Life Plc	None		United Kingdom
Rothesay MA No.1 Limited	None		United Kingdom
Rothesay MA No.3 Limited	None		United Kingdom
Rothesay MA No.4 Limited	None		United Kingdom
LT Mortgage Financing Limited	None		United Kingdom
Rothesay Property Partnership 1 LLP	None		United Kingdom
Rothesay Foundation	None		United Kingdom
Rothesay Pensions Management Limited	None		United Kingdom
Rothesay Asset Management UK Limited	None		United Kingdom
Rothesay Asset Management Australia Pty Ltd	None		Australia
Rothesay Asset Management North America LLC	None		Delaware
MML Investors Services, LLC	04-1590850		Massachusetts
MML Insurance Agency, LLC	04-1590850		Massachusetts
MMLISI Financial Alliances, LLC	41-2011634		Delaware
LifeScore Labs, LLC	47-1466022		Massachusetts
MM Asset Management Holding LLC	45-4000072		Delaware
Barings LLC	51-0504477		Delaware
Baring Asset Management (Asia) Holdings Limited	98-0524271		Hong Kong, Special Administrative Region of China
Baring International Fund Managers (Bermuda) Limited	98-0457465		Bermuda
Baring Asset Management (Asia) Limited	98-0457463		Hong Kong, Special Administrative Region of China
Baring Asset Management Korea Limited	None		Korea
Barings Investment Management (Shanghai) Limited	None		Hong Kong, Special Administrative Region of China
Barings Overseas Investment Fund Management (Shanghai) Limited	None		Hong Kong, Special Administrative Region of China
Baring SICE (Taiwan) Limited	98-0457707		Taiwan ROC
Barings Singapore Pte. Ltd.	None		Singapore
Barings Japan Limited	98-0236449		Japan
Barings Australia Holding Company Pty Ltd	None		Australia
Barings Australia Pty Ltd	None		Australia
Barings Australia Real Estate Holdings Pty Ltd	None		Australia
Barings Australia Real Estate Pty Ltd	14-0045656		Australia
Barings Australia Property Partners Holdings Pty Ltd	98-0457456		Australia
Barings Australia Asset Management Pty Ltd	None		Australia
Barings Australia Property Partners Pty Ltd	None		Australia
Barings Australia Structured Finance Holdings Pty Ltd	None		Australia
Barings Australia Structured Finance Pty Ltd	None		Australia
Gryphon Capital Partners Pty Ltd	None		Australia

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

12.6

	Federal Tax ID	NAIC Co Code	State of Domicile
Gryphon Capital Management Pty Ltd	None		Australia
Gryphon Capital Investments Pty Ltd	None		Australia
Barings Finance LLC	80-0875475		Delaware
BCF Europe Funding Limited	None		Ireland
BCF Senior Funding I LLC	None		Delaware
BCF Senior Funding I Designated Activity Company	None		Ireland
Barings Real Estate Acquisitions LLC	None		Delaware
Barings Securities LLC	04-3238351		Delaware
Barings Guernsey Limited	98-0437588		Guernsey
Barings Europe Limited	None		United Kingdom
Barings Asset Management Spain SL	None		Spain
Baring France SAS	None		France
Baring International Fund Managers (Ireland) Limited	None		Ireland
Barings GmbH	None		Germany
Barings Italy S.r.l.	None		Italy
Barings Sweden AB	None		Sweden
Barings Netherlands B.V.	None		Netherlands
Barings (U.K.) Limited	98-0432153		United Kingdom
Barings Switzerland Sàrl	None		Switzerland
Baring Asset Management Limited	98-0241935		United Kingdom
Barings European Direct Lending 1 GP LLP	None		United Kingdom
Baring International Investment Limited	98-0457328		United Kingdom
Baring Fund Managers Limited	98-0457586		United Kingdom
BCGSS 2 GP LLP	None		United Kingdom
Baring Investment Services Limited	98-0457578		United Kingdom
Barings Core Fund Feeder I GP S.à.r.l.	None		Luxembourg
Barings Investment Fund (LUX) GP S.à r.l.	None		Luxembourg
Barings BME GP S.à.r.l.	None		United Kingdom
Barings GPC GP S.à.r.l.	None		Luxembourg
Barings European Core Property Fund GP Sà.r.l	None		United Kingdom
Barings Umbrella Fund (LUX) GP S.à.r.l.	None		Luxembourg
GPLF4(S) GP S.à r. l	None		Luxembourg
PREIF Holdings Limited Partnership	None		United Kingdom
BMC Holdings DE LLC	None		Delaware
Barings Real Estate Advisers Inc.	04-3238351		Delaware
Remington L & W Holdings LLC	81-4065378		Delaware
Aland Royalty GP, LLC	None		Delaware
Alaska Future Fund GP, LLC	None		Delaware
BAI Funds SLP, LLC	None		Delaware
BAI GP, LLC	None		Delaware
Baring Asset-Based Income Fund (US) GP, LLC	None		Delaware
Barings CMS Fund GP, LLC	None		Delaware
Barings Infiniti Fund Management LLC	None		Delaware

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

12.7

	<u>Federal Tax ID</u>	<u>NAIC Co Code</u>	<u>State of Domicile</u>
Barings New Jersey Emerging Manager Program GP, LLC	None		Delaware
Barings Hotel Opportunity Venture I GP, LLC	None		Delaware
Baring Investment Series LLC	None		Delaware
Barings Emerging Generation Fund GP, LLC	None		Delaware
Barings Emerging Generation Fund GP II, LLC	None		Delaware
Barings EPLF4 Rated Feeder, L.P.	None		Delaware
Barings ERS PE Emerging Manager III GP, LLC	None		Delaware
Barings FC III LLC	None		Delaware
Barings Global Investment Funds (U.S.) Management LLC	04-1590850		Delaware
Barings CLO Investment Partners GP, LLC	None		Delaware
Barings Core Property Fund GP LLC	None		Delaware
Barings DAPPLF1 Rated Feeder, G.P.	None		Delaware
Barings DAPPLF1 Rated Feeder, L.P.	None		Delaware
Barings Direct Lending GP Ltd.	None		Cayman Islands
Barings Diversified Residential Fund GP LLC	None		Delaware
Barings Diversified Residential Fund LP	None		Delaware
Barings Global Energy Infrastructure Advisors, LLC	None		Delaware
Barings Capital Solutions Perpetual Fund GP LLC	None		Delaware
Barings Centre Street CLO Equity Partnership GP, LLC	None		Delaware
Barings Centre Street CLO Equity Partnership LP	None		Delaware
Barings Global Real Assets Fund GP, LLC	None		Delaware
Barings GPSF LLC	None		Delaware
Barings North American Private Loan Fund Management, LLC	None		Delaware
Barings North American Private Loan Fund II Management, LLC	None		Delaware
Barings North American Private Loan Fund III Management, LLC	None		Delaware
Barings Global Special Situations Credit Fund 4 GP (Delaware) LLC	None		Delaware
Barings - MM Revolver Fund GP LLC	None		Delaware
Barings Real Estate European Value Add Fund II Feeder LLC	None		Cayman Islands
Barings SEM GP LLC	None		Delaware
BMT RE Debt Fund GP LLC	None		Delaware
Barings Small Business Fund LLC	84-5063008		Delaware
Barings TYIDF2 Rated Feeder GP LLC	None		Delaware
Barings TYIDF2 Rated Feeder, L.P.	None		Delaware
Barings Active Passive Equity Direct EAFE LLC	None		Delaware
BCLF GP LLC	None		Delaware
Benton Street Advisors, Inc.	98-0536233		Cayman Islands
BHOVI Incentive LLC	None		Delaware
BIG Real Estate Fund GP LLC	None		Delaware
BIG Real Estate Incentive I LLC	None		Delaware
BIG Real Estate Incentive II LLC	None		Delaware
BRECS VII GP LLC	None		Delaware
BREDIF GP LLC	None		Delaware
CPF Springing Member, LLC	None		Delaware

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

12.8

	<u>Federal Tax ID</u>	<u>NAIC Co Code</u>	<u>State of Domicile</u>
CREA-MA Reorganization Trust	None		Delaware
CREF X GP LLC	None		Delaware
Great Lakes III GP, LLC	04-1590850		Delaware
Lake Jackson LLC	None		Delaware
Barings Emerging Markets Blended Fund I GP, LLC	None		Delaware
Barings EPLF4 Rated Feeder GP LLC	None		Delaware
Mezzco III LLC	41-2280126		Delaware
Mezzco IV LLC	80-0920285		Delaware
Mezzco Australia II LLC	None		Delaware
RECSA-NY GP LLC	None		Delaware
Barings CLO 2022-I	98-1624360		Cayman Island
Barings CLO 2022-II	None		Cayman Island
Amherst Long Term Holdings, LLC	None		Delaware
Enroll Confidently, Inc.	None		Delaware
MassMutual International LLC	04-3313782		Delaware
MassMutual Solutions LLC	None		Delaware
Haven Technologies Asia Limited	None		Hong Kong
Yunfeng Financial Group Limited	None		Hong Kong
MassMutual External Benefits Group LLC	27-3576835		Delaware
5301 Wisconsin Avenue Associates, LLC	None		District of Columbia
5301 Wisconsin Avenue GP, LLC	None		Delaware
Other Affiliates & Funds:			
100 w. 3rd Street LLC	04-1590850		Delaware
300 South Tryon Hotel LLC	82-2432216		Delaware
300 South Tryon LLC	04-1590850		Delaware
Almack Mezzanine Fund II Unleveraged LP	None		United Kingdom
Barings Affordable Housing Mortgage Fund I LLC	82-3468147		Delaware
Barings Affordable Housing Mortgage Fund II LLC	61-1902329		Delaware
Barings Affordable Housing Mortgage Fund III LLC	85-3036663		Delaware
Barings Construction Lending Fund LP	None		Delaware
Barings Emerging Generation Fund II LP	None		Delaware
Barings Emerging Generation Fund, LP	84-3784245		Delaware
Barings Emerging Markets Corporate Bond Fund	None		Ireland
Barings Hotel Opportunity Venture I LP	None		Delaware
Barings Miller Investment Trust	04-1590850		Australia
Barings Real Estate Debt Income Fund LP	85-3449260		Delaware
Barings Real Estate European Value Add I SCSp	None		Luxembourg
Barings Small Business Fund, L.P.	None		Delaware
Barings-MM Revolver Fund LP*	None		Delaware
Barings U.S. High Yield Fund	None		Delaware
Beauty Brands Acquisition LLC	None		Delaware
Beauty Brands Acquisition Intermediate LLC	None		Delaware
Forma Brands, LLC	None		Delaware

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	<u>Federal Tax ID</u>	<u>NAIC Co Code</u>	<u>State of Domicile</u>
Cornerstone Permanent Mortgage Fund LLC	45-2632610		Massachusetts
CREA Ridge Apartments, LLC	None		Delaware
Euro Real Estate Holdings Herleshausen LLC	None		Delaware
London Office JV Holdings LLC	None		Delaware
Riverwalk MM Member, LLC	None		Delaware
Aland Royalty Holdings LP	None		Delaware
Chassis Acquisition Holding LLC	81-2244465		Delaware
CRA Aircraft Holding LLC	81-4258759		Delaware
EIP Holdings I, LLC	None		Delaware
Red Lake Ventures, LLC	46-5460309		Delaware
Validus Holding Company LLC	46-0687392		Delaware
SBNP SIA II LLC	04-1590850		Delaware
SBNP SIA III LLC	None		Delaware
Barings European Real Estate Debt Income Fund	None		Luxembourg
Babson Capital Loan Strategies Fund, L.P.*	37-1506417		Delaware
Barings US High Yield Bond Fund	None		Ireland
Babson CLO Ltd. 2015-I	None		Cayman Islands
Babson CLO Ltd. 2015-II	None		Cayman Islands
Babson CLO Ltd. 2016-I	None		Cayman Islands
Babson CLO Ltd. 2016-II	None		Cayman Islands
Barings CLO Ltd. 2017-I	None		Cayman Islands
Barings CLO 2018-III	None		Cayman Islands
Barings CLO 2018-IV	None		Cayman Islands
Barings CLO 2019-II	98-1473665		Cayman Islands
Barings CLO 2019-III	None		Cayman Islands
Barings CLO 2019-IV	None		Cayman Islands
Barings CLO 2020-I	None		Cayman Islands
Barings CLO 2020-II	None		Cayman Islands
Barings CLO 2020-III	None		Cayman Islands
Barings CLO 2020-IV	None		Cayman Islands
Barings CLO 2021-I	None		Cayman Islands
Barings CLO 2021-II	None		Cayman Islands
Barings CLO 2021-III	None		Cayman Islands
Babson Euro CLO 2014-I BV	None		Netherlands
Babson Euro CLO 2014-II BV	None		Netherlands
Babson Euro CLO 2015-I BV	None		Netherlands
Barings Euro CLO 2019-I	3603726OH		Ireland
Barings Euro CLO 2019-II	None		Ireland
Barings Euro CLO 2020-I DAC	None		Ireland
Barings Euro CLO 2021-I DAC	3715576VH		Ireland
Barings Euro CLO 2021-II DAC	3750378QH		Ireland
Barings Euro CLO 2021-III DAC	None		Ireland

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	Federal Tax ID	NAIC Co Code	State of Domicile
Barings Euro CLO 2023-II DAC	None		Ireland
Barings Global Energy Infrastructure Fund I LP	98-1332384		Cayman Islands
Barings Global Special Situations Credit 4 Delaware*	85-1465973		Delaware
Barings Global Special Situations Credit 4 LUX*	98-1570693		Luxembourg
Barings Europe Select Fund	None		Ireland
Barings Hotel Opportunity Venture	87-0977058		Connecticut
Barings Innovations & Growth Real Estate Fund*	86-3661023		Delaware
Barings Middle Market CLO 2017-I Ltd & LLC	None		Cayman Islands
Barings Middle Market CLO 2018-I	None		Cayman Islands
Barings Middle Market CLO 2019-I	None		Cayman Islands
Barings Middle Market CLO Ltd 2021-I	98-1612604		Cayman Islands
Barings Middle Market CLO Ltd 2023-I	None		Bermuda
Barings Middle Market CLO Ltd 2023-II	None		Bermuda
Barings RE Credit Strategies VII LP	98-1332384		Delaware
Barings Target Yield Infrastructure Debt Fund	98-1567942		Luxembourg
Barings CLO Investment Partners LP	81-0841854		Delaware
Barings Euro Value Add II (BREEVA II)*	None		Luxembourg
Barings Transportation Fund LP*	87-1262754		Delaware
Braemar Energy Ventures I, L.P.*	None		Delaware
Barings European Core Property Fund SCSp*	None		Luxembourg
Barings European Private Loan Fund III A	46-5001122		Luxembourg
Benchmark 2018-B2 Mortgage Trust	38-4059932		New York
Benchmark 2018-B4	None		New York
Benchmark 2018-B8	38-4096530		New York
Barings Core Property Fund LP	20-5578089		Delaware
DPI Acres Capital SPV LLC	04-1590850		Delaware
DPI-ARES Mortgage Lending SPV, LLC	04-1590850		Delaware
E2E Affordable Housing Debt Fund LLC	None		Delaware
Great Lakes III, L.P.	37-1708623		Delaware
GIA EU Holdings - Emerson JV Sarl	98-1607033		Luxembourg
JPMCC Commercial Mortgage Securities Trust 2017-JP7	38-4041011; 38-4041012		New York
JPMDB Commercial Mortgage Securities Trust 2017-C5	38-4032059		New York
Martello Re Feeder LP	None		Delaware
Martello Re LP	None		Delaware
Martello Re Holding Limited LLC	None		Delaware
Martello Re Limited	None		Bermuda
Martello Re Services Company	None		Delaware
Miami Douglas Three MM, LLC	04-1590850		Delaware
MM BIG Peninsula Co-Invest Member LLC*	87-4021641		Delaware
MM Direct Private Investment Holding	04-1590850		Delaware
MM CM Holding LLC	None		Delaware
MM Debt Participations LLC	81-3000420		Delaware
MM MD1 Station Member LLC*	04-1590850		Delaware

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	Federal Tax ID	NAIC Co Code	State of Domicile
MM MD2 Station Member LLC*	04-1590850		Delaware
MMV Climate Technology Fund GP*	04-1590850		Delaware
MM REED District Landco Member LLC	None		Delaware
MM Subline Borrower LLC	04-1590850		Delaware
Washington Pine LLC	04-1590850		Delaware
Ten Fan Pier Boulevard LLC	35-2553915		Delaware
Tower Square Capital Partners III, L.P.	41-2280127		Delaware
Tower Square Capital Partners IIIA, L.P.	41-2280129		Delaware
Trailside MM Member LLC*	04-1590850		Delaware
Washington Gateway Three LLC	32-0574045		Delaware
Washington Gateway Two LLC*	83-1325764		Delaware
MALIC Debt Participations LLC	None		Delaware
Barings Affiliates & Funds:			
Babson Capital Loan Strategies Master Fund LP	None		Cayman Islands
Barings China Aggregate Bond Private Securities Investment Fund	None		Peoples Republic of China
Barings Global High Yield Fund	47-3790192		Massachusetts
Great Lakes II LLC*	71-1018134		Delaware
Wood Creek Venture Fund LLC	04-1590850		Delaware
Barings Real Estate Affiliates & Funds:			
Barings California Mortgage Fund IV	None		California
Barings Umbrella Fund LUX SCSp SICAV RAIF*	None		Luxembourg
Calgary Railway Holding LLC	82-2285211		Delaware
Cornbrook PRS Holdings LLC	82-3307907		Delaware
Cornerstone California Mortgage Fund I LLC	95-4207717		California
Cornerstone California Mortgage Fund II LLC	95-4207717		California
Cornerstone California Mortgage Fund III LLC	95-4207717		California
Cornerstone Fort Pierce Development, LLC*	56-2630592		Delaware
Cornerstone Permanent Mortgage Fund II LLC	61-1750537		Massachusetts
Cornerstone Permanent Mortgage Fund III LLC	35-2531693		Massachusetts
Cornerstone Permanent Mortgage Fund IV LLC	61-1793735		Massachusetts
CREA/PPC Venture, LLC	20-0348173		Delaware
Danville Riverwalk Venture, LLC	82-2783393		Delaware
Euro Real Estate Holdings LLC	04-1590850		Delaware
Fan Pier Development LLC*	20-3347091		Delaware
GIA EU Holdings LLC - Avalon Spain	04-1590850		Delaware
GIA EU Holdings LLC	04-1590850		Delaware
Landmark Manchester Holdings LLC	81-5360103		Delaware
MMLIC Debt Participations LLC	13-1935920		Delaware
MM Brookhaven Member LLC	04-1590850		Delaware
MM Ascend Mtg. Lending LLC	04-1590850		Delaware
MM Kannapolis Industrial Member LLC*	04-1590850		Delaware
MM East South Crossing Member LLC	04-1590850		Delaware
MM Horizon Savannah Member LLC*	04-1590850		Delaware

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	Federal Tax ID	NAIC Co Code	State of Domicile
MM Horizon Savannah Member II LLC*	04-1590850		Delaware
MM National Self-Storage Program Member LLC	04-1590850		Delaware
MM 1400 E 4th Street Member LLC	04-1590850		Delaware
MM 1370 AVE OF AM LLC	04-1590850		Delaware
One Harbor Shore LLC*	80-0948028		Delaware
Paco France Logistics LLC	04-1590850		Delaware
Salomon Brothers Commercial Mortgage Trust 2001-MM	None		Delaware
Three PW Office Holding LLC	81-5273574		Delaware
Trailside MM Member II LLC	04-1590850		Delaware
Unna, Dortmund Holding LLC	82-3250684		Delaware
Washington Gateway Apartments Venture LLC*	45-5401109		Delaware
West 37th Street Hotel LLC*	88-3861481		Delaware
MassMutual Premier Funds:			
MassMutual Premier Main Street Fund	51-0529328		Massachusetts
MassMutual Premier Strategic Emerging Markets Fund	26-3229251		Massachusetts
MassMutual Select Funds:			
MassMutual Select Mid-Cap Value Fund	42-1710935		Massachusetts
MassMutual Select Small Capital Value Equity Fund	02-0769954		Massachusetts
MassMutual Select Small Company Value Fund	04-3584140		Massachusetts
MassMutual Select T. Rowe Price Retirement 2005 Fund	82-3347422		Massachusetts
MassMutual Select T. Rowe Price Retirement 2010 Fund	82-3355639		Massachusetts
MassMutual Select T. Rowe Price Retirement 2015 Fund	82-3382389		Massachusetts
MassMutual Select T. Rowe Price Retirement 2020 Fund	82-3396442		Massachusetts
MassMutual Select T. Rowe Price Retirement 2025 Fund	82-3417420		Massachusetts
MassMutual Select T. Rowe Price Retirement 2030 Fund	82-3430358		Massachusetts
MassMutual Select T. Rowe Price Retirement 2035 Fund	82-3439837		Massachusetts
MassMutual Select T. Rowe Price Retirement 2040 Fund	82-3451779		Massachusetts
MassMutual Select T. Rowe Price Retirement 2045 Fund	82-3472295		Massachusetts
MassMutual Select T. Rowe Price Retirement 2050 Fund	82-3481715		Massachusetts
MassMutual Select T. Rowe Price Retirement 2055 Fund	82-3502011		Massachusetts
MassMutual Select T. Rowe Price Retirement 2060 Fund	82-3525148		Massachusetts
MassMutual Select T. Rowe Price Retirement Balanced Fund	82-3533944		Massachusetts
MML Series Investment Funds:			
MML Series International Equity Fund	46-4257056		Massachusetts
MML Series Investment Funds II:			
MML Series II Dynamic Bond Fund	47-3529636		Massachusetts
MML Series II Equity Rotation Fund	47-3544629		Massachusetts
MassMutual RetireSMART Funds:			
MassMutual RetireSMART 2035 Fund	27-1933380		Massachusetts
MassMutual RetireSMART 2045 Fund	27-1932769		Massachusetts
MassMutual RetireSMART 2055 Fund	46-3289207		Massachusetts
MassMutual RetireSMART 2060 Fund	47-5326235		Massachusetts
MassMutual 20/80 Allocation Fund	45-1618155		Massachusetts

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	<u>Federal Tax ID</u>	<u>NAIC Co Code</u>	<u>State of Domicile</u>
MassMutual 80/20 Allocation Fund	45-1618222		Massachusetts
MassMutual RetireSMART In Retirement Fund	03-0532464		Massachusetts
MassMutual 40/60 Allocation Fund	45-1618262		Massachusetts
MassMutual 60/40 Allocation Fund	45-1618046		Massachusetts
MassMutual ishares 60/40 Allocation Fund	45-1618046		Massachusetts
MassMutual Balanced Fund	04-3212054		Massachusetts
MassMutual Blue Chip Growth Fund	04-3556992		Massachusetts
MassMutual Core Bond Fund	04-3277549		Massachusetts
MassMutual Disciplined Growth Fund	04-3539084		Massachusetts
MassMutual Disciplined Value Fund	04-3539083		Massachusetts
MassMutual Diversified Value Fund	01-0821120		Massachusetts
MassMutual Equity Opportunities Fund	04-3512590		Massachusetts
MassMutual Growth Opportunities Fund	04-3512589		Massachusetts
MassMutual Inflation-Protected and Income Fund	03-0532475		Massachusetts
MassMutual Mid Cap Growth Fund	04-3512596		Massachusetts
MassMutual Premier Diversified Bond Fund	04-3464165		Massachusetts
MassMutual RetireSMART by JPMorgan 2065 Fund	92-1441036		Massachusetts
MassMutual Select 80/20 Allocation Fund	45-1618222		Massachusetts
MassMutual Select Fundamental Value Fund	04-3584138		Massachusetts
MassMutual Select Overseas Fund	04-3557000		Massachusetts
MassMutual Select T Rowe Price Retirement 2065 Fund	92-1427882		Massachusetts
MassMutual Small Cap Growth Equity Fund	04-3464205		Massachusetts
MassMutual Small Cap Opportunities Fund	04-3424705		Massachusetts
MassMutual Small Cap Value Equity Fund	02-0769954		Massachusetts
MassMutual Strategic Bond Fund	26-0099965		Massachusetts
MassMutual Clinton Municipal Credit Opportunities Fund	93-4168848		Massachusetts
MassMutual Clinton Municipal Fund	93-4190918		Massachusetts
MassMutual Clinton Short-Term Municipal Fund	93-4193313		Massachusetts

12.13

*This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12 Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	13 If Control is Owner- ship Provide Percen- tage	14 Ultimate Controlling Entity(ies)/Person(s)	15 Is an SCA Filing Re- quired? (Yes/No)	16 *
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi- ciliary Loca- tion	Rela- tion- ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)					
. 0435 ...	Massachusetts Mut Life Ins Co	... 65935 ...	04-1590850 ..	3848388 .....	.....	.....	Massachusetts Mutual Life Insurance Company (MMLIC)	.. MA.....	.. UIP.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0435 ...	Massachusetts Mut Life Ins Co	... 93432 ...	06-1041383 ..	.....	.....	.....	C.M. Life Insurance Company	.. CT.....	.. IA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0435 ...	Massachusetts Mut Life Ins Co	... 70416 ...	43-0581430 ..	.....	.....	.....	MML Bay State Life Insurance Company	.. CT.....	.. IA.....	C.M. Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							CML Special Situations Investor LLC	.. DE.....	.. NIA.....	C.M. Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							CM Life Mortgage Lending LLC	.. DE.....	.. NIA.....	C.M. Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							CML Mezzanine Investor III, LLC	.. DE.....	.. NIA.....	C.M. Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...										Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							CML Global Capabilities LLC	.. DE.....	.. NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							MM Global Capabilities I LLC	.. DE.....	.. NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							MassMutual Global Business Services India LLP	.. IND.....	.. NIA.....	MM Global Capabilities I LLC	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							MM Global Capabilities (Netherlands) B.V. ...	.. NLD.....	.. NIA.....	MM Global Capabilities I LLC	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							MassMutual Global Business Services Romania S.R.L.	.. ROU.....	.. NIA.....	MM Global Capabilities (Netherlands) B.V.	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...										Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							MM Global Capabilities II LLC	.. DE.....	.. NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							MM Global Capabilities III LLC	.. DE.....	.. NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							MM/Barings Multifamily TEBS 2020 LLC	.. DE.....	.. NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	.....	.....	Berkshire Way LLC	.. DE.....	.. NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...										Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							MML Special Situations Investor LLC	.. DE.....	.. NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...			47-5322979 ..	.....	.....	.....	.....	.....	.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...			47-5322979 ..	.....	.....	.....	Timberland Forest Holding LLC	.. DE.....	.. NIA.....	C.M. Life Insurance Company	Influence.....	.....	MMLIC .....	.....	.....
. 0000 ...			47-5322979 ..	.....	.....	.....	Timberland Forest Holding LLC	.. DE.....	.. NIA.....	Wood Creek Capital Management LLC	Management.....	.....	MMLIC .....	.....	.....
. 0000 ...										Timberland Forest Holding LLC	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							Lyme Adirondack Forest Company, LLC	.. DE.....	.. NIA.....	Lyme Adirondack Forest Company, LLC	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							Lyme Adirondack Timberlands I, LLC	.. DE.....	.. NIA.....	Lyme Adirondack Forest Company, LLC	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							Lyme Adirondack Timberlands II, LLC	.. DE.....	.. NIA.....	Lyme Adirondack Forest Company, LLC	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							Lyme Adirondack Timber Sales, LLC	.. DE.....	.. NIA.....	Lyme Adirondack Forest Company, LLC	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	.....	.....	.....	.....	.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							MSP-SC, LLC	.. DE.....	.. NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	.....	.....	Insurance Road LLC	.. DE.....	.. NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	.....	.....	MassMutual Trad Private Equity LLC	.. DE.....	.. NIA.....	Insurance Road LLC	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	.....	.....	MassMutual Intellectual Property LLC	.. DE.....	.. NIA.....	Insurance Road LLC	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							Trad Investments I LLC	.. DE.....	.. NIA.....	Insurance Road LLC	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...										Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							ITPSHolding LLC	.. DE.....	.. NIA.....	ITPS Holding LLC	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							HITPS LLC	.. DE.....	.. NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							EM Opportunities LLC	.. DE.....	.. NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...										Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...							MassMutual MCAM Insurance Company, Inc.	.. VT.....	.. NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 100.000 ..	MMLIC .....	.....	.....
. 0000 ...										Massachusetts Mutual Life Insurance Company	Ownership.....	.. 99.000 ..	MMLIC .....	.....	.....
. 0000 ...							MassMutual Ventures US IV GP, LLC	.. DE.....	.. NIA.....	Massachusetts Mutual Ascend	Ownership.....	.. 1.000 ..	MMLIC .....	.....	.....
. 0000 ...							MassMutual Ventures US IV GP, LLC	.. DE.....	.. NIA.....	.....	.....	.....	MMLIC .....	.....	.....

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12 Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	13 If Control is Owner- ship Provide Percen- tage	14 Ultimate Controlling Entity(ies)/Person(s)	15 Is an SCA Filing Re- quired? (Yes/No)	16 *
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi- ciliary Loca- tion	Rela- tion- ship to Report- ing Entity	Directly Controlled by (Name of Entity/Person)					
.0000 ...							MassMutual Ventures US IV, L.P.	..DE....	NIA.....	MassMutual Ventures US IV GP, LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							MassMutual Ventures US IV LLC	..DE....	NIA.....	MassMutual Ventures US IV, L.P.	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							MassMutual Ventures Europe/APAC I GP, LLC ..	..DE....	NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							MassMutual Ventures Europe/APAC I GP, L.P. .	..CYM....	NIA.....	MassMutual Ventures Europe/APAC I GP, LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							MassMutual Ventures Europe/APAC I L.P.	..CYM....	NIA.....	MassMutual Ventures Europe/APAC I GP, L.P.	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							MassMutual Ventures Southeast Asia III LLC .	..DE....	NIA.....	MassMutual Ventures Europe/APAC I L.P.	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							MMV Digital I LLC	..CYM....	NIA.....	MassMutual Ventures Southeast Asia III LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Counterpointe Sustainable Advisors LLC	..DE....	NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							CSA Intermediate Holdco LLC	..DE....	NIA.....	Counterpointe Sustainable Advisors LLC ...	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Counterpointe Trust Services LLC	..DE....	NIA.....	CSA Intermediate Holdco LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							CP PACE LLC	..DE....	NIA.....	CSA Intermediate Holdco LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							CSA Employee Services Company LLC	..DE....	NIA.....	CSA Intermediate Holdco LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Counterpointe Sustainable Real Estate II LLC	..DE....	NIA.....	CSA Intermediate Holdco LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Counterpointe Energy Solutions II LLC	..DE....	NIA.....	CSA Intermediate Holdco LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Counterpointe Energy Solutions (CA) II LLC ..	..DE....	NIA.....	Counterpointe Energy Solutions II LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Counterpointe Energy Solutions (FL) II LLC ..	..DE....	NIA.....	Counterpointe Energy Solutions II LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Counterpointe Energy Solutions (IL) LLC	..DE....	NIA.....	Counterpointe Energy Solutions II LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Loop-Counterpointe PACE LLC	..DE....	NIA.....	Counterpointe Energy Solutions (IL) LLC ...	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Counterpointe Energy Services LLC	..DE....	NIA.....	CSA Intermediate Holdco LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							JFIN Parent LLC	..DE....	NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...			27-0105644 ..	.....	.....	.....	Jefferies Finance LLC	..DE....	NIA.....	JFIN Parent LLC	Ownership.....	50.000 ...	MMLIC .....	.....	1
.0000 ...							JFIN GP Adviser LLC	..DE....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Jefferies MM Lending LLC	..DE....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Green SPE LLC	..DE....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Apex Credit Partners LLC	..DE....	NIA.....	Green SPE LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Apex GP I LLC	..DE....	NIA.....	Apex Credit Partners LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Apex Securitized Income Fund LP	..DE....	NIA.....	Apex GP I LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Jefferies Credit Partners LLC	..DE....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Jefferies Credit Management LLC	..DE....	NIA.....	Jefferies Credit Partners LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							JCM GP I LLC	..DE....	NIA.....	Jefferies Credit Management LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							JCM H-2 Credit Fund GP LLC	..DE....	NIA.....	Jefferies Credit Management LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							JCP Direct Lending CLO 2022 LLC	..DE....	NIA.....	Jefferies Credit Partners LLC	Ownership.....	9.900 ...	MMLIC .....	.....	.....
.0000 ...							Jefferies Direct Lending Europe SCSp SICAV- RAIF	..LUX....	NIA.....	Jefferies Credit Partners LLC	Ownership.....	9.900 ...	MMLIC .....	.....	.....
.0000 ...							Jefferies Credit Management Holdings LLC	..DE....	NIA.....	Jefferies Credit Partners LLC	Ownership.....	9.900 ...	MMLIC .....	.....	.....
.0000 ...							JDLF GP (Europe) S.a.r.l	..LUX....	NIA.....	Jefferies Credit Partners LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							JFAM GP LLC	..DE....	NIA.....	Jefferies Credit Partners LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							JFAM GP LP	..DE....	NIA.....	Jefferies Credit Partners LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Jefferies Direct Lending Fund C LP	..DE....	NIA.....	JFAM GP LP	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Jefferies DLF C Holdings LLC	..DE....	NIA.....	Jefferies Direct Lending Fund C LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Jefferies Direct Lending Fund C SPE LLC	..DE....	NIA.....	Jefferies DLF C Holdings LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							JDLF II GP LLC	..DE....	NIA.....	Jefferies Credit Partners LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							JDLF II GP LP	..DE....	NIA.....	JDLF II GP LLC	Ownership.....	100.000 ...	MMLIC .....	.....	.....
.0000 ...							Jefferies Direct Lending Fund II C LP	..DE....	NIA.....	JDLF II GP LP	Ownership.....	100.000 ...	MMLIC .....	.....	.....

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12 Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	13 If Control is Owner- ship Provide Percen- tage	14 Ultimate Controlling Entity(ies)/Person(s)	15 Is an SCA Filing Re- quired? (Yes/No)	16 *
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi- ciliary Loca- tion	Rela- tion- ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)					
.0000							Jefferies DLF 2 C Holdings LLC	..DE.....	NIA.....	Jefferies Direct Lending Fund II C LP	Ownership.....	100.000	MMLIC		
.0000							Jefferies Direct Lending Fund II C SPE LLC ..	..DE.....	NIA.....	Jefferies DLF 2 C Holdings LLC	Ownership.....	100.000	MMLIC		
.0000							JDLF III GP LLC	..DE.....	NIA.....	Jefferies Credit Partners LLC	Ownership.....	100.000	MMLIC		
.0000							JDLF III GP LP	..DE.....	NIA.....	JDLF III GP LLC	Ownership.....	100.000	MMLIC		
.0000							Jefferies Direct Lending Fund III C LP	..DE.....	NIA.....	JDLF III GP LP	Ownership.....	100.000	MMLIC		
.0000							JCP Direct Lending CLO 2023-1 LLC	..DE.....	NIA.....	Jefferies Credit Partners LLC	Ownership.....	100.000	MMLIC		
.0000							JCP Direct Lending CLO 2023 Ltd.	..JEY.....	NIA.....	JCP Direct Lending CLO 2023 Ltd.	Ownership.....	100.000	MMLIC		
.0000							JCP GP I LLC	..DE.....	NIA.....	Jefferies Credit Partners LLC	Ownership.....	100.000	MMLIC		
.0000							Jefferies M Super Private Credit Fund GP LLC	..DE.....	NIA.....	Jefferies Credit Partners LLC	Ownership.....	100.000	MMLIC		
.0000							Jefferies Private Credit BDC Inc.	..MD.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JCP Funding 2024 LLC	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							Jefferies Senior Lending LLC	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver Holdings LLC	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver Holdings II LLC	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Co-Issuer Corporation	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Europe GP, S.a.r.l.	..LUX.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							Jefferies Finance Europe, S.L.P.	..LUX.....	NIA.....	JFIN Europe GP, S.a.r.l.	Ownership.....	100.000	MMLIC		
.0000							Jefferies Finance Europe, SCSp	..LUX.....	NIA.....	JFIN Europe GP, S.a.r.l.	Ownership.....	100.000	MMLIC		
.0000							Jefferies Finance Business Credit LLC	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Business Credit Fund I LLC	..DE.....	NIA.....	Jefferies Finance Business Credit LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Funding 2021 LLC	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN LC Fund LLC	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver CLO 2017 Ltd.	..CYM.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver CLO 2017-II Ltd.	..CYM.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver CLO 2017-III Ltd.	..CYM.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver CLO 2018 Ltd.	..CYM.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver CLO 2019 Ltd.	..CYM.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver CLO 2019-II Ltd.	..CYM.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver CLO 2020 Ltd.	..CYM.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver CLO 2021-II Ltd.	..CYM.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver CLO 2021-V Ltd.	..CYM.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver CLO 2022-II Ltd.	..CYM.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver CLO 2022-III Ltd.	..CYM.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver CLO 2022-IV Ltd.	..CYM.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver CLO 2024-I Ltd.	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver CLO 2022-IV LLC	..CYM.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver Fund, L.P.	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	90.000	MMLIC		
.0000							JFIN Revolver Funding 2021 Ltd.	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver Funding 2021 III Ltd.	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver Funding 2021 IV Ltd.	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver Funding 2022-I Ltd.	..BMU.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver SPE1 2022 LLC	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver SPE3 2022 LLC	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver SPE4 2022 LLC	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JFIN Revolver SPE4 2022 Ltd.	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JCP Private Loan Management GP LLC	..DE.....	NIA.....	Jefferies Finance LLC	Ownership.....	100.000	MMLIC		
.0000							JCP Private Loan Management LP	..DE.....	NIA.....	JCP Private Loan Management GP LLC	Ownership.....	100.000	MMLIC		
.0000							Apex Credit Holdings LLC	..DE.....	NIA.....	JFIN Parent LLC	Ownership.....	100.000	MMLIC		

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12 Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	13 If Control is Owner- ship Provide Perce- ntage	14 Ultimate Controlling Entity(ies)/Person(s)	15 Is an SCA Filing Re- quired? (Yes/No)	16 *
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi- ciliary Loca- tion	Rela- tion- ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)					
.0000							JFIN CLO 2012 Ltd.	.CYM	NIA	Apex Credit Holdings LLC	Ownership	100.000	MMLIC		
.0000							JFIN CLO 2013 Ltd.	.CYM	NIA	Apex Credit Holdings LLC	Ownership	100.000	MMLIC		
.0000							JFIN CLO 2014 Ltd.	.CYM	NIA	Apex Credit Holdings LLC	Ownership	100.000	MMLIC		
.0000							JFIN CLO 2014-II Ltd.	.CYM	NIA	Apex Credit Holdings LLC	Ownership	100.000	MMLIC		
.0000							JFIN CLO 2015 Ltd.	.CYM	NIA	Apex Credit Holdings LLC	Ownership	100.000	MMLIC		
.0000							JFIN CLO 2015-II Ltd.	.CYM	NIA	Apex Credit Holdings LLC	Ownership	85.000	MMLIC		
.0000							JFIN CLO 2016 Ltd.	.CYM	NIA	Apex Credit Holdings LLC	Ownership	100.000	MMLIC		
.0000							JFIN CLO 2017 Ltd.	.CYM	NIA	Apex Credit Holdings LLC	Ownership	100.000	MMLIC		
.0000							JFIN CLO 2017-II Ltd.	.CYM	NIA	Apex Credit Holdings LLC	Ownership	100.000	MMLIC		
.0000			86-2294635				Tomorrow Parent, LLC	.DE	NIA	JFIN Parent LLC	Ownership	100.000	MMLIC		
.0000	Massachusetts Mut Life Ins Co	63312	13-1935920				Custom Ecology Holdco, LLC	.DE	NIA	JFIN Parent LLC	Ownership	100.000	MMLIC		
.0000										Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0435	Massachusetts Mut Life Ins Co	63312	13-1935920				Glidepath Holdings Inc.	.DE	UDP	Glidepath Holdings Inc.	Ownership	100.000	MMLIC		
.0000							MassMutual Ascend Life Insurance Company	.OH	.RE	Glidepath Holdings Inc.	Ownership	100.000	MMLIC		
.0000							AAG Insurance Agency, LLC	.KY	NIA	MassMutual Ascend Life Insurance Company	Ownership	100.000	MMLIC		
.0435	Massachusetts Mut Life Ins Co	93661	31-1021738				Annuity Investors Life Insurance Company	.OH	.DS	MassMutual Ascend Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MM Ascend Life Investor Services, LLC	.OH	NIA	MassMutual Ascend Life Insurance Company	Ownership	100.000	MMLIC		
.0000	Massachusetts Mut Life Ins Co	67083	31-1395344				MM Ascend Mortgage Lending LLC	.OH	.DS	MassMutual Ascend Life Insurance Company	Ownership	100.000	MMLIC		
.0000							Manhattan National Holding, LLC	.OH	.DS	MassMutual Ascend Life Insurance Company	Ownership	100.000	MMLIC		
.0435	Massachusetts Mut Life Ins Co	67083	45-0252531				Manhattan National Life Insurance Company	.OH	.DS	Manhattan National Holding LLC	Ownership	100.000	MMLIC		
.0000										Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MassMutual Mortgage Lending LLC	.DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			04-1590850				MM Copper Hill Road LLC	.DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000										Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MMV CTF I GP LLC	.DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MassMutual Ventures Climate Technology Fund I LP	.DE	NIA	MMV CTF I GP LLC	Ownership	100.000	MMLIC		
.0000										Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MM Direct Private Investments Holding LLC	.DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MM Direct Private Investments UK Limited	.GBR	NIA	MM Direct Private Investments Holding LLC	Ownership	100.000	MMLIC		
.0000										Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							DPI-ACRES Capital LLC	.DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000										Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							DPI-ARES Mortgage Lending LLC	.DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000										Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			26-0073611				MM Investment Holding	.CYM	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MMIH Bond Holdings LLC	.DE	NIA	MM Investment Holding	Ownership	99.610	MMLIC		
.0000							MassMutual Asset Finance LLC	.DE	NIA	C.M. Life Insurance Company	Ownership	0.400	MMLIC		
.0000							MassMutual Asset Finance LLC	.DE	NIA	MM Investment Holding	Ownership	99.600	MMLIC		
.0000							MMAF Equipment Finance LLC 2017-B	.DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000							MMAF Equipment Finance LLC 2019-A	.DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000							MMAF Equipment Finance LLC 2019-B	.DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000							MMAF Equipment Finance LLC 2020-A	.DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000							MMAF Equipment Finance LLC 2020-B	.DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000							MMAF Equipment Finance LLC 2021-A	.DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000							MMAF Equipment Finance LLC 2021-A	.DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000							MMAF Equipment Finance LLC 2022-A	.DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000							MMAF Equipment Finance LLC 2022-B	.DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000			04-2443240				MMAF Equipment Finance LLC 2023-A	.DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		YES
.0000							MMAF Equipment Finance LLC 2023-A	.DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000			04-3548444				MMAF Equipment Finance LLC 2024-A	.DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000										MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000			04-3341767								Ownership	100.000	MMLIC		

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12 Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	13 If Control is Owner- ship Provide Percen- tage	14 Ultimate Controlling Entity(ies)/Person(s)	15 Is an SCA Filing Re- quired? (Yes/No)	16 *
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi- ciliary Loca- tion	Rela- tion- ship to Report- ing Entity	Directly Controlled by (Name of Entity/Person)					
.0000			04-2443240				MML Management Corporation	..MA	NIA	MM Investment Holding	Ownership	100.000	MMLIC		
.0000			04-3548444				MassMutual International Holding MSC, Inc.	..MA	NIA	MML Management Corporation	Ownership	100.000	MMLIC		
.0000			04-3341767				MassMutual Holding MSC, Inc.	..MA	NIA	MML Management Corporation	Ownership	100.000	MMLIC		
							Massachusetts Mutual Life Insurance Company								
.0000							MML CM LLC	..DE	NIA	Company	Ownership	100.000	MMLIC		
.0000							Blueprint Income LLC	..NY	NIA	MML CM LLC	Ownership	100.000	MMLIC		
.0000							Flourish Holding Company LLC	..DE	NIA	MML CM LLC	Ownership	100.000	MMLIC		
.0000							Flourish Insurance Agency LLC	..DE	NIA	Flourish Holding Company LLC	Ownership	100.000	MMLIC		
.0000			04-3356880				Flourish Digital Assets LLC	..DE	NIA	Flourish Holding Company LLC	Ownership	100.000	MMLIC		
.0000			04-3356880				Flourish Financial LLC	..DE	NIA	Flourish Holding Company LLC	Ownership	100.000	MMLIC		
.0000							Flourish Technologies LLC	..DE	NIA	Flourish Holding Company LLC	Ownership	100.000	MMLIC		
							Massachusetts Mutual Life Insurance Company								
.0000			04-3356880				MML Distributors LLC	..MA	NIA	Company	Ownership	99.000	MMLIC		
.0000			04-3356880	2881445			MML Distributors LLC	..MA	NIA	MassMutual Holding LLC	Ownership	1.000	MMLIC	...YES	
							Massachusetts Mutual Life Insurance Company								
.0000			04-1590850				MML Investment Advisers, LLC	..DE	NIA	Company	Ownership	100.000	MMLIC		
							Massachusetts Mutual Life Insurance Company								
.0000			46-3238013				MML Strategic Distributors, LLC	..DE	NIA	Company	Ownership	100.000	MMLIC		
							Massachusetts Mutual Life Insurance Company								
.0000			06-1563535	2881445			The MassMutual Trust Company, FSB	..CT	NIA	Company	Ownership	100.000	MMLIC		
							MML Private Placement Investment Company I, LLC			Massachusetts Mutual Life Insurance Company					
.0000			04-1590850					..DE	NIA	Company	Ownership	100.000	MMLIC		
							Massachusetts Mutual Life Insurance Company								
.0000			04-1590850				MML Private Equity Fund Investor LLC	..DE	NIA	Company	Ownership	100.000	MMLIC		
.0000			04-1590850	2392316			MML Private Equity Fund Investor LLC	..DE	NIA	Baring Asset Management Limited	Management	100.000	MMLIC	...YES	
							Massachusetts Mutual Life Insurance Company								
.0000			04-1590850				MM Private Equity Intercontinental LLC	..DE	NIA	Company	Ownership	100.000	MMLIC		
							Massachusetts Mutual Life Insurance Company								
.0000			45-2738137				Pioneers Gate LLC	..DE	NIA	Company	Ownership	100.000	MMLIC		
							Massachusetts Mutual Life Insurance Company								
.0000			04-2854319	2392316			MassMutual Holding LLC	..DE	NIA	Company	Ownership	100.000	MMLIC		
.0000			37-1732913				Fern Street LLC	..DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
.0000			82-2932156				Low Carbon Energy Holding	..GBR	NIA	MassMutual Holding LLC	Ownership	49.000	MMLIC		
.0000			82-2932156				Sleeper Street LLC	..DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
.0000			46-2252944				Haven Life Insurance Agency, LLC	..DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
.0000			82-2932156				GASL Holdings LLC	..DE	NIA	MassMutual Holding LLC	Ownership	11.300	MMLIC		
.0000			82-2932156				GASL Holdings LLC	..DE	NIA	Barings LLC	Board		MMLIC		
.0000			36-4868350				Barings Asset-Based Income Fund (US) LP	..DE	NIA	MassMutual Holding LLC	Ownership/Influence	11.400	MMLIC		
.0000			36-4868350				Barings Asset-Based Income Fund (US) LP	..DE	NIA	C.M. Life Insurance Company	Ownership/Influence	1.160	MMLIC		
.0000			36-4868350				Barings Asset-Based Income Fund (US) LP	..DE	NIA	Barings LLC	Management	71.000	MMLIC		
							Massachusetts Mutual Life Insurance Company								
.0000			88-0916548				Barings Perpetual European Direct Lending Fund	..LUX	NIA	Company	Ownership/Influence	81.660	MMLIC		
							Barings Perpetual European Direct Lending Fund								
.0000			98-1206017					..LUX	NIA	Barings LLC	Influence	29.300	MMLIC		
							Massachusetts Mutual Life Insurance Company								
.0000			88-0916548				Barings Emerging Generation Fund II	..DE	NIA	Company	Ownership/Influence	62.550	MMLIC		
.0000			88-0916548				Barings Emerging Generation Fund II	..DE	NIA	Barings LLC	Influence		MMLIC		
							Babson Capital Global Special Situation Credit Fund 2								
.0000			98-1206017					..DE	NIA	MassMutual Holding LLC	Ownership/Influence	23.300	MMLIC		
							Babson Capital Global Special Situation Credit Fund 2								
.0000			98-1206017					..DE	NIA	C.M. Life Insurance Company	Ownership	1.100	MMLIC		

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi-ciliary Location	Relation-ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)	Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	If Control is Owner-ship Provide Percen-tage	Ultimate Controlling Entity(ies)/Person(s)	Is an SCA Filing Re-quired? (Yes/No)	*
.0000			98-1206017				Babson Capital Global Special Situation Credit Fund 2	.DE	NIA	Barings LLC	Management		MLL IC		
.0000			82-3867745				Barings Global Real Assets Fund LP	.DE	NIA	MassMutual Holding LLC	Ownership/Influence	37.410	MLL IC		
.0000			82-3867745				Barings Global Real Assets Fund LP	.DE	NIA	C.M. Life Insurance Company	Ownership	6.700	MLL IC		
.0000			82-3867745				Barings Global Real Assets Fund LP	.DE	NIA	Barings LLC	Management	13.800	MLL IC		
.0000			38-4010344				Barings Global Special Situations Credit Fund 3	.LUX	NIA	MassMutual Holding LLC	Ownership/Influence	19.410	MLL IC		
.0000			06-1597528				Barings Global Special Situations Credit Fund 3	.LUX	NIA	Barings LLC	Management	100.000	MLL IC		
.0000			06-1597528				MassMutual Assignment Company	.NC	NIA	MassMutual Holding LLC	Ownership	100.000	MLL IC		
.0000			04-1590850				MassMutual Capital Partners LLC	.DE	NIA	MassMutual Holding LLC	Ownership	100.000	MLL IC		
.0000			46-4255307				Marco Hotel LLC	.DE	NIA	MassMutual Holding LLC	Ownership	100.000	MLL IC		
.0000			45-3623262				HB Naples Golf Owner LLC	.DE	NIA	MassMutual Holding LLC	Ownership	100.000	MLL IC		
.0000			82-4411267				RB Apartments LLC	.DE	NIA	MassMutual Holding LLC	Ownership	100.000	MLL IC		
.0000							Intermodal Holding II LLC	.DE	NIA	MassMutual Holding LLC	Ownership	100.000	MLL IC		
.0000							MassMutual Ventures Holding LLC	.DE	NIA	MassMutual Holding LLC	Ownership	100.000	MLL IC		
.0000							Crane Venture Partners LLP	.GBR	NIA	MassMutual Ventures Holding LLC	Ownership	33.000	MLL IC		
.0000							MassMutual Ventures Management LLC	.DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MLL IC		
.0000							MassMutual Ventures SEA Management Private Limited	.DE	NIA	MassMutual Ventures Management LLC	Ownership	100.000	MLL IC		
.0000							MMV UK/SEA Limited	.GBR	NIA	MassMutual Ventures SEA Management Private Limited	Ownership	100.000	MLL IC		
.0000							MassMutual Ventures India Private Limited	.IND	NIA	MassMutual Ventures SEA Management Private Limited	Ownership	100.000	MLL IC		
.0000							MassMutual Ventures Southeast Asia I LLC	.DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MLL IC		
.0000							MassMutual Ventures Southeast Asia II LLC	.DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MLL IC		
.0000			47-1296410				MassMutual Ventures UK LLC	.DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MLL IC		
.0000			47-1296410				MassMutual Ventures US I LLC	.DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MLL IC		
.0000							MassMutual Ventures US II LLC	.DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MLL IC		
.0000							MassMutual Ventures US III LLC	.DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MLL IC		
.0000							MM Catalyst Fund LLC	.DE	NIA	MassMutual Holding LLC	Ownership	100.000	MLL IC		
.0000			04-1590850				MM Catalyst Fund II LLC	.DE	NIA	MassMutual Holding LLC	Ownership	100.000	MLL IC		
.0000			04-1590850				MM Rothesay Holdco US LLC	.DE	NIA	MassMutual Holding LLC	Ownership	100.000	MLL IC		
.0000							Rothesay Limited	.GBR	NIA	MM Rothesay Holdco US LLC	Ownership	48.800	MLL IC		
.0000							Rothesay Mortgages Limited	.GBR	NIA	Rothesay Limited	Ownership	100.000	MLL IC		
.0000							Rothesay Life Plc	.GBR	NIA	Rothesay Limited	Ownership	100.000	MLL IC		
.0000							Rothesay MA No.1 Limited	.GBR	NIA	Rothesay Life PLC	Ownership	100.000	MLL IC		
.0000							Rothesay MA No.3 Limited	.GBR	NIA	Rothesay Life PLC	Ownership	100.000	MLL IC		
.0000							Rothesay MA No.4 Limited	.GBR	NIA	Rothesay Life PLC	Ownership	100.000	MLL IC		
.0000							LT Mortgage Financing Limited	.GBR	NIA	Rothesay Life PLC	Ownership	100.000	MLL IC		
.0000							Rothesay Property Partnership 1 LLP	.GBR	NIA	Rothesay Life PLC	Ownership	100.000	MLL IC		
.0000							Rothesay Foundation	.GBR	NIA	Rothesay Limited	Ownership	100.000	MLL IC		
.0000							Rothesay Pensions Management Limited	.GBR	NIA	Rothesay Limited	Ownership	100.000	MLL IC		
.0000							Rothesay Asset Management UK Limited	.GBR	NIA	Rothesay Limited	Ownership	100.000	MLL IC		
.0000							Rothesay Asset Management Australia Pty Ltd	.AUS	NIA	Rothesay Asset Management UK Limited	Ownership	100.000	MLL IC		
.0000			04-1590850				Rothesay Asset Management North America LLC	.DE	NIA	Rothesay Asset Management UK Limited	Ownership	100.000	MLL IC		
.0000			04-1590850				MML Investors Services, LLC	.MA	NIA	MassMutual Holding LLC	Ownership	100.000	MLL IC		
.0000			04-1590850				MML Insurance Agency, LLC	.MA	NIA	MML Investors Services, LLC	Ownership	100.000	MLL IC		
.0000			41-2011634				MMLISI Financial Alliances, LLC	.DE	NIA	MML Investors Services, LLC	Ownership	100.000	MLL IC		
.0000			47-1466022				LifeScore Labs, LLC	.MA	NIA	MassMutual Holding LLC	Ownership	100.000	MLL IC		

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12 Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	13 If Control is Owner- ship Provide Percen- tage	14 Ultimate Controlling Entity(ies)/Person(s)	15 Is an SCA Filing Re- quired? (Yes/No)	16 *
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi- ciliary Loca- tion	Relation- ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)					
.0000			45-4000072				MM Asset Management Holding LLC	.MA	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
.0000			51-0504477				Barings LLC	.MA	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
.0000			98-0524271				Baring Asset Management (Asia) Holdings Limited	.HKG	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000			98-0457465				Baring International Fund Managers (Bermuda) Limited	.BMU	NIA	Baring Asset Management (Asia) Holdings Limited	Ownership	100.000	MMLIC		
.0000			98-0457463				Baring Asset Management (Asia) Limited	.HKG	NIA	Baring Asset Management (Asia) Holdings Limited	Ownership	100.000	MMLIC		
.0000							Baring Asset Management Korea Limited	.KOR	NIA	Baring Asset Management (Asia) Limited	Ownership	100.000	MMLIC		
.0000							Barings Investment Management (Shanghai) Limited	.HKG	NIA	Baring Asset Management (Asia) Limited	Ownership	100.000	MMLIC		
.0000			98-0457707				Barings Overseas Investment Fund Management (Shanghai) Limited	.HKG	NIA	Barings Investment Management (Shanghai) Limited	Ownership	100.000	MMLIC		
.0000			98-0457707				Baring SICE (Taiwan) Limited	.TWN	NIA	Baring Asset Management (Asia) Holdings Limited	Ownership	100.000	MMLIC		
.0000			98-0236449				Barings Singapore Pte. Ltd.	.SGP	NIA	Baring Asset Management (Asia) Holdings Limited	Ownership	100.000	MMLIC		
.0000			98-0236449				Barings Japan Limited	.JPN	NIA	Baring Asset Management (Asia) Holdings Limited	Ownership	100.000	MMLIC		
.0000							Barings Australia Holding Company Pty Ltd	.AUS	NIA	Baring Asset Management (Asia) Holdings Limited	Ownership	100.000	MMLIC		
.0000							Barings Australia Pty Ltd	.AUS	NIA	Barings Australia Holding Company Pty Ltd	Ownership	100.000	MMLIC		
.0000			14-0045656				Barings Australia Real Estate Holdings Pty Ltd	.AUS	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000			14-0045656				Barings Australia Real Estate Pty Ltd	.AUS	NIA	Barings Australia Real Estate Holdings Pty Ltd	Ownership	100.000	MMLIC		
.0000			98-0457456				Barings Australia Property Partners Holdings Pty Ltd	.AUS	NIA	Barings Australia Real Estate Pty Ltd	Ownership	100.000	MMLIC		
.0000							Barings Australia Asset Management Pty Ltd	.AUS	NIA	Barings Australia Property Partners Holdings Pty Ltd	Ownership	100.000	MMLIC		
.0000							Barings Australia Property Partners Pty Ltd	.AUS	NIA	Barings Australia Property Partners Holdings Pty Ltd	Ownership	100.000	MMLIC		
.0000							Barings Australia Structured Finance Holdings Pty Ltd	.AUS	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings Australia Structured Finance Pty Ltd	.AUS	NIA	Barings Australia Structured Finance Holdings Pty Ltd	Ownership	100.000	MMLIC		
.0000							Gryphon Capital Partners Pty Ltd	.AUS	NIA	Barings Australia Structured Finance Pty Ltd	Ownership	100.000	MMLIC		
.0000							Gryphon Capital Management Pty Ltd	.AUS	NIA	Gryphon Capital Partners Pty Ltd	Ownership	100.000	MMLIC		
.0000			80-0875475				Gryphon Capital Investments Pty Ltd	.AUS	NIA	Gryphon Capital Partners Pty Ltd	Ownership	100.000	MMLIC		
.0000			80-0875475				Barings Finance LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							BCF Europe Funding Limited	.IRL	NIA	Barings Finance LLC	Ownership	100.000	MMLIC		
.0000							BCF Senior Funding I LLC	.DE	NIA	Barings Finance LLC	Ownership	100.000	MMLIC		
.0000							BCF Senior Funding I Designated Activity Company	.IRL	NIA	Barings Finance LLC	Ownership	100.000	MMLIC		
.0000			04-3238351				Barings Real Estate Acquisitions LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000			04-3238351				Barings Securities LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000			98-0437588				Barings Guernsey Limited	.GGY	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings Europe Limited	.GBR	NIA	Barings Guernsey Limited	Ownership	100.000	MMLIC		
.0000							Barings Asset Management Spain SL	.ESP	NIA	Barings Europe Limited	Ownership	100.000	MMLIC		
.0000							Baring France SAS	.FRA	NIA	Barings Europe Limited	Ownership	100.000	MMLIC		

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

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.0000							Baring International Fund Managers (Ireland) Limited	.IRL	NIA	Barings Europe Limited	Ownership	100.000	MMLIC		
.0000							Barings GmbH	.DEU	NIA	Barings Europe Limited	Ownership	100.000	MMLIC		
.0000							Barings Italy S.r.l.	.ITA	NIA	Barings Europe Limited	Ownership	100.000	MMLIC		
.0000							Barings Sweden AB	.SWE	NIA	Barings Europe Limited	Ownership	100.000	MMLIC		
.0000			98-0432153				Barings Netherlands B.V.	.NLD	NIA	Barings Europe Limited	Ownership	100.000	MMLIC		
.0000			98-0432153				Barings (U.K.) Limited	.GBR	NIA	Barings Europe Limited	Ownership	100.000	MMLIC		
.0000			98-0241935				Barings Switzerland Sarl	.CHE	NIA	Barings Europe Limited	Ownership	100.000	MMLIC		
.0000			98-0241935				Baring Asset Management Limited	.GBR	NIA	Barings Europe Limited	Ownership	100.000	MMLIC		
.0000			98-0457328				Barings European Direct Lending 1 GP LLP	.GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
.0000			98-0457328				Baring International Investment Limited	.GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
.0000			98-0457586				Baring Fund Managers Limited	.GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
.0000			98-0457578				BCGSS 2 GP LLP	.GBR	NIA	Baring Fund Managers Limited	Ownership	100.000	MMLIC		
.0000			98-0457578				Baring Investment Services Limited	.GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
.0000							Barings Core Fund Feeder I GP S.à.r.l.	.LUX	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
.0000							Barings Investment Fund (LUX) GP S.à. r.l	.LUX	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
.0000							Barings BME GP S.à.r.l.	.GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
.0000							Barings GPC GP S.à. r.l	.LUX	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
.0000							Barings European Core Property Fund GP Sarl	.GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
.0000							Barings Umbrella Fund (LUX) GP S.à.r.l.	.LUX	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
.0000							GPLF4(S) GP S.à r. l	.LUX	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
.0000							PREIF Holdings Limited Partnership	.GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
.0000			04-3238351	3456895			BMC Holdings DE LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000			04-3238351	3456895			Barings Real Estate Advisers Inc.	.CA	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Massachusetts Mutual Life Insurance Company								
.0000			81-4065378				Remington L & W Holdings LLC	.DE	NIA	Barings LLC	Ownership/Influence	19.900	MMLIC		
.0000			81-4065378				Remington L & W Holdings LLC	.DE	NIA	Barings LLC	Influence	100.000	MMLIC		
.0000							Aland Royalty GP, LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Alaska Future Fund GP, LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							BAI Funds SLP, LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							BAI GP, LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Baring Asset-Based Income Fund (US) GP, LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings CMS Fund GP, LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings Infiniti Fund Management LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings New Jersey Emerging Manager Program GP, LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Massachusetts Mutual Life Insurance Company								
.0000							Barings Hotel Opportunity Venture I GP, LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Baring Investment Series LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings Emerging Generation Fund GP, LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000			04-1590850				Barings Emerging Generation Fund GP II, LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings EPLF4 Rated Feeder, L.P.	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings ERS PE Emerging Manager III GP, LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings FC III LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings Global Investment Funds (U.S.) Management LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000			04-1590850				Barings CLO Investment Partners GP, LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings Core Property Fund GP LLC	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000			88-3792609				Barings DAPPLF1 Rated Feeder, G.P.	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000			88-3792609				Barings DAPPLF1 Rated Feeder, L.P.	.DE	NIA	Barings LLC	Ownership	100.000	MMLIC		

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12 Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	13 If Control is Owner- ship Provide Percen- tage	14 Ultimate Controlling Entity(ies)/Person(s)	15 Is an SCA Filing Re- quired? (Yes/No)	16 *
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi- ciliary Loca- tion	Rela- tion- ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)					
.0000							Barings Direct Lending GP Ltd.	.CYM....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							Barings Diversified Residential Fund GP LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							Barings Diversified Residential Fund LP	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							Barings Global Energy Infrastructure Advisors, LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							Barings Capital Solutions Perpetual Fund GP LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							Barings Centre Street CLO Equity Partnership GP, LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000			88-3792609				Barings Centre Street CLO Equity Partnership LP	.DE....	NIA.....	Massachusetts Mutual Life Insurance Company	Ownership/Influence	24.110	MMLIC		
.0000			88-3792609				Barings Centre Street CLO Equity Partnership LP	.DE....	NIA.....	Barings LLC	Management.....	100.000	MMLIC		
.0000							Barings Global Real Assets Fund GP, LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000			84-5063008				Barings GPSF LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000			84-5063008				Barings North American Private Loan Fund Management, LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							Barings North American Private Loan Fund II Management, LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000			98-0536233				Barings North American Private Loan Fund III Management, LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							Barings Global Special Situations Credit Fund 4 GP (Delaware) LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							Barings – MM Revolver Fund GP LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							Barings Real Estate European Value Add Fund II Feeder LLC	.CYM....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							Barings SEM GP LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							BMT RE Debt Fund GP LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000			84-5063008				Barings Small Business Fund LLC	.DE....	NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	32.300	MMLIC		
.0000			84-5063008				Barings Small Business Fund LLC	.DE....	NIA.....	Barings LLC	Management.....	100.000	MMLIC		
.0000							Barings TYIDF2 Rated Feeder GP LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000			04-1590850				Barings TYIDF2 Rated Feeder, L.P.	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							BCLF GP LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000			98-0536233				Benton Street Advisors, Inc.	.CYM....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							Barings Active Passive Equity Direct EAFE LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000			41-2280126				BHOVI Incentive LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000			80-0920285				BIG Real Estate Fund GP LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							BIG Real Estate Incentive I LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							BIG Real Estate Incentive II LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000			98-1624360				BRECS VII GP LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							BREDIF GP LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							CPF Springing Member, LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							CREA-MA Reorganization Trust	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000			04-3313782				CREF X GP LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC	...YES...	
.0000			04-1590850				Great Lakes III GP, LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							Lake Jackson LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000							Barings Emerging Markets Blended Fund I GP, LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		
.0000			27-3576835				Barings EPLF4 Rated Feeder GP LLC	.DE....	NIA.....	Barings LLC	Ownership.....	100.000	MMLIC		

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi-ciliary Loca-tion	Relation-ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)	Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	If Control is Owner-ship Provide Percen-tage	Ultimate Controlling Entity(ies)/Person(s)	Is an SCA Filing Re-quired? (Yes/No)	*
.0000			41-2280126				Mezzco III LLC	..DE	..NIA	Barings LLC	Ownership	..99.300	MMLIC		
.0000			80-0920285				Mezzco IV LLC	..DE	..NIA	Barings LLC	Ownership	..99.300	MMLIC		
.0000			04-1590850				Mezzco Australia II LLC	..DE	..NIA	Barings LLC	Ownership	..100.000	MMLIC		
.0000			82-2432216				RECSA-NY GP LLC	..DE	..NIA	Barings LLC	Ownership	..100.000	MMLIC		
.0000			98-1624360				Barings CLO 2022-I	..CYM	..NIA	Barings LLC	Influence	..100.000	MMLIC		
.0000							Barings CLO 2022-II	..CYM	..NIA	Barings LLC	Influence	..72.900	MMLIC		
.0000							Amherst Long Term Holdings, LLC	..DE	..NIA	Massachusetts Mutual Life Insurance Company	Ownership	..24.500	MMLIC		
.0000							Enroll Confidently, Inc.	..DE	..NIA	Massachusetts Mutual Life Insurance Company	Ownership	..25.000	MMLIC		
.0000			04-3313782				MassMutual International LLC	..DE	..NIA	Massachusetts Mutual Life Insurance Company	Ownership	..100.000	MMLIC		
.0000			61-1902329				MassMutual Solutions LLC	..DE	..NIA	MassMutual International LLC	Ownership	..100.000	MMLIC		
.0000			85-3036663				Haven Technologies Asia Limited	..HKG	..NIA	MassMutual Solutions LLC	Ownership	..100.000	MMLIC		
.0000			85-3036663				Yunfeng Financial Group Limited	..HKG	..NIA	MassMutual International LLC	Ownership	..24.900	MMLIC		
.0000			27-3576835				MassMutual External Benefits Group LLC	..DE	..NIA	Massachusetts Mutual Life Insurance Company	Ownership	..100.000	MMLIC		
.0000							5301 Wisconsin Avenue Associates, LLC	..DC	..NIA	Massachusetts Mutual Life Insurance Company	Ownership	..99.000	MMLIC		
.0000			84-3784245				5301 Wisconsin Avenue GP, LLC	..DE	..NIA	Massachusetts Mutual Life Insurance Company	Ownership	..100.000	MMLIC		
.0000			04-1590850				100 w. 3rd Street LLC	..DE	..NIA	Massachusetts Mutual Life Insurance Company	Ownership	..100.000	MMLIC		
.0000			82-2432216				300 South Tryon Hotel LLC	..DE	..NIA	Massachusetts Mutual Life Insurance Company	Ownership	..100.000	MMLIC		
.0000			04-1590850				300 South Tryon LLC	..DE	..NIA	Massachusetts Mutual Life Insurance Company	Ownership	..100.000	MMLIC		
.0000							Almack Mezzanine Fund II Unleveraged LP	..GBR	..NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	..72.900	MMLIC		
.0000							Barings Affordable Housing Mortgage Fund I LLC	..DE	..NIA	Massachusetts Mutual Life Insurance Company	Ownership	..100.000	MMLIC		
.0000			85-3449260				Barings Affordable Housing Mortgage Fund I LLC	..DE	..NIA	Barings LLC	Management	..72.530	MMLIC		
.0000			61-1902329				Barings Affordable Housing Mortgage Fund II LLC	..DE	..NIA	Massachusetts Mutual Life Insurance Company	Ownership	..100.000	MMLIC		
.0000			61-1902329				Barings Affordable Housing Mortgage Fund II LLC	..DE	..NIA	Barings LLC	Management		MMLIC		
.0000							Barings Affordable Housing Mortgage Fund III LLC	..DE	..NIA	Massachusetts Mutual Life Insurance Company	Ownership	..100.000	MMLIC		
.0000			85-3036663				Barings Affordable Housing Mortgage Fund III LLC	..DE	..NIA	Barings LLC	Management	..4.800	MMLIC		
.0000			85-3036663				Barings Construction Lending Fund LP	..DE	..NIA	Massachusetts Mutual Life Insurance Company	Ownership	..85.710	MMLIC		
.0000							Barings Emerging Generation Fund II LP	..DE	..NIA	Massachusetts Mutual Life Insurance Company	Ownership	..39.700	MMLIC		
.0000			84-3784245				Barings Emerging Generation Fund, LP	..DE	..NIA	Massachusetts Mutual Life Insurance Company	Ownership	..33.850	MMLIC		
.0000			84-3784245				Barings Emerging Generation Fund, LP	..DE	..NIA	Barings LLC	Management	..86.000	MMLIC		
.0000							Barings Emerging Markets Corporate Bond Fund	..IRL	..NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	..14.000	MMLIC		
.0000			45-2632610				Barings Emerging Markets Corporate Bond Fund	..IRL	..NIA	Barings LLC	Ownership	..56.900	MMLIC		

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
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.0000			45-2632610				Barings Hotel Opportunity Venture I LP	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	65.000	MLLIC		
.0000							Barings Hotel Opportunity Venture I LP	DE	NIA	Barings LLC	Management	100.000	MLLIC		
.0000			04-1590850				Barings Miller Investment Trust	AUS	NIA	Massachusetts Mutual Life Insurance Company	Ownership	57.330	MLLIC		
.0000			04-1590850				Barings Miller Investment Trust	AUS	NIA	MassMutual Ascend Life Insurance Company	Ownership	9.330	MLLIC		
.0000			85-3449260				Barings Real Estate Debt Income Fund LP	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	66.200	MLLIC		
.0000			85-3449260				Barings Real Estate Debt Income Fund LP	DE	NIA	C.M. Life Insurance Company	Influence		MLLIC		
.0000			85-3449260				Barings Real Estate Debt Income Fund LP	DE	NIA	Barings LLC	Management	30.000	MLLIC		
.0000			81-4258759				Barings Real Estate European Value Add I SCSp	GBR	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	44.000	MLLIC		
.0000			81-4258759				Barings Real Estate European Value Add I SCSp	GBR	NIA	C.M. Life Insurance Company	Ownership	4.900	MLLIC		
.0000							Barings Real Estate European Value Add I SCSp	GBR	NIA	Barings LLC	Management	29.000	MLLIC		
.0000			46-5460309				Barings Small Business Fund, L.P.	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	33.600	MLLIC		
.0000			46-5460309				Barings U.S. High Yield Fund	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	30.090	MLLIC		
.0000			46-0687392				Barings-MM Revolver Fund LP	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	86.000	MLLIC		
.0000			04-1590850				Barings-MM Revolver Fund LP	DE	NIA	MM Ascend	Ownership/Influence	14.000	MLLIC		
.0000							Beauty Brands Acquisition LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	32.630	MLLIC		
.0000							Beauty Brands Acquisition Intermediate LLC	DE	NIA	Beauty Brands Acquisition LLC	Ownership	100.000	MLLIC		
.0000							Forma Brands, LLC	DE	NIA	Beauty Brands Acquisition Intermediate LLC	Ownership	100.000	MLLIC		
.0000			45-2632610				Cornerstone Permanent Mortgage Fund LLC	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MLLIC		
.0000			45-2632610				Cornerstone Permanent Mortgage Fund LLC	MA	NIA	Barings LLC	Management	3.800	MLLIC		
.0000			37-1506417				CREA Ridge Apartments, LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MLLIC		
.0000							Euro Real Estate Holdings Herleshausen LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	47.500	MLLIC		
.0000							London Office JV Holdings LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MLLIC		
.0000							Riverwalk MM Member, LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MLLIC		2
.0000			83-0560183				Aland Royalty Holdings LP	DE	NIA	MassMutual Holding LLC	Ownership/Influence	26.690	MLLIC		3
.0000			83-0560183				Aland Royalty Holdings LP	DE	NIA	Barings LLC	Management		MLLIC		
.0000			81-2244465				Chassis Acquisition Holding LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	30.000	MLLIC		
.0000			81-4258759				CRA Aircraft Holding LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	40.000	MLLIC		
.0000			81-4258759				CRA Aircraft Holding LLC	DE	NIA	Barings LLC	Influence		MLLIC		
.0000							EIP Holdings I, LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	29.000	MLLIC		
.0000			46-5460309				Red Lake Ventures, LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	31.520	MLLIC		
.0000			46-5460309				Red Lake Ventures, LLC	DE	NIA	Barings LLC	Influence		MLLIC		
.0000			46-0687392				Validus Holding Company LLC	DE	NIA	Barings LLC	Ownership	40.440	MLLIC		

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

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Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi- ciliary Loca- tion	Rela- tion- ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)					
.0000			04-1590850				SBNP SIA II LLC	..DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							SBNP SIA III LLC	..DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings European Real Estate Debt Income Fund	..LUX	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	54.700	MMLIC		
.0000							Barings European Real Estate Debt Income Fund	..LUX	NIA	Barings LLC	Influence		MMLIC		
.0000			37-1506417				Babson Capital Loan Strategies Fund, L.P.	..DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	76.630	MMLIC		
.0000			37-1506417				Babson Capital Loan Strategies Fund, L.P.	..DE	NIA	C.M. Life Insurance Company	Ownership	3.800	MMLIC		
.0000			37-1506417				Babson Capital Loan Strategies Fund, L.P.	..DE	NIA	Barings LLC	Management		MMLIC		
.0000							Barings US High Yield Bond Fund	..IRL	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence		MMLIC		
.0000							Barings US High Yield Bond Fund	..IRL	NIA	Barings LLC	Management		MMLIC		
.0000							Babson CLO Ltd. 2015-I	..CYM	NIA	Barings LLC	Influence		MMLIC		2
.0000			36-037260H				Babson CLO Ltd. 2015-II	..CYM	NIA	Barings LLC	Influence		MMLIC		3
.0000							Babson CLO Ltd. 2016-I	..CYM	NIA	Barings LLC	Influence		MMLIC		
.0000							Babson CLO Ltd. 2016-II	..CYM	NIA	Barings LLC	Influence		MMLIC		
.0000			37-15576VH				Barings CLO Ltd. 2017-I	..CYM	NIA	Barings LLC	Influence		MMLIC		
.0000							Barings CLO 2018-III	..CYM	NIA	Barings LLC	Influence		MMLIC		
.0000							Barings CLO 2018-IV	..CYM	NIA	Barings LLC	Influence		MMLIC		
.0000			98-1473665				Barings CLO 2019-I	..CYM	NIA	Barings LLC	Influence		MMLIC		
.0000			98-1332384				Barings CLO 2019-III	..CYM	NIA	Barings LLC	Influence	91.220	MMLIC		
.0000							Barings CLO 2019-IV	..CYM	NIA	Barings LLC	Influence	67.500	MMLIC		
.0000							Barings CLO 2020-I	..CYM	NIA	Barings LLC	Influence	3.540	MMLIC		
.0000							Barings CLO 2020-II	..CYM	NIA	Barings LLC	Influence		MMLIC		
.0000							Barings CLO 2020-III	..CYM	NIA	Barings LLC	Influence	12.500	MMLIC		
.0000							Barings CLO 2020-IV	..CYM	NIA	Barings LLC	Influence	0.700	MMLIC		
.0000							Barings CLO 2021-I	..CYM	NIA	Barings LLC	Influence		MMLIC		
.0000							Barings CLO 2021-II	..CYM	NIA	Barings LLC	Influence	70.780	MMLIC		
.0000							Barings CLO 2021-III	..CYM	NIA	Barings LLC	Influence		MMLIC		
.0000							Babson Euro CLO 2014-I BV	..NLD	NIA	Barings LLC	Influence		MMLIC		
.0000			87-0977058				Babson Euro CLO 2014-II BV	..NLD	NIA	Barings LLC	Influence	51.030	MMLIC		
.0000			87-0977058				Babson Euro CLO 2015-I BV	..NLD	NIA	Barings LLC	Influence		MMLIC		
.0000			36-037260H				Barings Euro CLO 2019-I BV	..IRL	NIA	Barings LLC	Influence	29.700	MMLIC		
.0000			86-3661023				Barings Euro CLO 2019-II BV	..IRL	NIA	Barings LLC	Influence	0.400	MMLIC		
.0000							Barings Euro CLO 2020-I DAC	..IRL	NIA	Barings LLC	Influence		MMLIC		
.0000			37-15576VH				Barings Euro CLO 2021-I DAC	..IRL	NIA	Barings LLC	Influence		MMLIC		
.0000							Barings Euro CLO 2021-II DAC	..IRL	NIA	Barings LLC	Influence		MMLIC		
.0000			98-1612604				Barings Euro CLO 2021-III DAC	..IRL	NIA	Barings LLC	Influence		MMLIC		
.0000							Barings Euro CLO 2023-II DAC	..IRL	NIA	Barings LLC	Influence		MMLIC		
.0000			98-1332384				Barings Global Energy Infrastructure Fund I LP	..CYM	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	97.550	MMLIC		
.0000			98-1332384				Barings Global Special Situations Credit 4 Delaware	..DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	67.230	MMLIC		
.0000			98-1332384				Barings Global Special Situations Credit 4 Delaware	..DE	NIA	C.M. Life Insurance Company	Ownership	3.540	MMLIC		
.0000			98-1567942				Barings Global Special Situations Credit 4 Delaware	..DE	NIA	Barings LLC	Management	18.470	MMLIC		

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

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.0000			98-1567942				Barings Global Special Situations Credit 4 LUX	.LUX	NIA	Massachusetts Mutual Life Insurance Company	Ownership	13.200	MMLIC		
.0000			81-0841854				Barings Global Special Situations Credit 4 LUX	.LUX	NIA	C.M. Life Insurance Company	Ownership	0.700	MMLIC		
.0000			81-0841854				Barings Global Special Situations Credit 4 LUX	.LUX	NIA	Barings LLC	Management		MMLIC		
.0000							Barings Europe Select Fund	.IRL	NIA	Barings LLC	Management	29.000	MMLIC		
.0000			87-0977058				Barings Hotel Opportunity Venture	.CT	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	49.300	MMLIC		
.0000			87-0977058				Barings Hotel Opportunity Venture	.CT	NIA	Barings LLC	Management		MMLIC		
.0000			86-3661023				Barings Innovations & Growth Real Estate Fund	.DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	29.700	MMLIC		
.0000			86-3661023				Barings Innovations & Growth Real Estate Fund	.DE	NIA	C.M. Life Insurance Company	Ownership	0.400	MMLIC		
.0000							Barings Middle Market CLO 2017-I Ltd & LLC	.CYM	NIA	Barings LLC	Influence	63.600	MMLIC		
.0000							Barings Middle Market CLO 2018-I	.CYM	NIA	Barings LLC	Influence	1.000	MMLIC		
.0000							Barings Middle Market CLO 2019-I	.CYM	NIA	Barings LLC	Influence		MMLIC		
.0000			98-1612604				Barings Middle Market CLO Ltd 2021-I	.CYM	NIA	Barings LLC	Influence	12.590	MMLIC		
.0000							Barings Middle Market CLO Ltd 2023-I	.BMJ	NIA	Barings LLC	Influence	0.800	MMLIC		
.0000							Barings Middle Market CLO Ltd 2023-II	.BMJ	NIA	Barings LLC	Influence		MMLIC		
.0000			98-1332384				Barings RE Credit Strategies VII LP	.DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	34.800	MMLIC		
.0000			98-1332384				Barings RE Credit Strategies VII LP	.DE	NIA	Baring Asset Management Limited	Management		MMLIC		
.0000			98-1567942				Barings Target Yield Infrastructure Debt Fund	.LUX	NIA	Massachusetts Mutual Life Insurance Company	Ownership	18.600	MMLIC		
.0000			98-1567942				Barings Target Yield Infrastructure Debt Fund	.LUX	NIA	Massachusetts Mutual Life Insurance Company	Ownership	18.600	MMLIC		
.0000			81-0841854				Barings CLO Investment Partners LP	.DE	NIA	Baring Asset Management Limited	Management		MMLIC		
.0000			81-0841854				Barings CLO Investment Partners LP	.DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	89.700	MMLIC		
.0000							Barings Euro Value Add II (BREEVA II)	.LUX	NIA	Barings LLC	Management		MMLIC		
.0000			04-1590850				Barings Euro Value Add II (BREEVA II)	.LUX	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	27.500	MMLIC		
.0000			04-1590850				Barings Euro Value Add II (BREEVA II)	.LUX	NIA	C.M. Life Insurance Company	Ownership	2.400	MMLIC		
.0000							Barings Euro Value Add II (BREEVA II)	.LUX	NIA	Barings LLC	Management	100.000	MMLIC		
.0000			87-1262754				Barings Transportation Fund LP	.DE	NIA	MassMutual Holding LLC	Ownership/Influence	11.100	MMLIC		
.0000			87-1262754				Barings Transportation Fund LP	.DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	8.200	MMLIC		
.0000			98-1607033				Braemar Energy Ventures I, L.P.	.DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	98.500	MMLIC		
.0000			98-1607033				Braemar Energy Ventures I, L.P.	.DE	NIA	C.M. Life Insurance Company	Ownership	1.500	MMLIC		
.0000			38-4041011				Braemar Energy Ventures I, L.P.	.DE	NIA	Barings LLC	Management		MMLIC		
.0000			38-4032059				Barings European Core Property Fund SCSp	.LUX	NIA	MassMutual Holding LLC	Ownership/Influence	12.500	MMLIC		
.0000							Barings European Core Property Fund SCSp	.LUX	NIA	C.M. Life Insurance Company	Ownership	0.800	MMLIC		
.0000			04-1590850				Barings European Core Property Fund SCSp	.LUX	NIA	Barings Real Estate Advisers LLC	Management	100.000	MMLIC		
.0000			46-5001122				Barings European Private Loan Fund III A	.LUX	NIA	Massachusetts Mutual Life Insurance Company	Ownership	43.320	MMLIC		
.0000			38-4059932				Benchmark 2018-B2 Mortgage Trust	.NY	NIA	Barings LLC	Influence	0.800	MMLIC		
.0000			04-1590850				Benchmark 2018-B4	.NY	NIA	Barings LLC	Influence	100.000	MMLIC		
.0000			38-4096530				Benchmark 2018-B8	.NY	NIA	Barings LLC	Influence	100.000	MMLIC		
.0000			20-5578089				Barings Core Property Fund LP	.DE	NIA	MassMutual Holding LLC	Ownership/Influence	24.400	MMLIC		

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi-ciliary Location	Relation-ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)	Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	If Control is Ownership Provide Percen-tage	Ultimate Controlling Entity(ies)/Person(s)	Is an SCA Filing Re-quired? (Yes/No)	*
. 0000 ...			20-5578089 ..				Barings Core Property Fund LP	.. DE.....	 NIA.....	Barings Real Estate Advisers LLC	Management.....		MMLIC		
. 0000 ...			04-1590850 ..				DPI Acres Capital SPV LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	100.000 ..	MMLIC		
. 0000 ...			04-1590850 ..				DPI-ARES Mortgage Lending SPV, LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	100.000 ..	MMLIC		
. 0000 ...			04-1590850 ..				E2E Affordable Housing Debt Fund LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership/Influence	100.000 ..	MMLIC		
. 0000 ...			37-1708623 ..				Great Lakes III, L.P.	.. DE.....	 NIA.....	Company	Ownership/Influence	41.570 ..	MMLIC		
. 0000 ...			37-1708623 ..				Great Lakes III, L.P.	.. DE.....	 NIA.....	Barings LLC	Management.....	99.000 ..	MMLIC		
. 0000 ...			98-1607033 ..				GIA EU Holdings - Emerson JV Sarl	.. LUX.....	 NIA.....	Company	Ownership/Influence	55.500 ..	MMLIC		
. 0000 ...			98-1607033 ..				GIA EU Holdings - Emerson JV Sarl	.. LUX.....	 NIA.....	Barings LLC	Management.....	100.000 ..	MMLIC		
. 0000 ...			38-4041011 ..				JPMCC Commercial Mortgage Securities Trust 2017-JP7	.. NY.....	 NIA.....	Barings LLC	Influence.....	100.000 ..	MMLIC		
. 0000 ...			38-4032059 ..				JPMDB Commercial Mortgage Securities Trust 2017-C5	.. NY.....	 NIA.....	Barings LLC	Influence.....	100.000 ..	MMLIC		
. 0000 ...			35-2553915 ..				Martello Re Feeder LP	.. DE.....	 NIA.....	MassMutual Holding LLC	Ownership.....	44.000 ..	MMLIC		
. 0000 ...			41-2280127 ..				Martello Re LP	.. DE.....	 NIA.....	Martello Re Feeder LP	Ownership.....	54.000 ..	MMLIC		
. 0000 ...			41-2280127 ..				Martello Re Holding Limited LLC	.. DE.....	 NIA.....	Martello Re LP	Ownership	100.000 ..	MMLIC		
. 0000 ...			41-2280129 ..				Martello Re Limited	.. BMJ.....	 NIA.....	Martello Re Holding Limited LLC	Ownership	100.000 ..	MMLIC		
. 0000 ...			41-2280129 ..				Martello Re Services Company	.. DE.....	 NIA.....	Martello Re Holding Limited LLC	Ownership.....	100.000 ..	MMLIC		
. 0000 ...			04-1590850 ..				Miami Douglas Three MM, LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	100.000 ..	MMLIC		
. 0000 ...			87-4021641 ..				MM BIG Peninsula Co-Invest Member LLC	.. DE.....	 NIA.....	Company	Ownership.....	27.000 ..	MMLIC		
. 0000 ...			87-4021641 ..				MM BIG Peninsula Co-Invest Member LLC	.. DE.....	 NIA.....	C.M. Life Insurance Company	Ownership.....	0.800 ..	MMLIC		
. 0000 ...			04-1590850 ..				MM Direct Private Invetment Holding	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	100.000 ..	MMLIC		
. 0000 ...			32-0574045 ..				MM CM Holding LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	100.000 ..	MMLIC		
. 0000 ...			81-3000420 ..				MM Debt Participations LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership/Influence	100.000 ..	MMLIC		
. 0000 ...			81-3000420 ..				MM Debt Participations LLC	.. DE.....	 NIA.....	Barings LLC	Management.....		MMLIC		
. 0000 ...			04-1590850 ..				MM MD1 Station Member LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	47.000 ..	MMLIC		
. 0000 ...			04-1590850 ..				MM MD1 Station Member LLC	.. DE.....	 NIA.....	C.M. Life Insurance Company	Ownership.....	3.100 ..	MMLIC		
. 0000 ...			04-1590850 ..				MM MD2 Station Member LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	47.000 ..	MMLIC		
. 0000 ...			04-1590850 ..				MM MD2 Station Member LLC	.. DE.....	 NIA.....	C.M. Life Insurance Company	Ownership.....	3.100 ..	MMLIC		
. 0000 ...			04-1590850 ..				MMV Climate Technology Fund GP	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	99.000 ..	MMLIC		
. 0000 ...			04-1590850 ..				MMV Climate Technology Fund GP	.. DE.....	 NIA.....	Massachusetts Mutual Ascend	Ownership.....	1.000 ..	MMLIC		
. 0000 ...							MM REED District Landco Member LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	100.000 ..	MMLIC		
. 0000 ...			04-1590850 ..				MM Subline Borrower LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	100.000 ..	MMLIC		
. 0000 ...			04-1590850 ..				Washington Pine LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	100.000 ..	MMLIC		
. 0000 ...			35-2553915 ..				Ten Fan Pier Boulevard LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	100.000 ..	MMLIC		
. 0000 ...			41-2280127 ..				Tower Square Capital Partners III, L.P.	.. DE.....	 NIA.....	Barings LLC	Management.....	100.000 ..	MMLIC		

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12 Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	13 If Control is Owner- ship Provide Percen- tage	14 Ultimate Controlling Entity(ies)/Person(s)	15 Is an SCA Filing Re- quired? (Yes/No)	16 *
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi- ciliary Loca- tion	Relation- ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)					
. 0000 ...			41-2280127 ..				Tower Square Capital Partners III, L.P.	.. DE.....	 NIA.....	MassMutual Holding LLC Massachusetts Mutual Life Insurance Company	Ownership/Influence	..18.180	MMLIC		
. 0000 ...			41-2280129 ..				Tower Square Capital Partners IIIA, L.P.	.. DE.....	 NIA.....	Company	Ownership/Influence	..100.000	MMLIC		
. 0000 ...			41-2280129 ..				Tower Square Capital Partners IIIA, L.P.	.. DE.....	 NIA.....	Barings LLC Massachusetts Mutual Life Insurance Company	Management.....	..90.000	MMLIC		
. 0000 ...			04-1590850 ..				Trailside MM Member LLC	.. DE.....	 NIA.....	Company	Ownership.....	..66.970	MMLIC		
. 0000 ...			04-1590850 ..				Trailside MM Member LLC	.. DE.....	 NIA.....	C.M. Life Insurance Company	Ownership.....	..7.380	MMLIC		
. 0000 ...			83-1325764 ..				Washington Gateway Two LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..95.800	MMLIC		
. 0000 ...			83-1325764 ..				Washington Gateway Two LLC	.. DE.....	 NIA.....	C.M. Life Insurance Company	Ownership.....	..6.720	MMLIC		
. 0000 ...			32-0574045 ..				Washington Gateway Three LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..95.230	MMLIC		
. 0000 ...			20-0348173 ..				MALIC Debt Participations LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC		
. 0000 ...			82-2783393 ..				Babson Capital Loan Strategies Master Fund LP	.. CYM.....	 NIA.....	Barings LLC	Management.....	..94.400	MMLIC		
. 0000 ...			04-1590850 ..				Barings China Aggregate Bond Private Securities Investment Fund	.. CHN.....	 NIA.....	Barings LLC	Management.....	..50.000	MMLIC		
. 0000 ...			47-3790192 ..				Barings Global High Yield Fund	.. MA.....	 NIA.....	Barings LLC	Management.....	..65.000	MMLIC		
. 0000 ...			71-1018134 ..				Great Lakes II LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..0.750	MMLIC		
. 0000 ...			71-1018134 ..				Great Lakes II LLC	.. DE.....	 NIA.....	C.M. Life Insurance Company	Ownership.....	..0.320	MMLIC		
. 0000 ...			04-1590850 ..				Wood Creek Venture Fund LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..40.000	MMLIC		
. 0000 ...			81-5360103 ..				Barings California Mortgage Fund IV	.. CA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC		
. 0000 ...			13-1935920 ..				Barings Umbrella Fund LUX SCSp SICAV RAIF ..	.. LUX.....	 NIA.....	Company	Ownership.....	..24.960	MMLIC		
. 0000 ...			04-1590850 ..				Barings Umbrella Fund LUX SCSp SICAV RAIF ...	.. LUX.....	 NIA.....	C.M. Life Insurance Company	Ownership.....	..2.300	MMLIC		
. 0000 ...			82-2285211 ..				Calgary Railway Holding LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..90.000	MMLIC		
. 0000 ...			82-3307907 ..				Cornbrook PRS Holdings LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC		
. 0000 ...			95-4207717 ..				Cornerstone California Mortgage Fund I LLC ..	.. CA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC		
. 0000 ...			95-4207717 ..				Cornerstone California Mortgage Fund II LLC ..	.. CA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC		
. 0000 ...			95-4207717 ..				Cornerstone California Mortgage Fund III LLC ..	.. CA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC		
. 0000 ...			56-2630592 ..				Cornerstone Fort Pierce Development LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..90.000	MMLIC		
. 0000 ...			56-2630592 ..				Cornerstone Fort Pierce Development LLC	.. DE.....	 NIA.....	C.M. Life Insurance Company	Ownership.....	..5.900	MMLIC		
. 0000 ...			61-1750537 ..				Cornerstone Permanent Mortgage Fund II	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC		
. 0000 ...			61-1750537 ..				Cornerstone Permanent Mortgage Fund II	.. MA.....	 NIA.....	Barings LLC	Management.....	..0.380	MMLIC		
. 0000 ...			04-1590850 ..				Cornerstone Permanent Mortgage Fund III LLC ..	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC		
. 0000 ...			61-1793735 ..				Cornerstone Permanent Mortgage Fund IV	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC		
. 0000 ...			20-0348173 ..				CREA/PPC Venture LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..28.520	MMLIC		

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12 Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	13 If Control is Owner- ship Provide Percen- tage	14 Ultimate Controlling Entity(ies)/Person(s)	15 Is an SCA Filing Re- quired? (Yes/No)	16 *
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi- ciliary Loca- tion	Rela- tion- ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)					
. 0000 ...			82-2783393 ..	.....	.....	.....	Danville Riverwalk Venture, LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..94.400	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	.....	.....	Euro Real Estate Holdings LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..50.000	MMLIC .....	.....	.....
. 0000 ...			20-3347091 ..	.....	.....	.....	Fan Pier Development LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..65.000	MMLIC .....	.....	.....
. 0000 ...			20-3347091 ..	.....	.....	.....	Fan Pier Development LLC	.. DE.....	 NIA.....	C.M. Life Insurance Company	Ownership.....	..5.850	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	.....	.....	GIA EU Holdings LLC – Avalon Spain	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	.....	.....	GIA EU Holdings LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			81-5360103 ..	.....	.....	.....	Landmark Manchester Holdings LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			13-1935920 ..	.....	.....	.....	MMLIC Debt Participations LLC	.. DE.....	 NIA.....	Massachusetts Mutual Ascend	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	.....	.....	MM Brookhaven Member LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..95.000	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	.....	.....	MM Ascend Mtg. Lending LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	0000927972 ..	00	MM Kannapolis Industrial Member LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..82.720	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	0000927972 ..	00	MM Kannapolis Industrial Member LLC	.. DE.....	 NIA.....	Massachusetts Mutual Ascend	Ownership.....	..12.280	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	0000916053 ..	00	MM East South Crossing Member LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..95.000	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	0000916053 ..	00	MM Horizon Savannah Member LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..95.000	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	0000916053 ..	00	MM Horizon Savannah Member LLC	.. DE.....	 NIA.....	C.M. Life Insurance Company	Ownership.....	..3.700	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	0000916053 ..	00	MM Horizon Savannah Member II LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..4.430	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	0000916053 ..	00	MM Horizon Savannah Member II LLC	.. DE.....	 NIA.....	C.M. Life Insurance Company	Ownership.....	..0.180	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	0000916053 ..	00	MM Horizon Savannah Member II LLC	.. DE.....	 NIA.....	Massachusetts Mutual Ascend	Ownership.....	..0.380	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	0000916053 ..	00	MM National Self-Storage Program Member LLC	.. DE.....	 NIA.....	C.M. Life Insurance Company	Ownership.....	..98.000	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	0000916053 ..	00	MM 1370 AVE OF AM LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..90.000	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	0000916053 ..	00	MM 1370 AVE OF AM LLC	.. DE.....	 NIA.....	C.M. Life Insurance Company	Ownership.....	..3.330	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	0000916053 ..	00	MM 1400 E 4th Street Member LLC	.. DE.....	 NIA.....	C.M. Life Insurance Company	Ownership.....	..96.000	MMLIC .....	.....	.....
. 0000 ...			80-0948028 ..	.....	0000916053 ..	00	One Harbor Shore LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..94.990	MMLIC .....	.....	.....
. 0000 ...			80-0948028 ..	.....	0000916053 ..	00	One Harbor Shore LLC	.. DE.....	 NIA.....	C.M. Life Insurance Company	Ownership.....	..6.030	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	0000916053 ..	00	Paco France Logistics LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			82-3481715 ..	.....	0000916053 ..	00	Salomon Brothers Commercial Mortgage Trust 2001-MM	.. DE.....	 NIA.....	Barings Real Estate Advisers LLC	Influence.....	.....	MMLIC .....	.....	.....
. 0000 ...			81-5273574 ..	.....	0000916053 ..	00	Three PW Office Holding LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..95.100	MMLIC .....	.....	.....
. 0000 ...			04-1590850 ..	.....	0000916053 ..	00	Trailside MM Member II LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..47.100	MMLIC .....	.....	.....
. 0000 ...			82-3250684 ..	.....	0000916053 ..	00	Unna, Dortmund Holding LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			45-5401109 ..	.....	.....	.....	Washington Gateway Apartments Venture LLC ...	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..95.440	MMLIC .....	.....	.....
. 0000 ...			45-5401109 ..	.....	.....	.....	Washington Gateway Apartments Venture LLC ...	.. DE.....	 NIA.....	C.M. Life Insurance Company	Ownership.....	..4.770	MMLIC .....	.....	.....
. 0000 ...			88-3861481 ..	.....	.....	.....	West 37th Street Hotel LLC	.. DE.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..93.800	MMLIC .....	.....	.....

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12 Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	13 If Control is Owner- ship Provide Percen- tage	14 Ultimate Controlling Entity(ies)/Person(s)	15 Is an SCA Filing Re- quired? (Yes/No)	16 *
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi- ciliary Loca- tion	Relation- ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)					
.0000			88-3861481		0000916053	OQ	West 37th Street Hotel LLC	..DE	NIA	C.M. Life Insurance Company Massachusetts Mutual Life Insurance Company	Ownership	..6.200	MMLIC		
.0000			51-0529328		0000927972	OQ	MassMutual Premier Main Street Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	..90.890	MMLIC		
.0000			26-3229251		0000927972	OQ	MassMutual Premier Strategic Emerging Markets Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	..58.850	MMLIC		
.0000			42-1710935		0000916053	OQ	MassMutual Select Mid-Cap Value Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	..35.710	MMLIC		
.0000			02-0769954		0000916053	OQ	MassMutual Select Small Capital Value Equity Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	..100.000	MMLIC		
.0000			04-3584140		0000916053	OQ	MassMutual Select Small Company Value Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	..18.340	MMLIC		
.0000			82-3347422		0000916053	OQ	MassMutual Select T. Rowe Price Retirement 2005 Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	..10.000	MMLIC		
.0000			82-3355639		0000916053	OQ	MassMutual Select T. Rowe Price Retirement 2010 Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	..100.000	MMLIC		
.0000			82-3382389		0000916053	OQ	MassMutual Select T. Rowe Price Retirement 2015 Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	..100.000	MMLIC		
.0000			82-3396442		0000916053	OQ	MassMutual Select T. Rowe Price Retirement 2020 Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	..63.350	MMLIC		
.0000			82-3417420		0000916053	OQ	MassMutual Select T. Rowe Price Retirement 2025 Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	..100.000	MMLIC		
.0000			82-3430358		0000916053	OQ	MassMutual Select T. Rowe Price Retirement 2030 Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	..100.000	MMLIC		
.0000			82-3439837		0000916053	OQ	MassMutual Select T. Rowe Price Retirement 2035 Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	..100.000	MMLIC		
.0000			82-3451779		0000916053	OQ	MassMutual Select T. Rowe Price Retirement 2040 Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	..100.000	MMLIC		
.0000			82-3472295		0000916053	OQ	MassMutual Select T. Rowe Price Retirement 2045 Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	..100.000	MMLIC		
.0000			82-3481715		0000916053	OQ	MassMutual Select T. Rowe Price Retirement 2050 Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	..100.000	MMLIC		
.0000			82-3502011		0000916053	OQ	MassMutual Select T. Rowe Price Retirement 2055 Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	..100.000	MMLIC		
.0000			82-3525148		0000916053	OQ	MassMutual Select T. Rowe Price Retirement 2060 Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	..100.000	MMLIC		
.0000			82-3533944		0000916053	OQ	MassMutual Select T. Rowe Price Retirement Balanced Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	..99.790	MMLIC		
.0000			46-4257056		0000916053	OQ	MML Series International Equity Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	..100.000	MMLIC		
.0000			47-3529636		0000916053	OQ	MML Series II Dynamic Bond Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	..100.000	MMLIC		
.0000			47-3544629		0000916053	OQ	MML Series II Equity Rotation Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	..97.230	MMLIC		
.0000			27-1933389		0000916053	OQ	MassMutual RetireSMART 2035 Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	..3.280	MMLIC		
.0000			27-1932769		0000916053	OQ	MassMutual RetireSMART 2045 Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	..7.690	MMLIC		
.0000			46-3289207		0000916053	OQ	MassMutual RetireSMART 2055 Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	..21.960	MMLIC		
.0000			47-5326235		0000916053	OQ	MassMutual RetireSMART 2060 Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	..38.540	MMLIC		
.0000			45-1618155		0000916053	OQ	MassMutual 20/80 Allocation Fund	..MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	..100.000	MMLIC		

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi-ciliary Loca-tion	Rela-tion-ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)	Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	If Control is Owner-ship Provide Percen-tage	Ultimate Controlling Entity(ies)/Person(s)	Is an SCA Filing Re-quired? (Yes/No)	*
. 0000 ...			45-1618222 ..	.....	0000916053 ..	OQ	MassMutual 80/20 Allocation Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..36.460	MMLIC .....	.....	.....
. 0000 ...			03-0532464 ..	.....	0000916053 ..	OQ	MassMutual RetireSMART In Retirement Fund ...	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	.. 7.040	MMLIC .....	.....	.....
. 0000 ...			45-1618262 ..	.....	0000916053 ..	OQ	MassMutual 40/60 Allocation Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Influence.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			45-1618046 ..	.....	0000916053 ..	OQ	MassMutual 60/40 Allocation Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			45-1618046 ..	.....	0000916053 ..	OQ	MassMutual ishares 60/40 Allocation Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..59.950	MMLIC .....	.....	.....
. 0000 ...			04-3212054 ..	.....	0000916053 ..	OQ	MassMutual Balanced Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			04-3556992 ..	.....	0000916053 ..	OQ	MassMutual Blue Chip Growth Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			04-3277549 ..	.....	0000916053 ..	OQ	MassMutual Core Bond Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..21.020	MMLIC .....	.....	.....
. 0000 ...			04-3539084 ..	.....	0000916053 ..	OQ	MassMutual Disciplined Growth Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			04-3539083 ..	.....	0000916053 ..	OQ	MassMutual Disciplined Value Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			01-0821120 ..	.....	0000916053 ..	OQ	MassMutual Diversified Value Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			04-3512590 ..	.....	0000916053 ..	OQ	MassMutual Equity Opportunities Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			04-3512589 ..	.....	0000916053 ..	OQ	MassMutual Growth Opportunities Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			03-0532475 ..	.....	0000916053 ..	OQ	MassMutual Inflation-Protected and Income Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..99.790	MMLIC .....	.....	.....
. 0000 ...			04-3512596 ..	.....	0000916053 ..	OQ	MassMutual Mid Cap Growth Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			04-3464165 ..	.....	0000916053 ..	OQ	MassMutual Premier Diversified Bond Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			92-1441036 ..	.....	0000916053 ..	OQ	MassMutual RetireSMART by JPMorgan 2065 Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..92.320	MMLIC .....	.....	.....
. 0000 ...			45-1618222 ..	.....	0000916053 ..	OQ	MassMutual Select 80/20 Allocation Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			04-3584138 ..	.....	0000916053 ..	OQ	MassMutual Select Fundamental Value Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			04-3557000 ..	.....	0000916053 ..	OQ	MassMutual Select Overseas Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			92-1427882 ..	.....	0000916053 ..	OQ	MassMutual Select T Rowe Price Retirement 2065 Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..23.000	MMLIC .....	.....	.....
. 0000 ...			04-3464205 ..	.....	0000916053 ..	OQ	MassMutual Small Cap Growth Equity Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..61.350	MMLIC .....	.....	.....
. 0000 ...			04-3424705 ..	.....	0000916053 ..	OQ	MassMutual Small Cap Opportunities Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..10.370	MMLIC .....	.....	.....
. 0000 ...			02-0769954 ..	.....	0000916053 ..	OQ	MassMutual Small Cap Value Equity Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			26-0099965 ..	.....	0000916053 ..	OQ	MassMutual Strategic Bond Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....
. 0000 ...			93-4168848 ..	.....	0000916053 ..	OQ	MassMutual Clinton Municipal Credit Opportunities Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	..100.000	MMLIC .....	.....	.....

SCHEDULE Y
PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi-ciliary Loca-tion	Relation-ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)	Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	If Control is Owner-ship Provide Percen-tage	Ultimate Controlling Entity(ies)/Person(s)	Is an SCA Filing Re-quired? (Yes/No)	*
. 0000 ...			93-4190918 ..	.....	0000916053 ..	OQ	MassMutual Clinton Municipal Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	100.000 ...	MMLIC .....	.....	.....
. 0000 ...			93-4193313 ..	.....	0000916053 ..	OQ	MassMutual Clinton Short-Term Municipal Fund	.. MA.....	 NIA.....	Massachusetts Mutual Life Insurance Company	Ownership.....	100.000 ...	MMLIC .....	.....	.....

Asterisk	Explanation
1	Massachusetts Mutual Life Insurance Company owns 14.23% of the affiliated debt of Jefferies Finance LLC
2	Debt investors own .5% and includes only Great Lakes III, L.P.
3	Debt investors own .2% and includes only Great Lakes III, L.P.

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SUPPLEMENTAL EXHIBITS AND SCHEDULES INTERROGATORIES

The following supplemental reports are required to be filed as part of your statement filing. However, in the event that your company does not transact the type of business for which the special report must be filed, your response of NO to the specific interrogatory will be accepted in lieu of filing a "NONE" report and a bar code will be printed below. If the supplement is required of your company but is not being filed for whatever reason enter SEE EXPLANATION and provide an explanation following the interrogatory questions.

	Response
1. Will the Trusteed Surplus Statement be filed with the state of domicile and the NAIC with this statement?	NO
2. Will the Medicare Part D Coverage Supplement be filed with the state of domicile and the NAIC with this statement?	NO
3. Will the Reasonableness of Assumptions Certification required by Actuarial Guideline XXXV be filed with the state of domicile and electronically with the NAIC?	NO
4. Will the Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXV be filed with the state of domicile and electronically with the NAIC?	YES
5. Will the Reasonableness of Assumptions Certification for Implied Guaranteed Rate Method required by Actuarial Guideline XXXVI be filed with the state of domicile and electronically with the NAIC?	NO
6. Will the Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXVI (Updated Average Market Value) be filed with the state of domicile and electronically with the NAIC?	NO
7. Will the Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXVI (Updated Market Value) be filed with the state of domicile and electronically with the NAIC?	NO
8. Will the Life PBR Statement of Exemption be filed with the state of domicile by July 1st and electronically with the NAIC with the second quarterly filing per the Valuation Manual (by August 15)? (2nd Quarter Only) The response for 1st and 3rd quarters should be N/A. A NO response resulting with a bar code is only appropriate in the 2nd quarter. In the case of an ongoing statement of exemption, enter "SEE EXPLANATION" and provide as an explanation that the company is utilizing an ongoing statement of exemption.	SEE EXPLANATION

AUGUST FILING

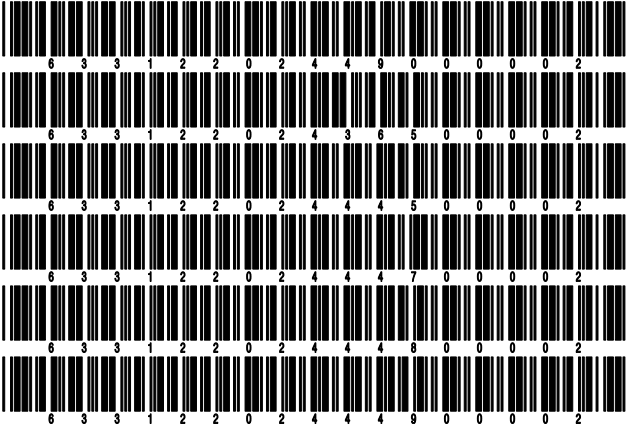
9. Will the regulator-only (non-public) Communication of Internal Control Related Matters Noted in Audit be filed with the state of domicile and electronically with the NAIC (as a regulator-only non-public document) by August 1? The response for 1st and 3rd quarters should be N/A. A NO response resulting with a bar code is only appropriate in the 2nd quarter.	YES
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Explanation:

1. The data for this supplement is not required to be filed.
2. The data for this supplement is not required to be filed.
3. The data for this supplement is not required to be filed.
5. The data for this supplement is not required to be filed.
6. The data for this supplement is not required to be filed.
7. The data for this supplement is not required to be filed.
8. The Company is utilizing an ongoing statement of exemption

Bar Code:

1. Trusteed Surplus Statement [Document Identifier 490]
2. Medicare Part D Coverage Supplement [Document Identifier 365]
3. Reasonableness of Assumptions Certification required by Actuarial Guideline XXXV [Document Identifier 445]
5. Reasonableness of Assumptions Certification for Implied Guaranteed Rate Method required by Actuarial Guideline XXXVI [Document Identifier 447]
6. Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXVI [Document Identifier 448]
7. Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXVI (Updated Market Value) [Document Identifier 449]



STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

OVERFLOW PAGE FOR WRITE-INS

Additional Write-ins for Assets Line 25

	Current Statement Date			4 December 31 Prior Year Net Admitted Assets
	1 Assets	2 Nonadmitted Assets	3 Net Admitted Assets (Cols. 1 - 2)	
2504. Accounts receivable	18,195,984	6,248,067	11,947,917	6,495,920
2597. Summary of remaining write-ins for Line 25 from overflow page	18,195,984	6,248,067	11,947,917	6,495,920

Additional Write-ins for Summary of Operations Line 8.3

	1 Current Year To Date	2 Prior Year To Date	3 Prior Year Ended December 31
08.304. Miscellaneous income	789,759	50,295	54,818
08.397. Summary of remaining write-ins for Line 8.3 from overflow page	789,759	50,295	54,818

SCHEDULE A - VERIFICATION

Real Estate

	1	2
	Year to Date	Prior Year Ended December 31
1. Book/adjusted carrying value, December 31 of prior year		
2. Cost of acquired:		
2.1 Actual cost at time of acquisition		
2.2 Additional investment made after acquisition		
3. Current year change in encumbrances		
4. Total gain (loss) on disposals		
5. Deduct amounts received on disposals		
6. Total foreign exchange change in book/adjusted carrying value		
7. Deduct current year's other than temporary impairment recognized		
8. Deduct current year's depreciation		
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

Mortgage Loans

	1	2
	Year to Date	Prior Year Ended December 31
1. Book value/recorded investment excluding accrued interest, December 31 of prior year	4,256,509,561	3,088,813,561
2. Cost of acquired:		
2.1 Actual cost at time of acquisition	596,083,889	1,756,164,211
2.2 Additional investment made after acquisition	87,386,326	124,941,328
3. Capitalized deferred interest and other	5,430,337	1,553,080
4. Accrual of discount	1,513,588	12,149,299
5. Unrealized valuation increase/(decrease)		0
6. Total gain (loss) on disposals	36,059	20,713
7. Deduct amounts received on disposals	242,200,429	715,396,315
8. Deduct amortization of premium and mortgage interest points and commitment fees	14,318,171	11,955,401
9. Total foreign exchange change in book value/recorded investment excluding accrued interest	(147,634)	219,085
10. Deduct current year's other than temporary impairment recognized		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)	4,690,293,526	4,256,509,561
12. Total valuation allowance		
13. Subtotal (Line 11 plus Line 12)	4,690,293,526	4,256,509,561
14. Deduct total nonadmitted amounts		0
15. Statement value at end of current period (Line 13 minus Line 14)	4,690,293,526	4,256,509,561

SCHEDULE BA - VERIFICATION

Other Long-Term Invested Assets

	1	2
	Year to Date	Prior Year Ended December 31
1. Book/adjusted carrying value, December 31 of prior year	1,407,752,674	1,363,435,250
2. Cost of acquired:		
2.1 Actual cost at time of acquisition	86,184,852	111,126,612
2.2 Additional investment made after acquisition	104,164,008	253,810,230
3. Capitalized deferred interest and other	0	
4. Accrual of discount	1,508,072	18,437,513
5. Unrealized valuation increase/(decrease)	67,350,758	40,213,029
6. Total gain (loss) on disposals	1,590,087	(24,473,456)
7. Deduct amounts received on disposals	59,827,336	337,563,388
8. Deduct amortization of premium and depreciation	1,332,132	(1,868,276)
9. Total foreign exchange change in book/adjusted carrying value	(559,335)	320,433
10. Deduct current year's other than temporary impairment recognized	49,138,621	19,421,825
11. Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5+6-7-8+9-10)	1,557,693,028	1,407,752,674
12. Deduct total nonadmitted amounts	10,530,524	
13. Statement value at end of current period (Line 11 minus Line 12)	1,547,162,504	1,407,752,674

SCHEDULE D - VERIFICATION

Bonds and Stocks

	1	2
	Year to Date	Prior Year Ended December 31
1. Book/adjusted carrying value of bonds and stocks, December 31 of prior year	35,889,697,885	34,200,158,053
2. Cost of bonds and stocks acquired	4,443,180,136	10,587,374,782
3. Accrual of discount	68,998,154	153,594,732
4. Unrealized valuation increase/(decrease)	55,242,584	22,186,367
5. Total gain (loss) on disposals	(100,128,348)	(443,074,595)
6. Deduct consideration for bonds and stocks disposed of	3,469,284,111	8,457,950,336
7. Deduct amortization of premium	10,668,921	108,381,453
8. Total foreign exchange change in book/adjusted carrying value	(16,806,214)	19,484,345
9. Deduct current year's other than temporary impairment recognized	26,457,062	83,694,011
10. Total investment income recognized as a result of prepayment penalties and/or acceleration fees		0
11. Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5-6-7+8-9+10)	36,833,774,103	35,889,697,885
12. Deduct total nonadmitted amounts	0	0
13. Statement value at end of current period (Line 11 minus Line 12)	36,833,774,103	35,889,697,885

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 1B

Showing the Acquisitions, Dispositions and Non-Trading Activity
During the Current Quarter for all Bonds and Preferred Stock by NAIC Designation

NAIC Designation	1 Book/Adjusted Carrying Value Beginning of Current Quarter	2 Acquisitions During Current Quarter	3 Dispositions During Current Quarter	4 Non-Trading Activity During Current Quarter	5 Book/Adjusted Carrying Value End of First Quarter	6 Book/Adjusted Carrying Value End of Second Quarter	7 Book/Adjusted Carrying Value End of Third Quarter	8 Book/Adjusted Carrying Value December 31 Prior Year
BONDS								
1. NAIC 1 (a)	20,814,947,762	4,105,101,111	3,646,104,821	237,901,535	20,814,947,762	21,511,845,587	0	20,587,542,236
2. NAIC 2 (a)	15,133,208,386	21,836,777,218	20,374,820,148	(1,191,040,704)	15,133,208,386	15,404,124,752	0	14,265,448,635
3. NAIC 3 (a)	1,265,821,956	116,483,850	122,612,471	(15,041,356)	1,265,821,956	1,244,651,980	0	1,252,366,009
4. NAIC 4 (a)	442,473,529	67,717,334	55,815,458	21,382,694	442,473,529	475,758,098	0	494,396,912
5. NAIC 5 (a)	248,030,788	(25,875)	24,496,494	12,859,941	248,030,788	236,368,359	0	271,743,826
6. NAIC 6 (a)	34,067,263	683,968	4,107,877	39,698,609	34,067,263	70,341,963	0	41,900,864
7. Total Bonds	37,938,549,683	26,126,737,606	24,227,957,269	(894,239,281)	37,938,549,683	38,943,090,739	0	36,913,398,482
PREFERRED STOCK								
8. NAIC 1	0	15,000,000	0	0	0	15,000,000	0	4,914,449
9. NAIC 2	244,611,090	(29,747,770)	495,000	13,840,364	244,611,090	228,208,684	0	161,940,169
10. NAIC 3	7,793,201	910,859		(6,961,283)	7,793,201	1,742,777	0	6,998,696
11. NAIC 4	3,000,000	500,000	0	0	3,000,000	3,500,000	0	3,000,000
12. NAIC 5	28,280,574	0		(2,682,443)	28,280,574	25,598,131	0	24,141,839
13. NAIC 6	(332,829)	3,000,000		(2,782,109)	(332,829)	(114,938)	0	31,076
14. Total Preferred Stock	283,352,036	(10,336,911)	495,000	1,414,529	283,352,036	273,934,654	0	201,026,229
15. Total Bonds and Preferred Stock	38,221,901,718	26,116,400,695	24,228,452,269	(892,824,752)	38,221,901,718	39,217,025,392	0	37,114,424,711

(a) Book/Adjusted Carrying Value column for the end of the current reporting period includes the following amount of short-term and cash equivalent bonds by NAIC designation:

NAIC 1 \$641,000,130 ; NAIC 2 \$2,520,461,393 ; NAIC 3 \$ NAIC 4 \$437,500 ; NAIC 5 \$0 ; NAIC 6 \$0

SCHEDULE DA - PART 1

Short-Term Investments

	1	2	3	4	5
	Book/Adjusted Carrying Value	Par Value	Actual Cost	Interest Collected Year-to-Date	Paid for Accrued Interest Year-to-Date
7709999999 Totals	506,457,996	xxx	501,694,747	2,142,033	0

SCHEDULE DA - VERIFICATION

Short-Term Investments

	1	2
	Year To Date	Prior Year Ended December 31
1. Book/adjusted carrying value, December 31 of prior year	424,197,318	389,684,178
2. Cost of short-term investments acquired	618,708,898	969,540,658
3. Accrual of discount	9,944,416	13,275,593
4. Unrealized valuation increase/(decrease)		0
5. Total gain (loss) on disposals		(31,610)
6. Deduct consideration received on disposals	546,392,636	948,271,501
7. Deduct amortization of premium	0	0
8. Total foreign exchange change in book/adjusted carrying value	0	0
9. Deduct current year's other than temporary impairment recognized	0	0
10. Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5-6-7+8-9)	506,457,996	424,197,318
11. Deduct total nonadmitted amounts	0	0
12. Statement value at end of current period (Line 10 minus Line 11)	506,457,996	424,197,318

SCHEDULE DB - PART A - VERIFICATION

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	346,286,354
3.	Unrealized Valuation increase/(decrease)	71,338,951
4.	SSAP No. 108 adjustments	
5.	Total gain (loss) on termination recognized	490,764,227
6.	Considerations received/(paid) on terminations	490,423,795
7.	Amortization	(309,242,435)
8.	Adjustment to the Book/Adjusted Carrying Value of hedged item	
9.	Total foreign exchange change in Book/Adjusted Carrying Value	
10.	Book/Adjusted Carrying Value at End of Current Period (Lines 1+2+3+4+5-6+7+8+9)	330,964,412
11.	Deduct nonadmitted assets	
12.	Statement value at end of current period (Line 10 minus Line 11)	330,964,412

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 to date minus	0
3.12	Section 1, Column 15, prior year	0
	Change in variation margin on open contracts - All Other	
3.13	Section 1, Column 18, current year to date minus	(661,806)
3.14	Section 1, Column 18, prior year	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	0
3.22	Section 1, Column 17, prior year	0
	Change in amount recognized	
3.23	Section 1, Column 19, current year to date minus	(661,806)
3.24	Section 1, Column 19, prior year plus	20,973,705
3.25	SSAP No. 108 adjustments	(21,635,511)
3.3	Subtotal (Line 3.1 minus Line 3.2)	0
4.1	Cumulative variation margin on terminated contracts during the year	(26,262,405)
4.2	Less:	
	4.21 Amount used to adjust basis of hedged item	
	4.22 Amount recognized	(47,236,110)
	4.23 SSAP No. 108 adjustments	(47,236,110)
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	661,806
6.	Book/Adjusted carrying value at end of current period (Lines 1+2+3.3-4.3-5.1-5.2)	(661,806)
7.	Deduct total nonadmitted amounts	
8.	Statement value at end of current period (Line 6 minus Line 7)	(661,806)

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.....	330,964,335
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)	330,964,335
4.	Part D, Section 1, Column 6	844,380,852
5.	Part D, Section 1, Column 7	(514,078,323)
6.	Total (Line 3 minus Line 4 minus Line 5)	661,806
		Fair Value Check
7.	Part A, Section 1, Column 16	952,331,904
8.	Part B, Section 1, Column 13	(661,806)
9.	Total (Line 7 plus Line 8)	951,670,098
10.	Part D, Section 1, Column 9	1,095,590,953
11.	Part D, Section 1, Column 10	(143,920,855)
12.	Total (Line 9 minus Line 10 minus Line 11)	0
		Potential Exposure Check
13.	Part A, Section 1, Column 21	87,770,783
14.	Part B, Section 1, Column 20	5,888,300
15.	Part D, Section 1, Column 12	93,659,083
16.	Total (Line 13 plus Line 14 minus Line 15)	0

SCHEDULE E - PART 2 - VERIFICATION

(Cash Equivalents)

	1	2
	Year To Date	Prior Year Ended December 31
1. Book/adjusted carrying value, December 31 of prior year	1,944,403,033	1,535,691,774
2. Cost of cash equivalents acquired	45,471,185,519	105,964,099,263
3. Accrual of discount	62,861,331	71,821,164
4. Unrealized valuation increase/(decrease)		0
5. Total gain (loss) on disposals	2,345	10,949
6. Deduct consideration received on disposals	44,703,035,107	105,627,220,117
7. Deduct amortization of premium	0	0
8. Total foreign exchange change in book/adjusted carrying value	0	0
9. Deduct current year's other than temporary impairment recognized	0	0
10. Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5-6-7+8-9)	2,775,417,122	1,944,403,033
11. Deduct total nonadmitted amounts	0	0
12. Statement value at end of current period (Line 10 minus Line 11)	2,775,417,122	1,944,403,033

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE A - PART 2

Showing All Real Estate ACQUIRED AND ADDITIONS MADE During the Current Quarter

[illegible]

SCHEDULE A - PART 3

Showing All Real Estate DISPOSED During the Quarter, Including Payments During the Final Year on "Sales Under Contract"

[illegible]

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE B - PART 2

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

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						
155020KL3	Various	TX		10/01/2021	.2.990		4,938	829,497
B6S2919H2	Various	FL		04/04/2024	.4.040	34,956,840		31,862,418
0299999. Mortgages in good standing - Residential mortgages-insured or guaranteed						34,956,840	4,938	32,691,915
121836H14	Various	HI		01/19/2023	.8.405		.51	834,111
121836XY1	Various	NJ		09/21/2023	.9.021		1,164	4,214,381
146738AB5	Various	FL		11/29/2022	.8.463	(785,978)		4,186,281
146738BC2	Various	FL		12/09/2022	.9.340	778,083		2,101,604
146738CD9	Various	WA		12/22/2022	11.670	.20,285		4,837,687
146738DE6	Various	FL		01/11/2023	.9.905	685,438		2,708,877
146738EF2	Various	PA		01/26/2023	10.028	300,887		3,792,750
146738FG9	Various	MA		02/09/2023	10.154	1,262,370		4,027,897
161225OR1	Various	NY		05/18/2023	.7.955		7,983	21,103,823
209999ZB0	Various	SC		11/15/2019	.3.260		2,660,562	40,966,794
209999ZC8	Various	SC		04/28/2020	.3.260		3,125,813	38,371,246
243820AF4	Various	CO		12/15/2023	.8.625	(1,565)		168,633
489123ZD4	Various	NY		11/16/2023	.8.710		5,083	6,814,971
62938VEE0	Various	FL		07/15/2022	.7.003		9,068	15,529,841
BC01531674	Various	VA		11/07/2023	.8.825		(72,099)	14,873,202
BC01874636	Various	NJ		05/09/2024	.9.980	7,704,474		7,657,337
B6S16AYD8	Various	TX		10/14/2021	.6.690		2,084,870	28,204,766
B6S16B3F5	Various	OH		01/18/2022	.3.600		4,200,000	90,159,140
B6S272DT1	Various	FL		02/29/2024	.8.670	(262,177)		7,322,275
B6S28LBN3	Various	CA		03/28/2024	.7.480	2,907,850		2,888,705
B6S29H2G6	Various	CA		04/11/2024	.7.970	7,161,854		7,188,573
B6S29JX94	Various	FL		04/11/2024	.8.370	18,675,559		18,749,210
B6S29VH79	Various	CA		04/11/2024	.9.570	15,366,498		15,235,182
B6S2AB1G8	Various	CO		04/18/2024	.7.920	6,168,864		6,190,488
B6S2AX8X6	Various	CA		04/25/2024	.8.413	10,148,088		10,245,567
B6S2AZPX2	Various	FL		04/25/2024	.9.740	16,643,345		16,525,052
B6S2AZRT9	Various	CA		04/25/2024	.7.633	2,616,502		2,635,151
B6S2B5J06	Various	TX		04/26/2024	.8.350	2,165,138		2,170,613
B6S2BKNT5	Various	CA		05/02/2024	.7.500	8,322,017		8,264,559
B6S2C6K27	Various	CA		05/09/2024	.7.700	8,583,836		8,583,875
B6S2D2F96	Various	FL		05/16/2024	.7.813	13,081,593		12,965,199
B6S2D2FR6	Various	NJ		05/16/2024	.7.914	7,262,619		7,296,158
B6S2DP7D5	Various	CA		05/23/2024	.9.620	854,475		854,475
B6S2DPFS3	Various	AZ		05/23/2024	.8.570	6,915,995		6,915,995
B6S2DSSB0	Various	FL		05/23/2024	.6.398	31,496,866		22,698,103
B6S2EBG86	Various	FL		05/28/2024	.8.250	8,162,319		8,291,993
B6S2EYCC1	Various	CA		06/06/2024	.7.850	6,327,513		6,317,656
B6S2F2V21	Various	WA		06/13/2024	.7.830	1,930,116		1,930,116
B6S2F2WD6	Various	NJ		06/13/2024	.7.522	11,374,088		11,345,190
B6S2F5SJ1	Various	CA		06/26/2024	.7.870	8,548,751		8,540,136
B6S2F5Z07	Various	MA		06/13/2024	.9.290	29,184,638		16,952,337
0399999. Mortgages in good standing - Residential mortgages-all other						233,600,341	12,022,495	500,659,949
N216311	Salt Lake City	UT		07/19/2022	12.930			87,743,502
N226021	Arlington	VA		05/05/2022	.4.490		5,607,714	108,131,878
N226161	Flower Mound	TX		12/02/2022	10.830		1,421,453	12,609,864
N236011	Philadelphia	PA		06/23/2023	10.330		1,157,997	13,632,247
N236081	Bedford	MA		07/27/2023	10.580		1,528,926	85,130,891
N236101	Lancaster	TX		09/20/2023	10.080		1,183,704	26,571,427
N236131	Beverly Hills	CA		10/30/2023	10.830		217,716	34,951,375
N23A021	Willawong	AUS		08/02/2023	10.340		1,254,837	7,185,403
N23A031	Te Kauhata	NZL		12/21/2023	10.090		943,713	10,028,378
N244011	Edgerton	KS		05/23/2024	.8.250	29,999,995		52,733,598

SCHEDULE B - PART 2

1 Loan Number	2 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						
N246081	Darien	CT		06/25/2024	10.830	990,196		3,823,529
0599999. Mortgages in good standing - Commercial mortgages-all other						30,990,191	24,357,108	442,542,092
N226091	Brooklyn	NY		11/16/2022	14.580	4,371,891		293,999,510
0699999. Mortgages in good standing - Mezzanine Loans						0	4,371,891	293,999,510
0899999. Total Mortgages in good standing						299,547,372	40,756,432	1,269,893,466
1699999. Total - Restructured Mortgages						0	0	0
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						299,547,372	40,756,432	1,269,893,466

SCHEDULE B - PART 3

1 Loan Number	Location		4 Loan Type	5 Date Acquired	6 Disposal Date	7 Book Value/ Recorded Investment Excluding Accrued Interest Prior Year	Change in Book Value/Recorded Investment						14 Book Value/ Recorded Investment Excluding Accrued Interest on Disposal	15 Consid-eration	16 Foreign Exchange Gain (Loss) on Disposal	17 Realized Gain (Loss) on Disposal	18 Total Gain (Loss) on Disposal
	2 City	3 State					8 Unrealized Valuation Increase/(Decrease)	9 Current Year's (Amortization)/Accretion	10 Current Year's Other-Than-Temporary Impairment Recognized	11 Capitalized Deferred Interest and Other	12 Total Change in Book Value (8+9-10+11)	13 Total Foreign Exchange Change in Book Value					
NAG0531	Tucson	AZ.....		06/01/2021	..05/30/2024	16 ,457 ,127	0	0	0	0	0	16 ,457 ,127	16 ,457 ,127	16 ,457 ,127	0	0	
0199999. Mortgages closed by repayment						16 ,457 ,127	0	0	0	0	0	16 ,457 ,127	16 ,457 ,127	0	0	0	
Residential						16 ,457 ,127	0	0	0	0	0	106 ,442 ,241	106 ,280 ,959	(161 ,282)	(161 ,282)		
Commercial							0	0	0	0	0	- 3 ,162 ,846	- 3 ,162 ,846	0	0	0	
0299999. Mortgages with partial repayments						0	0	0	0	0	0	109 ,605 ,087	109 ,443 ,805	0	(161 ,282)	(161 ,282)	
BC01531674	Various	VA.....		..11/07/2023			0	0	0	0	0	17 ,018 ,141	17 ,018 ,141	0	0	0	
0499999. Mortgages transferred						0	0	0	0	0	0	17 ,018 ,141	17 ,018 ,141	0	0	0	
0599999 - Totals						16 ,457 ,127	0	0	0	0	0	143 ,080 ,355	142 ,919 ,073	0	(161 ,282)	(161 ,282)	

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE BA - PART 2

Showing Other Long-Term Invested Assets ACQUIRED AND ADDITIONS MADE During the Current Quarter

1	2	Location		5	6	7	8	9	10	11	12	13
		3	4									
CUSIP Identification	Name or Description	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 at Time of Acquisition	Additional Investment Made After Acquisition	Amount of Encumbrances	Commitment for Additional Investment	Percentage of Ownership
000000-00-0	2781 FIRST EAGLE DCF A FUNDING LLC	Boston	MA	First Eagle DCF Manager LLC		07/06/2023	1	0	400,000	0	2,000,000	1.330
000000-00-0	6118 Yukon Capital Partners II LP	Minneapolis	MN	Yukon Partners II LLC		07/17/2014	2	0	23,794	0	550,187	0.779
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	356,392	0	700,000	0.842
000000-00-0	6124 Yukon Capital Partners III LP	Minneapolis	MN	Yukon Partners III LLC		07/18/2017	2	0	10,410	0	841,280	0.029
000000-00-0	6133 PineBridge Private Credit Feeder LP	New York	NY	PineBridge Private Credit Gen Part LP		11/28/2018		0	298,544	0	1,820,548	9.870
000000-00-0	6137 Cyprum Parallel Investors V LP	Cleveland	OH	Cyprum V Management LLC		08/15/2019		0	131,318	0	679,463	3.398
1799999	Joint Venture Interests - Fixed Income - NAIC Designation Not Assigned by the SVO - Unaffiliated							0	1,220,458	0	6,591,478	XXX
000000-00-0	2416 Gryphon Partners VI LP	San Francisco	CA	Gryphon GenPar VI LP		11/26/2021	3	0	66,184	0	948,556	0.427
000000-00-0	2558 JFL-NG Continuation Fund	New York	NY	J F Lehman & Company		10/27/2021	3	0	24,882	0	2,029,775	2.018
000000-00-0	2584 One Equity Partners VIII LP	New York	NY	One Equity Partners		01/26/2022	3	0	282,344	0	221,209	0.408
000000-00-0	2624 KLCP Domestic Fund III LP	New York	NY	Kennedy Lewis GP III LLC		12/27/2021	3	0	499,913	0	1,456,571	0.920
000000-00-0	2644 SDC Digital Infrastructure Opportunity Fund III LP	New York	NY	SDC DIOF III GP LP		04/25/2022	1	0	291,055	0	1,854,701	0.328
000000-00-0	2656 Trident IX LP	Greenwich	CT	Trident Capital IX LP		06/24/2022	1	0	334,185	0	2,127,352	
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	3,700,116	
000000-00-0	2665 AEA Growth Equity Fund LP	San Francisco	CA	AEA Growth		04/29/2022	3	0	49,878	0	1,388,619	2.063
000000-00-0	2686 SER Capital Partners I LP	Houston	TX	Apollo Global Management		07/31/2021	3	0	363,013	0	1,164,668	1.951
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	4,388,275	3.573
000000-00-0	2693 Sunstone Partners III Main LP	San Mateo	CA	Sunstone Partners		04/12/2023	3	0	230,343	0	3,255,429	0.595
000000-00-0	2710 Asper DHUK LP	London SE1 9SG		Asper Investment Management		10/21/2022	3	0	18,256	0	3,026,552	1.216
000000-00-0	2717 Amersand 2022 LP	Wellesley	MA	ANP CF Management Company Ltd Partner		11/02/2022	3	0	363,750	0	4,393,750	0.404
000000-00-0	2733 Capital Z Partners (MGA) L.P.	New York	NY	Capital Z Partners		12/14/2022	3	0	27,495	0		1.054
000000-00-0	2750 IPCC Fund LP	Wilmington	DE	IPCC GP LLC		05/25/2023	1	0	667,369	0	1,421,210	0.400
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	15,739	0	4,862,692	0.170
000000-00-0	2774 Terramont SC Co-Invest LP	New York	NY	Terramont Infrastructure Partners		08/01/2023	3	0	10,614	0	1,021,277	12.760
000000-00-0	2776 JFL Equity Investors VI LP	New York	NY	JFL GP Investors IV LLC		09/05/2023	3	0	327,233	0	1,443,518	0.150
000000-00-0	2780 Amulet Capital Fund III LP	Greenwich	CT	Amulet Capital Fund II GP LP		08/01/2023	3	0	18,658	0	3,006,808	0.360
000000-00-0	2800 Blue Ocean Income Fund III LP	New York	NY	Blue Ocean GP LLC		11/07/2023	3	0	1,912,699	0	902,789	0.150
000000-00-0	2802 Ara USDCF US Co Invest LP	Houston	TX	Ara Infrastructure		02/16/2024	3	0	266,192	0	3,008,732	3.333
000000-00-0	2804 EIV Capital Fund V LP	Houston	TX	EIV Fund Advisors IV LLC		06/03/2024	3	896,759	0	0	4,130,982	0.500
000000-00-0	2813 OSP BELL AGGREGATOR LP	Wilmington	DE	OceanSound Partners II		04/30/2024	2	39,000	0	0	0	0.021
000000-00-0	2828 KLAR Partners II SCSp	London		KLAR Partners		05/21/2024	3	426,768	0	0	2,106,913	0.277
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	0	0	3,000,000	0.500
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	27	0	697,832	0.875
000000-00-0	6030 Snow Phipps II LP	New York	NY	Snow Phipps GP II LP		01/08/2010	3	0	26,649	0	81,872	1.063
000000-00-0	6031 Snow Phipps III LP	New York	NY	Snow Phipps GP III LLC		06/08/2016	3	0	45,342	0	1,179,950	1.066
000000-00-0	6034 Solamere Capital Fund II-A LP	Cincinnati	OH	Snow Phipps GP III LLC		08/19/2013	3	0	53,574	0	531,365	2.087
000000-00-0	6048 Gryphon Partners V LP	San Francisco	CA	Gryphon GenPar V LP		08/29/2018		0	66,454	0	0	0.570
000000-00-0	6058 Cintrifuse Syndicate Fund II, LLC	Cincinnati	OH	Cintrifuse Fund Management II LLC		09/18/2017	1	0	68,740	0	185,522	4.477
000000-00-0	6065 Corsair Boomer Investors LP	New York	NY	Corsair Boomer Management LP		06/25/2018		0	7,887	0	0	7.163
000000-00-0	6066 Corsair V Financial Services Capital Partners LP	New York	NY	Rivercrest Capital GP LLC		06/25/2018		0	10,657	0	2,699,709	1.360
000000-00-0	6067 NB Dyal IV US Investors LP	New York	NY	NB Dyal Associates IV LP		06/11/2018	3	0	32,952	0	4,828,491	0.273
000000-00-0	6073 Roark Capital Partners Fund V LP	Atlanta	GA	Roark Capital GenPar V LP		11/01/2018		0	402,326	0	536,502	0.144
000000-00-0	6076 Blackstone Tactical Opportunities Fund III LP	New York	NY	Blackstone Tac Opportunities Assoc 3 LLC		02/08/2019		0	31,237	0	0	0.243
000000-00-0	6078 TriArtisan PFC Partners LLC	New York	NY	Get Me Mears Group Holdings LLC		02/27/2019		0	8,550	0	0	10.110
000000-00-0	6086 Gallant Capital Partners I LP	Los Angeles	CA	CincyTech LLC		05/29/2020		0	17,330	0	859,112	3.145
000000-00-0	6089 Bridge Growth Partners II LP	New York	NY	Bridge Growth Partners LP		10/01/2021		0	441,424	0	1,322,508	5.086
000000-00-0	6092 Corsair Indigo Investors LP	New York	NY	Corsair Indigo Management LP		12/07/2020		0	14,982	0	580,826	5.993
000000-00-0	6095 Greenspring Opportunities VI LP	Owning Mills	MD	Greenspring Opportunities VI LP		01/21/2020		0	50,000	0	125,000	0.400
000000-00-0	6098 Dyal V US Investors LP	New York	NY	NB Dyal Associates V LP		10/01/2021		0	787,500	0	5,253,976	0.145
000000-00-0	6100 NB Strategic Co-Investment Partners IV LP	New York	NY	NB Alternatives Advisors LLC		01/29/2020		0	371,400	0	350,155	0.493
000000-00-0	6101 Revelstoke EPIC Fund I LP	Denver	CA	ROP Single Asset Fund I GP LLC		10/01/2021		0	4,247	0	150,836	0.410
000000-00-0	6102 Riverwood Capital Partners III LP	Menlo Park	CA	Riverwood Capital III LP		03/27/2020		0	48,927	0	421,914	0.682
000000-00-0	6104 Vivo Capital Fund IX LP	Palo Alto	CA	Vivo Capital IX LLC		09/09/2019		0	62,086	0	197,808	0.350

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE BA - PART 2

Showing Other Long-Term Invested Assets ACQUIRED AND ADDITIONS MADE During the Current Quarter

1	2	Location		5	6	7	8	9	10	11	12	13
		3	4									
CUSIP Identification	Name or Description	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 at Time of Acquisition	Additional Investment Made After Acquisition	Amount of Encumbrances	Commitment for Additional Investment	Percentage of Ownership
000000-00-0	6139 GreyLion Capital LP	New York	NY	GreyLion Capital GP LP .....	.....	08/20/2014 .....	.....	0	20,657	0	1,451,069	2.833
000000-00-0	6140 GreyLion Capital II LP	New York	NY	GreyLion Capital II GP LP .....	.....	02/28/2018 .....	.....	0	29,724	0	1,402,904	1.202
000000-00-0	6142 TriArtisan Orlando Partners LLC	New York	NY	TriArtisan Orlando IM LLC .....	.....	03/12/2018 .....	.....	0	16,552	0	.....	11.502
000000-00-0	6143 Private Equity Solutions SCSP	Luxembourg	DE	DIVS Investment SA .....	.....	12/16/2019 .....	.....	0	105,594	0	1,053,627	1.585
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	50,000,000	5.000
000000-00-0	2820 MEGAWATT ACQUISITION PARTNERS LLC	Wilmington	DE	MEGAWATT ACQUISITION PARTNERS LLC .....	.....	03/01/2024	2	(4,900)	4,900	0	.....	.....
1999999. Joint Venture Interests - Common Stock - Unaffiliated								6,732,173	8,943,235	0	128,771,473	XXX
000000-00-0	2773 Arrow Prince Co-Investment SCSp	Grand Duchy of Luxembourg .....	.....	Bow Advisers II S a r l .....	.....	07/25/2023	3	0	106,494	0	.....	16.667
000000-00-0	2792 Hayfin Maritime Yield Fund LP	George Town .....	.....	HAYFIN MARITIME YIELD FUND GP LIMITED .....	.....	10/25/2023	3	0	275,068	0	1,713,643	.....
000000-00-0	2844 CB Addison Holdings LLC	New York	NY	Centerbridge Partners LP .....	.....	06/30/2024	3	10,562,049	0	0	.....	100.000
000000-00-0	2849 CP Argo Marina Holdings	New York	NY	Centerbridge Partners LP .....	.....	06/30/2024	3	870,900	0	0	.....	43.478
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	3,051,400	1.688
000000-00-0	6110 Lubert-Adler Workforce Housing Fund LP	Philadelphia	PA	Lubert-Adler Group WH LP .....	.....	10/01/2021 .....	.....	0	750,000	0	375,000	3.855
2199999. Joint Venture Interests - Real Estate - Unaffiliated								11,432,949	1,820,741	0	5,140,043	XXX
000000-00-0	2458 Barings Innovations & Growth Real Estate Fund	Springfield	MA	Massachusetts Mutual Life Ins Co .....	.....	10/06/2021 .....	.....	0	.....	15,793,787	.....	.....
000000-00-0	2525 MM BIG Peninsula Co-Invest Member LLC	Hartford	CT	Massachusetts Mutual Life Ins Co .....	.....	06/30/2021 .....	.....	0	.....	2,601,565	12,597,873	.....
000000-00-0	2530 MM Horizon Savannah Member LLC	Springfield	MA	Massachusetts Mutual Life Ins Co .....	.....	10/25/2021 .....	.....	0	.....	3,641,488	.....	.....
000000-00-0	2676 Trailside MM Member II LLC	Hartford	CT	Massachusetts Mutual Life Ins Co .....	.....	07/26/2022	3	0	1,971,686	883,322	1,100,404	19.880
000000-00-0	2731 MM Kannapolis Industrial Member LLC	Boston	MA	Massachusetts Mutual Life Ins Co .....	.....	02/08/2023 .....	.....	0	.....	816,169	1,153,804	.....
000000-00-0	2530A MM Horizon Savannah Member II LLC	Springfield	MA	Massachusetts Mutual Life Ins Co .....	.....	03/15/2024	3	(7,303)	7,303	0	.....	.....
000000-00-0	2833 Barings Miller Investment Trust	Sydney .....	.....	Barings Australia Asset Management Pty .....	.....	06/28/2024	3	4,647,075	0	0	.....	9.330
2299999. Joint Venture Interests - Real Estate - Affiliated								4,639,772	1,978,989	23,736,331	14,852,081	XXX
000000-00-0	2461 Barings Real Estate Debt Income Fund LP	Hartford	CT	BREDIF GP LLC .....	.....	03/24/2021	3	0	1,504,144	0	.....	11.742
000000-00-0	2461A Barings Real Estate Debt Income Fund LP	Hartford	CT	BREDIF GP LLC .....	.....	03/24/2021	3	0	18,796,003	0	.....	.....
000000-00-0	2735 MALIC Debt Participations LLC	Charlotte	NC	MassMutual Ascend Life Insurance Company .....	.....	02/06/2023	3	0	6,880	0	.....	100.000
2499999. Joint Venture Interests - Mortgage Loans - Affiliated								0	20,307,027	0	0	XXX
000000-00-0	2590 Woodland Parent LLC	Wilmington	DE	Woodland Graham Holdings GP LLC .....	.....	12/01/2021	2	0	55,867	0	.....	0.016
000000-00-0	2673 KSL Capital Partners CV I LP	Denver	CO	KSL Capital Partners .....	.....	05/25/2022	1	0	1,205,852	0	154,057	0.578
000000-00-0	2742 OceanSound Partners Co-Invest II LP Series F	New York	NY	OceanSound Partners .....	.....	03/01/2023	3	0	361,064	0	.....	2.620
000000-00-0	2746 AEA SBP CF LP	New York	NY	AEA Small Business Private Equity .....	.....	03/24/2023	3	0	6,461	0	174,954	0.301
000000-00-0	2823 COFF PARENT LLC	Austin	TX	COFF PARENT LLC .....	.....	04/01/2024	2	9,000	.....	0	.....	0.009
000000-00-0	2824 FOREST ULTIMATE HOLDINGS LLC	Chicago	IL	FOREST ULTIMATE HOLDINGS LLC .....	.....	04/30/2024	2	51,000	.....	0	.....	1.685
000000-00-0	2847 CB Notepad Co-Invest LP	New York	NY	Centerbridge Partners LP .....	.....	06/30/2024	3	11,697,576	0	0	.....	100.000
000000-00-0	2616A Stork SPV LP	Greenwich	CT	Amulet Capital Fund II GP LP .....	.....	12/20/2021	3	0	15,890	0	.....	.....
2599999. Joint Venture Interests - Other - Unaffiliated								11,757,576	1,645,134	0	329,011	XXX
000000-00-0	8999 SN balancing	Springfield	MA	Massachusetts Mutual Life Ins Co .....	.....	01/01/2023 .....	.....	0	5,462	0	.....	.....
2799999. Surplus Debentures, etc - Unaffiliated								0	5,462	0	0	XXX
US3631-9W-A	7161 Galaxy XXIII CLO Ltd-GALXY 2017-23A SUBA	Springfield	MA	Massachusetts Mutual Life Ins Co .....	.....	05/09/2014	3	243,770	0	0	.....	.....
US0017-6K-A	7167 AMMC CLO 16 Ltd	Springfield	MA	Massachusetts Mutual Life Ins Co .....	.....	03/13/2014	3	0	2,343,160	0	.....	.....
US9291-7T-A	7177 Voya CLO 2018-2 Ltd-VOYA 2018-2A SUB	Springfield	MA	Massachusetts Mutual Life Ins Co .....	.....	03/31/2023	3	0	2,638,436	0	.....	.....
4699999. Residual Tranches or Interests with Underlying Assets Having Characteristics of Fixed Income Instruments - Unaffiliated								0	5,225,366	0	0	XXX
6099999. Total - Unaffiliated								29,922,698	18,860,395	0	140,832,005	XXX
6199999. Total - Affiliated								4,639,772	22,286,016	23,736,331	14,852,081	XXX
6299999 - Totals								34,562,470	41,146,412	23,736,331	155,684,086	XXX

STATEMENT AS OF JUNE 30, 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 Quarter

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	2781 FIRST EAGLE DCF A FUNDING LLC	Boston	MA	Distribution	07/06/2023	04/30/2024	0	0	0	0	0	0	0	0	206,177	0	0	0	0
000000-00-0	6117 Monarch Capital Partners III LP	New York	NY	Distribution	01/12/2015	06/18/2024	0	0	0	0	0	0	0	0	511,269	0	0	0	0
000000-00-0	6118 Yukon Capital Partners II LP	Minneapolis	MN	Distribution	07/17/2014	05/31/2024	0	0	0	0	0	0	0	0	12,060	0	0	0	0
000000-00-0	6123 NB Private Equity Credit Opportunities Fund LP	New York	NY	Distribution	06/07/2017	06/17/2024	0	0	0	0	0	0	0	0	1,594,147	0	0	0	0
000000-00-0	6124 Yukon Capital Partners III LP	Minneapolis	MN	Distribution	07/18/2017	05/31/2024	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	04/04/2024	0	0	0	0	0	0	0	0	240,289	0	0	0	0
000000-00-0	6126 Gryphon Mezzanine Partners LP	San Francisco	CA	Distribution	11/30/2017	05/31/2024	0	0	0	0	0	0	0	0	897,491	0	0	0	0
000000-00-0	6132 Sagard Credit Partners LP	Toronto		Distribution	10/09/2018	05/29/2024	0	0	0	0	0	0	0	0	1,303,846	0	0	0	0
000000-00-0	6133 PineBridge Private Credit Feeder LP	New York	NY	Distribution	11/28/2018	05/01/2024	0	0	0	0	0	0	0	0	(1,884,474)	0	0	0	0
000000-00-0	6137 Cyprium Parallel Investors V LP	Cleveland	OH	Distribution	08/15/2019	04/29/2024	0	0	0	0	0	0	0	0	51,306	0	0	0	0
1799999. Joint Venture Interests - Fixed Income - NAIC Designation Not Assigned by the SVO - Unaffiliated								0	0	0	0	0	0	0	2,939,241	0	0	0	0
000000-00-0	2060 Gryphon Partners IV LP	San Francisco	CA	Distribution	11/25/2015	05/28/2024	0	0	0	0	0	0	0	0	416,122	0	0	0	0
000000-00-0	2242 Gryphon Partners V LP	San Francisco	CA	Distribution	08/29/2018	05/31/2024	0	0	0	0	0	0	0	0	(1,138,775)	0	0	0	0
000000-00-0	2416 Gryphon Partners VI LP	San Francisco	CA	Distribution	11/26/2021	06/26/2024	0	0	0	0	0	0	0	0	2,914	0	0	0	0
000000-00-0	2518 MidOcean Partners VI LP	New York	NY	Distribution	11/09/2021	06/07/2024	0	0	0	0	0	0	0	0	11,549	0	0	0	0
000000-00-0	2584 One Equity Partners VIII LP	New York	NY	Distribution	01/26/2022	05/14/2024	0	0	0	0	0	0	0	0	67,077	0	0	0	0
000000-00-0	2622 OceanSound Partners Fund LP	New York	NY	Distribution	12/27/2021	05/31/2024	0	0	0	0	0	0	0	0	1,498,274	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	2665 AEA Growth Equity Fund LP	San Francisco	CA	Distribution	04/29/2022	06/28/2024	0	0	0	0	0	0	0	0	89,884	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	06/05/2024	0	0	0	0	0	0	0	0	271,861	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	31,628	0	0	0	0
000000-00-0	2756 IPCC Fund LP	Wilmington	DE	Distribution	05/25/2023	05/31/2024	0	0	0	0	0	0	0	0	4,775	0	0	0	0
000000-00-0	2802 Ara USDOF US Co Invest LP	Houston	TX	Distribution	02/16/2024	05/31/2024	0	0	0	0	0	0	0	0	270,145	0	0	0	0
000000-00-0	6009 LLA Equity Partners IV LP	Philadelphia	PA	Distribution	03/14/2014	06/13/2024	0	0	0	0	0	0	0	0	363,873	0	0	0	0
000000-00-0	6010 NB Secondary Opportunities Fund III LP																		
000000-00-0	6012 NB Strategic Co-Investment Partners III LP	New York	NY	Distribution	05/23/2013	06/24/2024	0	0	0	0	0	0	0	0	111,666	0	0	0	0
000000-00-0	6013 NB Secondary Opportunities Fund IV LP	New York	NY	Distribution	01/28/2016	04/05/2024	0	0	0	0	0	0	0	0	144,595	0	0	0	0
000000-00-0	6027 River Cities Capital Fund V LP	Davenport	IA	Distribution	04/19/2017	06/24/2024	0	0	0	0	0	0	0	0	368,379	0	0	0	0
000000-00-0	6031 Snow Phipps III LP	New York	NY	Distribution	12/31/2012	06/10/2024	0	0	0	0	0	0	0	0	117,101	0	0	0	0
000000-00-0	6032 Snow Phipps LP	New York	NY	Distribution	06/08/2016	04/08/2024	0	0	0	0	0	0	0	0	154,449	0	0	0	0
000000-00-0	6033 Solamere Capital Fund II LP	Boston	MA	Distribution	02/06/2007	06/03/2024	0	0	0	0	0	0	0	0	438,242	0	0	0	0
000000-00-0	6034 Solamere Capital Fund II-A LP	Boston	MA	Distribution	08/19/2013	06/25/2024	0	0	0	0	0	0	0	0	212,198	0	0	0	0
000000-00-0	6040 Vida Longevity Fund LP	Cincinnati	OH	Distribution	08/19/2013	06/25/2024	0	0	0	0	0	0	0	0	203,639	0	0	0	0
000000-00-0	6048 Gryphon Partners V LP	Austin	TX	Distribution	04/01/2015	05/15/2024	0	0	0	0	0	0	0	0	104,130	0	0	0	0
000000-00-0	6049 A&M Capital Opportunities Fund LP	San Francisco	CA	Distribution	08/29/2018	05/01/2024	0	0	0	0	0	0	0	0	1,138,775	0	0	0	0
000000-00-0	6063 Rivercrest Capital Partners LP	Greenwich	CT	Distribution	10/01/2021	06/20/2024	0	0	0	0	0	0	0	0	6,659	0	0	0	0
000000-00-0	6067 NB Dyal IV US Investors LP	Fort Worth	TX	Distribution	04/02/2018	06/28/2024	0	0	0	0	0	0	0	0	208,324	0	0	0	0
000000-00-0	6068 Trilantic Capital Partners VI LP	New York	NY	Distribution	06/11/2018	06/30/2024	0	0	0	0	0	0	0	0	272,668	0	0	0	0
000000-00-0	6073 Roark Capital Partners Fund V LP	New York	NY	Distribution	07/25/2018	05/31/2024	0	0	0	0	0	0	0	0	58,243	0	0	0	0
000000-00-0	6076 Blackstone Tactical Opportunities Fund III LP	Atlanta	GA	Distribution	11/01/2018	05/24/2024	0	0	0	0	0	0	0	0	91,397	0	0	0	0
000000-00-0	6086 Gallant Capital Partners I LP	New York	NY	Distribution	02/08/2019	06/25/2024	0	0	0	0	0	0	0	0	143,799	0	0	0	0
000000-00-0	6091 CCA Life Settlements Fund II LP	Los Angeles	CA	Distribution	05/29/2020	06/05/2024	0	0	0	0	0	0	0	0	135,323	0	0	0	0
000000-00-0	6093 Foresite Capital Fund V LP	Dublin	CA	Distribution	12/16/2019	04/30/2024	0	0	0	0	0	0	0	0	99,390	0	0	0	0
000000-00-0	6098 Dyal V US Investors 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	6099 NB Strategic Capital LP	New York	NY	Distribution	10/01/2021	06/14/2024	0	0	0	0	0	0	0	0	44,495	0	0	0	0
000000-00-0	6104 Vivo Capital Fund IX LP	New York	NY	Distribution	03/05/2020	06/30/2024	0	0	0	0	0	0	0	0	390,524	0	0	0	0
000000-00-0	6104 GreyLion Capital II LP	Palo Alto	CA	Distribution	09/09/2019	05/20/2024	0	0	0	0	0	0	0	0	129,313	0	0	0	0
000000-00-0	6104 GreyLion Capital II LP	New York	NY	Distribution	02/28/2018	06/30/2024	0	0	0	0	0	0	0	0	1,889,612	0	0	0	0
1999999. Joint Venture Interests - Common Stock - Unaffiliated								0	0	0	0	0	0	0	8,375,081	0	0	0	0
000000-00-0	2792 Hayfin Maritime Yield Fund LP	George Town		Distribution	10/25/2023	06/30/2024	0	0	0	0	0	0	0	0	182,205	0	0	0	0

STATEMENT AS OF JUNE 30, 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 Quarter

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	6107 Lubert-Adler Real Estate Fund VII-B LP	Philadelphia	PA.....	Distribution	04/07/2017	05/24/2024	0	0	0	0	0	0	0	0	263,049	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	6112 Hillpointe Workforce Housing Partnership II LP	WINTER PARK	FL.....	Distribution	11/03/2020	05/20/2024	0	0	0	0	0	0	0	0	230,653	0	0	0	0
2199999. Joint Venture Interests - Real Estate - Unaffiliated							0	0	0	0	0	0	0	0	2,130,233	0	0	0	0
000000-00-0	2530 MM Horizon Savannah Member II LLC	Springfield	MA.....	Distribution	10/25/2021	06/25/2024	0	0	0	0	0	0	0	0	2,231,566	0	0	0	0
000000-00-0	2530 MM Horizon Savannah Member LLC	Springfield	MA.....	Distribution	10/25/2021	06/25/2024	0	0	0	0	0	0	0	0	188,133	0	0	0	0
2299999. Joint Venture Interests - Real Estate - Affiliated							0	0	0	0	0	0	0	0	2,419,700	0	0	0	0
000000-00-0	2461 Barings Real Estate Debt Income Fund LP	Hartford	CT.....	Distribution	03/24/2021	06/30/2024	0	0	0	0	0	0	0	0	1,263,025	0	0	0	0
000000-00-0	2461 Barings Real Estate Debt Income Fund LP	Hartford	CT.....	Distribution	03/24/2021	06/30/2024	0	0	0	0	0	0	0	0	3,883,298	0	0	0	0
2499999. Joint Venture Interests - Mortgage Loans - Affiliated							0	0	0	0	0	0	0	0	5,146,324	0	0	0	0
000000-00-0	2616 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	06/27/2024	0	0	0	0	0	0	0	0	1,371,429	0	0	0	0
000000-00-0	2707 TSS Co-Invest Holdings LP	Beverly Hills	CA.....	Distribution	09/09/2022	06/30/2024	0	0	0	0	0	0	0	0	7,614	0	0	0	0
000000-00-0	2765 Energy Acquisition Vehicle II LP	Wilmington	DE.....	Distribution	06/01/2023	06/30/2024	0	0	0	0	0	0	0	0	948,872	0	0	0	0
000000-00-0	2782 Q-Energy V FCR	Madrid		Distribution	08/18/2023	05/09/2024	0	0	0	0	0	0	0	0	47,750	(2,212)	0	(2,212)	0
2599999. Joint Venture Interests - Other - Unaffiliated							0	0	0	0	0	0	0	0	2,548,392	(2,212)	0	(2,212)	0
US0561-6M-A	7111 BABSON CLO LTD 2015-II SUB NT			Distribution	05/09/2014	04/30/2024	0	0	0	0	0	0	0	0	219,626	0	0	0	0
	7135 AMMC CLO XI Ltd-AMMC 2012-11A			Distribution	05/09/2014	06/30/2024	0	0	0	0	0	0	0	0	1,939,020	0	0	0	0
US2682-9D-A	7146 Man GLG US CLO-GLGU 2018-1A SUB			Distribution	05/09/2014	05/31/2024	0	0	0	0	0	0	0	0	916,858	0	0	0	0
US5595-3P-A	7147 Magnetite XVI Ltd-MAGNE 2015-16A SUB			Distribution	05/09/2014	04/30/2024	0	0	0	0	0	0	0	0	(700,674)	(350,337)	0	(350,337)	0
	7159 Oaktree CLO 2015-1 Ltd-OAKCL 2015-1A SUB			Distribution	05/09/2014	02/28/2024	0	0	0	0	0	0	0	0	0	0	0	0	0
US6738-9Y-A	7164 JCP Direct Lending CLO 2022 LLC			Distribution	03/13/2014	05/31/2024	0	0	0	0	0	0	0	0	761,544	0	0	0	0
46655H-AK-9	7167 AMMC CLO 16 Ltd			Distribution	03/13/2014	04/30/2024	0	0	0	0	0	0	0	0	29,006	0	0	0	0
US0017-6K-A	7170 RT balancing	Springfield	MA.....	Distribution	01/01/2023	06/30/2024	0	0	0	0	0	0	0	0	185,721	0	0	0	0
00834H-10-4	7171 Affirm Asset Securitizat-2022-X1 CERT			Distribution	03/31/2023	06/30/2024	0	0	0	0	0	0	0	0	150,958	0	0	0	0
	7206 Velocity Commercial Capi-VCC 2022-2 M6			Distribution	02/28/2024	05/31/2024	0	0	0	0	0	0	0	0	134,746	0	0	0	0
92259U-AG-3			MA.....	Distribution	02/28/2024	05/31/2024	0	0	0	0	0	0	0	0	134,746	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	0	3,636,805	(350,337)	0	(350,337)	0
6099999. Total - Unaffiliated							0	0	0	0	0	0	0	0	19,629,752	(352,549)	0	(352,549)	0
6199999. Total - Affiliated							0	0	0	0	0	0	0	0	7,566,023	0	0	0	0
6299999 - Totals							0	0	0	0	0	0	0	0	27,195,775	(352,549)	0	(352,549)	0

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 3

Show All Long-Term Bonds and Stock Acquired During the Current Quarter

1	2	3	4	5	6	7	8	9	10
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol
30767E-AE-9	Farm Credit Bank of Texa-FARMCB 7 3/4 PE		05/21/2024	VARIOUS		15,100,625	15,000,000	0	2.B FE
575898-CS-8	Massachusetts Port Autho-REVENUE BONDS		05/08/2024	STIFEL NICOLAUS		2,083,510	2,015,000	44,781	1.F FE
0909999999 Subtotal - Bonds - U.S. Special Revenues						17,184,135	17,015,000	44,781	XXX
008513-AA-1	Agree LP-SENIOR UNSECURED		04/23/2024	SEAPORT GROUP		4,241,750	5,000,000	9,667	2.B FE
009158-BJ-4	Air Products and Chemica-SENIOR UNSECURE		05/07/2024	BNP PARIBAS		9,880,200	10,000,000	120,069	1.F FE
02666T-AB-3	American Homes 4 Rent LP-SENIOR UNSECURE		04/23/2024	GOLDMAN		6,375,233	6,593,000	62,817	2.B FE
03027X-BW-9	American Tower Corp-SENIOR UNSECURED		04/09/2024	GOLDMAN		19,029,032	20,900,000	61,133	2.C FE
036752-AR-4	Anthem Inc-SENIOR UNSECURED		06/25/2024	WELLS FARGO		3,027,985	3,225,000	13,572	2.A FE
04020R-AA-6	Ares Direct Lending CLO -ARESDL 2024-1A		04/26/2024	BNP PARIBAS		15,000,000	15,000,000	0	1.A Z
04685A-3Q-2	ATH 5.583 01/09/29		04/09/2024	BOFAMLSEC		8,020,080	8,000,000	114,141	1.E FE
049560-AT-2	Atmos Energy Corp-SENIOR UNSECURED		05/07/2024	GOLDMAN		1,842,761	2,285,000	10,854	1.G FE
053332-AW-2	AutoZone Inc-SENIOR UNSECURED		04/23/2024	U. S. BANCORP		10,236,050	11,000,000	8,021	2.B FE
05642*-AA-1	BWIC TERMINALS INC Senior Secured Notes A		06/17/2024	DIRECT		21,875,000	21,875,000	0	2.B Z
07336P-AA-2	Bayview Opportunity Mast-BVCLN 2024-EDU1		04/23/2024	BOFAMLSEC		13,500,000	13,500,000	0	1.A FE
07336P-AC-8	Bayview Opportunity Mast-BVCLN 2024-EDU1		04/23/2024	BOFAMLSEC		2,500,000	2,500,000	0	1.F FE
08661U-AA-4	Beth Israel Lahey Health-SENIOR UNSECURE		05/08/2024	SUNTRUST CAPITAL MAR		1,376,117	1,564,000	12,442	1.G FE
095828-AA-3	Blue Owl RE Net Lease Pr Senior Secured		04/24/2024	DIRECT		30,000,000	30,000,000	0	2.A PL
101137-BA-4	Boston Scientific Corp-SENIOR UNSECURED		04/09/2024	TORONTO DOMINION SEC		4,377,150	5,000,000	47,847	2.A FE
10334*-AT-9	BOYD WATTERSON GSA FUND Senior Notes		05/23/2024	DIRECT		22,500,000	22,500,000	0	2.B Z
11135F-AQ-4	Broadcom Inc-SENIOR UNSECURED		04/24/2024	BOFAMLSEC		4,935,370	5,325,000	98,831	2.C FE
11135F-BT-7	Broadcom Inc-SENIOR UNSECURED		04/23/2024	BOFAMLSEC		5,699,117	6,270,000	7,228	2.C FE
12510H-AM-2	CARS-DB5 LP-CAUTO 2021-1A A3		05/01/2024	CANTOR		654,468	733,234	704	1.E FE
12543D-BN-9	CHS/Community Health Sys-FIRST LIEN		05/21/2024	U B S SECURITIES		3,303,780	3,239,000	159,487	4.C FE
12582B-AS-3	CNH Industrial Capital L-SENIOR UNSECURE		04/23/2024	BOFAMLSEC		15,018,894	15,206,000	57,804	2.A FE
126650-EB-2	CVS 5.4 06/01/29		05/07/2024	BOFAMLSEC		14,985,450	15,000,000	0	2.B FE
14310Q-AN-8	Carlyle Direct Lending C-CGFM 2015-1A A1		05/30/2024	CITIGROUP GLOBAL MAR		50,000,000	50,000,000	0	1.A Z
14310Q-AS-7	Carlyle Direct Lending C-CGFM 2015-1A A2		05/30/2024	CITIGROUP GLOBAL MAR		15,000,000	15,000,000	0	1.D Z
14576A-AC-6	Cars Net Lease Mortgage -CARM 2020-1A A3		05/07/2024	BARCLAYS CAPITAL INC		570,456	639,167	1,321	1.F FE
14913U-AJ-9	Caterpillar Financial Se-SENIOR UNSECURE		04/09/2024	TORONTO DOMINION SEC		5,001,150	5,000,000	29,639	1.F FE
16144C-AG-1	Chase Auto Owner Trust-CHAOT 2024-2A D		04/18/2024	JP MORGAN SECURITIES		7,259,499	7,260,000	0	2.C FE
16308N-AA-2	Cheever Escrow Issuer LL-SECURED		06/06/2024	VARIOUS		2,030,000	2,000,000	26,125	4.C FE
17136M-AA-0	Church & Dwight Co Inc-SENIOR UNSECURED		04/09/2024	WELLS FARGO		6,607,760	8,000,000	59,289	2.A FE
20268A-AB-8	Commonbond Student Loan -CBSLT 2021-BGS		05/20/2024	BARCLAYS CAPITAL INC		5,830	7,067	3	1.G FE
20268J-AK-9	CommonSpirit Health-SECURED		04/23/2024	SOUTHWEST SEC.		18,798,371	18,466,000	542,029	1.G FE
209111-FM-0	ED 3 1/8 11/15/27		04/24/2024	BOFAMLSEC		9,115,628	9,765,000	136,473	1.G FE
22160K-AP-0	Costco Wholesale Corp-SENIOR UNSECURED		04/09/2024	TORONTO DOMINION SEC		4,182,300	5,000,000	38,000	1.E FE
22228*-AF-3	The Corbin District Owner LLC 2023-1 SU		06/26/2024	DIRECT		76,973	76,973	0	1.F Z
23110A-AB-2	Cumulus Media New Holdin-FIRST LIEN		05/02/2024	EXCHANGE OFFER		2,500,412	2,490,000	56,492	5.A FE
25179M-BF-9	DVN 4 1/2 01/15/30		04/09/2024	BARCLAYS CAPITAL INC		3,391,063	3,537,000	38,023	2.B FE
25461L-AA-0	DTV 5 7/8 08/15/27-SECURED		05/15/2024	VARIOUS		5,400,935	5,808,000	70,833	3.B FE
255123-A*-2	Diversified ABS Phase VI Senior Secured		05/29/2024	BARCLAYS CAPITAL INC		22,338,000	22,338,000	0	1.F Z
000000-00-0	Diversified ABS Phase VI Senior Secured		05/29/2024	BARCLAYS CAPITAL INC		5,172,000	5,172,000	0	2.A Z
25755T-AN-0	Domino's Pizza Master Is-DPABS 2021-1A A		04/18/2024	JP MORGAN SECURITIES		2,546,772	2,917,500	18,769	2.A FE
26844Q-AA-5	EFMT 2023-1-EFMT 2023-1 A1		04/16/2024	VARIOUS		(24,483)	(24,778)	(24)	1.A FE
278062-AD-6	EATON CORP-SR UNSECURED		04/09/2024	U. S. BANCORP		1,387,065	1,479,000	26,129	1.G FE
29273V-AT-7	Energy Transfer LP-SENIOR UNSECURED		04/23/2024	BOFAMLSEC		9,945,078	9,611,000	246,042	2.B FE
293658-AG-1	Entergy New Orleans LLC First Mortgage B		05/23/2024	BARCLAYS CAPITAL INC		25,000,000	25,000,000	0	2.B Z
302704-AB-7	FLYWHHEEL ENERGY ASSET IS Class B Note		06/24/2024	DIRECT		10,000,000	10,000,000	0	1.F Z

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 3

Show All Long-Term Bonds and Stock Acquired During the Current Quarter

1	2	3	4	5	6	7	8	9	10
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol
31740J-AA-6	FINANCE OF AMERICA STRUC-FASST 2023-RMF1		..05/25/2024	PAYUP		16,764	16,764	0	1.A FE
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	2.B FE
34535Q-AC-9	Ford Credit Auto Owner T-FORDR 2023-1 C		..05/02/2024	BOFAMILSEC		2,967,773	3,000,000	9,785	1.F FE
372460-AA-3	Genuine Parts Co-SENIOR UNSECURED		..04/09/2024	U. S. BANCORP		6,467,360	8,000,000	66,667	2.B FE
373298-BR-8	GEORGIA-PACIFIC LLC-SENIOR UNSECURED		..04/09/2024	JP MORGAN SECURITIES		17,027,550	15,000,000	471,458	1.G FE
417558-AB-9	Harvest Midstream I LP-SENIOR UNSECURED		..06/05/2024	WELLS FARGO		3,045,000	3,000,000	18,750	3.C FE
43283Y-AB-9	Hilton Grand Vacations T-HGVT 2024-1B B		..04/15/2024	BOFAMILSEC		1,899,648	1,900,000	0	1.F FE
43324@-AH-0	HINES GLOBAL REAL ESTATE Senior Note		..06/20/2024	DIRECT		15,750,000	15,750,000	0	1.F PL
437076-CZ-3	Home Depot Inc/The-SENIOR UNSECURED		..06/25/2024	MORGAN		10,013,200	10,000,000	1,431	1.F FE
44961@-AA-1	iGPS Logistics LLC Senior Secured Note S		..04/18/2024	JEFFGROUPLLC		6,551,700	6,551,700	0	2.B Z
44961@-AB-9	iGPS Logistics LLC Senior Secured Note S		..04/18/2024	JEFFGROUPLLC		12,718,750	12,718,750	0	2.B Z
451102-CG-0	Icahn Enterprises LP / I-SENIOR UNSECURE		..06/26/2024	VARIOUS		2,711,938	2,749,000	4,934	3.C FE
45687V-AE-6	Ingersoll Rand Inc-SENIOR UNSECURED		..05/08/2024	VARIOUS		21,871,678	21,880,000	0	2.B FE
45866F-AJ-3	Intercontinental Exchang-SENIOR UNSECURED		..05/07/2024	JP MORGAN SECURITIES		4,781,200	5,000,000	25,000	1.G FE
461070-AQ-7	Interstate Power & Light-SENIOR UNSECURE		..04/09/2024	DEUTSCHE BANK SECURI		4,668,950	5,000,000	5,000	2.A FE
46188B-AD-4	Invitation Homes Operati-SENIOR UNSECURE		..04/23/2024	WELLS FARGO		2,234,300	2,500,000	2,882	2.B FE
46630W-AL-4	JP Morgan Mortgage Trust-JPMIT 2007-S2 1		..04/24/2024	PAYUP		3,191	3,191	0	4.C FM
47587#-AA-6	JEN HoldCo 23 LLC Senior Secured Note		..05/14/2024	DIRECT		1,245,370	1,245,370	0	2.B PL
47587*-AA-0	JEN HoldCo 24 LLC Senior Secured Notes		..06/14/2024	DIRECT		7,830,000	7,830,000	0	2.B PL
49271V-AT-7	Keurig Dr Pepper Inc-SENIOR UNSECURED		..04/09/2024	TORONTO DOMINION SEC		4,986,050	5,000,000	23,847	2.B FE
548661-EP-8	Lowe's Cos Inc-SENIOR UNSECURED		..06/25/2024	BOFAMILSEC		4,962,250	5,000,000	56,667	2.A FE
55336V-AR-1	MPLX LP-SENIOR UNSECURED		..04/23/2024	JP MORGAN SECURITIES		7,840,142	8,262,000	36,720	2.B FE
55400W-AA-7	MVII 2023-2 LLC-MVIIOT 2023-2A A		..05/07/2024	BOFAMILSEC		7,066,035	6,941,309	22,640	1.A FE
571676-AB-1	MARS 3.2 04/01/30		..05/07/2024	U. S. BANCORP		1,878,028	2,070,000	6,992	1.E FE
571676-AU-9	Mars Inc-SENIOR UNSECURED		..04/09/2024	DEUTSCHE BANK SECURI		4,912,400	5,000,000	110,438	1.E FE
57763R-AD-9	Mauser Packaging Solutio-SECURED		..04/16/2024	EXCHANGE OFFER		4,882,962	4,949,000	66,038	4.B FE
67080L-AC-9	Nuveen LLC-SENIOR UNSECURED		..04/23/2024	VARIOUS		20,042,780	20,000,000	19,425	2.A FE
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	1.A FE
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	1.C FE
70338C-10-9	Patrons' Legacy-PATRLN 6.673 12/04/23		..05/30/2024	DIRECT		1,103,347	1,103,347	5,317	1.G FE
709599-BU-7	Penske Truck Leasing Co -SENIOR UNSECURE		..06/25/2024	U. S. BANCORP		2,508,975	2,500,000	12,778	2.B FE
718547-AK-8	Phillips 66 Co-SENIOR UNSECURED		..05/08/2024	JP MORGAN SECURITIES		10,064,314	11,198,000	142,075	2.A FE
72303#-AA-7	Pinebridge Private Credi Term Loan FAC		..05/30/2024	DIRECT		1,031,553	1,031,553	0	1.E PL
744573-AV-8	Public Service Enterpris-SENIOR UNSECURE		..04/24/2024	CITIGROUP GLOBAL MAR		10,242,612	10,100,000	264,241	2.B FE
758750-AM-5	Regal Rexnord Corp-SENIOR UNSECURED		..05/02/2024	EXCHANGE OFFER		25,253,556	25,000,000	71,424	2.C FE
76209P-AD-5	RGA Global Funding-SECURED		..04/23/2024	SUNTRUST CAPITAL MAR		5,927,940	6,000,000	95,333	1.E FE
776743-AL-0	Roper Technologies Inc-SENIOR UNSECURED		..04/23/2024	VARIOUS		11,035,460	14,000,000	47,639	2.A FE
78403D-AT-7	SBA Tower Trust-SBATOW 1.631 11/15/26		..05/07/2024	BAIRD		6,323,800	7,000,000	7,611	1.F FE
784710-AA-3	SSM Health Care Corp-SENIOR UNSECURED		..05/21/2024	JP MORGAN SECURITIES		2,890,500	3,000,000	54,796	1.E FE
785592-AX-4	Sabine Pass Liquefaction-FIRST LIEN		..04/09/2024	BOFAMILSEC		4,785,800	5,000,000	91,250	2.A FE
78573N-AH-5	Sabre GLBL Inc-SECURED		..05/31/2024	CITIGROUP GLOBAL MAR		389,000	400,000	21,000	4.C FE
78573N-AJ-1	Sabre GLBL Inc-FIRST LIEN		..06/04/2024	U B S SECURITIES		553,500	600,000	13,513	4.C FE
79582M-AA-9	Saluda Grade Alternative-GRADE 2024-FIG5		..04/05/2024	NOMURA SECURITIES IN		9,999,986	10,000,000	19,113	1.A FE
806851-AK-7	Schlumberger Holdings Co-SENIOR UNSECURE		..04/23/2024	SUNTRUST CAPITAL MAR		8,262,996	8,685,000	148,658	2.A FE
81743C-AE-5	Sequoia Mortgage Trust 2-SEMT 2024-5 A5		..05/07/2024	BOFAMILSEC		4,971,873	5,000,000	10,833	1.A FE
82340*-AA-5	Shepherds Flat Funding T Trust A-1-A Cer		..05/02/2024	DIRECT		1,941,097	1,900,000	0	2.C FE
82667C-AC-9	Signal Rail I LLC-SRL 2024-1A A		..05/13/2024	WELLS FARGO		8,995,275	9,000,000	0	1.C FE
83206E-AA-5	SMB Private Education Lo-SMB 2024-C A1A		..05/07/2024	BOFAMILSEC		9,998,200	10,000,000	0	1.A FE

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 3

Show All Long-Term Bonds and Stock Acquired During the Current Quarter

1	2	3	4	5	6	7	8	9	10
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol
83206N-AC-1	SMB Private Education Lo-SMB 2022-B B		04/17/2024	GOLDMAN		1,418,555	1,500,000	758	1.D FE
85253#-AN-1	STAG Industrial Operatin Gtd Senior Note		05/28/2024	BANK OF AMERICA CORP		8,000,000	8,000,000	0	2.B Z
855244-AK-5	Starbucks Corp-SENIOR UNSECURED		06/25/2024	BARCLAYS CAPITAL INC		4,751,850	5,000,000	3,743	2.A FE
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	1.A FE
863667-BC-4	Stryker Corp-SENIOR UNSECURED		05/07/2024	U. S. BANCORP		5,755,804	5,800,000	117,990	2.A FE
86746F-AA-2	Sunnova Hestia II Issuer-SNVA 2024-GRID1		05/22/2024	SMBC NIKKO SECURITIE		9,999,644	10,000,000	0	1.A FE
87251F-AD-1	TOW DIRECT LENDING STRUCTURED SOLUTIONS		05/23/2024	DIRECT		658,993	658,993	0	2.B FE
872540-AW-9	TJX Cos Inc/The-SENIOR UNSECURED		04/09/2024	GOLDMAN		6,600,918	8,200,000	53,209	1.F FE
874054-AG-4	Take-Two Interactive Sof-SENIOR UNSECURE		04/23/2024	TORONTO DOMINION SEC		5,020,318	5,273,000	5,961	2.B FE
87612E-BP-0	Target Corp-SENIOR UNSECURED		04/23/2024	VARIOUS		12,134,130	12,575,000	50,625	1.F FE
88632Q-AE-3	Cloud Software Group Inc-SECURED		05/29/2024	VARIOUS		7,437,258	7,830,000	72,638	4.B FE
89236T-MD-4	Toyota Motor Credit Corp-SENIOR UNSECURE		06/25/2024	VARIOUS		7,012,600	7,000,000	40,444	1.E FE
89680H-AE-2	Triton Container Finance-TCF 2021-1A A		05/10/2024	MTSUTBSHI UFJ SEC I		11,776,484	13,459,600	16,007	1.F FE
89683L-AA-8	TRP - TRIP Rail Master F-TRP 2021-2 A		05/08/2024	MIZUHO SECURITIES		3,150,435	3,485,657	4,788	1.F FE
902494-BJ-1	Tyson Foods Inc-SENIOR UNSECURED		06/25/2024	JP MORGAN SECURITIES		2,581,656	2,643,000	33,772	2.B FE
90352W-AD-6	ITE Rail Fund Levered LP-SERIES 21-1A CL		04/03/2024	PAYUP		(50,665)	(50,665)	0	1.F FE
000000-00-0	United Power, Inc. First Mortgage Bond S		04/25/2024	DIRECT		7,894,750	7,894,750	0	1.F Z
911358-AB-1	United Power, Inc. First Mortgage Bonds		04/25/2024	DIRECT		4,500,000	4,500,000	0	1.F FE
92343V-DD-3	Verizon Communications I-SENIOR UNSECURE		06/25/2024	MORGAN		6,142,833	6,469,000	61,792	2.A FE
927804-FZ-2	Virginia Electric & Powe-SENIOR UNSECURE		04/23/2024	VARIOUS		6,661,607	7,033,000	17,817	2.A FE
92839H-AA-4	Vista Point Securitizati-VSTA 2024-CES1		05/10/2024	PIPERJAFFRAY		7,899,919	7,900,000	62,995	1.A FE
98138H-AH-4	Workday Inc-SENIOR UNSECURED		04/09/2024	JP MORGAN SECURITIES		8,672,409	9,256,000	9,513	2.B FE
BGS2GP-MS-2	FLYWHHEEL ENERGY ASSET IS Class A Note		06/24/2024	DIRECT		40,000,000	40,000,000	0	2.B Z
66369#-AB-7	NSG UK Enterprises Limit Senior Note Ser		04/17/2024	BOFAMLSEC		26,562,500	26,562,513	0	2.B Z
T3420#-AE-1	CRIF SpA Senior Unsecured Notes		05/07/2024	BNP PARIBAS		26,935,000	26,935,011	0	2.B Z
071734-AQ-0	Bausch Health Cos Inc-FIRST LIEN	A.	06/18/2024	DLB ACCOUNTING ONLY		(1,964,829)	(2,451,000)	0	5.A FE
071734-AR-8	Bausch Health Cos Inc-BHCON 14 10/15/30	A.	06/18/2024	DLB ACCOUNTING ONLY		(392,806)	(490,000)	0	5.C FE
68251P-AA-5	1375209 BC Ltd-FIRST LIEN	A.	06/18/2024	VARIOUS		(1,104,665)	(1,378,000)	0	5.B
00176B-AM-5	AMMC CLO XIII Ltd-AMMC 2013-13A B3LR	D.	04/24/2024	PAYUP		6,627	0	0	6. FE
03332Q-AA-3	Anchorage Capital CLO Lt-ANCHC 2024-29A	D.	04/09/2024	CIBC OPPENHEIMER		15,000,000	15,000,000	0	1.A Z
04020T-AE-4	Ares Loan Funding VI Ltd-ARES 2024-ALF6A	D.	05/24/2024	MORGAN		10,000,000	10,000,000	0	1.D Z
05876N-AA-7	Ballyrock CLO 26 Ltd-BALLY 2024-26A A1A	D.	04/29/2024	MORGAN		12,950,000	12,950,000	0	1.A Z
06761V-AQ-0	Barings Clo Ltd 2019-IV-BABSN 2019-4A AR	D.	05/13/2024	JP MORGAN SECURITIES		5,750,000	5,750,000	39,597	1.A FE
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	1.C FE
06761V-AU-1	Barings Clo Ltd 2019-IV-BABSN 2019-4A CR	D.	05/13/2024	JP MORGAN SECURITIES		1,000,000	1,000,000	8,856	1.F FE
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	1.A Z
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	1.D Z
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	1.F Z
08182Y-AA-6	Benefit Street Partners -BSP 2024-35A A	D.	04/25/2024	JP MORGAN SECURITIES		16,000,000	16,000,000	0	1.A Z
08182Y-AC-2	Benefit Street Partners -BSP 2024-35A B	D.	04/25/2024	JP MORGAN SECURITIES		10,000,000	10,000,000	0	1.D Z
12478C-AQ-4	CBAM 2018-8 Ltd/KY-CBAM 2018-8A A1R	D.	05/10/2024	MORGAN		18,000,000	18,000,000	0	1.A FE
12478C-AU-5	CBAM 2018-8 Ltd/KY-CBAM 2018-8A B1R	D.	05/10/2024	MORGAN		7,750,000	7,750,000	0	1.C FE
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	1.A Z
12563E-AN-3	CIFC Funding 2021-I Ltd-CIFC 2021-1A AR	D.	05/31/2024	BOFAMLSEC		12,000,000	12,000,000	0	1.A Z
12661P-AC-3	CSL Finance Plc-SENIOR UNSECURED	D.	04/09/2024	DEUTSCHE BANK SECURI		4,720,550	5,000,000	96,806	1.G FE
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	1.C FE
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	1.C FE
14115D-AA-2	Carbon Revolution Ltd-SECURED	D.	05/23/2024	VARIOUS		19,500	20,000	61	1.E PL
14987V-AQ-2	CBAM 2019-9 Ltd-CBAM 2019-9A B1R	D.	04/08/2024	MORGAN		10,000,000	10,000,000	0	1.C FE
25243Y-BE-8	Diageo Capital PLC-SENIOR UNSECURED	D.	04/09/2024	CITIGROUP GLOBAL MAR		8,117,500	10,000,000	95,625	1.G FE
25255W-AA-6	Diameter Capital CLO 7 L-DCLC 2024-7A A1	D.	05/21/2024	MORGAN		15,000,000	15,000,000	0	1.A Z
25255W-AA-8	Diameter Capital CLO 7 L-DCLC 2024-7A A2	D.	05/21/2024	MORGAN		10,000,000	10,000,000	0	1.D Z

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 3

Show All Long-Term Bonds and Stock Acquired During the Current Quarter

1	2	3	4	5	6	7	8	9	10
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol
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	1.A Z
29002G--AL-5	Elmwood CLO IV Ltd-ELMW4 2020-1A AR	D	05/06/2024	BNP PARIBAS		15,000,000	15,000,000	0	1.A FE
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	1.D Z
37147X--AC-7	Generate CLO 15 Ltd-GNRT 2024-15A B	D	04/03/2024	DEUTSCHE BANK		9,500,000	9,500,000	0	1.C FE
37149Y--AG-4	Generate CLO 16 Ltd-GNRT 2024-16A B	D	05/17/2024	BOFAMLSEC		10,000,000	10,000,000	0	1.C FE
38172U--AE-5	Golub Capital Partners C-GOCAP 2018-38A	D	06/07/2024	BNP PARIBAS		20,000,000	20,000,000	0	1.C FE
38190B--AA-3	Golub Capital Partners C-GOBSL 2024-74A	D	05/20/2024	MITSUBISHI UFJ SEC I		11,250,000	11,250,000	0	1.A FE
38190B--AC-9	Golub Capital Partners C-GOBSL 2024-74A	D	05/20/2024	MITSUBISHI UFJ SEC I		6,500,000	6,500,000	0	1.D Z
39843P--ZZ-8	GRIFOLS SA 1st Lien Secured	B	05/15/2024	DIRECT		10,708,920	10,872,000	38,505	4.B Z
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	1.C FE
46656T--AD-8	JCP Direct Lending CLO 2-JCPDL 2023-1I A	D	06/11/2024	VARIOUS		6,314,948	6,314,948	(44,214)	1.A FE
46656T--AK-2	JCP Direct Lending CLO 2-JCPDL 2023-1I B	D	06/11/2024	VARIOUS		980,332	980,332	(7,512)	1.C FE
46656T--AM-8	JCP Direct Lending CLO 2-JCPDL 2023-1I C	D	06/11/2024	VARIOUS		631,496	631,496	(5,466)	1.F FE
50220P--AB-9	LSEGA Financing PLC-SENIOR UNSECURED	D	06/25/2024	BOFAMLSEC		6,327,977	6,780,000	20,717	1.G FE
59801F--AE-3	MidOcean Credit CLO XV L-MIDO 2024-15A B	D	05/10/2024	GOLDMAN		7,000,000	7,000,000	0	1.D Z
65345X--AA-2	GENESIS AIRCRAFT SERVICE Class A Certifi	C	06/25/2024	VARIOUS		84,219,248	84,219,248	0	1.F Z
65345X--AB-0	GENESIS AIRCRAFT SERVICE Class B Certifi	C	06/17/2024	VARIOUS		32,714,946	33,022,975	0	2.B Z
68626B--AB-4	Antares Capital Advisers-ANTOR 2024-3A A	D	05/03/2024	JP MORGAN SECURITIES		20,000,000	20,000,000	0	1.A FE
68626B--AC-0	Antares Capital Advisers-ANTOR 2024-3A B	D	05/03/2024	JP MORGAN SECURITIES		10,000,000	10,000,000	0	1.C FE
714264--AM-0	PERNOD RICARD SA-SENIOR UNSECURED	D	06/25/2024	BARCLAYS CAPITAL INC		2,405,450	2,500,000	4,063	2.A FE
75009L--AL-0	Rad CLO 16 Ltd-RAD 2022-16A A1R	D	05/03/2024	GOLDMAN		25,500,000	25,500,000	0	1.A FE
76192S--AA-4	REVL 2024-1, Ltd Class A Notes	C	05/28/2024	DIRECT		7,583,333	7,583,333	0	1.D Z
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	1.D Z
000000--00-0	Cura Day Hospitals	B	04/30/2024	BANK LOANS BABSON CA		4,322,813	4,456,507	0	4.C Z
E1000#--AE-9	Acciona Financiacion Fil Green Gtd Senio	B	05/08/2024	DIRECT		37,611,000	37,610,993	0	2.B PL
G1746#--AG-1	Cadent Finance PLC - Senior Unsecured No	B	04/02/2024	DIRECT		(88,800)	(88,799)	0	1.G Z
G1969#--AJ-5	Balfour Beatty PLC Senior Note Series A	D	05/28/2024	HSBC SECURITIES INC		8,035,700	8,035,700	0	2.B Z
G2964#--AA-7	AP Grange Holdings LLC Senior Secured No	C	06/11/2024	DIRECT		50,000,000	50,000,000	0	1.F Z
G4640#--AA-5	Holman Leasing Ltd Senior Guaranteed Not	B	05/23/2024	BANK OF AMERICA		38,136,000	38,136,013	0	2.B Z
G9020*-AC-4	Travis Perkins PLC Senior Note Series A	B	06/14/2024	RBS SECURITIES INC		(19,600)	(19,596)	0	3.B Z
G9020*-AE-0	Travis Perkins PLC Senior Note Series C	B	06/14/2024	RBS SECURITIES INC		(12,600)	(12,597)	0	3.B Z
K7802#--BH-1	Royal Greenland A/S Senior Note		06/11/2024	CITIGROUP GLOBAL MAR		24,111,821	24,111,821	0	2.A Z
L3009#--AA-6	Ergea Group S.A r.L. Guaranteed Secured	B	06/13/2024	DIRECT		12,000	12,009	0	2.B PL
L6256K--AA-8	Maslow Kensington Investments S.A.R.L -	B	05/17/2024	DIRECT		253,535	253,535	0	1.F Z
45254N--NT-0	Impac CMB Trust Series 2005-3		06/25/2024	PAYUP		(1,770)	0	0	1.A FM
1109999999. Subtotal - Bonds - Industrial and Miscellaneous (Unaffiliated)						1,670,921,793	1,695,594,550	4,995,071	XXX
00130H--CK-9	AES 7.6 01/15/55		05/16/2024	CITIGROUP GLOBAL MAR		18,291,000	18,291,000	0	3.B FE
025537--BA-8	American Electric Power -AEP 6.95 12/15/		06/18/2024	VARIOUS		19,996,190	20,000,000	0	3.A FE
04018V--AA-1	ARES FINANCE CO-SUBORDINATED		06/11/2024	VARIOUS		3,880,225	4,177,000	62,999	2.C FE
25746U--DU-0	Dominion Energy Inc-D 7 06/01/54		05/06/2024	MIZUHO SECURITIES		8,333,000	8,333,000	0	2.C FE
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	3.A FE
29336U--AH-0	ENLK Float PERP		04/15/2024	VARIOUS		17,917,133	18,059,000	140,538	3.B FE
65339K--CI-8	NextEra Energy Capital H-NEE 6.7 09/01/5		04/11/2024	VARIOUS		1,351,995	1,356,000	11,104	2.B FE
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	2.B FE
65473P--AR-6	NiSource Inc-NI 6.95 11/30/54		05/22/2024	VARIOUS		14,993,750	15,000,000	7,722	3.A FE
726503--AE-5	Plains All American Pipe-PAA FLOAT PERP		05/15/2024	VARIOUS		3,695,375	3,700,000	1,535	3.A FE
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	2.C FE
28250N--CF-0	Enbridge Inc-ENBRN 7.2 06/27/54	A	06/24/2024	MIZUHO SECURITIES		9,960,000	9,960,000	0	2.C FE
00774Y--AA-7	AerCap Holdings NV-AER 5 7/8 10/10/2079	D	04/17/2024	BOFAMLSEC		14,906,250	15,000,000	22,031	3.A FE
1309999999. Subtotal - Bonds - Hybrid Securities						145,437,418	146,376,000	462,744	XXX
22228#--AD-8	CounterpointeSRE C-PAGE 3111 Sunset Blvd		05/02/2024	DIRECT		603,059	603,059	0	1.F
1509999999. Subtotal - Bonds - Parent, Subsidiaries and Affiliates						603,059	603,059	0	XXX
00463#--AB-4	Accuserve Solutions Inc - 2024 Increment		06/04/2024	BANK LOANS BABSON CA		18,796	18,796	0	3.B Z

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 3

Show All Long-Term Bonds and Stock Acquired During the Current Quarter

1	2	3	4	5	6	7	8	9	10
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol
00463@-AC-2	Accuserve Solutions Inc - 2024 Delayed D		..06/14/2024	BANK LOANS BABSON CA		162,536	162,536	0	4.B Z
00797*-AA-5	Aero Operating LLC/Term Loan 1/20		..04/01/2024	VARIOUS		11,058	11,058	0	3.B PL
03770*-AA-0	Apollo Asset-Backed Finance Lending Comp		..06/28/2024	BANK LOANS BABSON CA		5,000,000	5,000,000	0	1.F Z
03770*-AB-8	Apollo Asset-Backed Finance Lending Comp		..06/28/2024	BANK LOANS BABSON CA		2,000,000	2,000,000	0	2.B Z
03770*-AC-6	Apollo Asset-Backed Finance Lending Comp		..06/28/2024	BANK LOANS BABSON CA		12,000,000	12,000,000	0	2.B Z
04250#-AC-9	ARMSTRONG TRANS GROUP LLC / MAXFR8 LLC T		..05/24/2024	PIK NOTE BUY UP		3,839	3,839	0	4.C
04940#-AA-9	Atlas Securitized Products Funding 3 LP		..06/27/2024	BANK LOANS BABSON CA		67,540,541	67,540,541	0	1.D Z
04940#-AB-7	Atlas Securitized Products Funding 3 LP		..06/27/2024	BANK LOANS BABSON CA		5,959,459	5,959,459	0	2.B Z
04940J-AB-9	Atlas Securitized Products Funding 1 LP		..06/28/2024	BANK LOANS BABSON CA		21,918,126	23,561,448	413,148	1.G Z
04940J-AC-7	Atlas Securitized Products Funding 1 LP		..06/28/2024	BANK LOANS BABSON CA		11,202,885	11,534,564	216,602	1.G Z
05629*-AA-8	BR DSCO I INVESTCO, LLC - Senior Secured		..05/01/2024	BANK LOANS BABSON CA		1,460,000	1,460,000	0	2.B PL
08890@-AB-0	Beyond Risk - Delayed Draw Term Loan		..05/24/2024	BANK LOANS BABSON CA		1,926,706	1,926,706	0	4.C
09262X-AD-3	Blackstone Credit Rated Fund Trust SPV L		..06/12/2024	BANK LOANS BABSON CA		7,846,985	7,846,985	0	1.G PL
09580*-AA-7	BLUE OCEAN INCOME FUND III LP - Class A		..06/25/2024	BANK LOANS BABSON CA		2,075,772	2,075,772	0	1.G PL
09582*-AB-3	Blue Owl Capital Call Facility - Fixed T		..06/11/2024	BANK LOANS BABSON CA		11,750,000	11,750,000	0	1.B Z
09582*-AC-1	Blue Owl Capital Call Facility - Fixed T		..06/12/2024	BANK LOANS BABSON CA		6,500,000	6,500,000	0	1.B Z
10970#-AA-9	Brinley PD SPV I LLC/Revolving Facility		..04/22/2024	BANK LOANS BABSON CA		712,500	712,500	0	1.F PL
12759#-AA-2	CELF SPV LLC - Revolving Senior Secured		..06/21/2024	BANK LOANS BABSON CA		28,571,429	28,571,429	0	1.F PL
14318*-AA-6	CARLYLE SECURED LENDING III SPV, - Senio		..06/07/2024	BANK LOANS BABSON CA		2,760,000	2,760,000	0	2.A PL
000000-00-0	Kellermeyer Bergensons Services, LLC - 2		..05/14/2024	BANK LOANS BABSON CA		144,484	144,484	0	4.A Z
15645#-AA-3	Centric Brands Inc. - 2024 Term Loan A1		..05/06/2024	PIK NOTE BUY UP		61,993	61,993	0	6. PL
15645#-AB-1	Centric Brands Inc. - 2024 Term Loan A2		..05/06/2024	PIK NOTE BUY UP		51,060	51,060	0	6. PL
18539@-AA-8	Cleaver-Brooks Inc - 2022 Fixed PIK Term		..04/01/2024	PIK NOTE BUY UP		980	980	0	5.B GI
21079#-AA-6	CONTINENTAL ACQUISITION HOLDINGS INC. -		..06/28/2024	VARIOUS		13,670	13,670	0	3.B PL
21079#-AB-4	CONTINENTAL ACQUISITION HOLDINGS INC. -		..06/28/2024	VARIOUS		2,782	2,782	0	3.B PL
23942Z-MN-2	DAWSON RATED FUND 6-R1 LP - Secured Clas		..06/18/2024	BANK LOANS BABSON CA		11,597,364	11,597,364	0	1.F Z
23942Z-MO-0	DAWSON RATED FUND 6-R1 LP - Secured Clas		..06/18/2024	BANK LOANS BABSON CA		2,899,341	2,899,341	0	2.B Z
28931@-AB-9	Macon County Georgia School District - B		..04/30/2024	VARIOUS		51,043	51,043	0	3.B PL
29251@-AB-9	Encina Business Credit SPV LLC Revolving		..06/18/2024	BANK LOANS BABSON CA		12,800,000	12,800,000	0	2.B PL
30034@-AA-3	EVERLAKE PRIVATE FUND BORROWER, LLC - Se		..06/13/2024	BANK LOANS BABSON CA		2,000,000	2,000,000	0	2.A PL
31575*-AA-8	First Eagle DCF-A Funding LLC - Revolvin		..05/16/2024	BANK LOANS BABSON CA		1,600,000	1,600,000	0	3.A PL
34960#-AE-3	Fortis Payment Systems LLC 10TH AMEND TE		..06/13/2024	BANK LOANS BABSON CA		2,154	2,154	0	4.C
37963#-AC-7	GLOBAL CRITICAL LOGISTICS LLC USD 7TH AM		..06/06/2024	BANK LOANS BABSON CA		624,508	624,508	0	4.C Z
38050*-AA-7	GOJO Industries Inc. - Term Loan		..05/28/2024	PIK NOTE BUY UP		21,460	21,460	0	4.C Z
40348#-AB-9	Gutter Buyer, Inc. - Term Loan Tranche A		..05/20/2024	BANK LOANS BABSON CA		11,183	8,370	0	3.B PL
000000-00-0	HXSG INTERMEDIARY 2 LLC INITIAL DDTL		..04/02/2024	BANK LOANS BABSON CA		55,879	55,879	0	4.C Z
46127*-AA-9	Invesco Private Credit Opportunities Hol		..05/10/2024	BANK LOANS BABSON CA		2,300,000	2,300,000	0	1.G PL
47235#-AA-2	JEFFERIES DIRECT LENDING FUND II SPE LLC		..06/20/2024	BANK LOANS BABSON CA		4,262,409	4,262,409	0	2.C PL
47236#-AA-1	JEFFERIES DIRECT LENDING OFFSHORE FD II		..06/20/2024	BANK LOANS BABSON CA		1,406,016	1,406,016	0	2.C PL
47236*-AA-5	JEFFERIES DIRECT LENDING OFFSHORE FUND I		..06/20/2024	BANK LOANS BABSON CA		302,354	302,354	0	2.C PL
47236@-AA-3	JEFFERIES DIRECT LENDING FD II C SPE LLC		..06/20/2024	BANK LOANS BABSON CA		741,026	741,026	0	2.C PL
47237#-AA-0	JEFFERIES DIRECT LENDING OFFSHORE FUND I		..06/20/2024	BANK LOANS BABSON CA		1,512,333	1,512,333	0	2.B PL
48773#-AF-7	Kellermeyer Bergensons Services, LLC - 2		..04/30/2024	PIK NOTE BUY UP		64,288	64,288	0	6. Z
48773#-AH-3	Kellermeyer Bergensons Services, LLC - 2		..04/30/2024	VARIOUS		2,117,806	2,117,806	0	4.A Z
50246*-AG-4	LVNV Funding LLC - 1st Lien		..06/12/2024	BANK LOANS BABSON CA		1,250,000	1,250,000	0	1.F Z
50541#-AA-5	Laboratories Bidco LLC/Term Loan 9/19		..06/28/2024	VARIOUS		3,166	3,166	0	3.C PL
50541#-AB-3	Laboratories Bidco LLC/Second Amendment		..06/28/2024	VARIOUS		502	502	0	3.C PL
50541#-AC-1	LABORATORIES BIDCO LLC - THIRD AMENDMENT		..06/28/2024	PIK NOTE BUY UP		4,684	4,684	0	3.C PL

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 3

Show All Long-Term Bonds and Stock Acquired During the Current Quarter

1	2	3	4	5	6	7	8	9	10
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol
50541#-AD-9	LABORATORIES BIDCO LLC - TL		..06/28/2024	PIK NOTE BUY UP		15,215	15,215	0	3.C PL
50541#-AE-7	LABORATORIES BIDCO LLC - DELAYED DRAW TE		..06/28/2024	PIK NOTE BUY UP		118		0	5.B Z
51514#-AA-0	Landmark Equity Partners XVII-B, L.P. -		..04/04/2024	BANK LOANS BABSON CA		1,780,000	1,780,000	0	1.F PL
51514#-AA-8	LANDMARK EQUITY PARTNERS XVII-D LLC REVO		..06/13/2024	BANK LOANS BABSON CA		220,000	220,000	0	1.F PL
54288#-AC-2	LONG TERM CARE GROUP INC AMENDMENT NO 1		..04/19/2024	PIK NOTE BUY UP		4,619		0	5.B
55076#-AA-1	LUXURY MTG CORP REVOLVING LOAN		..05/28/2024	BANK LOANS BABSON CA		500,000	500,000	0	6. *
000000-00-0	MB PURCHASER LLC DDTL		..05/06/2024	BANK LOANS BABSON CA		88,129	88,129	0	4.C Z
60510M-AA#-5	Mission Lane Credit Card Master Trust -		..04/05/2024	BANK LOANS BABSON CA		533,333	533,333	0	2.B PL
60510M-AA#-7	Mission Lane Credit Card Master Trust -		..04/05/2024	BANK LOANS BABSON CA		2,533,333	2,533,333	0	1.F PL
60510M-B#-8	Mission Lane Credit Card Master Trust -		..04/05/2024	BANK LOANS BABSON CA		266,667	266,667	0	3.A PL
62879K-AB-9	NB SOF V ISPV 2022 LLC - Class A Term Lo		..04/18/2024	BANK LOANS BABSON CA		1,729,622	1,729,622	0	1.G PL
62879X-AB-1	NB Select Opportunities ISPV 2022 LLC -		..06/12/2024	BANK LOANS BABSON CA		1,546,936	1,546,936	0	1.G PL
62879X-AC-9	NB Select Opportunities ISPV 2022 LLC -		..06/12/2024	BANK LOANS BABSON CA		358,518	358,518	0	2.C PL
62902#-AA-3	NCL III-PE-D LLC / NCL III-PE-E LLC SECD		..06/13/2024	BANK LOANS BABSON CA		600,000	600,000	0	1.F PL
62931#-AA-2	NMC Skincare Intermediate Holdings II L		..06/06/2024	PIK NOTE BUY UP		1,402	1,402	0	3.B PL
62931#-AC-8	NMC Skincare Intermediate Holdings II L		..06/06/2024	PIK NOTE BUY UP		472	472	0	3.B PL
63001Z-MM-8	NSPC-L HOLDINGS II LP, - Revolver		..05/21/2024	BANK LOANS BABSON CA		35,000,000	35,000,000	0	1.F Z
63147#-AA-6	Nashville Team Holdings LLC - Term Loan		..06/25/2024	BANK LOANS BABSON CA		7,500,000	7,500,000	0	2.B PL
65658#-AA-2	NORTH HAVEN FALCON BUYER LLC - TERM LOA		..05/22/2024	VARIOUS		6,602	6,602	0	3.C PL
65658#-AB-0	NORTH HAVEN FALCON BUYER LLC - DELAYED		..05/31/2024	VARIOUS		1,805	1,805	0	3.C PL
67008#-AA-9	NOVIPAK BUYER LLC INITIAL TERM LN		..06/28/2024	PIK NOTE BUY UP		1,324	1,324	0	2.C PL
67080B-A#-8	NXT Capital Structured Note I, LLC - Cla		..06/05/2024	BANK LOANS BABSON CA		886,427	886,427	0	1.A PL
67117#-AD-1	Office Ally - 2024 Incremental Term Loan		..06/10/2024	BANK LOANS BABSON CA		863,432	867,771	0	4.B Z
68144#-AB-6	Olympia Acquisition, Inc-2022 2nd Amendn		..05/31/2024	PIK NOTE BUY UP		847		0	4.C PL
68144#-AC-4	Olympia Acquisition, Inc - 2022 2nd Amen		..06/20/2024	VARIOUS		1,318	1,318	0	4.C PL
68144#-AD-2	Olympia Acquisition, Inc-2022 Rolled Ter		..05/31/2024	PIK NOTE BUY UP		19,636	19,636	0	4.C PL
68144#-AE-0	Olympia Acquisition, Inc - 2023 First Ou		..06/20/2024	PIK NOTE BUY UP		1,273	1,273	0	4.C PL
70216#-AA-1	PARTNERS GROUP PRIVATE EQUITY II, LLC -		..06/17/2024	BANK LOANS BABSON CA		27,500,000	27,500,000	0	1.F PL
70466#-AA-6	Polymer Solutions Group Holdings LLC - T		..04/04/2024	BANK LOANS BABSON CA		10,346	10,346	0	5.B GI
72305#-AA-7	PINEBRIDGE PRIVATE CREDIT III HOLDINGS L		..06/27/2024	BANK LOANS BABSON CA		1,116,667	1,116,667	0	1.G PL
73112#-AB-6	Policy Services Company, 1L PIK Toggle T		..04/24/2024	PIK NOTE BUY UP		81,061	81,061	0	5.B Z
73112#-AC-4	Policy Services Company, 1L PIK Toggle D		..04/24/2024	VARIOUS		28,716	28,716	0	5.B Z
74066#-AA-4	PREMIER SPECIALTIES INC. - TERM LOAN		..05/31/2024	PIK NOTE BUY UP		1,828		0	3.A PL
000000-00-0	Pretium Packaging LLC New 1st Out Ter		..05/01/2024	PIK NOTE BUY UP		1,006	1,006	0	4.B Z
000000-00-0	Pretium Packaging LLC New 2nd Out Ter		..05/01/2024	PIK NOTE BUY UP		1,918	1,918	0	5.B Z
74309#-AA-7	PRODUCTION RESOURCE GROUP L.L.C. - DELA		..06/28/2024	VARIOUS		7,807	7,807	0	4.C PL
74309#-AB-5	PRG 9/20 Last Out		..06/28/2024	VARIOUS		36,666	36,666	0	4.C PL
74309#-AC-3	PRODUCTION RESOURCE GROUP L.L.C. - DELA		..06/28/2024	VARIOUS		425	425	0	5.B PL
74309#-AD-1	PRODUCTION RESOURCE GROUP L.L.C. - SECD		..05/21/2024	BANK LOANS BABSON CA		1,476	1,476	0	5.B GI
74350E-AA-8	PHP Holdings, LLC - Bridge Term Loan		..04/25/2024	BANK LOANS BABSON CA		1,956,800	2,000,000	0	4.A Z
74354#-AA-1	PROJECT ESSENTIAL BIDCO LLC - TERM LOAN		..05/28/2024	PIK NOTE BUY UP		3,135	3,135	0	4.A PL
000000-00-0	PROSPECT INTER HLDGS LLC/PROSPECT PHYSIC		..04/25/2024	BANK LOANS BABSON CA		15,033,864	15,398,816	0	4.A Z
75279#-AB-2	RANDYS HLDGS INC DELAYED DRAW TERM LOAN		..04/18/2024	BANK LOANS BABSON CA		35,300	35,300	0	4.C Z
000000-00-0	ROYAL HOLDCO CORP DELAYED DRAW TERM LN B		..04/18/2024	BANK LOANS BABSON CA		43,597	43,597	0	4.C Z
000000-00-0	SSE Buyer, Inc - 2022 2nd Lien Term Loan		..04/24/2024	PIK NOTE BUY UP		13,416	13,416	0	2.B Z
78503#-AA-4	SPV FACILITY I LLC - Senior Secured Revo		..06/14/2024	BANK LOANS BABSON CA		6,000,000	6,000,000	0	1.G PL
81272#-AB-7	Seattle Soccer LLC - 2023 Multi Draw Ter		..06/18/2024	VARIOUS		2,887,860	2,887,860	0	2.A PL
816307-AA#-1	SelectQuote Inc./Term Loan 10/19		..06/28/2024	PIK NOTE BUY UP		5,414	5,414	0	3.C PL

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 3

Show All Long-Term Bonds and Stock Acquired During the Current Quarter

1	2	3	4	5	6	7	8	9	10
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol
82419*-AC-7	Shermco Intermediate Holdings Inc. - 202		..06/10/2024	BANK LOANS BABSON CA		15,187	15,187	0	3.B PL
84724*-AB-1	Sparus Holdings LLC - Delayed Draw Term		..05/15/2024	BANK LOANS BABSON CA		128,247	128,247	0	4.C
84967*-AA-9	SPRING INSURANCE SOLUTIONS LLC - INITIA		..04/30/2024	BANK LOANS BABSON CA		8,686	8,686	0	3.A PL
84967*-AB-7	SPRING INSURANCE SOLUTIONS LLC - DELAYE		..04/30/2024	BANK LOANS BABSON CA		1,480	1,480	0	3.A PL
86662*-AB-0	SUN ACQUIRER CORP		..06/25/2024	BANK LOANS BABSON CA		(311,256)	(311,256)	0	3.B PL
87338*-AC-4	Technosylva - Delayed Draw Term Loan		..05/31/2024	BANK LOANS BABSON CA		672,566	672,566	0	4.C Z
88167*-AA-8	Tetragon Financial Group (Delaware) LLC		..06/05/2024	BANK LOANS BABSON CA		10,000,000	10,000,000	0	1.F PL
91860*-AA-6	VPC ASSET BACKED OPPORTUNISTIC CREDIT Ho		..06/13/2024	BANK LOANS BABSON CA		3,975,527	3,975,527	0	1.F PL
928432-A#-0	Visual Edge Technology, Inc./Last Out T		..05/22/2024	PIK NOTE BUY UP		18,282	18,282	0	5.B PL
96524K-AD-2	WHITEHORSE LIQUIDITY PARTNERS V-R LP, -C		..06/17/2024	BANK LOANS BABSON CA		1,709,400	1,709,400	0	1.G PL
000000-00-0	Woodland Foods Inc - 2024 Incremental Te		..04/09/2024	BANK LOANS BABSON CA		144,106	147,047	0	5.B Z
98415D-AA-3	XIFIN Inc./Term Loan 02/20		..06/28/2024	PIK NOTE BUY UP		6,961	6,961	0	3.B PL
98876*-AE-5	ZB Holdco LLC - 2023 Incremental Delayed		..04/18/2024	BANK LOANS BABSON CA		62,376	62,376	0	3.B PL
000000-00-0	Kings III - Delayed Draw Term Loan		..05/30/2024	BANK LOANS BABSON CA		100,108	100,108	0	5.B GI
000000-00-0	Checkout Holding Corp. - 2023 Exit Term		..05/13/2024	PIK NOTE BUY UP		9,684	9,684	0	5.B Z
000000-00-0	CyrusOne LP Senior Term Lo		..05/07/2024	BANK LOANS BABSON CA		72,099	22,421,500	0	2.B Z
000000-00-0	LeadsOnline LLC - 2024 Incremental Term		..05/17/2024	BANK LOANS BABSON CA		745,598	749,345	0	4.C Z
000000-00-0	Tencarva Machinery Company LLC - 2024 In		..05/08/2024	BANK LOANS BABSON CA		1,606,948	1,639,743	0	4.B Z
000000-00-0	Coherus Biosciences Inc - Term Loan		..05/08/2024	BANK LOANS BABSON CA		3,871,256	3,990,985	0	3.B Z
000000-00-0	Project Maple Term Loan		..05/21/2024	BANK LOANS BABSON CA		17,000,000	17,000,000	0	1.F Z
68656*-AA-9	TPG TIGER HOLDCO, LLC, - Class A Term Lo		..05/24/2024	BANK LOANS BABSON CA		2,215,105	2,215,105	0	1.G PL
68656*-AB-7	TPG TIGER HOLDCO, LLC, - Class B Term Lo		..05/24/2024	BANK LOANS BABSON CA		738,368	738,368	0	2.B PL
69341J-AN-0	Veritas US Inc. - 2021 USD Term Loan B		..04/04/2024	BANK LOANS BABSON CA		76	76	0	5.A FE
000000-00-0	Cascade Services - Delayed Draw Term Loa		..04/01/2024	BANK LOANS BABSON CA		19,252	19,252	0	4.C Z
00259*-HM-3	ASF VIII SUNTORI, L.P and ASF VIII B SUN	B.	..06/25/2024	BANK LOANS BABSON CA		42,820,000	42,819,997	0	1.F Z
000000-00-0	Innovad NV - 2024 EUR Delayed Draw Term	B.	..04/29/2024	BANK LOANS BABSON CA		2,624,301	2,624,301	0	4.C Z
000000-00-0	Auris Luxembourg III S.a.r.l. - 2024 EUR	B.	..04/30/2024	BANK LOANS BABSON CA		1,064,568	1,067,900	0	4.C Z
000000-00-0	Solor Bioenergi AB - SEK Term Loan	B.	..05/23/2024	BANK LOANS BABSON CA		30,409,368	30,716,533	0	2.B Z
000000-00-0	Tech 7 SAS Super Senior EU	B.	..06/10/2024	BANK LOANS BABSON CA		79,553	79,553	0	5.B Z
000000-00-0	IMI SQUARE EURO SR BDS C	B.	..05/14/2024	BANK LOANS BABSON CA		2,419,492	2,487,909	0	4.C Z
64701*-AA-1	IFM USIDF (INTERMEDIATE) B, L.P. - Secur	D.	..04/01/2024	BANK LOANS BABSON CA		458,333	458,333	0	2.A PL
000000-00-0	Preqin Ltd - 2024 GBP Incremental Delaye	B.	..04/22/2024	BANK LOANS BABSON CA		1,215,256	1,215,256	0	4.C Z
67741*-AA-6	SSG CREDIT STRATEGIES VII ICAV - Senior	D.	..06/05/2024	BANK LOANS BABSON CA		640,000	640,000	0	1.E PL
L4807*-AA-2	HL SCOPE MASTER SICAV-RAIF SCSp - Senior	D.	..05/22/2024	BANK LOANS BABSON CA		7,500,000	7,500,000	0	1.F PL
L9714*-AA-3	WEST STREET EUROPEAN PRIVATE CREDIT MM S	B.	..06/24/2024	BANK LOANS BABSON CA		11,346,413	11,346,413	0	1.G PL
L9714*-AC-9	WEST STREET EUROPEAN PRIVATE CREDIT MM S	B.	..06/24/2024	BANK LOANS BABSON CA		11,346,413	11,346,413	0	1.G PL
L9714*-AD-7	WEST STREET EUROPEAN PRIVATE CREDIT MM S	D.	..04/09/2024	BANK LOANS BABSON CA		379,000	379,000	0	1.G PL
Y0019*-AD-0	Acclime Holdings HK Limited USD Fac D L	D.	..04/29/2024	BANK LOANS BABSON CA		454,545	454,545	0	5.B GI
000000-00-0	850 Lake Shore CML - Bank Debt Revolver		..06/30/2024	PRIVATE		(30,271,250)	(30,500,000)	0	2.B Z
000000-00-0	CyrusOne LP Senior Term Lo	B.	..05/07/2024	BANK LOANS BARINGS		17,018,141	0	0	2.B Z
1909999999. Subtotal - Bonds - Unaffiliated Bank Loans						486,865,635	494,890,945	629,750	XXX
2509999997. Total - Bonds - Part 3						2,321,012,040	2,354,479,553	6,132,346	XXX
2509999998. Total - Bonds - Part 5						XXX	XXX	XXX	XXX
2509999999. Total - Bonds						2,321,012,040	2,354,479,553	6,132,346	XXX
69078F-13-1	Triton International Ltd-TRITON INTERNAT	D.	..04/15/2024	SEAPORT GROUP	24,149,000	605,829	0.00	0	3.A FE
69078F-15-6	Triton International Ltd-TRITON INTERNAT	D.	..04/15/2024	SEAPORT GROUP	15,249,000	305,030	0.00	0	3.A FE
4019999999. Subtotal - Preferred Stocks - Industrial and Miscellaneous (Unaffiliated) Perpetual Preferred						910,859	XXX	0	XXX
03770*-HM-1	APOLLO ASSET-BACKED FINANCE LENDING COMP		..06/28/2024	DIRECT	3,000,000	3,000,000	0.00	0	6.*
14314C-10-5	Carlyle Finance LLC-CARLYLE FINANCE LLC		..04/08/2024	SEAPORT GROUP	51,625,000	1,021,605	0.00	0	2.B FE
30290Y-A*-2	FS Credit Opportunities Series 2029 Term		..05/16/2024	DIRECT	15,000,000	15,000,000	0.00	0	1.D Z

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 3

Show All Long-Term Bonds and Stock Acquired During the Current Quarter

1	2	3	4	5	6	7	8	9	10
CUSIP Identification	Description	Foreign	Date Acquired	Name of Vendor	Number of Shares of Stock	Actual Cost	Par Value	Paid for Accrued Interest and Dividends	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol
55076*-11-1	Luxury Mortgage Corp Series I Preferred .....	.....	.....05/28/2024	DIRECT	500,000.000	500,000	0.00	0	4.C Z
872652-10-2	TPG Operating Group II L-TPG OPERATING G .....	.....	.....04/11/2024	MORGAN	(1,230,775.000)	(30,769,375)	0.00	0	2.C FE
4029999999. Subtotal - Preferred Stocks - Industrial and Miscellaneous (Unaffiliated) Redeemable Preferred						(11,247,770)	XXX	0	XXX
4509999997. Total - Preferred Stocks - Part 3						(10,336,911)	XXX	0	XXX
4509999998. Total - Preferred Stocks - Part 5						XXX	XXX	XXX	XXX
4509999999. Total - Preferred Stocks						(10,336,911)	XXX	0	XXX
16411R-20-8	CHENIERE ENERGY INC-COMMON STOCK .....	.....	.....05/17/2024	BLOOMBERG TRADEBOOK	3,200.000	510,835 .....	.....	.....0 .....	.....
30231G-10-2	Exxon Mobil Corp-COMMON STOCK .....	.....	.....05/03/2024	MERGER	500.000	113,662 .....	.....	.....0 .....	.....
35671D-85-7	FREEPORT-MCMORAN INC-COMMON STOCK .....	.....	.....04/29/2024	BLOOMBERG TRADEBOOK	3,500.000	182,317 .....	.....	.....0 .....	.....
36828A-10-1	GE Vernova Inc-COMMON STOCK .....	.....	.....04/02/2024	SPIN OFF	400.000	37,374 .....	.....	.....0 .....	.....
55336V-10-0	MPLX LP COMMON UNIT .....	.....	.....05/01/2024	VARIOUS	22,000.000	922,535 .....	.....	.....0 .....	.....
866142-40-9	Summit Midstream Partner-COMMON STOCK .....	.....	.....06/24/2024	RILY	9,000.000	324,990 .....	.....	.....0 .....	.....
86765K-10-9	SUNOCO LP COMMON STK .....	.....	.....05/03/2024	MERGER	186,038.000	3,370,083 .....	.....	.....0 .....	.....
87807B-10-7	TC Energy Corp-COMMON STOCK .....	.....	.....06/06/2024	VARIOUS	37,300.000	1,450,758 .....	.....	.....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 .....	.....
38059T-10-6	GOLD FIELDS LTD-ADR	C.....	04/18/2024	BLOOMBERG TRADEBOOK	16,000.000	283,370 .....	.....	.....0 .....	.....
84473L-10-5	SOUTH32 LTD-ADR	C.....	04/18/2024	BLOOMBERG TRADEBOOK	21,000.000	222,204 .....	.....	.....0 .....	.....
86563T-10-4	Sumitomo Metal Mining Co-ADR	C.....	04/18/2024	BLOOMBERG TRADEBOOK	34,000.000	278,925 .....	.....	.....0 .....	.....
000000-00-0	CP Argo Marina Holdings .....	.....	.....06/14/2024	PRIVATE	(537,351.740)	(537,352) .....	.....	.....0 .....	.....
5019999999. Subtotal - Common Stocks - Industrial and Miscellaneous (Unaffiliated) Publicly Traded						7,405,088	XXX	0	XXX
5989999997. Total - Common Stocks - Part 3						7,405,088	XXX	0	XXX
5989999998. Total - Common Stocks - Part 5						XXX	XXX	XXX	XXX
5989999999. Total - Common Stocks						7,405,088	XXX	0	XXX
5999999999. Total - Preferred and Common Stocks						(2,931,823)	XXX	0	XXX
6009999999 - Totals						2,318,080,217	XXX	6,132,346	XXX

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident-ification	Description	For-eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid-eration	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 Recogn-ized	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	NAIC Desig-nation, NAIC Desig-nation Modifier and SVO Admini-strative Symbol
..36179X-NF-9	Ginnie Mae II Pool-POOL #MA8490		06/01/2024	PAYDOWN		612,812	612,812	613,674	613,618	0	(806)	0	(806)	0	612,812	0	0	0	15,224	12/01/2052	1.A
..36179X-QW-9	Ginnie Mae II Pool-POOL #MA8569		06/01/2024	PAYDOWN		558,875	558,875	562,892	562,647	0	(3,772)	0	(3,772)	0	558,875	0	0	0	14,048	01/01/2053	1.A
..36179Y-AS-3	Ginnie Mae II Pool-POOL #MA9017		06/01/2024	PAYDOWN		574,812	574,812	569,288	569,454	0	5,357	0	5,357	0	574,812	0	0	0	31,933	07/01/2053	1.A
..36179Y-DK-7	Ginnie Mae II Pool-POOL #MA9106		06/01/2024	PAYDOWN		901,280	901,281	893,172	893,431	0	7,849	0	7,849	0	901,281	0	0	0	19,649	08/01/2053	1.A
0109999999	Subtotal - Bonds - U.S. Governments					2,647,779	2,647,780	2,639,026	2,639,150	0	8,628	0	8,628	0	2,647,780	0	0	0	80,854	XXX	XXX
..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	1.D FE
..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	1.D FE
..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	36,827	06/30/2028	1.C FE
0509999999	Subtotal - Bonds - U.S. States, Territories and Possessions					3,547,680	3,547,680	3,712,415	3,611,781	0	(64,101)	0	(64,101)	0	3,547,680	0	0	0	125,909	XXX	XXX
..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	1.E FE
..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	1.C FE
0709999999	Subtotal - Bonds - U.S. Political Subdivisions of States, Territories and Possessions					1,780,000	1,780,000	1,780,000	1,780,000	0	0	0	0	0	1,780,000	0	0	0	73,224	XXX	XXX
..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	1.C FE
..041083-VB-9	Arkansas Development Fin-REVENUE BONDS		05/23/2024	CALL 100		73,439	73,439	73,439	73,439	0	0	0	0	0	73,439	0	0	0	1,078	07/01/2043	1.B FE
..130795-26-7	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	1.C FE
..196479-F9-5	Colorado Housing and Fin-REVENUE BONDS		05/01/2024	CALL 100		332,431	332,431	342,331	336,499	0	318	0	318	0	336,816	0	(4,385)	(4,385)	1,346	03/01/2048	1.A FE
..196479-V4-8	Colorado Housing and Fin-REVENUE BONDS		05/01/2024	CALL 100		82,886	82,886	85,319	84,050	0	(82)	0	(82)	0	83,968	0	(1,082)	(1,082)	1,635	11/01/2048	1.A FE
..196480-EX-1	Colorado Housing and Fin-REVENUE BONDS		05/01/2024	CALL 100		105,928	105,928	105,928	105,928	0	0	0	0	0	105,928	0	0	0	1,305	01/01/2050	1.A FE
..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	1.D FE
..25477P-NF-8	District of Columbia Hou-REVENUE BONDS		05/15/2024	CALL 100		44,801	44,801	44,801	44,801	0	0	0	0	0	44,801	0	0	0	724	06/15/2045	1.B FE
..296122-UT-9	Escambia County Housing -REVENUE BONDS		05/01/2024	CALL 100		78,266	78,266	78,266	78,266	0	0	0	0	0	78,266	0	0	0	803	11/01/2038	1.A FE
..312931-A6-5	Freddie Mac Gold Pool-FG A84529		06/01/2024	PAYDOWN		227	227	230	229	0	(1)	0	(1)	0	227	0	0	0	4	02/01/2039	1.A
..3132DQ-AG-1	Freddie Mac Pool-FR SD2707		06/01/2024	PAYDOWN		1,064,312	1,064,312	1,047,183	1,047,262	0	17,050	0	17,050	0	1,064,312	0	0	0	21,370	04/01/2053	1.A
..3132DQ-B9-6	Freddie Mac Pool-FR SD2764		06/01/2024	PAYDOWN		499,726	499,726	491,137	491,269	0	8,457	0	8,457	0	499,726	0	0	0	9,156	04/01/2053	1.A
..313398-P7-8	Freddie Mac REMICS-FHR 2334 TD		06/01/2024	PAYDOWN		1,426	1,426	1,491	1,437	0	(11)	0	(11)	0	1,426	0	0	0	39	07/01/2031	1.A
..3133JL-UE-7	Freddie Mac Pool-FREDDIE MAC POOL-FR QU7		06/01/2024	PAYDOWN		1,079,712	1,079,712	1,088,147	1,086,881	0	(7,170)	0	(7,170)	0	1,079,712	0	0	0	9,033	03/01/2051	1.A
..3133KP-Q2-7	Freddie Mac Pool-FR RA7673		06/01/2024	PAYDOWN		306,973	306,973	301,169	301,342	0	5,631	0	5,631	0	306,973	0	0	0	6,910	07/01/2052	1.A
..3133KQ-VY-9	Freddie Mac Pool-FR RA8731		06/01/2024	PAYDOWN		436,737	436,737	428,389	428,567	0	8,170	0	8,170	0	436,737	0	0	0	8,408	04/01/2053	1.A
..3133KR-BN-3	Freddie Mac Pool-FR RA9045		06/01/2024	PAYDOWN		314,821	314,821	309,901	309,968	0	4,852	0	4,852	0	314,821	0	0	0	6,304	05/01/2053	1.A
..3133KR-MX-9	Freddie Mac Pool-FR RA9374		06/01/2024	PAYDOWN		419,085	419,085	410,507	410,641	0	8,444	0	8,444	0	419,085	0	0	0	9,405	07/01/2053	1.A
..3133KS-C6-7	Freddie Mac Pool-FR RA9993		06/01/2024	PAYDOWN		276,759	276,759	272,002	272,077	0	4,682	0	4,682	0	276,759	0	0	0	6,317	10/01/2053	1.A
..3133N3-U9-3	Freddie Mac Pool-FREDDIE MAC POOL-FR RE6		06/01/2024	PAYDOWN		98,371	98,371	100,009	99,841	0	(1,470)	0	(1,470)	0	98,371	0	0	0	1,431	11/01/2049	1.A
..3133N3-VG-6	Freddie Mac Pool-FREDDIE MAC POOL-FR RE6		06/01/2024	PAYDOWN		69,998	69,998	71,016	71,001	0	(1,003)	0	(1,003)	0	69,998	0	0	0	1,184	09/01/2049	1.A
..3133N3-X3-3	Freddie Mac Pool-FREDDIE MAC POOL-FR RE6		06/01/2024	PAYDOWN		176,398	176,398	180,643	180,564	0	(4,166)	0	(4,166)	0	176,398	0	0	0	1,772	05/01/2051	1.A
..3133TB-4G-2	Freddie Mac REMICS-FHR 1991 PG		06/01/2024	PAYDOWN		2,851	2,851	2,957	2,859	0	(7)	0	(7)	0	2,851	0	0	0	71	09/01/2057	1.A
..3133TC-HE-1	Freddie Mac REMICS-FHR 2018 PG		06/01/2024	PAYDOWN		667	667	704	674	0	(7)	0	(7)	0	667	0	0	0	18	01/01/2028	1.A
..3133TD-3A-2	Freddie Mac REMICS-FHR 2037 HB		06/01/2024	PAYDOWN		1,795	1,795	1,963	1,829	0	(34)	0	(34)	0	1,795	0	0	0	67	03/01/2028	1.A
..3133TH-S8-1	Freddie Mac REMICS-FHR 2118 PE		06/01/2024	PAYDOWN		4,914	4,914	5,159	4,963	0	(49)	0	(49)	0	4,914	0	0	0	134	01/01/2029	1.A
..3133TS-F2-4	Freddie Mac REMICS-FHR 2303 OK		06/01/2024	PAYDOWN		1,907	1,907	1,969	1,924	0	(17)	0	(17)	0	1,907	0	0	0	48	04/01/2031	1.A
..3133TU-S7-4	Freddie Mac REMICS-FHR 2357 QH		06/01/2024	PAYDOWN		787	787	826	801	0	(13)	0	(13)	0	787	0	0	0	21	09/01/2031	1.A
..31359H-NW-0	Fannie Mae REMICS-FNR 1994-63 PK		04/01/2024	MATURITY		28	28	31	28	0	0	0	0	0	28	0	0	0	(1)	04/01/2024	1.A
..31359N-2W-0	Fannie Mae REMICS-FNR 1997-19 PG		06/01/2024	PAYDOWN		1,720	1,720	1,853	1,726	0	(6)	0	(6)	0	1,720	0	0	0	51	04/01/2027	1.A
..31359V-GF-4	Fannie Mae REMICS-FNR 1999-1 PJ		06/01/2024	PAYDOWN		6,187	6,187	6,580	6,269	0	(82)	0	(82)	0	6,187	0	0	0	161	02/01/2029	1.A
..31371K-LU-3	Fannie Mae Pool-POOL #254239		06/01/2024	PAYDOWN		101	101	117	109	0	(8)	0	(8)	0	101	0	0	0	3	03/01/2032	1.A
..31388T-QZ-9	Fannie Mae Pool-POOL #614372		06/01/2024	PAYDOWN		461	461	527	488	0	(27)	0	(27)	0	461	0	0	0	13	01/01/2032	1.A
..313921-JK-5	Fannie Mae REMICS-FNR 2001-57 PD		06/01/2024	PAYDOWN		3,242	3,242	3,419	3,300	0	(57)	0	(57)	0	3,242	0	0	0	97	10/01/2031	1.A

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident-ification	Description	For-eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid-eration	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 Recogn-ized	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	NAIC Desig-nation, NAIC Desig-nation Modifier and SVO Admini-strative Symbol
..31392B-SC-1	Fannie Mae REMICS-FNR 2002-6 L .....	.....	06/01/2024	PAYDOWN	.....	296	296	308	301	0	(5)	0	(5)	0	296	0	0	0	7	02/01/2032	1.A
..31392C-EM-2	Fannie Mae REMIC Trust 2-FNW 2002-W2 AFS ....	.....	06/01/2024	PAYDOWN	.....	2,420	2,420	2,324	2,324	0	96	0	96	0	2,420	0	0	0	90	06/01/2032	1.A
..31392E-PC-8	Fannie Mae REMICS-FNR 2002-58 PG .....	.....	06/01/2024	PAYDOWN	.....	6,682	6,682	7,043	6,803	0	(120)	0	(120)	0	6,682	0	0	0	168	09/01/2032	1.A
..31392K-SC-6	Freddie Mac REMICS-FHR 2455 GK .....	.....	06/01/2024	PAYDOWN	.....	5,926	5,926	6,302	6,059	0	(133)	0	(133)	0	5,926	0	0	0	161	05/01/2032	1.A
..31392M-SR-9	Freddie Mac REMICS-FHR 2448 TX .....	.....	06/01/2024	PAYDOWN	.....	8,310	8,310	8,729	8,441	0	(131)	0	(131)	0	8,310	0	0	0	207	05/01/2032	1.A
..3140HN-LY-6	Fannie Mae Pool-POOL #BK8442 .....	.....	06/01/2024	PAYDOWN	.....	573,621	573,621	575,055	574,896	0	(1,275)	0	(1,275)	0	573,621	0	0	0	5,113	01/01/2051	1.A
..3140JS-EP-0	Fannie Mae Pool-POOL #BN9141 .....	.....	06/01/2024	PAYDOWN	.....	302,755	302,755	301,714	301,785	0	970	0	970	0	302,755	0	0	0	2,733	04/01/2051	1.A
..3140JX-EE-4	Fannie Mae Pool-POOL #B02832 .....	.....	06/01/2024	PAYDOWN	.....	6,207	6,207	6,339	6,303	0	(96)	0	(96)	0	6,207	0	0	0	93	09/01/2049	1.A
..3140KO-EL-8	Fannie Mae Pool-POOL #B04638 .....	.....	06/01/2024	PAYDOWN	.....	14,828	14,828	14,854	14,842	0	(14)	0	(14)	0	14,828	0	0	0	222	11/01/2049	1.A
..3140K2-LK-8	Fannie Mae Pool-POOL #B06629 .....	.....	06/01/2024	PAYDOWN	.....	612,706	612,706	615,674	615,356	0	(2,650)	0	(2,650)	0	612,706	0	0	0	5,101	04/01/2051	1.A
..3140K2-PV-0	Fannie Mae Pool-POOL #B06735 .....	.....	06/01/2024	PAYDOWN	.....	718,744	718,744	720,372	720,148	0	(1,404)	0	(1,404)	0	718,744	0	0	0	6,459	05/01/2051	1.A
..3140OB-NS-3	Fannie Mae Pool-POOL #CA4011 .....	.....	06/01/2024	PAYDOWN	.....	7,302	7,302	7,417	7,406	0	(104)	0	(104)	0	7,302	0	0	0	128	08/01/2049	1.A
..3140OC-DT-0	Fannie Mae Pool-POOL #CA4613 .....	.....	06/01/2024	PAYDOWN	.....	65,911	65,911	66,955	66,887	0	(976)	0	(976)	0	65,911	0	0	0	1,152	11/01/2049	1.A
..3140OC-PN-0	Fannie Mae Pool-POOL #CA4928 .....	.....	06/01/2024	PAYDOWN	.....	13,614	13,614	13,912	13,906	0	(292)	0	(292)	0	13,614	0	0	0	204	01/01/2050	1.A
..3140OH-NJ-0	Fannie Mae Pool-POOL #CA9392 .....	.....	06/01/2024	PAYDOWN	.....	832,399	832,399	840,463	839,493	0	(7,095)	0	(7,095)	0	832,399	0	0	0	6,892	03/01/2051	1.A
..3140OM-4N-1	Fannie Mae Pool-POOL #CB2628 .....	.....	06/01/2024	PAYDOWN	.....	233,147	233,147	197,446	198,792	0	34,355	0	34,355	0	233,147	0	0	0	2,333	01/01/2052	1.A
..3140OR-EJ-8	Fannie Mae Pool-POOL #CB5536 .....	.....	06/01/2024	PAYDOWN	.....	249,307	249,307	252,151	252,063	0	(2,756)	0	(2,756)	0	249,307	0	0	0	6,356	01/01/2053	1.A
..3140OS-QC-8	Fannie Mae Pool-POOL #CB6750 .....	.....	06/01/2024	PAYDOWN	.....	410,749	410,749	397,318	397,458	0	13,291	0	13,291	0	410,749	0	0	0	8,928	07/01/2053	1.A
..3140OS-TZ-4	Fannie Mae Pool-POOL #CB6867 .....	.....	06/01/2024	PAYDOWN	.....	758,949	758,949	733,737	733,965	0	24,984	0	24,984	0	758,949	0	0	0	15,818	08/01/2053	1.A
..3140XL-W6-1	Fannie Mae Pool-POOL #FS5168 .....	.....	06/01/2024	PAYDOWN	.....	441,675	441,675	433,808	433,941	0	7,735	0	7,735	0	441,675	0	0	0	9,138	06/01/2053	1.A
..31416K-WP-9	Fannie Mae Pool-POOL #AA2453 .....	.....	06/01/2024	PAYDOWN	.....	112	112	114	113	0	(1)	0	(1)	0	112	0	0	0	2	02/01/2039	1.A
..31418D-JW-3	Fannie Mae Pool-POOL #MA3876 .....	.....	06/01/2024	PAYDOWN	.....	28,486	28,486	28,557	28,533	0	(47)	0	(47)	0	28,486	0	0	0	426	12/01/2049	1.A
..31418D-YS-5	Fannie Mae Pool-POOL #MA4320 .....	.....	06/01/2024	PAYDOWN	.....	367,080	367,080	374,192	373,725	0	(6,645)	0	(6,645)	0	367,080	0	0	0	3,776	04/01/2051	1.A
..31418E-T6-7	Fannie Mae Pool-POOL #MA5072 .....	.....	06/01/2024	PAYDOWN	.....	470,748	470,748	467,327	467,348	0	3,399	0	3,399	0	470,748	0	0	0	10,113	07/01/2053	1.A
..31418E-XU-9	Fannie Mae Pool-POOL #MA5190 .....	.....	06/01/2024	PAYDOWN	.....	364,525	364,525	362,232	362,246	0	2,279	0	2,279	0	364,525	0	0	0	7,941	11/01/2053	1.A
..34074M-ND-9	Florida Housing Finance -REVENUE BONDS .....	.....	05/01/2024	CALL 100	.....	106,232	106,232	106,232	106,232	0	0	0	0	0	106,232	0	0	0	1,453	07/01/2037	1.A FE
..34074M-PF-2	Florida Housing Finance -REVENUE BONDS .....	.....	05/01/2024	CALL 100	.....	83,248	83,248	83,248	83,250	0	0	0	0	0	83,250	0	(2)	(2)	853	01/01/2043	1.A FE
..41980U-AB-7	State of Hawaii Departme-REVENUE BONDS .....	.....	05/15/2024	CALL 100	.....	439,187	439,187	439,165	439,187	0	0	0	0	0	439,187	0	0	0	10,707	01/01/2043	1.A FE
..45201Y-YL-5	ILLINOIS ST HSG DEV AUTH REV PROG SER B .....	.....	05/01/2024	CALL 100	.....	23,047	23,047	22,333	22,488	0	5	0	5	0	22,494	0	553	553	264	06/01/2043	1.B FE
..45203L-CT-8	Illinois Housing Develop-REVENUE BONDS .....	.....	05/29/2024	CALL 100	.....	38,519	38,519	38,519	38,488	0	1	0	1	0	38,489	0	29	29	662	09/01/2034	1.A FE
..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	1.F FE
..47770V-AY-6	JobsOhio Beverage System-REVENUE BONDS .....	.....	06/30/2024	CALL 100	.....	725,000	725,000	703,091	704,435	0	(327)	0	(327)	0	704,107	0	20,893	20,893	10,210	01/01/2029	1.D FE
..52518R-BE-5	Lehman Structured Securi-LSSC 2002-GE1 A ....	.....	05/22/2024	PAYDOWN	.....	13,498	13,498	12,886	60	400	13,038	0	13,438	0	13,498	0	0	0	0	07/01/2024	6. *
..544525-NZ-4	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	1.C FE
..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	1.C FE
..57586N-MW-8	Massachusetts Housing Fi-REVENUE BONDS .....	.....	06/01/2024	SINKING PAYMENT	.....	16,122	16,122	16,122	16,122	0	0	0	0	0	16,122	0	0	0	325	12/01/2027	1.C FE
..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	1.A FE
..59334H-FU-4	Miami-Dade County Housin-REVENUE BONDS .....	.....	06/01/2024	CALL 100	.....	44,077	44,077	44,077	44,077	0	0	0	0	0	44,077	0	0	0	530	11/01/2038	1.A FE
..60416Q-FW-9	Minnesota Housing Financ-REVENUE BONDS .....	.....	05/01/2024	CALL 100	.....	39,523	39,523	38,535	38,760	0	8	0	8	0	38,768	0	755	755	423	09/01/2041	1.A FE
..60416Q-GK-4	Minnesota Housing Financ-REVENUE BONDS .....	.....	05/01/2024	CALL 100	.....	18,678	18,678	18,678	18,678	0	0	0	0	0	18,678	0	0	0	231	08/01/2046	1.A FE
..60416Q-GM-0	Minnesota Housing Financ-REVENUE BONDS .....	.....	06/01/2024	CALL 100	.....	6,348	6,348	5,535	5,620	0	7	0	7	0	5,627	0	721	721	59	10/01/2046	1.A FE
..60416Q-HA-5	Minnesota Housing Financ-REVENUE BONDS .....	.....	05/01/2024	CALL 100	.....	90,149	90,149	90,149	90,149	0	0	0	0	0	90,149	0	0	0	1,230	03/01/2048	1.A FE
..60416Q-HE-7	Minnesota Housing Financ-REVENUE BONDS .....	.....	05/01/2024	CALL 100	.....	42,410	42,410	42,410	42,410	0	0	0	0	0	42,410	0	0	0	676	09/01/2048	1.A FE
..60416Q-HG-2	Minnesota Housing Financ-REVENUE BONDS .....	.....	05/01/2024	CALL 100	.....	44,492	44,492	44,492	44,492	0	0	0	0	0	44,492	0	0	0	772	11/01/2048	1.A FE
..60416Q-HJ-6	Minnesota Housing Financ-REVENUE BONDS .....	.....	05/01/2024	CALL 100	.....	44,802	44,802	44,802	44,802	0	0	0	0	0	44,802	0	0	0	773	01/01/2049	1.A FE
..60416Q-HL-1	Minnesota Housing Financ-REVENUE BONDS .....	.....	05/01/2024	CALL 100	.....	45,748	45,748	45,748	45,748	0	0	0	0	0	45,748	0	0	0	719	03/01/2049	1.A FE

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident-ification	Description	For-ign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid-eration	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 Recogn-ized	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	NAIC Desig-nation, NAIC Desig-nation Modifier and SVO Admini-strative Symbol
..60416Q-HN-7	Minnesota Housing Financ-REVENUE BONDS .....	.....	06/01/2024	CALL 100 .....	.....	6,365	6,365	6,365	6,365	0	0	0	0	0	6,365	0	0	0	72	06/01/2049	1.A FE
..60416Q-HS-6	Minnesota Housing Financ-REVENUE BONDS .....	.....	05/01/2024	CALL 100 .....	.....	62,574	62,574	62,574	62,574	0	0	0	0	0	62,574	0	0	0	747	12/01/2049	1.A FE
..60636Y-HL-8	Missouri Housing Develop-REVENUE BONDS .....	.....	05/29/2024	CALL 100 .....	.....	3,272	3,272	3,272	3,272	0	0	0	0	0	3,272	0	0	0	67	07/01/2028	1.B FE
..60636Y-MJ-7	Missouri Housing Develop-REVENUE BONDS .....	.....	05/01/2024	CALL 100 .....	.....	7,251	7,251	7,251	7,251	0	0	0	0	0	7,251	0	0	0	128	01/01/2040	1.B FE
..60637B-FA-3	MISSOURI ST HSG DEV COMM-TAXABLE-REF-SPL .....	.....	04/01/2024	CALL 100 .....	.....	79,820	79,820	79,820	79,820	0	0	0	0	0	79,820	0	0	0	225	08/01/2036	1.B FE
..60637B-ML-1	Missouri Housing Develop-REVENUE BONDS .....	.....	05/01/2024	CALL 100 .....	.....	77,585	77,585	75,063	75,612	0	20	0	20	0	75,633	0	1,952	1,952	825	06/01/2044	1.B FE
..647200-2G-8	New Mexico Mortgage Fina-REVENUE BONDS .....	.....	05/01/2024	CALL 100 .....	.....	37,255	37,255	37,255	37,255	0	0	0	0	0	37,255	0	0	0	392	08/01/2035	1.A FE
..647200-4S-0	New Mexico Mortgage Fina-REVENUE BONDS .....	.....	05/01/2024	CALL 100 .....	.....	135,000	135,000	135,000	135,000	0	0	0	0	0	135,000	0	0	0	1,408	09/01/2040	1.B FE
..64971Q-8H-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	1.A FE
..64972B-R3-1	New York City Housing De-REVENUE BONDS .....	.....	05/01/2024	SINKING PAYMENT .....	.....	605,000	605,000	605,000	605,000	0	0	0	0	0	605,000	0	0	0	10,648	11/01/2025	1.C FE
..64972B-R4-9	New York City Housing De-REVENUE BONDS .....	.....	05/01/2024	SINKING PAYMENT .....	.....	895,000	895,000	897,685	896,023	0	(1,023)	0	(1,023)	0	895,000	0	0	0	16,916	05/01/2028	1.C FE
..64972C-BD-4	New York City Housing De-REVENUE BONDS .....	.....	05/15/2024	CALL 100 .....	.....	11,183	11,183	11,183	11,183	0	0	0	0	0	11,183	0	0	0	142	06/15/2036	1.C FE
..64972C-M6-7	New York City Housing De-REVENUE BONDS .....	.....	05/01/2024	CALL 100 .....	.....	64,432	64,432	64,506	64,432	0	(1)	0	(1)	0	64,505	0	(73)	(73)	832	10/01/2046	1.B FE
..67178K-AA-8	Oak Ridge Industrial Dev-REVENUE BONDS .....	.....	06/15/2024	SINKING PAYMENT .....	.....	45,582	45,582	42,765	43,966	0	1,616	0	1,616	0	45,582	0	0	0	1,317	12/15/2032	1.D FE
..677377-2P-7	Ohio Housing Finance Age-REVENUE BONDS .....	.....	05/01/2024	CALL 100 .....	.....	245,000	245,000	245,000	245,000	0	0	0	0	0	245,000	0	0	0	2,669	11/01/2041	1.A FE
..708797-AN-5	Pennsylvania Housing Fin-REVENUE BONDS .....	.....	05/28/2024	CALL 100 .....	.....	29,704	29,704	29,704	29,688	0	0	0	0	0	29,689	0	15	15	524	08/01/2035	1.A FE
..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	1.E FE
..88275F-NJ-9	Texas Department of Hous-REVENUE BONDS .....	.....	05/01/2024	CALL 100 .....	.....	25,000	25,000	25,000	25,006	0	(3)	0	(3)	0	25,003	0	(3)	(3)	493	09/01/2039	1.B FE
..88275F-PA-1	Texas Department of Hous-REVENUE BONDS .....	.....	05/01/2024	CALL 100 .....	.....	20,371	20,371	19,212	19,369	0	5	0	5	0	19,374	0	997	997	231	09/01/2047	1.B FE
..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	1.D FE
..91412G-GX-7	University of California-REVENUE BONDS .....	.....	05/15/2024	CALL 100 .....	.....	85,000	85,000	89,604	87,235	0	(93)	0	(93)	0	87,142	0	(2,142)	(2,142)	2,039	05/15/2031	1.C FE
..91743P-DD-4	Utah Housing Corp-REVENUE BONDS .....	.....	05/21/2024	CALL 100 .....	.....	47,841	47,841	49,941	49,772	0	(16)	0	(16)	0	49,756	0	(1,915)	(1,915)	856	02/21/2050	1.B FE
..91743P-DE-2	Utah Housing Corp-REVENUE BONDS .....	.....	05/21/2024	CALL 100 .....	.....	80,067	80,067	83,032	82,803	0	(11)	0	(11)	0	82,792	0	(2,725)	(2,725)	714	03/21/2050	1.B FE
..92812U-Q3-5	Virginia Housing Develop-REVENUE BONDS .....	.....	05/25/2024	CALL 100 .....	.....	84,209	84,209	84,209	84,156	0	1	0	1	0	84,156	0	53	53	1,903	12/25/2043	1.A FE
..92812U-Q4-3	Virginia Housing Develop-REVENUE BONDS .....	.....	05/25/2024	CALL 100 .....	.....	171,895	171,895	171,895	171,895	0	0	0	0	0	171,895	0	0	0	2,881	10/25/2037	1.A FE
..92812U-Q6-8	Virginia Housing Develop-REVENUE BONDS .....	.....	05/25/2024	CALL 100 .....	.....	82,363	82,363	82,363	82,348	0	0	0	0	0	82,348	0	15	15	1,235	06/25/2041	1.A FE
..92812U-Q7-6	Virginia Housing Develop-REVENUE BONDS .....	.....	05/25/2024	CALL 100 .....	.....	102,814	102,814	102,814	102,814	0	0	0	0	0	102,814	0	0	0	1,200	10/25/2049	1.A FE
..92812U-Q8-4	Virginia Housing Develop-REVENUE BONDS .....	.....	05/25/2024	CALL 100 .....	.....	187,695	187,695	187,695	187,695	0	0	0	0	0	187,695	0	0	0	2,635	12/25/2049	1.A FE
..92812U-XB-9	Virginia Housing Develop-REVENUE BONDS .....	.....	04/25/2024	CALL 100 .....	.....	478,795	478,795	515,902	502,693	0	(352)	0	(352)	0	502,340	0	(23,545)	(23,545)	2,713	03/25/2038	1.A FE
..92813T-EE-6	Virginia Housing Develop-REVENUE BONDS .....	.....	05/25/2024	CALL 100 .....	.....	165,282	165,285	165,285	165,208	0	1	0	1	0	165,209	0	76	76	2,464	08/25/2042	1.B FE
..93978X-EQ-9	Washington State Housing-REVENUE BONDS .....	.....	05/01/2024	CALL 100 .....	.....	65,000	65,000	65,000	64,951	0	18	0	18	0	64,969	0	31	31	818	09/01/2040	1.A FE
..93978X-ER-7	Washington State Housing-REVENUE BONDS .....	.....	05/01/2024	CALL 100 .....	.....	55,000	55,000	54,753	55,000	0	0	0	0	0	55,000	0	0	0	722	05/01/2041	1.A FE
..97689Q-EL-6	Wisconsin Housing & Econ-REVENUE BONDS .....	.....	04/05/2024	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	1.C FE
0909999999. Subtotal - Bonds - U.S. Special Revenues						42,775,716	42,591,239	44,835,590	43,770,854	400	2,097	0	2,497	0	43,773,346	0	(997,628)	(997,628)	1,134,035	XXX	XXX
..000077B-4W-0	ABN Amro Mortgage Corp-AMAC 2002-9 A30 .....	.....	06/01/2024	PAYDOWN .....	.....	219	219	221	214	0	6	0	6	0	219	0	0	0	5	12/01/2032	1.A FM
..0000780-NL-6	ABN Amro Mortgage Corp-AMAC 2003-12 2A .....	.....	06/01/2024	PAYDOWN .....	.....	93	93	95	92	0	2	0	2	0	93	0	0	0	2	12/01/2033	1.A FM
..000085K-AS-2	ABPCI Direct Lending Fun-ABPCI 2019-7A A .....	.....	05/30/2024	PAYDOWN .....	.....	9,308,250	9,308,250	9,308,250	9,308,250	0	0	0	0	0	9,308,250	0	0	0	291,800	10/20/2031	1.A FE
..00184@-AA-4	Amazon (Euclid Oh) Trust Certificate .....	.....	06/30/2024	SINKING PAYMENT .....	.....	34,878	34,878	34,878	34,861	0	17	0	17	0	34,878	0	0	0	703	06/30/2039	1.D
..00191#-AA-3	Amazon (Tucson Az) Trust Certificate .....	.....	06/30/2024	SINKING PAYMENT .....	.....	38,460	38,460	38,428	38,428	0	32	0	32	0	38,460	0	0	0	788	08/31/2039	1.D
..00191@-AA-5	Amazon (Oklahoma City Ok Trust Certifica .....	.....	06/30/2024	SINKING PAYMENT .....	.....	73,367	73,367	73,367	73,358	0	8	0	8	0	73,367	0	0	0	1,555	09/30/2039	1.E
..00193*-AA-5	Amazon (Tulsa Ok) Trust Certificate .....	.....	06/30/2024	SINKING PAYMENT .....	.....	76,710	76,710	76,710	76,707	0	4	0	4	0	76,710	0	0	0	1,806	09/30/2039	1.D
..00195#-AA-9	Amazon (Toledo Oh) Trust Certificate .....	.....	06/30/2024	SINKING PAYMENT .....	.....	126,625	126,625	126,625	126,625	0	0	0	0	0	126,625	0	0	0	2,633	10/31/2040	1.D
..00217L-AC-6	AREIT 2019-CRE3 Trust-AREIT 2019-CRE3 AS .....	.....	04/15/2024	PAYDOWN .....	.....	5,661,914	5,661,914	5,661,914	5,661,914	0	0	0	0	0	5,661,914	0	0	0	192,701	09/14/2036	1.A FE
..00225#-AA-3	Amazon (Grand Rapids, M Trust Certifica .....	.....	06/30/2024	SINKING PAYMENT .....	.....	35,970	35,970	35,970	35,943	0	27	0	27	0	35,970	0	0	0	738	09/30/2039	1.D
..00432C-CW-9	ACCESS GROUP INC-SERIES 2005-B CLASS A3 .....	.....	04/25/2024	PAYDOWN .....	.....	55,126	55,126	50,854	54,311	0	815	0	815	0	55,126	0	0	0	1,816	07/25/2035	1.A FE
..00436M-AA-3	Accelerated Assets 2018-AALLC 2018-1 A .....	.....	06/02/2024	PAYDOWN .....	.....	148,094	148,094	148,057	148,076	0	18	0	18	0	148,094	0	0	0	2,403	12/02/2033	1.F FE

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident-ification	Description	For-eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid-eration	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 Recogn-ized	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	NAIC Desig-nation, NAIC Desig-nation Modifier and SVO Admini-strative Symbol
..007036-GS-9	Adjustable Rate Mortgage-ARMT 2005-2 2A1		06/01/2024	PAYDOWN		77,418	77,418	72,435	75,144	0	2,274	0	2,274	0	77,418	0	0	0	2,977	06/01/2035	1.A FM
..007036-SE-7	Adjustable Rate Mortgage-ARMT 2005-9 5A1		06/25/2024	PAYDOWN		61,450	61,450	42,866	76,530	0	(15,080)	0	(15,080)	0	61,450	0	0	0	1,273	11/25/2035	1.A FM
..00703Q-AD-4	Adjustable Rate Mortgage-ARMT 2006-3 4A1		06/25/2024	PAYDOWN		78,198	78,198	42,419	30,506	0	47,422	(269)	47,691	0	78,198	0	0	0	465	08/25/2036	1.A FM
..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	1.A FE
..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	1.F FE
..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	1.A FE
..009098-AA*-5	Air Cargo Logistics Ft W Lease-Collatera		06/10/2024	SINKING PAYMENT		28,677	28,677	28,677	28,677	0	0	0	0	0	28,677	0	0	0	645	11/10/2039	1.E
..00910G-AA*-4	Air Cargo Logistics Ctl Trust Certificat		06/10/2024	SINKING PAYMENT		40,767	40,767	40,767	40,767	0	0	0	0	0	40,767	0	0	0	950	02/10/2041	1.E
..00981@-AA-9	Akron Childrens Hospital Trust Certifica		06/15/2024	SINKING PAYMENT		26,900	26,900	27,169	27,136	0	(236)	0	(236)	0	26,900	0	0	0	534	08/15/2050	1.F
..02146P-AF-2	Alternative Loan Trust 2-CWALT 2006-HY12		06/01/2024	PAYDOWN		29,278	29,278	18,780	22,994	0	6,294	0	6,294	0	29,278	0	0	0	445	08/01/2036	1.A FM
..02146T-AL-1	Alternative Loan Trust 2-CWALT 2006-24CB		06/01/2024	PAYDOWN		9,207	9,207	4,711	4,785	0	4,425	0	4,425	0	9,207	0	0	0	177	08/01/2036	1.A FM
..02147X-AR-8	Alternative Loan Trust 2-CWALT 2006-32CB		06/01/2024	PAYDOWN		5,013	4,407	2,869	3,024	0	1,547	6	1,541	0	5,013	0	0	0	98	11/01/2036	4.A FM
..02150V-AA-3	Alternative Loan Trust 2-CWALT 2007-HY7C		06/25/2024	PAYDOWN		13,209	12,245	9,894	11,865	0	590	0	590	0	13,209	0	0	0	341	08/25/2037	1.A FM
..02152A-AS-8	Alternative Loan Trust 2-CWALT 2007-16CB		06/25/2024	PAYDOWN		26,684	23,168	14,140	14,521	0	(6,483)	(26,807)	20,324	0	26,684	0	0	0	673	08/25/2037	1.A FM
..02377A-AA-6	American Airlines 2014-1-SECURED NOTE		04/01/2024	SINKING PAYMENT		207,207	207,207	207,207	207,238	0	(31)	0	(31)	0	207,207	0	0	0	3,833	10/01/2026	2.C FE
..02660L-AA-8	American Home Mortgage A-AHMA 2006-4 1A1		06/25/2024	PAYDOWN		1,899	1,899	1,424	1,688	0	1,211	0	1,211	0	1,899	0	0	0	35	10/25/2046	1.A FM
..02660T-AR-4	American Home Mortgage I-AHM 2004-1 4A		06/01/2024	PAYDOWN		85,057	85,057	84,100	85,057	0	0	0	0	0	85,057	0	0	0	1,616	04/01/2044	5.A FM
..02660T-DH-3	American Home Mortgage I-AHM 2005-1 6A		06/01/2024	PAYDOWN		18,470	18,470	16,092	20,805	0	(2,334)	0	(2,334)	0	18,470	0	0	0	422	06/01/2045	1.A FM
..02660T-EK-5	American Home Mortgage I-AHM 2005-2 1A1		06/25/2024	PAYDOWN		28,075	28,075	26,277	27,235	0	840	0	840	0	28,075	0	0	0	510	09/25/2045	1.A FM
..02660V-AE-8	American Home Mortgage A-AHMA 2005-1 3A1		06/25/2024	PAYDOWN		781	781	637	758	0	23	0	23	0	781	0	0	0	12	11/25/2035	1.A FM
..026929-AA-7	American Home Mortgage I-AHM 2006-3 11A1		06/25/2024	PAYDOWN		27,590	27,590	21,124	22,286	0	5,304	0	5,304	0	27,590	0	0	0	957	12/25/2046	1.A FM
..03464B-AA-5	Angel Oak Mortgage Trust-AOMT 2022-1 A1		06/01/2024	PAYDOWN		214,035	214,035	214,032	214,035	0	0	0	0	0	214,035	0	0	0	2,527	12/01/2066	1.A
..03464B-AB-4	Angel Oak Mortgage Trust-AOMT 2022-1 A2		06/01/2024	PAYDOWN		609,017	609,017	609,012	609,012	0	5	0	5	0	609,017	0	0	0	7,830	12/01/2066	1.A
..03464B-AC-2	Angel Oak Mortgage Trust-AOMT 2022-1 A3		06/01/2024	PAYDOWN		609,017	609,017	609,007	609,008	0	9	0	9	0	609,017	0	0	0	8,211	12/01/2066	1.A
..03464B-AA-5	Angel Oak Mortgage Trust-AOMT 2022-2 A1		06/01/2024	PAYDOWN		626,298	626,298	624,096	626,298	0	0	0	0	0	626,298	0	0	0	8,722	01/01/2067	1.A FE
..03464P-AB-3	Angel Oak Mortgage Trust-AOMT 2022-2 A2		06/01/2024	PAYDOWN		375,779	375,779	375,199	375,203	0	576	0	576	0	375,779	0	0	0	5,871	01/01/2067	1.B FE
..03464P-AC-1	Angel Oak Mortgage Trust-AOMT 2022-2 A3		06/01/2024	PAYDOWN		375,779	375,779	374,834	374,840	0	939	0	939	0	375,779	0	0	0	6,030	01/01/2067	1.E FE
..03464T-AA-7	Angel Oak Mortgage Trust-AOMT 2022-3 A1		06/01/2024	PAYDOWN		179,550	179,550	177,628	178,132	0	1,418	0	1,418	0	179,550	0	0	0	3,092	01/01/2067	1.A FE
..03464T-AB-5	Angel Oak Mortgage Trust-AOMT 2022-3 A2		06/01/2024	PAYDOWN		119,704	119,704	117,150	117,616	0	2,087	0	2,087	0	119,704	0	0	0	2,301	01/01/2067	1.C FE
..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	1.F FE
..03837Q-AA-0	Aqua Finance Trust 2019-AQFIT 2019-A A		06/15/2024	PAYDOWN		66,812	66,812	66,802	66,798	0	14	0	14	0	66,812	0	0	0	877	07/16/2040	1.A FE
..038413-AA-8	Aqua Finance Trust 2020-AQFIT 2020-AA A		06/17/2024	PAYDOWN		238,359	238,359	238,315	238,316	0	43	0	43	0	238,359	0	0	0	1,889	07/17/2046	1.A FE
..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	1.F PL
..04249@-AD-3	Army & Air Force Exchang Senior Note		06/15/2024	SINKING PAYMENT		46,138	46,138	46,138	46,138	0	0	0	0	0	46,138	0	0	0	1,182	10/15/2024	1.D
..04285E-AC-1	Arroyo Mortgage Trust 20-ARRW 2022-2 A2		06/01/2024	PAYDOWN		134,275	134,275	130,001	131,182	0	3,093	0	3,093	0	134,275	0	0	0	1,861	07/01/2057	1.C FE
..04285E-AD-9	Arroyo Mortgage Trust 20-ARRW 2022-2 A3		06/01/2024	PAYDOWN		134,275	134,275	128,709	130,240	0	4,035	0	4,035	0	134,275	0	0	0	2,750	07/01/2057	1.F FE
..04285E-AM-9	Arroyo Mortgage Trust 20-ARRW 2022-2 A1		06/01/2024	PAYDOWN		129,110	129,110	127,549	128,217	0	893	0	893	0	129,110	0	0	0	1,774	07/01/2057	1.A FE
..05279@-AA-9	Autoliv ASP, Inc. Trust Certificate Tran		06/15/2024	SINKING PAYMENT		74,209	74,209	74,209	74,209	0	0	0	0	0	74,209	0	0	0	1,525	05/15/2034	2.B
..05532E-CE-3	BCAP LLC 2009-RR10 Trust-BCAP 2009-RR10		06/01/2024	PAYDOWN		10,329	10,810	3,110	6,808	0	3,654	0	3,654	0	10,329	0	0	0	304	06/01/2037	1.A FM
..05532T-AF-9	BCAP LLC 2010-RR1 Trust-BCAP 2010-RR1 2A		06/01/2024	PAYDOWN		166,763	166,763	72,542	252,276	0	(85,513)	0	(85,513)	0	166,763	0	0	0	4,114	06/01/2045	1.A FM
..05533N-AJ-3	BCAP LLC 2010-RR12 Trust-BCAP 2010-RR12		06/01/2024	PAYDOWN		62,431	62,712	54,943	60,965	0	1,648	0	1,648	0	62,431	0	0	0	1,039	06/01/2037	5.A FM
..05552Y-AX-4	BBCMS Mortgage Trust 202-BBCMS 2022-C16		06/26/2024	BOFAMILSEC		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	1.D
..05553D-AB-7	BHG Securitization Trust-BHG 2022-B B		06/17/2024	PAYDOWN		867,476	867,476	867,454	867,454	0	11	0	11	0	867,476	0	0	0	19,718	06/18/2035	1.D FE
..05568D-AA-2	BNSF Railway Co 2006-3 P-FIRST LIEN		04/01/2024	MATURITY		47,584	47,584	45,995	47,334	0	250	0	250	0	47,584	0	0	0	1,280	04/01/2024	1.C FE
..05586*-AA-9	BGS Spartanburg 2017 Trust Certificate		06/15/2024	SINKING PAYMENT		119,674	119,674	119,674	119,674	0	0	0	0	0	119,674	0	0	0	3,296	07/15/2032	2.A S
..05587*-AA-8	BGS Fedex Series 2017A Trust Certificate		06/15/2024	SINKING PAYMENT		102,998	102,998	102,998	103,001	0	(3)	0	(3)	0	102,998	0	0	0	2,703	03/15/2037	1.E PL

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Identification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..05588*-AA-7	BGS Huntersville 2017 Trust Certificate		06/15/2024	SINKING PAYMENT		98,575	98,575	98,575	98,575	0	0	0	0	0	98,575	0	0	0	1,827	05/15/2038	2.B S
..05590#-AA-9	BPHQ 2017 Trust Certificate BP Corp Nort		06/15/2024	SINKING PAYMENT		53,236	53,236	53,236	53,236	0	0	0	0	0	53,236	0	0	0	946	11/15/2032	1.F
..05606D-AC-2	BX TRUST - BX 2022-PSB B-BX 2022-PSB B		05/15/2024	PAYDOWN		366,360	366,360	363,922	362,280	0	4,080	0	4,080	0	366,360	0	0	0	12,838	08/15/2039	1.A
..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	1.A
..05608W-AG-9	BX Commercial Mortgage T-BX 2021-SOAR B		05/15/2024	PAYDOWN		16,679	16,679	15,887	17,161	0	(482)	0	(482)	0	16,679	0	0	0	445	06/15/2038	1.A
..05608W-AN-4	BX Trust-BX 2021-SOAR E		05/15/2024	PAYDOWN		60,061	60,061	60,061	60,061	0	0	0	0	0	60,061	0	0	0	1,838	06/15/2038	1.A
..05609K-AC-3	BX Commercial Mortgage T-BX 2021-XL2 B		06/15/2024	PAYDOWN		390,110	390,110	374,688	376,628	0	13,482	0	13,482	0	390,110	0	0	0	10,145	10/15/2038	1.A
..05609K-AJ-8	BX Commercial Mortgage T-BX 2021-XL2 E		06/15/2024	PAYDOWN		390,110	390,110	388,159	388,136	0	1,974	0	1,974	0	390,110	0	0	0	11,480	10/15/2038	1.A
..05609K-AL-3	BX Commercial Mortgage T-BX 2021-XL2 F		06/15/2024	PAYDOWN		975,275	975,275	970,395	970,463	0	4,811	0	4,811	0	975,275	0	0	0	30,269	10/15/2038	1.A
..05609K-AN-9	BX Commercial Mortgage T-BX 2021-XL2 G		06/15/2024	PAYDOWN		1,170,330	1,170,330	1,164,436	1,164,474	0	5,894	0	5,894	0	1,170,330	0	0	0	39,148	10/15/2038	1.A
..05609R-AL-8	BX Trust-BX 2021-BXMF D		06/15/2024	PAYDOWN		62,935	62,935	62,427	62,776	0	159	0	159	0	62,935	0	0	0	2,327	10/15/2026	1.A
..05609R-AN-4	BX Trust-BX 2021-BXMF E		06/15/2024	PAYDOWN		117,791	117,791	116,838	117,495	0	296	0	296	0	117,791	0	0	0	4,713	10/15/2026	1.A
..058927-AG-9	Banc of America Funding -BAFC 2006-A 3A2		06/01/2024	PAYDOWN		5,400	4,702	4,105	4,515	0	(11,674)	0	(11,674)	0	5,400	0	0	0	258	02/01/2036	3.B FM
..058931-AD-8	Banc of America Funding -BAFC 2006-3 2A1		06/01/2024	PAYDOWN		197,860	200,337	163,387	161,853	0	36,986	0	36,986	0	197,860	0	0	0	6,963	03/01/2036	1.A FM
..058931-AT-3	Banc of America Funding -BAFC 2006-3 4A1		06/01/2024	PAYDOWN		192,047	197,694	178,665	201,138	0	3,855	9,127	(5,272)	0	192,047	0	0	0	6,677	03/01/2036	4.C FM
..058931-BL-9	Banc of America Funding -BAFC 2006-3 5A8		06/01/2024	PAYDOWN		597	717	728	555	0	65	0	65	0	597	0	0	0	13	03/01/2036	3.C FM
..058933-AN-2	Banc of America Funding -BAFC 2006-D 5A1		06/01/2024	PAYDOWN		10,821	10,496	9,574	9,746	0	768	0	768	0	10,821	0	0	0	459	05/01/2036	1.A FM
..05946X-XP-3	Banc of America Funding -BAFC 2005-E 3A1		06/01/2024	PAYDOWN		109,486	111,402	109,243	113,694	0	(2,491)	0	(2,491)	0	109,486	0	0	0	2,886	05/01/2035	4.B FM
..05946X-Y7-2	Banc of America Funding -BAFC 2005-8 2A8		06/01/2024	PAYDOWN		10,336	11,016	10,766	10,632	0	(1,552)	0	(1,924)	0	8,711	0	0	0	2,603	01/01/2036	3.C FM
..05946X-YV-9	Banc of America Funding -BAFC 2005-F 2A1		06/01/2024	PAYDOWN		2,025	8,359	7,790	8,546	0	(639)	0	(639)	0	2,025	0	0	0	358	09/01/2035	3.B FM
..05948X-T2-7	Banc of America Mortgage-BOAMS 2004-A 2A		06/01/2024	PAYDOWN		16,749	16,749	16,498	16,716	0	33	0	33	0	16,749	0	0	0	608	02/01/2034	1.A FM
..05949A-H8-6	Banc of America Mortgage-BOAMS 2005-A 2A		06/01/2024	PAYDOWN		10,632	10,632	10,632	10,632	0	0	0	0	0	10,632	0	0	0	265	02/01/2035	1.A FM
..05949A-H9-4	Banc of America Mortgage-BOAMS 2005-A 2A		06/01/2024	PAYDOWN		13,277	13,277	12,929	13,277	0	0	0	0	0	13,277	0	0	0	256	02/01/2035	1.A FM
..05949C-GW-0	Banc of America Mortgage-BOAMS 2005-8 A9		06/01/2024	PAYDOWN		5,861	8,009	7,800	7,598	0	386	0	386	0	5,861	0	0	0	448	09/01/2035	4.C FM
..05949C-HM-1	Banc of America Mortgage-BOAMS 2005-I 1A		06/01/2024	PAYDOWN		6,458	6,458	5,548	5,688	0	770	0	770	0	6,458	0	0	0	208	10/01/2035	4.B FM
..05949C-KS-4	Banc of America Mortgage-BOAMS 2005-J 2A		06/01/2024	PAYDOWN		1,976	1,888	1,845	1,948	0	(58)	0	(58)	0	1,976	0	0	0	84	11/01/2035	3.A FM
..05949C-KX-3	Banc of America Mortgage-BOAMS 2005-J 4A		06/01/2024	PAYDOWN		14,072	14,254	11,665	11,715	0	2,487	(1)	2,488	0	14,072	0	0	0	449	11/01/2035	1.A FM
..05949C-PP-5	Banc of America Mortgage-BOAMS 2005-L 4A		06/01/2024	PAYDOWN		14,501	15,063	14,253	14,184	0	808	0	808	0	14,501	0	0	0	607	01/01/2036	1.A FM
..05949T-AX-7	Banc of America Funding -BAFC 2006-1 1A2		06/01/2024	PAYDOWN		58,002	58,002	63,310	63,750	0	(5,748)	0	(5,748)	0	58,002	0	0	0	1,368	01/01/2036	1.A FM
..05950M-AJ-9	Banc of America Funding -BAFC 2006-G 3A3		06/01/2024	PAYDOWN		111,026	111,026	106,446	109,543	0	1,483	0	1,483	0	111,026	0	0	0	2,588	07/01/2036	1.A FM
..05950P-AF-0	Banc of America Funding -BAFC 2006-H 2A3		06/01/2024	PAYDOWN		16,697	17,183	15,052	14,596	0	2,481	0	2,481	0	16,697	0	0	0	602	09/01/2046	1.A FM
..05950T-AC-9	Banc of America Mortgage-BOAMS 2006-B 2A		06/01/2024	PAYDOWN		2,787	3,101	2,989	2,547	0	(47)	0	(47)	0	2,292	0	495	495	26	11/01/2046	1.A FM
..05951F-AB-0	Banc of America Funding -BAFC 2007-1 TA1		06/01/2024	PAYDOWN		914	889	845	703	0	188	0	188	0	914	0	0	0	18	01/01/2037	1.A FM
..05951K-AN-3	Banc of America Funding -BAFC 2006-7 1A1		06/01/2024	PAYDOWN		3,400	6,916	6,072	6,305	0	500	0	500	0	3,400	0	0	0	173	09/01/2036	3.B FM
..05951U-AC-5	Banc of America Funding -BAFC 2006-8T2 A		06/01/2024	PAYDOWN		118	136	129	103	0	32	0	32	0	118	0	0	0	6	10/01/2036	1.A FM
..05951V-AV-1	Banc of America Funding -BAFC 2006-I 6A1		06/20/2024	PAYDOWN		42,534	42,534	35,068	42,178	0	(32,566)	0	(32,566)	0	42,534	0	0	0	817	12/20/2046	1.A FM
..059522-AA-0	Banc of America Funding -BAFC 2007-C 6A1		06/20/2024	PAYDOWN		192,792	192,792	165,801	219,782	0	(26,991)	0	(26,991)	0	192,792	0	0	0	7,817	05/20/2047	1.A FM
..059522-AU-6	Banc of America Funding -BAFC 2007-C 1A2		06/01/2024	PAYDOWN		80,364	66,962	60,488	59,664	0	(16,547)	(54,757)	38,210	0	80,364	0	0	0	2,939	05/01/2036	1.A FM
..059523-AX-8	Banc of America Funding -BAFC 2007-5 TA1		06/01/2024	PAYDOWN		5,713	20,837	12,157	15,139	0	(231)	0	(231)	0	5,713	0	0	0	1,168	07/01/2047	1.A FM
..05952G-AT-8	Banc of America Funding -BAFC 2007-D 3A1		06/01/2024	PAYDOWN		1,198	2,496	2,487	2,487	0	38	132	(94)	0	1,198	0	0	0	55	06/01/2037	1.A FM
..05952G-AV-3	Banc of America Funding -BAFC 2007-D 3A3		06/01/2024	PAYDOWN		1,724	3,591	3,368	3,574	0	(1,424)	188	(1,612)	0	1,724	0	0	0	66	06/01/2037	2.C FM
..05953Y-AH-4	Banc of America Funding -BAFC 2007-4 TA1		06/01/2024	PAYDOWN		3,631	3,631	3,173	2,964	0	667	0	667	0	3,631	0	0	0	110	05/01/2037	1.A FM
..05954D-AL-0	Banc of America Funding -BAFC 2007-E 6A1		06/01/2024	PAYDOWN		214	216	188	195	0	(1,584)	0	(1,584)	0	214	0	0	0	15	09/01/2037	4.A FM
..05956E-AB-8	Banc of America Funding -BAFC 2010-R6 1A		04/01/2024	PAYDOWN		60,724	60,724	59,814	60,710	0	122	0	122	0	60,724	0	0	0	1,141	02/01/2035	1.A FM
..05990E-AD-2	Banc of America Funding -BAFC 2012-R6 2A		06/26/2024	PAYDOWN		65,473	58,736	51,116	64,408	0	(4,186)	0	(4,186)	0	65,473	0	0	0	2,288	07/26/2036	3.C FM
..05990H-AH-6	Banc of America Funding -BAFC 2010-R2 1A		06/01/2024	PAYDOWN		55,232	56,017	35,443	37,751	0	17,933	0	17,933	0	55,232	0	0	0	1,628	08/01/2037	1.A FM

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident- ification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..05990H-AQ-6	Banc of America Funding -BAFC 2010-R2 3A		06/01/2024	PAYDOWN		15,529	15,529	15,097	15,302	0	227	0	227	0	15,529	0	0	0	454	07/01/2035	1.A FM
..05990H-AT-0	Banc of America Funding -BAFC 2010-R2 4A		06/01/2024	PAYDOWN		20,247	43,101	33,955	36,913	0	1,917	897	1,020	0	20,247	0	0	0	1,127	08/01/2036	1.A FM
..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	2.A FE
..06051G-LA-5	Bank of America Corp-SENIOR UNSECURED		06/11/2024	BARINGSLLC		7,916,582	8,000,000	8,000,000	8,000,000	0	0	0	0	0	8,000,000	0	(83,418)	(83,418)	342,181	07/22/2026	1.G FE
..064248-AA-1	Bank Of America (Houston Pass-Thru Certi		06/15/2024	SINKING PAYMENT		98,277	98,277	98,881	98,614	0	(338)	0	(338)	0	98,277	0	0	0	1,419	12/31/2029	1.B S
..06541L-AL-0	Bank-SERIES 22-BNK40 CLASS E		05/21/2024	BOFAMILSEC		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	1.G
..06744D-AA-7	Barclays Mortgage Loan T-BARC 2022-NQM1		06/01/2024	PAYDOWN		45,227	45,227	44,383	44,574	0	653	0	653	0	45,227	0	0	0	911	07/01/2052	1.A FE
..06744D-AB-5	Barclays Mortgage Loan T-BARC 2022-NQM1		06/01/2024	PAYDOWN		45,227	45,227	43,511	43,814	0	1,413	0	1,413	0	45,227	0	0	0	904	07/01/2052	1.C FE
..06744D-AC-3	Barclays Mortgage Loan T-BARC 2022-NQM1		06/01/2024	PAYDOWN		127,178	127,178	120,723	121,851	0	5,327	0	5,327	0	127,178	0	0	0	3,001	07/01/2052	1.F FE
..06744Y-AA-1	Barclays Mortgage Loan T-BARC 2022-INV1		06/01/2024	PAYDOWN		505,044	505,044	505,037	505,044	0	0	0	0	0	505,044	0	0	0	9,735	02/01/2062	1.A FE
..07325D-AF-1	Bayview Financial Mortga-BAYV 2006-C 1A5		06/01/2024	PAYDOWN		7,836	7,836	6,329	7,282	0	732	178	554	0	7,836	0	0	0	122	11/01/2036	1.A FM
..07325V-AE-4	Bayview Financial Acquis-BAYV 2007-A 1A4		06/01/2024	PAYDOWN		749,881	749,881	629,900	698,656	0	51,225	0	51,225	0	749,881	0	0	0	19,424	05/01/2037	1.A FM
..07336P-AA-2	Bayview Opportunity Mast-BVCLN 2024-EDU1		06/25/2024	PAYDOWN		680,926	680,926	680,926	680,926	0	0	0	0	0	680,926	0	0	0	4,633	06/25/2047	1.A FE
..07336P-AC-8	Bayview Opportunity Mast-BVCLN 2024-EDU1		06/25/2024	PAYDOWN		126,097	126,097	126,097	126,097	0	0	0	0	0	126,097	0	0	0	902	06/25/2047	1.F FE
..07384M-4K-5	Bear Stearns ARM Trust 2-BSARM 2004-10 2		06/01/2024	PAYDOWN		15,901	15,901	14,827	15,648	0	252	0	252	0	15,901	0	0	0	472	01/01/2035	1.A FM
..07384M-Q8-8	Bear Stearns ARM Trust 2-BSARM 2004-3 2A		06/01/2024	PAYDOWN		6,329	6,329	6,329	6,329	0	0	0	0	0	6,329	0	0	0	112	07/01/2034	1.A FM
..07384M-S7-8	Bear Stearns ARM Trust 2-BSARM 2004-5 2A		06/01/2024	PAYDOWN		125,441	125,441	125,988	125,441	0	0	0	0	0	125,441	0	0	0	1,600	07/01/2034	4.A FM
..07384Y-KF-2	Bear Stearns Asset Backe-BSABS 2003-AC4		06/01/2024	PAYDOWN		40,613	40,613	41,045	40,122	0	491	0	491	0	40,613	0	0	0	1,691	09/01/2033	1.A FM
..07384Y-TL-0	Bear Stearns Asset Backe-BSABS 2004-SD2		06/01/2024	PAYDOWN		4,201	4,201	4,249	4,316	0	(114)	0	(114)	0	4,201	0	0	0	106	03/01/2044	1.A FM
..07386H-PD-7	Bear Stearns ALT-A Trust-BALTA 2004-12 2		06/01/2024	PAYDOWN		3,050	3,050	2,799	2,900	0	151	0	151	0	3,050	0	0	0	70	01/01/2035	1.A FM
..07386H-QZ-7	Bear Stearns ALT-A Trust-BALTA 2005-2 2A		06/01/2024	PAYDOWN		60,909	60,909	51,775	50,049	0	10,432	0	10,432	0	60,909	0	0	0	1,711	04/01/2035	1.A FM
..07386H-UG-4	Bear Stearns ALT-A Trust-BALTA 2005-5 21		05/01/2024	PAYDOWN		48	48	43	46	0	2	0	2	0	48	0	0	0	1	07/01/2035	1.A FM
..07386Y-AE-4	Bear Stearns ARM Trust 2-BSARM 2007-5 3A		06/01/2024	PAYDOWN		21,349	18,072	17,086	16,542	0	4,600	2,227	2,373	0	21,349	0	0	0	2,136	08/01/2047	1.A FM
..073870-AG-2	Bear Stearns ALT-A Trust-BALTA 2007-2 2A		06/01/2024	PAYDOWN		3,966	6,029	3,194	3,456	0	609	0	609	0	3,966	0	0	0	110	04/01/2037	1.A FM
..073879-GN-2	Bear Stearns Asset Backe-BSABS 2004-AC5		06/25/2024	PAYDOWN		10,430	10,430	7,796	8,973	0	1,457	0	1,457	0	10,430	0	0	0	205	10/25/2034	1.A FM
..073880-AD-8	Bear Stearns ARM Trust 2-BSARM 2007-1 2A		06/01/2024	PAYDOWN		4,568	13,434	10,486	12,590	0	(4,554)	(10,051)	5,497	0	4,568	0	0	0	890	02/01/2047	4.A FM
..073980-AG-1	Bear Stearns ARM Trust 2-BSARM 2007-1 3A		06/01/2024	PAYDOWN		8,821	6,294	5,305	5,764	0	(21,685)	0	(21,685)	0	8,821	0	0	0	1,031	02/01/2047	1.A FM
..073989-AC-9	Bear Stearns Asset Backe-BSABS 2006-SD4		06/01/2024	PAYDOWN		21,167	21,167	16,623	17,173	0	4,563	569	3,994	0	21,167	0	0	0	361	10/01/2036	1.A FM
..07401C-AS-2	Bear Stearns ARM Trust 2-BSARM 2007-4 21		06/01/2024	PAYDOWN		808,992	800,129	711,449	734,847	0	125,473	15,706	109,767	0	808,992	0	0	0	13,889	06/01/2047	5.A FM
..08862G-AA-2	BHG Securitization Trust-BHG 2023-B A		06/17/2024	PAYDOWN		498,569	498,569	498,503	498,507	0	62	0	62	0	498,569	0	0	0	14,630	12/17/2036	1.A FE
..09258E-AB-4	BlackRock TCP 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	0	(575,768)	(575,768)	239,083	02/09/2026	2.C FE
..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	2.C FE
..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	2.C FE
..097093-AC-2	BOF VII AL Funding Trust-BVABS 2023-CAR3		06/25/2024	PAYDOWN		825,860	825,860	825,852	825,860	0	0	0	0	0	825,860	0	0	0	18,037	07/26/2032	1.0 FE
..10568K-AA-6	BRAVO Residential Fundin-BRAVO 2022-NQM2		06/01/2024	PAYDOWN		167,754	167,754	167,751	167,754	0	0	0	0	0	167,754	0	0	0	3,029	11/01/2061	1.A FE
..10568K-AB-4	BRAVO Residential Fundin-BRAVO 2022-NQM2		06/01/2024	PAYDOWN		74,996	74,996	74,995	74,995	0	1	0	1	0	74,996	0	0	0	1,548	11/01/2061	1.C FE
..10569F-AA-5	BRAVO Residential Fundin-BRAVO 2022-NQM1		06/01/2024	PAYDOWN		356,136	356,136	355,876	355,876	0	260	0	260	0	356,136	0	0	0	5,578	09/01/2061	1.E FE
..10569J-AB-6	BRAVO Residential Fundin-BRAVO 2022-NQM3		06/01/2024	PAYDOWN		22,883	22,883	22,793	22,860	0	23	0	23	0	22,883	0	0	0	570	07/01/2062	1.C FE
..10948W-AA-1	Brightsphere Investment -SENIOR UNSECURE		06/12/2024	VARIOUS		26,751,700	27,000,000	26,431,330	26,819,945	0	28,775	0	28,775	0	27,745,035	0	(993,335)	(993,335)	1,120,350	07/27/2026	3.A FE
..11044M-AA-4	BRITISH AIR 20-1 A PPT-FIRST LIEN		05/15/2024	SINKING PAYMENT		36,987	36,987	36,987	36,987	0	0	0	0	0	36,987	0	0	0	786	11/15/2032	1.G FE
..11750*-AA-7	Bryan Health (Kearney NE Senior Secured		06/15/2024	SINKING PAYMENT		70,712	70,712	70,712	70,712	0	0	0	0	0	70,712	0	0	0	1,571	12/15/2046	1.E
..12327A-AA-6	Business Jet Securities -BJETS 2022-1A A		06/15/2024	PAYDOWN		518,513	518,513	503,039	506,626	0	11,887	0	11,887	0	518,513	0	0	0	8,364	06/15/2037	1.F FE
..12327F-AA-5	Business Jet Securities -BJETS 2020-1A A		04/15/2024	PAYDOWN		1,436,787	1,436,787	1,436,766	1,436,777	0	10	0	10	0	1,436,787	0	0	0	10,702	11/15/2035	1.F FE
..12489W-4Q-8	Credit-Based Asset Servi-CBASS 2004-CB4		06/01/2024	PAYDOWN		854	854	852	848	0	6	0	6	0	854	0	0	0	14	05/01/2035	1.A FM
..12510H-AB-6	CARS-DB4 LP-CAUTO 2020-1A A2		06/15/2024	PAYDOWN		7,118	7,118	7,117	7,117	0	1	0	1	0	7,118	0	0	0	90	02/15/2050	1.A FE
..12510H-AC-4	Capital Automotive Reit-CAUTO 2020-1A A3		06/15/2024	PAYDOWN		9,446	9,446	9,184	7,412	0	260	0	260	0	9,446	0	0	0	123	02/15/2050	1.A FE

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident-ification	Description	For-ign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid-eration	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 Recogn-ized	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	NAIC Desig-nation, NAIC Desig-nation Modifier and SVO Admini-strative Symbol
..12510H-AF-7	Capital Automotive Reit-CAUTO 2020-1A A6 ....	.....	06/15/2024	PAYDOWN	.....	2,938	2,938	2,669	2,700	0	237	0	237	0	2,938	0	0	0	47	02/15/2050	1.E FE
..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	25,715	02/15/2050	2.B FE
..12510H-AL-4	CARS-DB5 LP-CAUTO 2021-1A A2 .....	.....	06/15/2024	PAYDOWN	.....	1,259	1,259	982	0	0	277	0	277	0	1,259	0	0	0	10	08/15/2051	1.A FE
..12510H-AM-2	CARS-DB5 LP-CAUTO 2021-1A A3 .....	.....	06/15/2024	PAYDOWN	.....	3,502	3,502	3,118	2,616	0	337	0	337	0	3,502	0	0	0	25	08/15/2051	1.E FE
..12510H-AN-0	Capital Automotive REIT-CAUTO 2021-1A A4 .....	.....	06/15/2024	PAYDOWN	.....	22,500	22,500	21,465	21,638	0	862	0	862	0	22,500	0	0	0	246	08/15/2051	1.E FE
..12510H-AQ-3	Capital Automotive REIT-CAUTO 2022-1A A2 .....	.....	06/15/2024	PAYDOWN	.....	64,375	64,375	64,002	64,049	0	326	0	326	0	64,375	0	0	0	934	03/15/2052	1.E FE
..12530M-AB-1	CF Hippylyta Issuer LLC-SERIES 20-1 CLAS ....	.....	06/15/2024	PAYDOWN	.....	10,924	10,924	10,918	10,919	0	4	0	4	0	10,924	0	0	0	109	07/15/2060	1.E FE
..125431-AH-9	CHL Mortgage Pass-Throug-CIHL 2006-HYB4 .....	.....	06/01/2024	PAYDOWN	.....	52,830	52,830	51,677	36,052	0	16,812	0	16,812	0	52,830	0	0	0	925	06/01/2036	1.A FM
..12543D-BN-9	CHS/Community Health Sys-FIRST LIEN .....	.....	06/03/2024	U B S SECURITIES	.....	3,352,365	3,239,000	3,303,780	0	0	0	0	0	0	3,303,780	0	48,585	48,585	159,487	01/15/2032	4.C FE
..12543X-AD-8	CHL Mortgage Pass-Through-CIHL 2006-19 1A ....	.....	06/01/2024	PAYDOWN	.....	18,140	10,896	5,123	6,633	0	5,190	0	5,190	0	18,140	0	0	0	307	01/01/2037	3.A FM
..12544B-AE-3	CHL Mortgage Pass-Through-CIHL 2007-HY5 3 .....	.....	06/01/2024	PAYDOWN	.....	4,382	4,382	3,411	3,853	0	529	0	529	0	4,382	0	0	0	93	09/01/2037	1.C FM
..12544H-BF-6	CHL Mortgage Pass-Through-CIHL 2007-HY7 A .....	.....	06/01/2024	PAYDOWN	.....	258	245	306	235	0	211	0	211	0	258	0	0	0	5	11/01/2037	2.C FM
..12545E-AK-2	CHL Mortgage Pass-Through-CIHL 2007-J2 2A .....	.....	06/01/2024	PAYDOWN	.....	38,483	38,551	18,914	16,591	0	21,964	0	21,964	0	38,483	0	0	0	1,084	07/01/2037	1.A FM
..12546Y-AA-9	CHNGE Mortgage Trust-CHNGE 2022-2 A1 .....	.....	06/01/2024	PAYDOWN	.....	975,346	975,346	975,338	975,346	0	0	0	0	0	975,346	0	0	0	14,618	03/01/2067	1.C FE
..12551S-AA-4	CHNGE Mortgage Trust 202-CHNGE 2022-4 A1 .....	.....	06/01/2024	PAYDOWN	.....	661,715	661,715	648,421	653,390	0	8,325	0	8,325	0	661,715	0	0	0	17,191	10/01/2057	1.C FE
..12558M-AG-7	CIT Home Equity Loan Tru-CITHE 2002-1 AF .....	.....	06/01/2024	PAYDOWN	.....	5,648	5,648	5,782	5,615	0	34	0	34	0	5,648	0	0	0	139	02/01/2030	1.A FM
..12563L-AS-6	CLI Funding VII LLC-2020-3A A .....	.....	06/18/2024	PAYDOWN	.....	275,000	275,000	252,175	253,694	0	21,306	0	21,306	0	275,000	0	0	0	2,378	10/18/2045	1.F FE
..12564E-AA-0	CIM Trust 2021-J2-CIM 2021-J2 A1 .....	.....	06/01/2024	PAYDOWN	.....	727,531	727,531	735,716	735,101	0	(7,570)	0	(7,570)	0	727,531	0	0	0	8,346	04/01/2051	1.A
..12564X-AM-6	CIM Trust 2021-J1-CIM 2021-J1 A1 .....	.....	06/01/2024	PAYDOWN	.....	164,771	164,771	169,096	168,800	0	(4,029)	0	(4,029)	0	164,771	0	0	0	1,998	03/01/2051	1.A
..12565K-AA-5	CLI Funding VIII LLC-CLIF 2021-1A A .....	.....	06/18/2024	PAYDOWN	.....	155,585	155,585	133,233	135,689	0	19,896	0	19,896	0	155,585	0	0	0	1,063	02/18/2046	1.F FE
..12565K-AE-7	CLI Funding VIII LLC-CLIF 2022-1A A .....	.....	06/18/2024	PAYDOWN	.....	200,000	200,000	170,242	170,681	0	29,319	0	29,319	0	200,000	0	0	0	2,267	01/18/2047	1.F FE
..12566U-AE-4	CitiMortgage Alternative-CMALT 2007-A2 1 .....	.....	06/01/2024	PAYDOWN	.....	4,250	5,924	5,513	5,711	0	92	0	92	0	4,250	0	0	0	243	02/01/2037	3.B FM
..12566U-AN-4	CitiMortgage Alternative-CMALT 2007-A2 1 .....	.....	06/01/2024	PAYDOWN	.....	6,670	9,286	7,257	7,945	0	616	132	484	0	6,670	0	0	0	312	02/01/2037	1.A FM
..12566V-AE-2	CitiMortgage Alternative-CMALT 2007-A4 1 .....	.....	06/01/2024	PAYDOWN	.....	10,687	15,291	13,358	13,383	0	2,644	0	2,644	0	10,687	0	0	0	2,112	04/01/2037	1.A FM
..12566X-AW-0	CitiMortgage Alternative-CMALT 2007-A7 2 .....	.....	06/01/2024	PAYDOWN	.....	5,662	8,372	7,834	8,233	0	207	190	17	0	5,662	0	0	0	89	07/01/2037	4.A FM
..12569C-AB-7	CHNGE Mortgage Trust 202-CHNGE 2022-NQM1 .....	.....	06/01/2024	PAYDOWN	.....	163,148	163,148	162,776	163,148	0	0	0	0	0	163,148	0	0	0	4,977	06/01/2067	1.B FE
..12569C-AC-5	CHNGE Mortgage Trust 202-CHNGE 2022-NQM1 .....	.....	06/01/2024	PAYDOWN	.....	339,892	339,892	335,057	336,903	0	2,988	0	2,988	0	339,892	0	0	0	10,396	06/01/2067	1.F FE
..12569Q-AB-8	CHNGE Mortgage Trust 202-CHNGE 2023-4 A1 .....	.....	06/01/2024	PAYDOWN	.....	387,593	387,593	388,380	388,299	0	(706)	0	(706)	0	387,593	0	0	0	11,647	09/01/2058	1.A FE
..12585B-AA-4	CHP (Fresno Ca) Trust Certificate .....	.....	06/15/2024	SINKING PAYMENT	.....	400,777	400,777	400,777	400,777	0	0	0	0	0	400,777	0	0	0	4,284	02/15/2028	1.E
..12593F-BC-7	COMM 2015-LC21 Mortgage -COMM 2015-LC21 .....	.....	04/01/2024	PAYDOWN	.....	254,776	254,776	256,438	255,038	0	(262)	0	(262)	0	254,776	0	0	0	3,740	07/01/2048	1.A
..12598R-AA-1	COLT 2021-5 Mortgage Loa-COLT 2021-5 A1 .....	.....	06/01/2024	PAYDOWN	.....	250,785	250,785	227,274	231,064	0	19,721	0	19,721	0	250,785	0	0	0	1,780	11/01/2066	1.A FE
..12628L-AD-2	CSAB Mortgage-Backed Tru-CSAB 2006-4 A2A .....	.....	06/01/2024	PAYDOWN	.....	9,230	9,230	1,916	2,017	0	7,312	99	7,213	0	9,230	0	0	0	57	12/01/2036	1.A FM
..12632Q-AX-1	COMM 2014-CCRE18 Mortgag-COMM 2014-CR18 .....	.....	06/01/2024	PAYDOWN	.....	3,885,166	3,885,166	4,001,435	3,889,415	0	(4,249)	0	(4,249)	0	3,885,166	0	0	0	77,200	07/01/2047	1.A
..12635R-AW-8	CSAIL 2015-C4 Commercial-CSAIL 2015-C4 A .....	.....	06/01/2024	PAYDOWN	.....	66,911	66,911	67,342	66,911	0	(431)	0	(431)	0	66,911	0	0	0	1,188	11/01/2048	1.A
..12638P-AB-5	CSMC Mortgage-Backed Tru-CSMC 2007-3 1A1 .....	.....	06/01/2024	PAYDOWN	.....	5,972	5,972	1,874	1,974	0	4,105	108	3,997	0	5,972	0	0	0	29	04/01/2037	1.A FM
..12640W-AC-4	CSMC Series 2008-3R-CSMC 2008-3R 1A2 .....	.....	06/01/2024	PAYDOWN	.....	23,824	25,582	23,457	24,119	0	1,295	0	1,295	0	23,824	0	0	0	497	07/01/2037	4.A FM
..126416-AB-2	CSMC 2022-NQM1-CSMC 2022-NQM1 A2 .....	.....	06/01/2024	PAYDOWN	.....	314,540	314,540	314,535	314,536	0	4	0	4	0	314,540	0	0	0	3,474	11/01/2066	1.C FE
..126416-AC-0	CSMC 2022-NQM1-CSMC 2022-NQM1 A3 .....	.....	06/01/2024	PAYDOWN	.....	770,279	770,279	770,276	770,277	0	2	0	2	0	770,279	0	0	0	8,849	11/01/2066	1.F FE
..12641T-AB-2	CSMC Series 2009-5R-CSMC 2009-5R 1A2 .....	.....	06/01/2024	PAYDOWN	.....	306,092	381,216	290,621	310,949	0	52,401	0	52,401	0	306,092	0	0	0	9,724	06/01/2036	3.C FM
..12646U-AK-4	CSMC Trust 2013-IVR1-CSMC 2013-IVR1 A2 .....	.....	06/01/2024	PAYDOWN	.....	15,441	15,441	14,438	14,575	0	867	0	867	0	15,441	0	0	0	191	03/01/2043	1.A
..12646W-AH-7	CSMC Trust 2013-IVR2-CSMC 2013-IVR2 A2 .....	.....	06/01/2024	PAYDOWN	.....	12,409	12,409	11,594	11,694	0	715	0	715	0	12,409	0	0	0	165	04/01/2043	1.A
..12646X-AJ-1	CSMC Trust 2013-IVR3-CSMC 2013-IVR3 A2 .....	.....	06/01/2024	PAYDOWN	.....	82,883	82,883	78,480	79,501	0	3,382	0	3,382	0	82,883	0	0	0	1,187	05/01/2043	1.A
..12647G-BZ-0	CSMC Trust 2013-IVR4-CSMC 2013-IVR4 A20 .....	.....	06/01/2024	PAYDOWN	.....	6,514	6,514	6,381	6,381	0	134	0	134	0	6,514	0	0	0	98	07/01/2043	1.A
..12647H-BC-9	CSMC Trust 2013-8R-CSMC 2013-8R 4A2 .....	.....	06/27/2024	PAYDOWN	.....	142,254	142,254	103,250	131,345	0	(92,444)	0	(92,444)	0	142,254	0	0	0	6,490	12/27/2036	1.A FM
..12647P-AK-4	CSMC Trust 2013-7-CSMC 2013-7 A6 .....	.....	06/01/2024	PAYDOWN	.....	44,487	44,487	42,874	43,066	0	1,421	0	1,421	0	44,487	0	0	0	675	08/01/2043	1.A
..12648H-BB-0	CSMC Trust 2014-IVR2-CSMC 2014-IVR2 B1 .....	.....	06/01/2024	PAYDOWN	.....	66,680	66,680	65,347	65,574	0	1,106	0	1,106	0	66,680	0	0	0	927	04/01/2044	1.A

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident- ification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..12648T-AQ-2	CSMC Trust 2014-IVR3-CSMC 2014-IVR3 B1 .....	.....	06/01/2024	PAYDOWN	.....	24,166	24,166	24,030	24,004	0	162	0	162	0	24,166	0	0	0	939	07/01/2044	1.A
..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	1.A
..12659Y-AB-0	COLT 2022-3 Mortgage Loa-COLT 2022-3 A2 .....	.....	06/01/2024	PAYDOWN	.....	375,490	375,490	375,485	375,487	0	4	0	4	0	375,490	0	0	0	6,628	06/01/2028	1.C FE
..12659Y-AC-8	COLT 2022-3 Mortgage Loa-COLT 2022-3 A3 .....	.....	06/01/2024	PAYDOWN	.....	300,392	300,392	300,236	300,292	0	100	0	100	0	300,392	0	0	0	5,635	06/01/2028	1.F FE
..12660B-AB-7	Credit Suisse Mortgage C-CSMC 2022-ATH1 .....	.....	06/01/2024	PAYDOWN	.....	322,851	322,851	322,846	322,847	0	4	0	4	0	322,851	0	0	0	4,095	01/01/2067	1.C FE
..12660B-AC-5	Credit Suisse Mortgage C-CSMC 2022-ATH1 .....	.....	06/01/2024	PAYDOWN	.....	479,922	479,922	479,918	479,919	0	3	0	3	0	479,922	0	0	0	6,363	01/01/2067	1.F FE
..12663G-AA-5	COLT 2022-7 Mortgage Loa-COLT 2022-7 A1 .....	.....	06/01/2024	PAYDOWN	.....	122,236	122,236	122,236	122,236	0	0	0	0	0	122,236	0	0	0	2,606	04/01/2067	1.A FE
..12663G-AB-3	COLT 2022-7 Mortgage Loa-COLT 2022-7 A2 .....	.....	06/01/2024	PAYDOWN	.....	116,128	116,128	116,128	116,128	0	0	0	0	0	116,128	0	0	0	2,891	04/01/2067	1.C FE
..12663G-AC-1	COLT 2022-7 Mortgage Loa-COLT 2022-7 A3 .....	.....	06/01/2024	PAYDOWN	.....	61,120	61,120	60,704	60,904	0	216	0	216	0	61,120	0	0	0	1,578	04/01/2067	1.F FE
..12664A-AE-9	CSMC 2022-ATH3-CSMC 2022-ATH3 A2 .....	.....	06/01/2024	PAYDOWN	.....	350,635	350,635	350,631	350,635	0	0	0	0	0	350,635	0	0	0	11,573	08/01/2067	1.C FE
..12664A-AF-6	CSMC 2022-ATH3-CSMC 2022-ATH3 A3 .....	.....	06/01/2024	PAYDOWN	.....	365,439	365,439	365,438	365,439	0	0	0	0	0	365,439	0	0	0	12,792	08/01/2067	1.F FE
..126650-AN-0	CVS Pass-Through Trust-FIRST LIEN .....	.....	06/10/2024	SINKING PAYMENT	.....	81,493	81,493	83,349	81,493	0	0	0	0	0	81,493	0	0	0	2,216	10/10/2025	2.B
..126650-AW-0	CVS Pass-Through Trust-FIRST LIEN .....	.....	06/10/2024	SINKING PAYMENT	.....	69,604	69,604	69,604	69,604	0	0	0	0	0	69,604	0	0	0	1,546	01/11/2027	2.B
..126650-BQ-2	CVS HEALTH CORP PASS THRU CTF 30/360 .....	.....	06/10/2024	SINKING PAYMENT	.....	104,501	104,501	122,706	97,990	0	6,511	0	6,511	0	104,501	0	0	0	3,032	01/10/2030	2.B FE
..126650-BY-5	CVS PASS-THROUGH TRUST-SENIOR SECURED NO .....	.....	06/10/2024	SINKING PAYMENT	.....	11,452	11,452	13,534	12,402	0	(949)	0	(949)	0	11,452	0	0	0	283	01/10/2034	2.B FE
..12665G-AD-2	CSMC 2022-NM4 Trust-CSMC 2022-NM4 A2 .....	.....	06/01/2024	PAYDOWN	.....	84,814	84,814	82,534	83,200	0	1,614	0	1,614	0	84,814	0	0	0	1,845	06/01/2067	1.C FE
..12665W-AD-2	CSMC 2022-ATH2-CSMC 2022-ATH2 A2 .....	.....	06/01/2024	PAYDOWN	.....	245,360	245,360	238,306	239,122	0	6,239	0	6,239	0	245,360	0	0	0	7,670	05/01/2067	1.C FE
..126670-JP-4	CHL Mortgage Pass-Through-CIHL 2005-HYB9 .....	.....	06/01/2024	PAYDOWN	.....	5,260	5,260	6,690	7,334	0	639	0	639	0	5,260	0	0	0	201	02/01/2036	1.A FM
..126670-NY-0	CIABS Asset-Backed Certi-CHL 2005-16 2AF .....	.....	06/01/2024	PAYDOWN	.....	6,077	6,077	5,820	152,709	0	(146,632)	0	(146,632)	0	6,077	0	0	0	119	05/01/2036	1.A FM
..126673-DR-0	CIABS Asset-Backed Certi-CHL 2004-7 MF2 .....	.....	06/01/2024	PAYDOWN	.....	129,155	129,155	132,061	128,401	0	754	0	754	0	129,155	0	0	0	2,017	10/01/2034	1.A FM
..12667F-4N-2	Alternative Loan Trust 2-CWALT 2005-7CB .....	.....	06/01/2024	PAYDOWN	.....	59,184	58,528	48,548	49,667	0	9,520	542	8,978	0	59,184	0	0	0	1,434	03/01/2038	1.A FM
..12667F-5E-1	Alternative Loan Trust 2-CWALT 2005-6CB .....	.....	06/01/2024	PAYDOWN	.....	47,371	42,739	36,972	38,038	0	5,103	0	5,103	0	47,371	0	0	0	742	04/01/2035	1.A FM
..12667F-EG-6	Alternative Loan Trust 2-CWALT 2004-J2 3 .....	.....	06/01/2024	PAYDOWN	.....	29,539	29,539	29,332	29,454	0	86	0	86	0	29,539	0	0	0	754	04/01/2034	1.A FM
..12667F-RE-7	Alternative Loan Trust 2-CWALT 2004-J6 1 .....	.....	05/01/2024	PAYDOWN	.....	75,239	75,239	76,367	75,266	0	(27)	0	(27)	0	75,239	0	0	0	1,712	08/01/2024	1.A FM
..12667F-RG-2	Alternative Loan Trust 2-CWALT 2004-J6 2 .....	.....	06/01/2024	PAYDOWN	.....	319	319	320	319	0	0	0	0	0	319	0	0	0	8	11/01/2031	1.A FM
..12667F-VN-2	COUNTRYWIDE ALTERNATIVE -SERIES 2004-24C .....	.....	06/01/2024	PAYDOWN	.....	246,595	246,595	246,440	244,740	0	1,855	0	1,855	0	246,595	0	0	0	6,293	11/01/2034	1.A FM
..12667G-AA-1	Alternative Loan Trust 2-CWALT 2005-13CB .....	.....	06/25/2024	PAYDOWN	.....	130,369	130,059	112,325	101,717	0	28,387	0	28,387	0	130,369	0	0	0	2,409	05/25/2035	1.A FM
..12667G-AC-7	Alternative Loan Trust 2-CWALT 2005-13CB .....	.....	06/01/2024	PAYDOWN	.....	17,864	17,822	14,633	15,680	0	2,149	0	2,149	0	17,864	0	0	0	418	05/01/2035	1.A FM
..12668A-PC-3	Alternative Loan Trust 2-CWALT 2005-54CB .....	.....	06/01/2024	PAYDOWN	.....	31,629	31,453	24,804	25,754	0	5,403	0	5,403	0	31,629	0	0	0	719	11/01/2035	1.A FM
..12668A-XL-4	Alternative Loan Trust 2-CWALT 2005-63 5 .....	.....	06/01/2024	PAYDOWN	.....	1,528	1,528	1,391	1,384	0	251	0	251	0	1,528	0	0	0	31	12/01/2035	1.A FM
..12668B-YA-5	Alternative Loan Trust 2-CWALT 2006-7CB .....	.....	06/01/2024	PAYDOWN	.....	4,157	2,762	2,386	1,747	0	1,747	0	1,747	0	4,157	0	0	0	102	05/01/2036	1.A FM
..126694-2H-0	CHL Mortgage Pass-Through-CIHL 2006-10 1A .....	.....	04/01/2024	PAYDOWN	.....	6,536	6,537	3,577	3,540	0	2,994	0	2,994	0	6,536	0	0	0	210	05/01/2036	3.C FM
..126694-4F-2	CHL Mortgage Pass-Through-CIHL 2006-HYB3 .....	.....	06/01/2024	PAYDOWN	.....	37,885	31,524	30,275	31,414	0	314	0	314	0	37,885	0	0	0	181	05/01/2036	1.A FM
..126694-BE-7	CHL Mortgage Pass-Through-CIHL 2005-HYB6 .....	.....	06/01/2024	PAYDOWN	.....	8,896	4,179	3,719	3,776	0	1,234	0	1,234	0	8,896	0	0	0	83	10/01/2035	1.A FM
..126694-CS-5	CHL Mortgage Pass-Through-CIHL 2005-21 A1 .....	.....	05/01/2024	PAYDOWN	.....	28,773	28,785	22,627	21,762	0	7,025	0	7,025	0	28,773	0	0	0	660	10/01/2035	4.C FM
..126694-HP-6	CHL Mortgage Pass-Through-CIHL 2005-25 A1 .....	.....	05/01/2024	PAYDOWN	.....	19,717	17,524	9,272	8,889	0	9,563	0	9,563	0	19,717	0	0	0	576	11/01/2035	1.A FM
..126694-LC-0	CHL Mortgage Pass-Through-CIHL 2005-24 A3 .....	.....	06/01/2024	PAYDOWN	.....	11,046	23,302	17,777	17,160	0	3,177	0	3,177	0	11,046	0	0	0	277	11/01/2035	5.A FM
..126694-MH-8	CHL Mortgage Pass-Through-CIHL 2005-HYB7 .....	.....	06/01/2024	PAYDOWN	.....	131,587	137,281	109,825	120,920	0	15,504	0	15,504	0	131,587	0	0	0	2,604	11/01/2035	1.A FM
..126694-GJ-0	CHL Mortgage Pass-Through-CIHL 2005-HYB8 .....	.....	06/01/2024	PAYDOWN	.....	39,749	39,728	36,066	38,862	0	(69,349)	0	(69,349)	0	39,749	0	0	0	863	12/01/2035	1.A FM
..126694-UJ-5	CHL Mortgage Pass-Through-CIHL 2005-31 1A .....	.....	06/01/2024	PAYDOWN	.....	253,431	249,031	212,410	212,410	0	37,759	0	37,759	0	253,431	0	0	0	4,981	01/01/2036	1.A FM
..126694-UI-8	CHL Mortgage Pass-Through-CIHL 2005-31 2A .....	.....	06/01/2024	PAYDOWN	.....	47,396	47,387	45,595	45,618	0	1,769	0	1,769	0	47,396	0	0	0	827	01/01/2036	1.A FM
..126694-UN-6	CHL Mortgage Pass-Through-CIHL 2005-31 2A .....	.....	06/01/2024	PAYDOWN	.....	73,206	73,192	70,424	70,460	0	2,732	0	2,732	0	73,206	0	0	0	1,273	01/01/2036	1.A FM
..12669D-US-5	CHL Mortgage Pass-Through-CIHL 2002-39 A1 .....	.....	06/01/2024	PAYDOWN	.....	19,350	19,365	18,848	19,365	0	(1)	0	(1)	0	18,834	0	517	517	465	02/01/2033	1.A FM
..12669F-A8-6	CHL Mortgage Pass-Through-CIHL 2004-11 2A .....	.....	06/01/2024	PAYDOWN	.....	35,379	35,379	28,657	31,732	0	3,647	0	3,647	0	35,379	0	0	0	1,082	07/01/2034	1.A FM
..12669F-VH-3	CHL Mortgage Pass-Through-CIHL 2004-6 2A1 .....	.....	06/01/2024	PAYDOWN	.....	4,863	4,863	4,872	4,768	0	95	0	95	0	4,863	0	0	0	101	05/01/2034	1.A FM
..12669G-3S-8	CHL Mortgage Pass-Through-CIHL 2005-16 A2 .....	.....	06/01/2024	PAYDOWN	.....	20,012	20,012	15,595	15,294	0	4,717	0	4,717	0	20,012	0	0	0	636	09/01/2035	3.A FM

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Identification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..12669G-4K-4	CHL Mortgage Pass-Through-CIHL 2005-J3 1A		06/01/2024	PAYDOWN		24,028	24,123	19,235	19,347	0	4,896	134	4,762	0	24,028	0	0	0	559	09/01/2035	1.A FM
..12669G-A5-0	CHL Mortgage Pass-Through-CIHL 2005-HYB3		06/01/2024	PAYDOWN		2,625	2,625	2,389	2,610	0	15	0	15	0	2,625	0	0	0	39	06/01/2035	1.A FM
..12669G-BY-6	CHL Mortgage Pass-Through-CIHL 2004-HYB7		06/01/2024	PAYDOWN		6,579	6,579	6,607	6,477	0	102	0	102	0	6,579	0	0	0	129	11/01/2034	1.A FM
..12669G-BZ-3	CHL Mortgage Pass-Through-CIHL 2004-HYB7		06/01/2024	PAYDOWN		19,161	19,161	18,858	19,244	0	303	0	303	0	19,161	0	0	0	375	11/01/2034	1.A FM
..12669G-GH-8	CHL Mortgage Pass-Through-CIHL 2004-HYB8		06/01/2024	PAYDOWN		25,315	25,315	20,695	22,772	0	2,543	0	2,543	0	25,315	0	0	0	756	01/01/2035	1.A FM
..12669G-R4-5	CHL Mortgage Pass-Through-CIHL 2005-15 A8		06/01/2024	PAYDOWN		313	237	124	142	0	19,172	(4,377)	23,549	0	313	0	0	0	72	08/01/2035	1.A FM
..12694*-AA-4	CVS (New Albany, IN) Trust Certificate		06/15/2024	SINKING PAYMENT		47,253	47,253	47,253	47,253	0	0	0	0	0	47,253	0	0	0	1,616	01/15/2041	2.B
..12697*-AA-7	Cric KY HQ LLC Senior Secured Note		06/15/2024	SINKING PAYMENT		41,589	41,589	41,589	41,590	0	(1)	0	(1)	0	41,589	0	0	0	1,240	03/15/2042	1.D PL
..12707*-AA-9	CVS (NC SC PA & VA) Con Trust Certifica		06/15/2024	SINKING PAYMENT		111,517	111,517	111,517	111,517	0	0	0	0	0	111,517	0	0	0	2,270	01/15/2044	2.B
..12724*-AA-6	CVS (Clawson & Richmond Trust Certificat		06/15/2024	SINKING PAYMENT		127,015	127,015	128,238	127,834	0	(819)	0	(819)	0	127,015	0	0	0	1,718	01/15/2035	2.B
..12733*-AA-3	CTL Pass-Thru Trust Seri Trust Certifica		06/15/2024	SINKING PAYMENT		79,664	79,664	79,664	79,664	0	0	0	0	0	79,664	0	0	0	296	10/15/2043	1.F
..12760*-AA-1	CGA Capital Corp Pass Thru Ctls Series 2		06/10/2024	SINKING PAYMENT		258,170	258,170	258,170	258,170	0	0	0	0	0	258,170	0	0	0	6,245	03/10/2031	1.A
..12762*-AA-1	CDI Tuscany Intermediate Senior Secured		06/30/2024	SINKING PAYMENT		46,662	46,662	46,662	46,662	0	0	0	0	0	46,662	0	0	0	3,378	06/30/2040	2.A PL
..13177*-AA-8	Camargo Investments I LL Senior Note		05/31/2024	VARIOUS		828,368	828,368	828,368	828,368	0	0	0	0	0	828,368	0	0	0	72,116	05/31/2024	5.B GI
..14310Q-AA-6	Carlyle GMS Finance MM C-CGFM 2015-1A A1		04/15/2024	PAYDOWN		2,763,322	2,763,322	2,763,322	2,763,322	0	0	0	0	0	2,763,322	0	0	0	104,243	10/15/2031	1.A FE
..14310Q-AA-8	Carlyle GMS Finance MM C-CGFM 2015-1A A1		04/15/2024	PAYDOWN		1,423,530	1,423,530	1,423,391	1,423,391	0	139	0	139	0	1,423,530	0	0	0	49,213	10/15/2031	1.A FE
..14576A-AA-0	Cars Net Lease Mortgage -CARM 2020-1A A1		06/15/2024	PAYDOWN		17,500	17,500	17,493	17,495	0	5	0	5	0	17,500	0	0	0	137	12/15/2050	1.A FE
..14576A-AB-8	Cars Net Lease Mortgage -CARM 2020-1A A2		06/15/2024	PAYDOWN		1,875	1,875	1,874	1,874	0	1	0	1	0	1,875	0	0	0	19	12/15/2050	1.A FE
..14576A-AC-6	Cars Net Lease Mortgage -CARM 2020-1A A3		06/15/2024	PAYDOWN		3,354	3,354	3,294	2,811	0	.60	0	.60	0	3,354	0	0	0	39	12/15/2050	1.F FE
..14686G-AD-8	Carvana Auto Receivables-CRVNA 2022-N1 C		06/10/2024	PAYDOWN		530,976	530,976	530,916	530,956	0	20	0	20	0	530,976	0	0	0	6,728	12/11/2028	1.D FE
..14855W-AA-4	Castlelake Secured Aviat Notes Class A		06/15/2024	SINKING PAYMENT		695,279	695,279	677,622	680,249	0	15,030	0	15,030	0	695,279	0	0	0	26,607	07/31/2036	1.F PL
..14856G-AA-8	Castlelake Aircraft Stru-CLAST 2021-1A A		05/15/2024	PAYDOWN		35,184	35,184	35,183	35,184	0	0	0	0	0	35,184	0	0	0	453	01/15/2046	1.G FE
..14989B-AA-2	CEAMER FINANCE II LLC Senior Secured Not		05/15/2024	CA_CASH_CLOSE		1,828,284	1,828,284	1,828,284	1,828,284	0	0	0	0	0	1,828,284	0	0	0	118,001	11/15/2037	2.B PL
..152314-KJ-8	Centex Home Equity Loan -CXHE 2004-C AF5		06/01/2024	PAYDOWN		104,997	104,997	104,734	104,495	0	502	0	502	0	104,997	0	0	0	1,957	06/01/2034	1.A FM
..161546-CW-4	Chase Funding Trust Seri-CFAB 2002-3 1A5		06/01/2024	PAYDOWN		28,994	28,994	28,705	28,862	0	132	0	132	0	28,994	0	0	0	844	06/01/2032	1.A FM
..16159W-AC-8	Chase Home Lending Mortg-CHASE 2019-1 A3		06/01/2024	PAYDOWN		36,680	36,680	37,551	37,563	0	(883)	0	(883)	0	36,680	0	0	0	727	03/01/2050	1.A
..16162W-PV-5	Chase Mortgage Finance T-CHASE 2005-A2 1		06/01/2024	PAYDOWN		1,686	949	815	758	0	298	0	298	0	1,686	0	0	0	32	01/01/2036	1.A FM
..161630-BA-5	Chase Mortgage Finance T-CHASE 2007-A1 1		06/01/2024	PAYDOWN		1,803	1,803	1,745	1,787	0	16	0	16	0	1,803	0	0	0	37	02/01/2037	1.A FM
..16165M-AG-3	ChaseFlex Trust Series 2-CFKX 2006-2 A5		06/01/2024	PAYDOWN		58,126	58,135	53,174	53,594	0	4,549	0	4,549	0	58,126	0	0	0	1,343	09/01/2036	1.A FM
..16372*-AA-0	Chemical Bank Pass-Through Certificate		06/10/2024	SINKING PAYMENT		55,735	55,735	55,735	55,735	0	0	0	0	0	55,735	0	0	0	841	06/10/2044	2.A
..16877*-AA-0	Childress Klien-Cambridge Senior Secured		06/05/2024	SINKING PAYMENT		242,094	242,094	242,397	242,286	0	456	0	456	0	242,094	0	0	0	(27,246)	01/05/2036	1.B
..169926-AA-0	CHNGE Mortgage Trust 202-CHNGE 2023-2 A1		06/01/2024	PAYDOWN		480,950	480,950	473,134	473,933	0	7,017	0	7,017	0	480,950	0	0	0	12,760	06/01/2058	1.A FE
..17025R-AA-3	COUNTRYWIDE HOME LOANS-SERIES 2007-HY4 C		06/01/2024	PAYDOWN		11,977	11,957	8,638	9,213	0	2,750	0	2,750	0	11,977	0	0	0	193	09/01/2047	1.A FM
..17030A-AA-3	CHNGE Mortgage Trust 202-CHNGE 2023-3 A1		06/01/2024	PAYDOWN		534,933	534,933	531,422	531,913	0	3,020	0	3,020	0	534,933	0	0	0	15,962	07/01/2058	1.A FE
..17030J-AA-4	CHNGE Mortgage Trust 202-CHNGE 2022-1 A1		06/01/2024	PAYDOWN		254,276	254,276	254,275	254,276	0	0	0	0	0	254,276	0	0	0	3,050	01/01/2067	1.A FE
..17307G-EB-7	Citigroup Mortgage Loan -CMLTI 2005-8 1A		06/01/2024	PAYDOWN		34,245	34,845	29,535	31,348	0	3,411	0	3,411	0	34,245	0	0	0	537	10/01/2035	1.A FM
..17307G-ED-6	Citigroup Mortgage Loan -CMLTI 2004-HYB2		06/01/2024	PAYDOWN		13,543	13,543	12,200	13,179	0	1,179	0	1,179	0	13,543	0	0	0	1,771	03/01/2034	1.A FM
..17307G-RE-0	Citigroup Mortgage Loan -CMLTI 2005-2 1A		06/01/2024	PAYDOWN		12,693	12,693	11,816	12,503	0	190	0	190	0	12,693	0	0	0	274	05/01/2035	1.A FM
..17307G-TY-4	Citigroup Mortgage Loan -CMLTI 2005-3 24		06/01/2024	PAYDOWN		138,506	139,260	132,472	117,158	0	22,026	0	22,026	0	138,506	0	0	0	3,093	08/01/2035	1.A FM
..17307G-WN-5	Citigroup Mortgage Loan -CMLTI 2005-WF2		06/01/2024	PAYDOWN		215	215	179	156	0	156	0	156	0	215	0	0	0	7	08/01/2035	1.A FM
..17307G-W9-5	Citigroup Mortgage Loan -CMLTI 2005-11 A		06/01/2024	PAYDOWN		763	763	739	765	0	(2)	0	(2)	0	763	0	0	0	27	11/01/2035	1.A FM
..17309A-AD-1	CitiMortgage Alternative-CMALT 2006-A1 1		06/01/2024	PAYDOWN		2,814	4,687	4,424	4,523	0	(10,046)	(1,541)	(8,505)	0	2,814	0	0	0	171	04/01/2036	1.A FM
..17309A-AF-6	CitiMortgage Alternative-CMALT 2006-A1 1		05/01/2024	PAYDOWN		18,306	3,060	2,832	10,332	0	10,332	0	10,332	0	18,306	0	0	0	97	04/01/2036	1.A FM
..17309B-AB-3	Citigroup Mortgage Loan -CMLTI 2006-WF2		06/01/2024	PAYDOWN		3,006	3,006	1,270	1,292	0	1,735	20	1,715	0	3,006	0	0	0	44	05/01/2036	1.A FM
..17309N-AG-6	Citicorp Residential Mor-CRMSI 2006-1 M1		06/01/2024	PAYDOWN		198,903	198,903	190,574	197,510	0	1,393	0	1,393	0	198,903	0	0	0	3,648	07/01/2036	1.A FM
..17309V-AH-6	CitiMortgage Alternative-CMALT 2006-A4 1		06/01/2024	PAYDOWN		23,434	24,206	23,270	23,535	0	528	0	528	0	23,434	0	0	0	804	09/01/2036	4.A FM

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident- ification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..17312H-AF-6	Citicorp Residential Mor-CRMSI 2007-2 A6		06/01/2024	PAYDOWN		166	166	160	165	0	1	0	1	0	166	0	0	0	3	06/01/2037	1.A FM
..17312V-AA-6	Citigroup Mortgage Loan -CMLTI 2007-6 1A		06/01/2024	PAYDOWN		968	1,072	374	631	0	373	0	373	0	968	0	0	0	6	03/01/2037	1.A FM
..17315X-AF-8	Citigroup Mortgage Loan -CMLTI 2009-9 2A		04/01/2024	PAYDOWN		162,220	162,220	122,887	149,215	0	13,005	0	13,005	0	162,220	0	0	0	3,066	11/01/2035	1.A FM
..17322N-AD-6	Citigroup Mortgage Loan -CMLTI 2014-J1 A		06/01/2024	PAYDOWN		5,048	5,048	5,018	4,949	0	99	0	99	0	5,048	0	0	0	74	06/01/2044	1.A
..17323M-AE-5	Citigroup Mortgage Loan -CMLTI 2015-A B3		06/01/2024	PAYDOWN		371,253	371,253	337,376	342,763	0	28,490	0	28,490	0	371,253	0	0	0	7,045	06/01/2058	1.A
..193938-AB-3	College Ave Student Loan-CASL 2023-A A2		06/25/2024	PAYDOWN		91,491	91,491	91,477	91,477	0	14	0	14	0	91,491	0	0	0	2,159	05/25/2055	1.A FE
..19421U-AB-0	College Avenue Student L-CASL 2019-A A2		06/25/2024	PAYDOWN		118,517	118,517	118,474	118,488	0	29	0	29	0	118,517	0	0	0	1,596	12/28/2048	1.A FE
..19424K-AB-9	College Avenue Student L-CASL 2021-A A2		06/25/2024	PAYDOWN		229,182	229,182	229,136	229,145	0	37	0	37	0	229,182	0	0	0	1,492	07/25/2051	1.A FE
..19424K-AD-5	College Ave Student Loan-CASL 2021-A C		06/25/2024	PAYDOWN		122,157	122,157	112,384	113,954	0	8,203	0	8,203	0	122,157	0	0	0	1,452	07/25/2051	1.F FE
..19425A-AD-6	College Avenue Student L-CASL 2021-B C		06/25/2024	PAYDOWN		107,468	107,468	107,452	107,458	0	9	0	9	0	107,468	0	0	0	1,201	06/25/2052	1.F FE
..19425A-AE-4	College Avenue Student L-CASL 2021-B D		06/25/2024	PAYDOWN		548,948	548,948	548,697	548,798	0	151	0	151	0	548,948	0	0	0	8,683	06/25/2052	2.B FE
..19685G-AA-4	COLT Funding LLC-COLT 2022-4 A1		06/01/2024	PAYDOWN		191,959	191,959	187,880	189,388	0	2,571	0	2,571	0	191,959	0	0	0	3,835	03/01/2067	1.A FE
..19685G-AC-0	COLT Funding LLC-COLT 2022-4 A3		06/01/2024	PAYDOWN		256,819	256,819	254,636	255,047	0	1,772	0	1,772	0	256,819	0	0	0	5,368	03/01/2067	1.F FE
..19687Y-AA-3	COLT 2020-RPL1 Trust-COLT 2020-RPL1 A1		06/01/2024	PAYDOWN		550,830	550,830	550,829	550,822	0	8	0	8	0	550,830	0	0	0	3,382	01/01/2065	1.A FE
..19688E-AA-6	COLT 2021-1 Mortgage Loa-COLT 2021-1 A1		06/01/2024	PAYDOWN		562,874	562,874	495,329	514,609	0	48,265	0	48,265	0	562,874	0	0	0	1,860	06/01/2066	1.A FE
..19688F-AA-3	COLT 2021-3 Mortgage Loa-COLT 2021-3 A1		06/01/2024	PAYDOWN		104,863	104,863	90,051	91,877	0	12,986	0	12,986	0	104,863	0	0	0	445	09/01/2066	1.A FE
..19688H-AA-9	COLT 2022-1 Mortgage Loa-COLT 2022-1 A1		06/01/2024	PAYDOWN		1,352,706	1,352,706	1,352,693	1,352,698	0	8	0	8	0	1,352,706	0	0	0	12,739	12/01/2066	1.A FE
..19688L-AA-0	COLT 2022-5 Mortgage Loa-COLT 2022-5 A1		06/01/2024	PAYDOWN		214,108	214,108	214,042	214,108	0	0	0	0	0	214,108	0	0	0	4,205	04/01/2067	1.A FE
..19688L-AB-8	COLT 2022-5 Mortgage Loa-COLT 2022-5 A2		06/01/2024	PAYDOWN		356,996	356,996	351,796	353,532	0	3,464	0	3,464	0	356,996	0	0	0	7,011	03/01/2067	1.C FE
..19688M-AB-6	COLT 2022-8 Mortgage Loa-COLT 2022-8 A2		06/01/2024	PAYDOWN		166,540	166,540	165,147	165,397	0	1,143	0	1,143	0	166,540	0	0	0	4,372	08/01/2067	1.C FE
..19688M-AC-4	COLT 2022-8 Mortgage Loa-COLT 2022-8 A3		06/01/2024	PAYDOWN		172,464	172,464	169,806	170,259	0	2,205	0	2,205	0	172,464	0	0	0	4,531	08/01/2067	1.F FE
..20267U-AA-7	COMMONBOND STUDENT LOAN -SERIES 16-B CLA		06/25/2024	PAYDOWN		52,662	52,662	52,648	52,648	0	7	0	7	0	52,662	0	0	0	608	10/25/2040	1.A FE
..20268A-AB-8	Commonbond Student Loan -GBSLT 2021-BG5		05/25/2024	PAYDOWN		89,831	89,831	74,110	0	0	15,720	0	15,720	0	89,831	0	0	0	737	09/25/2051	1.G FE
..20268B-AB-6	Commonbond Student Loan -GBSLT 2020-1 B		06/25/2024	PAYDOWN		104,486	104,486	88,813	89,427	0	15,059	0	15,059	0	104,486	0	0	0	1,545	10/25/2051	1.D FE
..20268W-AB-0	Commonbond Student Loan -GBSLT 2021-AG5		06/25/2024	PAYDOWN		37,279	37,279	28,332	0	0	8,947	0	8,947	0	37,279	0	0	0	220	03/25/2052	1.D FE
..20753Y-CH-3	Connecticut Avenue Secur-CAS 2022-R04 1M		06/25/2024	PAYDOWN		296,476	296,476	296,337	296,615	0	(139)	0	(139)	0	296,476	0	0	0	9,308	03/25/2042	1.A
..20755D-AA-4	Connecticut Avenue Secur-CAS 2022-R08 1M		06/25/2024	PAYDOWN		710,796	710,796	714,533	707,890	0	2,906	0	2,906	0	710,796	0	0	0	24,106	07/25/2042	1.A
..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	4.B FE
..21872M-AG-7	CoreVest American Financ-CARL 2018-2 B		05/01/2024	PAYDOWN		679,144	679,144	679,120	679,135	0	10	0	10	0	679,144	0	0	0	15,348	11/01/2052	1.A FE
..22160*-AA-6	Costco (Monterey Park C Trust Certifica		06/20/2024	SINKING PAYMENT		32,188	32,188	32,188	32,183	0	5	0	5	0	32,188	0	0	0	977	06/20/2043	1.E
..22163*-AA-1	Costco (Oceanside NY) Le Trust Certifica		06/15/2024	SINKING PAYMENT		78,728	78,728	78,728	78,728	0	0	0	0	0	78,728	0	0	0	1,304	11/30/2041	1.E
..224092-AA-4	CP EF Asset Securitizati-CPEF 2023-1A A		06/15/2024	PAYDOWN		1,562,607	1,562,607	1,554,858	1,555,072	0	7,535	0	7,535	0	1,562,607	0	0	0	49,065	03/15/2032	1.C FE
..22541Q-CZ-3	Credit Suisse First Bost-CSFB 2003-AR15		06/25/2024	PAYDOWN		24,989	24,989	24,989	25,500	0	(511)	0	(511)	0	24,989	0	0	0	564	06/25/2033	1.A FM
..22541Q-FV-9	CSFB MORTGAGE-BACKED PAS-CSFB 2003-17 1A		06/01/2024	PAYDOWN		18,487	18,487	18,659	18,458	0	29	0	29	0	18,487	0	0	0	474	06/01/2033	4.C FM
..22541Q-XS-6	Credit Suisse First Bost-CSFB 2003-23 DB		06/01/2024	PAYDOWN		71,707	71,707	71,752	71,581	0	126	0	126	0	71,707	0	0	0	1,433	09/01/2033	1.A FM
..225458-2Y-3	Credit Suisse First Bost-CSFB 2005-8 9A1		05/01/2024	PAYDOWN		13,638	1,134	4,039	933	0	1,312	(1,041)	2,353	0	13,638	0	0	0	(1,241)	09/01/2035	4.A FM
..225458-L5-5	Credit Suisse First Bost-CSFB 2005-7 1A1		06/01/2024	PAYDOWN		4,043	3,723	3,635	3,635	0	503	95	408	0	4,043	0	0	0	54	08/01/2035	3.B FM
..225458-LD-8	CSFB MORTGAGE-BACKED PAS-CSFB 2005-3 6A1		06/01/2024	PAYDOWN		23,616	23,616	20,841	22,522	0	1,094	0	1,094	0	23,616	0	0	0	542	07/01/2035	2.C FM
..225470-VF-7	CSMC Mortgage-Backed Tru-CSMC 2006-1 3A1		06/01/2024	PAYDOWN		151,224	149,363	86,055	84,838	0	65,294	0	65,294	0	151,224	0	0	0	3,944	02/01/2036	1.A FM
..225410-FJ-9	Credit Suisse First Bost-CSFB 2003-1 1A1		06/01/2024	PAYDOWN		8,813	8,813	8,928	8,928	0	(115)	0	(115)	0	8,813	0	0	0	258	02/01/2033	2.B FM
..22942M-BF-2	CSMC Mortgage-Backed Tru-CSMC 2006-8 5A1		06/01/2024	PAYDOWN		20,442	20,442	19,931	19,925	0	517	0	517	0	20,442	0	0	0	495	10/01/2026	3.B FM
..22960*-AA-0	CTL PASS THRU TR SER 2013 (OCHSNER SLIDE		06/15/2024	SINKING PAYMENT		245,567	245,567	245,567	245,569	0	(2)	0	(2)	0	245,567	0	0	0	5,041	12/15/2028	1.G
..229658-AA-3	WAG (Edina, Minnesota) C Trust Certifica		06/15/2024	SINKING PAYMENT		48,946	48,946	49,436	49,241	0	(294)	0	(294)	0	48,946	0	0	0	1,125	07/15/2037	3.A
..22970*-AA-8	BN5F (Dayton, Texas) Con Trust Certifica		06/01/2024	SINKING PAYMENT		180,760	180,760	180,760	180,765	0	(5)	0	(5)	0	180,760	0	0	0	5,529	05/15/2034	1.D PL
..229738-AA-3	Great West Casualty Comp Trust Certifica		06/15/2024	SINKING PAYMENT		87,250	87,250	87,543	87,474	0	(224)	0	(224)	0	87,250	0	0	0	1,577	12/15/2037	1.C PL
..229778-AA-9	CTL Pass-Thru Trust Seri Trust Certifica		06/15/2024	SINKING PAYMENT		79,004	79,004	79,004	79,004	0	0	0	0	0	79,004	0	0	0	2,033	12/15/2038	1.E

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident- ification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..23110A-AA-4	Cumulus Media New Holdin-FIRST LIEN		05/02/2024	EXCHANGE OFFER		2,443,921	2,490,000	2,409,075	2,437,814	0	6,107	0	6,107	0	2,443,921	0	0	0	140,529	07/01/2026	6. FE
..23242L-AB-9	CIWEO Revolving Home Equ-CIWHEL 2006-F 2A		06/17/2024	PAYDOWN		9,291	9,291	6,492	8,727	0	564	0	564	0	9,291	0	0	0	212	07/15/2036	1.A FM
..23248A-AJ-0	COUNTRYWIDE ASSET-BACKED-SERIES 2007-SEA		05/28/2024	PAYDOWN		22,222	22,222	13,777	28,884	0	(6,662)	0	(6,662)	0	22,222	0	0	0	358	05/25/2047	1.A FM
..233046-AF-8	DNKN 2017-1A A211		05/20/2024	PAYDOWN		52,500	52,500	52,500	52,500	0	0	0	0	0	52,500	0	0	0	1,058	11/20/2047	2.B FE
..233046-AH-4	DB Master Finance LLC-DNKN 2017-1AW A211		05/20/2024	PAYDOWN		30,000	30,000	29,986	29,994	0	6	0	6	0	30,000	0	0	0	759	11/20/2047	1.C FE
..233046-AM-3	DB Master Finance LLC-DNKN 2019-1AW A23W		05/20/2024	PAYDOWN		45,000	45,000	45,480	45,282	0	(282)	0	(282)	0	45,000	0	0	0	1,360	05/20/2049	1.C FE
..23316#-AA-5	DEA (Nashville TN) LLC Pass-Thru Certifi		06/05/2024	SINKING PAYMENT		91,824	91,824	91,824	91,824	0	0	0	0	0	91,824	0	0	0	1,729	08/05/2040	1.B
..23332U-AD-6	DSLA Mortgage Loan Trust-DSLA 2004-AR1 A		06/20/2024	PAYDOWN		9,294	9,294	8,153	9,445	0	(151)	0	(151)	0	9,294	0	0	0	662	09/19/2044	1.A FM
..24023#-AA-7	DC Department of Correct Pass-Thru Certi		06/15/2024	SINKING PAYMENT		90,843	90,843	90,955	90,955	0	(112)	0	(112)	0	90,843	0	0	0	2,077	03/15/2033	1.B PL
..24380X-AB-5	Deephaven Residential Mo-DRMT 2022-2 A1		06/01/2024	PAYDOWN		104,953	104,953	98,919	98,998	0	5,955	0	5,955	0	104,953	0	0	0	2,740	03/01/2067	1.A FE
..24703T-AD-8	Dell International LLC -FIRST LIEN		05/20/2024	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	2.B FE
..24736X-AA-6	DELTA AIR LINES 2015-1AA-FIRST LIEN		06/11/2024	BARINGSLLC		4,157,032	4,406,810	4,406,810	4,407,375	0	(156)	0	(156)	0	4,407,219	0	(250,187)	(250,187)	140,784	07/30/2027	1.F FE
..25150M-AC-0	Deutsche Alt-A Securitie-DBALT 2007-RMP1		06/25/2024	PAYDOWN		52,308	52,308	41,193	58,329	0	(6,021)	0	(6,021)	0	52,308	0	0	0	424	12/25/2036	1.A FM
..25150N-AB-0	Deutsche Alt-A Securitie-DBALT 2006-AR5		06/25/2024	PAYDOWN		103,579	103,579	55,156	37,619	0	65,960	0	65,960	0	103,579	0	0	0	780	10/25/2036	1.A FM
..251510-CV-3	Deutsche Alt-A Securitie-DBALT 2005-1 1A		06/25/2024	PAYDOWN		39,339	39,339	28,570	32,941	0	6,398	0	6,398	0	39,339	0	0	0	835	02/25/2035	1.A FM
..251510-EP-4	DEUTSCHE ALT-A SECURITIE-DBALT 2005-3 5A		06/25/2024	PAYDOWN		84,185	84,185	63,186	79,886	4,662	(363)	0	4,299	0	84,185	0	0	0	1,985	06/25/2035	5.A FM
..251510-LM-3	Deutsche Alt-A Securitie-DBALT 2006-AR1		06/01/2024	PAYDOWN		11,524	11,524	10,346	11,332	0	264	0	264	0	11,524	0	0	0	215	02/01/2036	2.B FM
..251510-MD-2	Deutsche Alt-B Securitie-DBALT 2006-AB1		06/01/2024	PAYDOWN		9,013	9,135	9,121	6,400	0	2,768	0	2,768	0	9,013	0	0	0	218	02/01/2036	1.A FM
..25273C-AB-6	Diamond Resorts Owner Tr-DROT 2021-1A B		06/20/2024	PAYDOWN		82,870	82,870	82,365	82,546	0	324	0	324	0	82,870	0	0	0	711	11/21/2033	1.F FE
..25512D-AA-7	Diversified ABS Phase V Senior Secured N		05/31/2024	VARIOUS		38,790,793	37,650,630	37,650,630	37,650,630	0	0	0	0	0	38,547,945	0	242,847	242,847	1,238,739	12/31/2030	2.B FE
..26067*-AA-3	Dow (Midland Mi) Control Trust Certifica		06/15/2024	SINKING PAYMENT		164,867	164,867	165,609	165,242	0	(375)	0	(375)	0	164,867	0	0	0	3,564	03/15/2034	2.A
..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	2.A FE
..26208L-AC-2	DRIVEN BRANDS FUNDING LL-HONK 2018-1A A2		04/20/2024	PAYDOWN		17,500	17,500	17,500	17,501	0	(1)	0	(1)	0	17,500	0	0	0	415	04/20/2048	2.C FE
..26209X-AC-5	DRIVEN BRANDS FUNDING LL-HONK 2020-2A A2		04/20/2024	PAYDOWN		12,500	12,500	12,500	12,500	0	0	0	0	0	12,500	0	0	0	202	01/20/2051	2.C FE
..26209X-AF-8	DRIVEN BRANDS FUNDING LL-HONK 2022-1A A2		04/20/2024	PAYDOWN		87,500	87,500	87,500	87,500	0	0	0	0	0	87,500	0	0	0	3,234	10/20/2052	2.C FE
..26443B-AA-6	Dulles Discovery 1 Contr Pass-Thru Certi		06/05/2024	SINKING PAYMENT		149,099	149,099	149,099	149,099	0	0	0	0	0	149,099	0	0	0	3,317	06/05/2037	1.B
..26844Q-AA-5	EFMT 2023-1-EFMT 2023-1 A1		06/01/2024	PAYDOWN		329,339	329,339	325,428	(175,912)	0	3,921	0	3,921	0	329,339	0	0	0	5,709	02/01/2068	1.A FE
..26847B-AA-8	Edx/Ge Inventory Supply Pass-Thru Certif		04/15/2024	SINKING PAYMENT		104,964	104,964	104,964	104,965	0	(1)	0	(1)	0	104,964	0	0	0	2,824	04/15/2028	2.A
..26848#-AA-5	EDX/GE Inventory Supply Pass-Thru Certif		04/15/2024	SINKING PAYMENT		107,277	107,277	107,277	107,278	0	(1)	0	(1)	0	107,277	0	0	0	2,389	01/15/2029	2.A
..26848*-AA-9	EDX/GE Inventory Supply Pass-Thru Certif		04/15/2024	SINKING PAYMENT		51,698	51,698	51,698	51,698	0	0	0	0	0	51,698	0	0	0	874	01/15/2030	2.A
..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	2.C FE
..26929H-AB-1	EWIC Master Issuer LLC-WAX 2022-1A A2		06/15/2024	PAYDOWN		18,750	18,750	18,015	18,129	0	621	0	621	0	18,750	0	0	0	516	03/15/2052	2.B FE
..28166L-AA-2	EDvestinU Private Educat-EDVES 2021-A A		06/25/2024	PAYDOWN		239,435	239,435	209,235	210,011	0	29,424	0	29,424	0	239,435	0	0	0	1,813	11/25/2045	1.A FE
..28416L-AA-0	Elara HGV Timeshare Issu-EHGV 2021-A A		06/25/2024	PAYDOWN		164,168	164,168	147,187	148,517	0	15,651	0	15,651	0	164,168	0	0	0	927	08/27/2035	1.A FE
..28416L-AB-8	Elara HGV Timeshare Issu-EHGV 2021-A B		06/25/2024	PAYDOWN		125,540	125,540	123,431	123,845	0	1,696	0	1,696	0	125,540	0	0	0	907	08/27/2035	1.F FE
..28416T-AA-3	Elara HGV Timeshare Issu-EHGV 2019-A A		06/25/2024	PAYDOWN		178,934	178,934	167,639	169,440	0	9,494	0	9,494	0	178,934	0	0	0	2,273	01/25/2034	1.A FE
..28628C-AB-2	ELFI Graduate Loan Progr-ELFI 2022-A B		06/25/2024	PAYDOWN		327,775	327,775	264,885	276,675	0	51,101	0	51,101	0	327,775	0	0	0	0	08/26/2047	1.C FE
..29280M-AA-9	Energy Asset Issuer Trus Senior Secured		06/25/2024	SINKING PAYMENT		1,213,800	1,213,800	1,213,800	0	0	0	0	0	0	1,213,800	0	0	0	51,248	03/25/2049	1.F PL
..29977F-AA-2	EverBright Solar Trust 2-EVBRT 2024-A A		06/20/2024	PAYDOWN		186,560	186,560	184,919	0	0	1,642	0	1,642	0	186,560	0	0	0	1,710	06/22/2054	1.G FE
..30227F-AJ-9	Extended Stay America Tr-ESA 2021-ESH D		06/15/2024	PAYDOWN		96,919	96,919	96,919	96,919	0	0	0	0	0	96,919	0	0	0	3,678	07/15/2038	1.A
..30260G-AA-4	FCI Funding 2021-1 LLC-FCITL 2021-1A A		06/15/2024	PAYDOWN		226,017	226,017	226,007	226,015	0	2	0	2	0	226,017	0	0	0	933	04/15/2033	1.A FE
..302637-AG-8	FS KKR MM QLO 1 LLC-FSKMM 2019-1A A1R		04/15/2024	PAYDOWN		2,830,734	2,830,734	2,830,734	2,830,734	0	0	0	0	0	2,830,734	0	0	0	110,399	01/15/2031	1.A FE
..30292*-AA-2	FBI Bronx Control Trust Pass-Thru Certif		06/15/2024	SINKING PAYMENT		145,849	145,849	145,849	145,849	0	0	0	0	0	145,849	0	0	0	2,383	07/15/2033	1.B PL
..31307#-AA-9	FDL-CC LLC Senior Note Tranche A-1		06/15/2024	SINKING PAYMENT		34,666	34,666	34,671	34,669	0	(3)	0	(3)	0	34,666	0	0	0	1,179	02/15/2035	1.A
..31307#-AC-5	FDL-CC LLC Senior Note Tranche A-3		06/15/2024	SINKING PAYMENT		19,892	19,892	19,893	19,893	0	(1)	0	(1)	0	19,892	0	0	0	600	06/15/2037	1.A
..3137BL-AR-9	Freddie Mac Multifamily -FMV M036 A		06/17/2024	CALL 100		165,000	165,000	169,538	165,906	0	(204)	0	(204)	0	165,702	0	(702)	(702)	3,683	12/01/2029	1.B FE

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22		
										11	12	13	14	15									
CUSIP Ident-ification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recog- nized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol		
..31429#-AA-2	Fedex Chino Control Pass Trust Certifica		06/15/2024	SINKING PAYMENT		208,385	208,385	208,385	208,385	0		0	0	0	208,385	0	0	0	0	3,038	10/15/2035	2.B	
..31572Y-AB-4	Ellington Financial Mort-EFMT 2022-2 A2		06/01/2024	PAYDOWN		128,615	128,615	126,664	127,043	0	1,571	0	1,571	0	128,615	0	0	0	0	2,137	04/01/2067	1.C FE	
..31572Y-AC-2	Ellington Financial Mort-EFMT 2022-2 A3		06/01/2024	PAYDOWN		490,073	490,073	481,040	482,800	0	7,273	0	7,273	0	490,073	0	0	0	0	8,142	04/01/2067	1.G FE	
..31573E-AA-9	Ellington Financial Mort-EFMT 2022-3 A1		06/01/2024	PAYDOWN		376,653	376,653	372,520	373,466	0	3,187	0	3,187	0	376,653	0	0	0	0	8,825	08/01/2067	1.A FE	
..31573E-AB-7	Ellington Financial Mort-EFMT 2022-3 A2		06/01/2024	PAYDOWN		260,343	260,343	253,034	254,479	0	5,864	0	5,864	0	260,343	0	0	0	0	6,100	08/01/2067	1.C FE	
..31573E-AC-5	Ellington Financial Mort-EFMT 2022-3 A3		06/01/2024	PAYDOWN		125,551	125,551	120,057	121,099	0	4,452	0	4,452	0	125,551	0	0	0	0	2,942	08/01/2067	1.F FE	
..31740J-AA-6	FINANCE OF AMERICA STRUC-FASST 2023-RMF1		04/25/2024	PAYDOWN		265,982	265,982	235,580	237,939	0	28,043	0	28,043	0	265,982	0	0	0	0	2,654	02/25/2053	1.A FE	
..31982Q-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	0	303,605	06/01/2028	2.C FE	
..32010L-AN-4	First Eagle Commercial L-NWISTR 2016-1A A		04/25/2024	PAYDOWN		1,419,280	1,419,280	1,419,261	1,419,213	0	67	0	67	0	1,419,280	0	0	0	0	27,177	01/25/2032	1.A FE	
..32027L-AE-5	First Franklin Mortgage -FFML 2006-FF14		06/25/2024	PAYDOWN		33,795	33,795	29,587	33,711	0	84	0	84	0	33,795	0	0	0	0	478	10/25/2036	1.A FM	
..32051G-SQ-9	First Horizon Alternativ-FHAMS 2005-AA7		06/01/2024	PAYDOWN		52,637	52,655	46,099	46,216	0	6,434	0	6,434	0	52,637	0	0	0	0	1,579	09/01/2035	1.A FM	
..32051G-T7-0	First Horizon Alternativ-FHAMS 2006-FA1		06/01/2024	PAYDOWN		11,071	11,943	5,916	6,273	0	5,470	215	5,255	0	11,071	0	0	0	0	261	04/01/2036	1.A FM	
..32051G-XQ-3	First Horizon Mortgage P-FHASI 2005-AR5		06/01/2024	PAYDOWN		11,271	11,271	10,202	9,644	0	1,627	0	1,627	0	11,271	0	0	0	0	1,268	11/01/2035	1.A FM	
..32051G-XV-2	First Horizon Mortgage P-FHASI 2005-AR5		06/01/2024	PAYDOWN		15,119	15,119	14,903	14,490	0	628	0	628	0	15,119	0	0	0	0	331	11/01/2035	1.A FM	
..32052E-AA-7	First Horizon Mortgage P-FHASI 2006-AR3		06/01/2024	PAYDOWN		610	610	386	389	0	224	7	217	0	610	0	0	0	0	10	11/01/2036	1.A FM	
..32056J-AA-2	First Horizon Mortgage P-FHASI 2007-AR3		06/01/2024	PAYDOWN		108,044	108,046	47,326	49,604	0	59,739	1,298	58,441	0	108,044	0	0	0	0	2,608	11/01/2037	1.A FM	
..33803W-AA-7	Fishers Lane Associates -SECURED		05/05/2024	SINKING PAYMENT		166,224	166,224	166,224	166,224	0	0	0	0	0	166,224	0	0	0	0	2,500	08/05/2030	1.B	
..34417M-AB-3	FOCUS Brands Funding LLC-FOCUS 2017-1A A		04/30/2024	PAYDOWN		15,000	15,000	15,000	15,000	0	0	0	0	0	15,000	0	0	0	0	382	04/30/2047	2.B FE	
..34417R-AA-4	FOCUS Brands Funding LLC-FOCUS 2017-1A A		05/30/2024	PAYDOWN		3,820,000	3,820,000	3,820,000	0	0	0	0	0	0	3,820,000	0	0	0	0	98,407	04/30/2047	2.B FE	
..347466-AE-4	Fort Irwin Land LLC-UNSECURED		06/15/2024	SINKING PAYMENT		227,757	227,757	214,191	219,879	0	7,878	0	7,878	0	227,757	0	0	0	0	6,036	12/15/2035	1.F FE	
..35041J-AA-3	Foundation Finance Trust-FFIN 2019-1A A		06/15/2024	PAYDOWN		196,608	196,608	196,578	196,180	0	428	0	428	0	196,608	0	0	0	0	3,997	11/15/2034	1.A FE	
..35564K-B2-4	Freddie Mac Structured A-STACR 2022-HQ42		06/25/2024	PAYDOWN		617,323	617,323	616,823	616,823	0	500	0	500	0	617,323	0	0	0	0	21,246	07/25/2042	1.A	
..35564K-E3-9	Freddie Mac STACR REMIC -STACR 2022-HQ43		06/25/2024	PAYDOWN		336,119	336,119	336,119	336,119	0	0	0	0	0	336,119	0	0	0	0	10,966	08/25/2042	1.A	
..35824#-AA-4	Fresno County (Rowell Bu Trust Certifica		06/15/2024	SINKING PAYMENT		3,831	3,831	3,866	3,860	0	(29)	0	(29)	0	3,831	0	0	0	0	52	05/15/2040	1.D S	
..35826#-AA-4	County of Fresno CA Trust Certificates		06/15/2024	SINKING PAYMENT		102,055	102,055	103,073	102,783	0	(728)	0	(728)	0	102,055	0	0	0	0	1,995	06/15/2038	1.C	
..36120F-AA-3	Granite Park FX Notes Is Senior Secured		06/15/2024	SINKING PAYMENT		388,721	388,721	388,658	0	0	63	0	63	0	388,721	0	0	0	0	5,891	07/15/2032	1.G PL	
..36120F-AB-1	Granite Park FX Notes Is Senior Secured		06/15/2024	VARIOUS		414,998	414,998	414,888	0	0	111	0	111	0	414,998	0	0	0	0	6,610	07/15/2032	2.B PL	
..36152B-AC-6	GBX Leasing 2023-1 LLC-GBXL 2023-1A A		06/20/2024	PAYDOWN		9,735	9,735	9,730	9,730	0	5	0	5	0	9,735	0	0	0	0	261	11/20/2053	1.C FE	
..36157N-FL-3	GE Mortgage Services LLC-GEOMS 1997-HE4		06/01/2024	PAYDOWN		1,883	1,883	1,486	673	0	1,211	0	1,211	0	1,883	0	0	0	0	38	12/01/2028	1.A FM	
..36167K-AA-6	GCAT 2021-NQM6 Trust-GCAT 2021-NQM6 A1		06/01/2024	PAYDOWN		99,280	99,280	89,228	91,584	0	7,695	0	7,695	0	99,280	0	0	0	0	743	08/01/2066	1.A	
..36169K-AA-4	GCAT 2022-NQM2 Trust-GCAT 2022-NQM2 A1		06/01/2024	PAYDOWN		103,596	103,596	103,114	103,364	0	232	0	232	0	103,596	0	0	0	0	1,821	02/01/2067	1.A FE	
..36169K-AB-2	GCAT 2022-NQM2 Trust-GCAT 2022-NQM2 A2		06/01/2024	PAYDOWN		379,854	379,854	372,384	373,607	0	6,247	0	6,247	0	379,854	0	0	0	0	6,679	02/01/2067	1.C FE	
..36185N-6N-5	GMACM Mortgage Loan Trus-GMACM 2005-AR2		06/01/2024	PAYDOWN		92,356	92,356	77,169	80,637	0	11,719	0	11,719	0	92,356	0	0	0	0	2,206	05/01/2035	1.A FM	
..36198#-AA-0	GE Huntsville 2020A Leas Trust Certifica		06/15/2024	SINKING PAYMENT		64,486	64,486	64,486	64,486	0	0	0	0	0	64,486	0	0	0	0	1,227	04/15/2046	2.A	
..36200#-AA-8	GE Huntsville 2020B Leas Trust Certifica		06/15/2024	SINKING PAYMENT		15,220	15,220	15,220	15,220	0	0	0	0	0	15,220	0	0	0	0	290	04/15/2046	2.A	
..36228F-UJ-3	GSR Mortgage Loan Trust -GSR 2003-7F AA1		06/01/2024	PAYDOWN		9,996	9,996	9,749	9,732	0	264	0	264	0	9,996	0	0	0	0	228	10/01/2032	1.A FM	
..3622EA-AA-8	GSAA TRUST-GSAA 2007-3 1A1A		06/25/2024	PAYDOWN		133,628	133,628	74,423	71,520	0	63,000	892	62,108	0	133,628	0	0	0	0	295	03/25/2047	1.A FM	
..362341-AA-4	GSR Mortgage Loan Trust -GSR 2006-AR1 2A		05/01/2024	PAYDOWN		11,175	10,401	9,951	10,215	0	(4,639)	0	(4,639)	0	11,175	0	0	0	0	310	01/01/2036	1.A FM	
..362341-4F-3	GSR Mortgage Loan Trust -GSR 2006-AR1 3A		06/01/2024	PAYDOWN		1,191	892	877	834	0	(1,610)	0	(1,610)	0	1,191	0	0	0	0	492	01/01/2036	1.A FM	
..362341-DP-1	GSR Mortgage Loan Trust -GSR 2005-6F 1A5		06/01/2024	PAYDOWN		16,868	16,868	16,931	16,907	0	(39)	0	(39)	0	16,868	0	0	0	0	326	07/01/2035	1.F FM	
..362341-FN-4	GSR Mortgage Loan Trust -GSR 2005-AR4 3A		06/01/2024	PAYDOWN		4,432	4,432	3,447	3,442	0	28,556	(4,503)	33,059	0	4,432	0	0	0	0	428	07/01/2035	1.A FM	
..362341-SG-5	GSR MORTGAGE LOAN TRUST-SERIES 2005-AR6		06/01/2024	PAYDOWN		200,510	200,747	181,927	183,362	0	17,354	0	17,354	0	200,510	0	0	0	0	7,185	09/01/2035	1.A FM	
..362341-XC-8	GSR Mortgage Loan Trust -GSR 2005-AR7 4A		06/01/2024	PAYDOWN		4,643	0	(939)	0	0	26,151	(9,147)	35,298	249	4,643	0	0	0	0	0	0	11/01/2035	4.B FM
..362341-XE-4	GSR Mortgage Loan Trust -GSR 2005-AR7 5A		06/01/2024	PAYDOWN		65,947	53,619	46,510	46,842	0	(7,553)	0	(7,553)	0	65,947	0	0	0	0	3,810	11/01/2035	1.A FM	
..362341-XG-9	GSR Mortgage Loan Trust -GSR 2005-AR7 6A		06/01/2024	PAYDOWN		24,193	24,193	23,008	23,874	0	319	0	319	0	24,193	0	0	0	0	543	11/01/2035	1.A FM	
..36242D-4W-0	GSR Mortgage Loan Trust -GSR 2005-AR3 6A		06/01/2024	PAYDOWN		3,953	3,953																

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident- ification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..36242D-BZ-5	GSR MORTGAGE LOAN TRUST-SERIES 2004-9 CL		06/01/2024	PAYDOWN		35,886	35,886	34,854	35,886	0	0	0	0	0	35,886	0	0	0	691	08/01/2034	1.A FM
..36242D-FS-7	GSR Mortgage Loan Trust -GSR 2004-11 2A1		06/01/2024	PAYDOWN		6,871	6,871	6,907	6,871	0	0	0	0	0	6,871	0	0	0	167	09/01/2034	1.A FM
..36242D-FX-6	GSR Mortgage Loan Trust -GSR 2004-11 3A1		06/01/2024	PAYDOWN		792	792	794	792	0	0	0	0	0	792	0	0	0	21	09/01/2034	1.A FM
..36242D-H4-8	GSR Mortgage Loan Trust -GSR 2005-AR2 1A		06/01/2024	PAYDOWN		7,934	7,934	7,708	7,708	0	227	0	227	0	7,934	0	0	0	151	04/01/2035	1.A FM
..36242D-H9-7	GSR Mortgage Loan Trust -GSR 2005-AR2 4A		06/01/2024	PAYDOWN		18,900	18,900	18,369	18,900	0	0	0	0	0	18,900	0	0	0	550	04/01/2035	1.A FM
..36242D-QY-2	GSR Mortgage Loan Trust -GSR 2004-15F 2A		06/01/2024	PAYDOWN		1,735	1,735	1,544	1,544	0	192	0	192	0	1,735	0	0	0	35	12/01/2034	4.A FM
..36242D-VA-8	GSR Mortgage Loan Trust -GSR 2005-1F 1A6		06/01/2024	PAYDOWN		13,302	13,302	13,095	12,887	0	415	0	415	0	13,302	0	0	0	305	02/01/2035	2.C FM
..36244S-AD-0	GSAA Home Equity Trust 2-GSAA 2006-13 AF		06/01/2024	PAYDOWN		57,873	57,873	16,700	16,927	0	40,903	(43)	40,946	0	57,873	0	0	0	334	07/01/2036	1.A FM
..36248#-AA-0	GSA (Anchorage AK) CTL P Pass-Thru Certi		06/15/2024	SINKING PAYMENT		359,557	359,557	362,793	360,759	0	(1,202)	0	(1,202)	0	359,557	0	0	0	5,257	11/15/2030	1.A
..36248D-AD-7	GSC CAPITAL CORP MORTGAG-SERIES 2006-2 C		06/25/2024	PAYDOWN		44,027	44,027	34,055	45,442	0	(1,407)	0	(1,407)	0	44,027	0	0	0	795	05/25/2036	1.A FM
..36249#-AA-1	GSA Gth l US Government Lease-Backed Pas		06/15/2024	SINKING PAYMENT		379,797	379,797	379,797	379,802	0	(11)	0	(11)	0	379,797	0	0	0	3,578	05/15/2038	1.A
..36264E-BD-5	GS Mortgage-Backed Secur-GSMBs 2022-NM1		06/01/2024	PAYDOWN		121,645	121,645	125,408	124,659	0	(3,014)	0	(3,014)	0	121,645	0	0	0	2,077	05/01/2062	1.D
..36298G-AA-7	GSPA Monetization Trust-SECURED		06/09/2024	SINKING PAYMENT		252,104	252,104	255,632	253,052	0	(948)	0	(948)	0	252,104	0	0	0	6,765	10/09/2029	2.A FE
..36831B-CC-6	GCAT 2024-INV1 Trust-GCAT 2024-INV1 B1		06/01/2024	PAYDOWN		21,916	21,916	23,231	0	0	(1,315)	0	(1,315)	0	21,916	0	0	0	657	01/01/2054	1.E FE
..36831B-CF-9	GCAT 2024-INV1 Trust-GCAT 2024-INV1 B2		06/01/2024	PAYDOWN		16,148	16,148	16,847	0	0	(699)	0	(699)	0	16,148	0	0	0	484	01/01/2054	1.F FE
..36850#-AA-9	Geisinger (Jenkins Towns Trust Certifica		06/15/2024	SINKING PAYMENT		142,566	142,566	142,566	142,566	0	0	0	0	0	142,566	0	0	0	1,999	12/15/2033	1.F S
..380241-AA-7	Goddard Funding LLC-GDRD 2022-1 A2		04/30/2024	PAYDOWN		42,250	42,250	42,262	42,317	0	(67)	0	(67)	0	42,250	0	0	0	1,450	10/30/2052	2.C FE
..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	2.A FE
..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	2.A FE
..38150Y-AD-5	Goldman Home Improvement-GHIT 2022-GRN1		06/25/2024	PAYDOWN		797,864	797,864	780,737	785,941	0	11,923	0	11,923	0	797,864	0	0	0	24,051	06/25/2052	2.B FE
..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	2.C FE
..38177B-AA-0	Golub Capital BDC CLO 20-GCBDC 2018-1A A		04/22/2024	VARIOUS		2,384,625	2,384,625	2,384,625	2,384,625	0	0	0	0	0	2,384,625	0	0	0	141,987	01/20/2031	1.A FE
..38217U-AC-6	Goodgreen 2021-1 Trust-GOODG 2021-1A C		06/15/2024	PAYDOWN		19,631	19,631	17,913	18,019	0	(1,608)	0	(1,608)	0	19,631	0	0	0	(19,458)	10/15/2056	2.B FE
..38237G-AA-7	GoodLeap Sustainable Hom-GOOD 2021-4GS A		06/20/2024	PAYDOWN		266,769	266,769	203,745	0	0	63,024	0	63,024	0	266,769	0	0	0	2,161	07/20/2048	1.F FE
..38928#-AA-3	Gray Escrow ll 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	4.C FE
..39538W-BE-7	GreenPoint Mortgage Fund-GPMF 2005-HY1 M		06/25/2024	PAYDOWN		416,303	416,303	300,519	493,314	0	(77,011)	0	(77,011)	0	416,303	0	0	0	7,687	07/25/2035	1.A FM
..39678W-AA-6	Greenwich Capital Struct-GCSP 2005-1 A1		06/01/2024	PAYDOWN		16,226	16,226	16,145	16,443	0	(217)	0	(217)	0	16,226	0	0	0	374	09/01/2034	1.A FM
..41161P-CX-9	HarborView Mortgage Loan-HVMLT 2004-1 1A		06/19/2024	PAYDOWN		4,309	4,309	4,088	4,091	0	219	1	218	0	4,309	0	0	0	115	04/19/2034	1.A FM
..41161P-EX-7	HarborView Mortgage Loan-HVMLT 2004-5 2A		06/01/2024	PAYDOWN		11,660	11,660	9,357	11,320	0	340	0	340	0	11,660	0	0	0	213	06/01/2034	1.A FM
..41161P-EZ-2	HarborView Mortgage Loan-HVMLT 2004-5 3A		06/01/2024	PAYDOWN		6,171	6,171	6,143	6,171	0	0	0	0	0	6,171	0	0	0	96	06/01/2034	1.A FM
..41161P-FV-0	HarborView Mortgage Loan-HVMLT 2004-6 5A		06/01/2024	PAYDOWN		10,544	10,544	10,689	10,763	0	(219)	0	(219)	0	10,544	0	0	0	227	08/01/2034	1.A FM
..41161P-MV-2	HarborView Mortgage Loan-HVMLT 2005-4 1A		06/01/2024	PAYDOWN		4,191	4,191	2,958	2,837	0	0	0	0	0	2,837	0	1,355	1,355	101	07/01/2035	1.A FM
..41161P-TN-3	HARBORVIEW MORTGAGE LOAN-SERIES 2005-10		06/20/2024	PAYDOWN		11,453	11,453	6,659	6,843	0	4,610	0	4,610	0	11,453	0	0	0	196	11/19/2035	1.A FM
..41161P-UK-7	HarborView Mortgage Loan-SERIES 05-11 CL		06/20/2024	PAYDOWN		18,788	18,788	13,251	20,802	0	(2,013)	0	(2,013)	0	18,788	0	0	0	496	08/19/2045	1.A FM
..41161V-AC-4	HarborView Mortgage Loan-HVMLT 2006-7 2A		06/20/2024	PAYDOWN		2,857	2,857	2,030	2,557	0	302	0	302	0	2,857	0	0	0	18	09/19/2046	1.A FM
..41162G-AA-0	HarborView Mortgage Loan-HVMLT 2006-11 A		06/20/2024	PAYDOWN		12,080	12,080	10,890	11,923	0	(115,828)	0	(115,828)	0	12,080	0	0	0	290	12/19/2036	1.B FM
..41170Y-AD-4	Hardee's Funding LLC-HNGRY 2018-1A A21		04/05/2024	PAYDOWN		13,230,000	13,230,000	13,230,000	13,230,000	0	0	0	0	0	13,230,000	0	0	0	191,355	06/20/2048	2.B FE
..417558-AA-1	Harvest Midstream l 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	3.C FE
..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	3.B FE
..43283B-AB-9	Hilton Grand Vacations T-HGVT 2022-1D B		06/20/2024	Hilton Grand Vacations		185,812	185,812	176,348	177,136	0	8,676	0	8,676	0	185,812	0	0	0	3,157	06/20/2034	1.G FE
..43283G-AD-4	Hilton Grand Vacations T-HGVT 2022-2A D		06/25/2024	PAYDOWN		372,323	372,323	372,273	372,283	0	41	0	41	0	372,323	0	0	0	13,284	01/25/2037	3.C FE
..43283Y-AB-9	Hilton Grand Vacations T-HGVT 2024-1B B		06/15/2024	PAYDOWN		101,254	101,254	101,235	0	0	19	0	19	0	101,254	0	0	0	520	09/15/2039	1.F FE
..432917-AB-8	Hilton Grand Vacations T-HGVT 2023-1A B		06/25/2024	PAYDOWN		1,393,642	1,393,642	1,392,698	1,392,741	0	901	0	901	0	1,393,642	0	0	0	35,477	01/25/2038	1.G FE
..433674-AA-6	NRZ Excess Spread-Collat-NZES 2020-PLS1		06/25/2024	PAYDOWN		190,849	190,849	190,848	190,848	0	0	0	0	0	190,849	0	0	0	3,045	12/25/2025	2.C FE
..43722#-AA-1	Home Depot (Monterey Par Trust Certifica		06/15/2024	SINKING PAYMENT		66,431	66,431	66,431	66,431	0	0	0	0	0	66,431	0	0	0	1,028	06/15/2038	1.F
..43722#-AA-5	Home Depot South Windsor Pass-Thru Certi		06/15/2024	SINKING PAYMENT		54,727	54,727	54,727	54,727	0	0	0	0	0	54,727	0	0	0	769	10/15/2040	1.F

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident- ification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..43739E-AP-2	HOMEBANC MORTGAGE TRUST-SERIES 2005-1 CL		06/25/2024	PAYDOWN		20,227	20,227	17,048	16,738	0	3,603	114	3,489	0	20,227	0	0	0	358	03/25/2035	1.A FM
..43739E-CL-9	HomeBanc Mortgage Trust -HMBT 2006-1 1A1		06/01/2024	PAYDOWN		3,322	5,199	4,537	4,631	0	303	0	303	0	3,322	0	0	0	96	04/01/2037	1.A FM
..43741B-AA-7	HomeBanc Mortgage Trust -HMBT 2007-1 11A		06/01/2024	PAYDOWN		43,245	42,675	42,389	41,112	0	1,508	0	1,508	0	43,245	0	0	0	1,115	04/01/2047	1.C FM
..45254N-JB-4	IMPAC CMB TRUST-SERIES 2004-4 CLASS 2A1		06/01/2024	PAYDOWN		9,374	9,374	9,019	9,032	0	342	0	342	0	9,374	0	0	0	273	09/01/2034	1.A FM
..45254N-KX-4	IMPAC CMB TRUST-SERIES 2004-9 CLASS 1A1		06/25/2024	PAYDOWN		7,813	7,813	7,149	7,799	0	14	0	14	0	7,813	0	0	0	209	01/25/2035	1.A FM
..45254N-MZ-7	Impac CMB Trust Series 2-IMM 2005-2 1A2		06/25/2024	PAYDOWN		22,969	22,969	18,662	21,415	0	1,553	0	1,553	0	22,969	0	0	0	577	04/25/2035	1.A FM
..45254N-NT-0	Impac CMB Trust Series 2-IMM 2005-3 M1		06/25/2024	PAYDOWN		3,614	1,964	952	1,964	1,275	(14,985)	0	(13,710)	0	3,614	0	0	0	59	08/25/2035	1.A FM
..45254T-TN-4	Impac Secured Assets Tru-IMSA 2006-1 2A1		06/25/2024	PAYDOWN		50	50	35	69	0	(19)	0	(19)	0	50	0	0	0	1	05/25/2036	1.A FM
..45276Q-AA-2	Imperial Fund Mortgage T-IMPRL 2022-NQM5		06/01/2024	PAYDOWN		145,659	145,659	145,658	145,659	0	0	0	0	0	145,659	0	0	0	3,361	08/01/2067	1.A FE
..45276Q-AB-0	Imperial Fund Mortgage T-IMPRL 2022-NQM5		06/01/2024	PAYDOWN		392,901	392,901	392,896	392,901	0	0	0	0	0	392,901	0	0	0	10,297	08/01/2067	1.C FE
..45276Q-AC-8	Imperial Fund Mortgage T-IMPRL 2022-NQM5		06/01/2024	PAYDOWN		108,152	108,152	107,235	108,152	0	0	0	0	0	108,152	0	0	0	2,890	08/01/2067	1.G FE
..45660K-AA-9	IndyMac INDX Mortgage Lo-INDX 2006-AR39		06/25/2024	PAYDOWN		21,091	27,311	22,002	27,769	0	(107,356)	0	(107,356)	0	21,091	0	0	0	1,361	02/25/2037	1.A FM
..45660L-DB-2	IndyMac INDX Mortgage Lo-INDX 2005-AR1 1		06/01/2024	PAYDOWN		2,087	2,087	2,072	2,087	0	0	0	0	0	2,087	0	0	0	44	03/01/2035	1.A FM
..45660L-V9-7	IndyMac INDX Mortgage Lo-INDX 2005-AR31		04/01/2024	PAYDOWN		20	20	18	20	0	0	0	0	0	20	0	0	0	3	01/01/2036	1.A FM
..45660N-X9-1	IndyMac INDX Mortgage Lo-INDX 2004-AR6 5		06/01/2024	PAYDOWN		3,076	3,076	2,522	2,863	0	213	0	213	0	3,076	0	0	0	70	10/01/2034	1.A FM
..45661X-AB-8	IndyMac INDX Mortgage Lo-INDX 2006-AR13		06/25/2024	PAYDOWN		7,350	7,350	4,405	4,960	0	2,389	0	2,389	0	7,350	0	0	0	112	07/25/2036	1.A FM
..45669A-AD-6	IndyMac INDX Mortgage Lo-INDA 2007-AR1 2		06/01/2024	PAYDOWN		11,574	11,574	10,053	9,970	0	1,604	0	1,604	0	11,574	0	0	0	306	03/01/2037	3.B FM
..45783N-AA-5	InStar Leasing III LLC-INSTR 2021-1A A		06/15/2024	PAYDOWN		47,844	47,844	47,818	47,825	0	19	0	19	0	47,844	0	0	0	455	02/15/2054	1.F FE
..46591K-AC-7	JP Morgan Mortgage Trust-JPMIT 2019-8 A3		06/01/2024	PAYDOWN		105,176	105,176	106,540	108,881	0	(3,706)	0	(3,706)	0	105,176	0	0	0	1,569	03/01/2050	1.A FM
..46616M-AA-8	J G WENTWORTH RECV XXII-ASSET BKD NT 10-		06/15/2024	PAYDOWN		27,250	27,250	27,245	27,159	0	92	0	92	0	27,250	0	0	0	440	12/15/2048	1.A FE
..46616M-AB-6	JG Wentworth XXII LLC-HENDR 2010-3A B		06/15/2024	PAYDOWN		10,519	10,519	10,519	10,520	0	(1)	0	(1)	0	10,519	0	0	0	305	12/15/2050	1.A FE
..46616P-AA-1	JGWPT XXIII LLC-HENDR 2011-1A A		06/15/2024	PAYDOWN		57,601	57,601	57,586	57,587	0	15	0	15	0	57,601	0	0	0	1,171	10/15/2056	1.A FE
..46616Q-AA-9	321 HENDERSON RECEIVABLE-SERIES 2011-2A		06/15/2024	PAYDOWN		89,400	89,400	89,349	89,352	0	48	0	48	0	89,400	0	0	0	1,960	09/15/2056	1.A FE
..46616V-AA-8	J G WENTWORTH RECV XXV-ASSET BKD NT 12-1		06/15/2024	PAYDOWN		34,679	34,679	34,671	34,932	0	(253)	0	(253)	0	34,679	0	0	0	642	02/16/2065	1.A FE
..46617A-AA-3	JGWPT XXVII LLC-ASSET BKD SERIES 2012-3		06/15/2024	PAYDOWN		91,390	91,390	90,474	90,811	0	579	0	579	0	91,390	0	0	0	1,269	09/15/2065	1.A FE
..46617F-AA-2	JGWPT XXVIII LLC-HENDR 2013-1A A		06/17/2024	PAYDOWN		79,556	79,556	79,327	79,305	0	251	0	251	0	79,556	0	0	0	1,229	04/15/2067	1.A FE
..46617J-AA-4	JGWPT XXIX LLC-HENDR 2013-2A A		06/15/2024	PAYDOWN		83,507	83,507	83,487	83,506	0	1	0	1	0	83,507	0	0	0	1,430	03/15/2062	1.A FE
..46617L-AA-9	JGWPT XXX LLC-HENDR 2013-3A A		06/15/2024	PAYDOWN		124,601	124,601	124,500	124,515	0	86	0	86	0	124,601	0	0	0	2,170	01/17/2073	1.A FE
..46617T-AA-2	JGWPT XXXI LLC-ASSET BKD SERIES 2014-1 C		06/15/2024	PAYDOWN		74,640	74,640	74,598	74,596	0	43	0	43	0	74,640	0	0	0	1,248	03/15/2063	1.A FE
..46618A-AA-2	JGWPT XXXII LLC-ASSET BKD SERIES 2014-2		06/15/2024	PAYDOWN		199,247	199,247	198,968	198,994	0	252	0	252	0	199,247	0	0	0	3,015	01/17/2073	1.A FE
..46618B-AA-6	J G WENTWORTH XXXIII LLC-ASSET BKD SER 2		06/15/2024	PAYDOWN		264,590	264,590	264,793	264,770	0	(180)	0	(180)	0	264,590	0	0	0	3,821	06/15/2077	1.A FE
..46618L-AA-8	J G WENTWORTH XXXIV LLC-ASSET BKD SER 20		06/15/2024	PAYDOWN		205,990	205,990	204,077	205,433	0	557	0	557	0	205,990	0	0	0	2,721	09/15/2072	1.A FE
..46619R-AA-4	J G WENTWORTH XXXV LLC-ASSET BKD NT 15-		06/15/2024	PAYDOWN		157,882	157,882	158,125	158,070	0	(188)	0	(188)	0	157,882	0	0	0	2,594	03/15/2058	1.A FE
..46619X-AA-1	JG Wentworth XXXVI LLC-HENDR 2015-3A A		06/15/2024	PAYDOWN		62,832	62,832	62,777	62,784	0	48	0	48	0	62,832	0	0	0	1,127	03/17/2070	1.A FE
..46620J-AA-9	J.G. Wentworth XXXVIII L-HENDR 2017-1A A		06/15/2024	PAYDOWN		41,463	41,463	41,431	41,431	0	33	0	33	0	41,463	0	0	0	688	08/16/2060	1.A FE
..46620V-AA-2	J.G. Wentworth XXXIX LLC-HENDR 2017-2A A		06/15/2024	PAYDOWN		148,744	148,744	148,677	148,744	0	0	0	0	0	148,744	0	0	0	2,131	09/15/2072	1.A FE
..466247-J4-6	JP Morgan Mortgage Trust-JPMIT 2006-A2 2		06/01/2024	PAYDOWN		3,047	3,047	2,717	2,719	0	327	0	327	0	3,047	0	0	0	61	04/01/2036	1.A FM
..466247-L6-8	JP Morgan Mortgage Trust-JPMIT 2006-A2 1		05/01/2024	PAYDOWN		81,180	81,180	77,374	81,178	0	1	0	1	0	81,180	0	0	0	2,015	08/01/2034	1.A FM
..466247-OP-1	JP Morgan Mortgage Trust-JPMIT 2005-A3 7		06/01/2024	PAYDOWN		2,786	2,786	2,561	2,338	0	448	0	448	0	2,786	0	0	0	134	06/01/2035	1.A FM
..466247-PP-0	JP Morgan Mortgage Trust-JPMIT 2005-A4 2		06/01/2024	PAYDOWN		9,242	9,242	8,202	9,062	0	181	0	181	0	9,242	0	0	0	212	07/01/2035	1.A FM
..466247-UG-6	JP MORGAN MORTGAGE TRUST-SERIES 2005-A6		06/01/2024	PAYDOWN		34,194	34,194	30,514	30,723	0	3,471	0	3,471	0	34,194	0	0	0	596	08/01/2035	1.A FM
..466247-ZP-1	JP Morgan Mortgage Trust-JPMIT 2005-S3 1		05/01/2024	PAYDOWN		3,342	3,342	1,922	1,829	0	1,513	0	1,513	0	3,342	0	0	0	97	01/01/2036	2.C FM
..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	1.F FE
..46627M-AD-9	JP Morgan Alternative Lo-JPALT 2005-S1 1		06/01/2024	PAYDOWN		6,012	3,359	(109)	1,276	0	53,787	(2,890)	56,677	0	6,012	0	0	0	133	12/01/2035	1.A FM
..46627M-CU-9	JP Morgan Alternative Lo-JPALT 2006-A1 2		06/01/2024	PAYDOWN		11,762	11,762	11,756	7,745	0	16,175	0	16,175	0	11,762	0	0	0	220	03/01/2036	1.A FM
..46627M-CY-1	JP Morgan Alternative Lo-JPALT 2006-A1 3		06/01/2024	PAYDOWN		285,431	285,431	218,944	219,746	0	67,453	1,768	65,685	0	285,430	0	0	0	6,468	03/01/2036	1.A FM

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SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident-ification	Description	For-ign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid-eration	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 Recogn-ized	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	NAIC Desig-nation, NAIC Desig-nation Modifier and SVO Admini-strative Symbol
..46627M-EC-7	JP Morgan Alternative Lo-JPALT 2006-S1 1	.....	06/01/2024	PAYDOWN	.....	1,911	1,770	949	1,023	0	763	4	759	0	1,911	0	0	0	52	03/01/2036	1.A FM
..46627M-EJ-2	JP Morgan Alternative Lo-JPALT 2006-S1 1	.....	06/01/2024	PAYDOWN	.....	10,849	10,875	6,941	7,048	0	3,832	4	3,828	0	10,849	0	0	0	342	03/01/2036	4.B FM
..46628K-AC-4	JP Morgan Mortgage Trust-JPMMT 2006-A3 2	.....	06/01/2024	PAYDOWN	.....	3,736	3,736	3,299	3,037	0	699	0	699	0	3,736	0	0	0	73	05/01/2036	1.A FM
..46628L-AB-4	JP Morgan Mortgage Trust-JPMMT 2006-A4 1	.....	06/01/2024	PAYDOWN	.....	1,363	1,363	970	970	0	393	0	393	0	1,363	0	0	0	43	06/01/2036	1.A FM
..46630B-AE-3	JP Morgan Alternative Lo-JPALT 2008-R3 3	.....	06/01/2024	PAYDOWN	.....	16,473	16,473	14,925	13,200	0	3,273	0	3,273	0	16,473	0	0	0	325	05/01/2037	1.A FM
..46630G-AN-5	JP Morgan Mortgage Trust-JPMMT 2007-A1 4	.....	06/01/2024	PAYDOWN	.....	953	953	891	948	0	5	0	5	0	953	0	0	0	23	07/01/2035	1.A FM
..46630P-AP-0	JP Morgan Mortgage Trust-JPMMT 2007-A2 3	.....	06/01/2024	PAYDOWN	.....	108	108	103	80	0	28	0	28	0	108	0	0	0	2	04/01/2037	1.A FM
..46630W-AB-6	JP Morgan Mortgage Trust-JPMMT 2007-S2 1	.....	06/01/2024	PAYDOWN	.....	643	643	348	300	0	343	0	343	0	643	0	0	0	15	06/01/2037	3.C FM
..46630X-AL-4	JP Morgan Mortgage Trust-JPMMT 2007-S2 1	.....	05/01/2024	PAYDOWN	.....	2,495	3,149	1,762	1,635	0	1,208	(3)	1,211	0	2,495	0	0	0	62	06/01/2037	4.B FM
..46631N-AA-7	JP Morgan Mortgage Trust-JPMMT 2007-S3 1	.....	06/01/2024	PAYDOWN	.....	1,210	1,210	718	684	0	527	0	527	0	1,210	0	0	0	32	08/01/2037	4.B FM
..46631N-DT-3	JP Morgan Mortgage Trust-JPMMT 2007-S3 1	.....	06/01/2024	PAYDOWN	.....	61,260	3,594	8	1,955	0	25,051	0	25,051	0	61,260	0	0	0	138	08/01/2037	1.A FM
..46632T-AA-3	JP Morgan Mortgage Trust-JPMMT 2008-R2 1	.....	06/01/2024	PAYDOWN	.....	115,300	115,300	92,815	109,383	0	5,916	0	5,916	0	115,300	0	0	0	2,471	07/01/2037	1.A FM
..46632Y-AB-0	JP Morgan Mortgage Trust-JPMMT 2008-R3 1	.....	06/01/2024	PAYDOWN	.....	47,159	47,160	5,996	(3,560)	0	50,711	0	50,711	0	47,159	0	0	0	1,075	06/01/2036	1.A FM
..46633M-AM-1	JP Morgan Resecuritizati-JPMRR 2009-6 2A	.....	06/01/2024	PAYDOWN	.....	3,514	3,661	370	(259)	0	3,788	0	3,788	0	3,514	0	0	0	92	04/01/2035	1.A FM
..46634D-AX-6	JP Morgan Resecuritizati-JPMRR 2010-1 3A	.....	06/01/2024	PAYDOWN	.....	99,808	111,310	52,564	63,198	0	42,106	0	42,106	0	99,808	0	0	0	4,431	04/01/2037	1.A FM
..46635B-AD-3	JP Morgan Resecuritizati-JPMRR 2010-7 1A	.....	06/01/2024	PAYDOWN	.....	126,590	126,590	89,025	104,699	0	21,892	0	21,892	0	126,590	0	0	0	4,684	03/01/2039	1.A FM
..46636S-AC-7	Jack in the Box Funding -JACK 2019-1A A2	.....	05/25/2024	PAYDOWN	.....	80,238	80,238	75,615	77,229	0	3,008	0	3,008	0	80,238	0	0	0	1,994	08/25/2049	2.B FE
..46636S-AD-5	Jack in the Box Funding -JACK 2022-1A A2	.....	05/25/2024	PAYDOWN	.....	35,000	35,000	35,000	35,000	0	0	0	0	0	35,000	0	0	0	603	02/26/2052	2.B FE
..46636S-AE-3	Jack in the Box Funding -JACK 2022-1A A2	.....	05/25/2024	PAYDOWN	.....	25,725	25,725	22,935	23,851	0	1,874	0	1,874	0	25,725	0	0	0	532	02/26/2052	2.B FE
..46651G-AC-3	JP Morgan Mortgage Trust-JPMMT 2019-7 A3	.....	06/01/2024	PAYDOWN	.....	26,503	26,503	26,834	26,869	0	(366)	0	(366)	0	26,503	0	0	0	421	02/01/2050	1.A
..472320-AA-8	Jefferies Resecuritizati-JMAC 2008-R1 A	.....	06/25/2024	PAYDOWN	.....	26,089	60,874	55,745	58,213	0	1,683	0	1,683	0	26,089	0	0	0	3,003	06/25/2047	1.A FM
..472321-AA-6	Jefferies Resecuritizati-JMAC 2008-R2 1A	.....	06/01/2024	PAYDOWN	.....	10,045	10,045	7,698	9,860	0	185	0	185	0	10,045	0	0	0	325	10/01/2035	1.A FM
..472321-AD-0	Jefferies Resecuritizati-JMAC 2008-R2 2A	.....	06/01/2024	PAYDOWN	.....	43,203	43,203	18,650	37,569	0	5,634	0	5,634	0	43,203	0	0	0	1,145	01/01/2037	1.A FM
..472321-AK-4	Jefferies Resecuritizati-JMAC 2008-R2 3A	.....	06/01/2024	PAYDOWN	.....	120,626	123,351	42,686	78,328	0	43,180	0	43,180	0	120,626	0	0	0	2,644	01/01/2039	1.A FM
..47232A-AC-2	Jefferies Resecuritizati-JMAC 2008-R3 1A	.....	06/01/2024	PAYDOWN	.....	10,953	11,661	4,387	6,606	0	4,611	0	4,611	0	10,953	0	0	0	388	03/01/2036	1.A FM
..47232A-AE-8	Jefferies Resecuritizati-JMAC 2008-R3 2A	.....	06/01/2024	PAYDOWN	.....	14,650	14,650	10,401	14,650	0	0	0	0	0	14,650	0	0	0	869	06/01/2036	1.A FM
..47232A-AH-1	Jefferies Resecuritizati-JMAC 2008-R3 3A	.....	06/01/2024	PAYDOWN	.....	19,799	19,731	3,853	8,324	0	11,669	0	11,669	0	19,799	0	0	0	405	05/01/2037	1.A FM
..47232C-AH-7	Jefferies Resecuritizati-JMAC 2009-R1 4A	.....	06/01/2024	PAYDOWN	.....	7,019	14,617	12,462	12,703	0	(956)	295	(1,251)	0	5,993	0	1,026	1,026	470	06/01/2037	1.A FM
..47232T-AB-3	Jefferies Resecuritizati-JMAC 2009-R3 1A	.....	06/01/2024	PAYDOWN	.....	12,998	12,998	11,374	12,312	0	686	0	686	0	12,998	0	0	0	298	12/01/2035	1.A FM
..47233D-AB-7	Jefferies Resecuritizati-JMAC 2009-R11 1	.....	06/01/2024	PAYDOWN	.....	86,848	90,594	12,763	28,182	0	57,616	0	57,616	0	86,848	0	0	0	1,850	09/01/2036	1.A FM
..47760Q-AB-9	Jimmy Johns Funding LLC-JIMMY 2017-1A A2	.....	04/30/2024	PAYDOWN	.....	18,000	18,000	18,000	18,000	0	0	0	0	0	18,000	0	0	0	436	07/30/2047	2.B FE
..50243B-AA-8	LVCVA (Las Vegas NV) Rec Trust Certifica	.....	06/15/2024	SINKING PAYMENT	.....	283,593	283,593	283,593	283,593	0	0	0	0	0	283,593	0	0	0	12,405	12/15/2039	4.A
..50543L-AA-0	LABRADOR AVIATION FINANC-SERIES 2016-1A	.....	06/15/2024	PAYDOWN	.....	496,845	496,845	487,205	494,240	0	2,605	0	2,605	0	496,845	0	0	0	8,009	01/15/2042	3.A FE
..52520M-CE-1	Lehman Mortgage Trust 20-LMT 2005-2 3A7	.....	06/01/2024	PAYDOWN	.....	1,295	1,257	909	909	0	585	0	585	0	1,295	0	0	0	33	12/01/2035	1.A FM
..525221-EM-5	Lehman XS Trust Series 2-LXS 2005-7N 1A1	.....	06/25/2024	PAYDOWN	.....	24,738	24,738	18,143	21,557	0	3,181	0	3,181	0	24,738	0	0	0	411	12/25/2035	1.A FM
..525221-GM-3	LEHMAN XS TRUST-SERIES 2005-9N CLASS 1A1	.....	06/25/2024	PAYDOWN	.....	222,845	222,845	190,045	239,982	0	(17,137)	0	(17,137)	0	222,845	0	0	0	3,694	02/25/2036	1.A FM
..52523M-AD-2	Lehman XS Trust 2006-15-LXS 2006-15 A4	.....	06/25/2024	PAYDOWN	.....	11,446	11,446	6,327	10,576	0	867	0	867	0	11,446	0	0	0	234	10/25/2036	1.A FM
..525241-AL-9	Lehman XS Trust 2007-1-LXS 2007-1 WF1	.....	06/01/2024	PAYDOWN	.....	3,241	7,267	4,694	5,022	0	772	0	772	0	3,241	0	0	0	116	01/01/2037	1.A FM
..53946H-AA-6	Loan Asset Issuer LLC - Series 2022 NG-2	.....	04/25/2024	CA_CASH_CLOSE	.....	2,820,728	2,820,728	2,820,728	2,820,728	0	0	0	0	0	2,820,728	0	0	0	45,444	11/25/2047	1.G PL
..53948W-AA-1	Loan Asset Issuer LLC - Series 2021 NG-1	.....	05/28/2024	CA_CASH_CLOSE	.....	1,238,518	1,238,518	1,238,518	1,238,518	0	0	0	0	0	1,238,518	0	0	0	17,272	10/25/2046	1.G PL
..53950T-AA-3	Loan Asset Issuer LLC, Series 2021 M-2 -	.....	05/10/2024	CA_CASH_CLOSE	.....	22,394,998	22,394,998	22,394,998	22,394,998	0	0	0	0	0	22,394,998	0	0	0	219,549	11/10/2033	1.D PL
..53950T-AB-1	Loan Asset Issuer LLC, Series 2021 M-2 -	.....	05/10/2024	CA_CASH_CLOSE	.....	11,116,405	11,116,405	11,116,405	11,116,405	0	0	0	0	0	11,116,405	0	0	0	129,165	11/10/2033	1.G PL
..53950T-AC-9	Loan Asset Issuer LLC, Series 2021 M-2 -	.....	04/10/2024	CA_CASH_CLOSE	.....	3,159,470	3,159,470	3,159,470	3,159,470	0	0	0	0	0	3,159,470	0	0	0	43,774	11/10/2033	2.C PL
..53950T-AD-7	Loan Asset Issuer LLC, Series 2021 M-2 -	.....	04/10/2024	CA_CASH_CLOSE	.....	2,527,576	2,527,576	2,527,576	2,527,576	0	0	0	0	0	2,527,576	0	0	0	44,366	11/10/2033	3.C PL
..53950T-AE-5	Loan Asset Issuer LLC, Series 2021 M-2 -	.....	05/10/2024	CA_CASH_CLOSE	.....	3,619,394	3,619,394	3,619,394	3,619,394	0	0	0	0	0	3,619,394	0	0	0	96,375	11/10/2033	4.C PL
..53950U-AA-0	Loan Asset Issuer LLC - Series 2023 NG-1	.....	04/25/2024	CA_CASH_CLOSE	.....	4,266,717	4,266,717	4,266,717	4,266,717	0	0	0	0	0	4,266,717	0	0	0	16,801	08/25/2048	1.G PL

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Identification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..53950U-AB-8	Loan Asset Issuer LLC - Series 2023 NG-1		04/24/2024	CA_CASH_CLOSE		606,802	606,802	606,802	606,802	0	0	0	0	0	606,802	0	0	0	43,358	08/25/2048	2.C PL
..53950X-AA-4	Loan Asset Issuer LLC - Series 2022 NG-1		04/25/2024	CA_CASH_CLOSE		1,204,009	1,204,009	1,204,009	1,204,009	0	0	0	0	0	1,204,009	0	0	0	14,762	02/25/2047	1.G PL
..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	2.C PL
..55274Q-AK-1	MASTR Asset Securitizati-MASTR 2006-2 1A		06/01/2024	PAYDOWN		4,087	4,124	3,887	2,900	0	1,222	0	1,222	0	4,087	0	0	0	154	06/01/2036	3.C FM
..55275B-AA-2	MFRA Trust-MFRA 2022-CHM1 A1		06/01/2024	PAYDOWN		597,658	597,658	597,657	597,658	0	0	0	0	0	597,658	0	0	0	9,438	09/01/2056	1.C FE
..55283A-AA-7	MCA Fund Holding LLC-MCA 2020-1 A		05/01/2024	PAYDOWN		1,083,385	1,083,385	1,085,663	1,084,362	0	(977)	0	(977)	0	1,083,385	0	0	0	17,605	11/01/2035	1.F FE
..55285P-AB-0	MFA 2023-NQM1 Trust-MFRA 2023-NQM1 A2		06/01/2024	PAYDOWN		45,824	45,824	45,176	45,345	0	479	0	479	0	45,824	0	0	0	1,127	11/01/2067	1.C FE
..55286E-AC-2	MFA 2022-NQM3 Trust-MFRA 2022-NQM3 A3		06/01/2024	PAYDOWN		273,218	273,218	266,178	268,356	0	4,862	0	4,862	0	273,218	0	0	0	6,281	09/01/2067	1.F FE
..55400U-AB-9	MVW 2022-1 LLC-MVWOT 2022-1A B		06/20/2024	PAYDOWN		599,175	599,175	599,108	599,111	0	63	0	63	0	599,175	0	0	0	10,905	11/21/2039	1.F FE
..55400W-AA-7	MVW 2023-2 LLC-MVWOT 2023-2A A		06/20/2024	PAYDOWN		327,954	327,954	333,847	0	0	(5,893)	0	(5,893)	0	327,954	0	0	0	2,487	11/20/2040	1.A FE
..576431-AJ-9	MASTR Adjustable Rate Mo-MARM 2007-1 2A1		06/01/2024	PAYDOWN		90	90	72	(6)	0	96	0	96	0	90	0	0	0	4	11/01/2036	1.A FM
..576433-C5-3	MASTR Adjustable Rate Mo-MARM 2005-6 5A2		06/01/2024	PAYDOWN		14,697	14,699	11,381	12,386	0	2,313	0	2,313	0	14,697	0	0	0	192	07/01/2035	1.A FM
..576433-GM-2	MASTR Adjustable Rate Mo-MARM 2003-6 6A1		05/01/2024	PAYDOWN		3,840	3,840	3,696	3,701	0	139	0	139	0	3,840	0	0	0	55	12/01/2033	1.A FM
..576433-HM-1	MASTR Adjustable Rate Mo-MARM 2003-7 4A1		06/01/2024	PAYDOWN		7,797	7,797	7,583	7,758	0	39	0	39	0	7,797	0	0	0	194	01/01/2034	1.A FM
..576433-QD-1	MASTR Adjustable Rate Mo-MARM 2004-7 5A1		06/01/2024	PAYDOWN		3,785	3,785	3,596	3,708	0	77	0	77	0	3,785	0	0	0	106	07/01/2034	2.C FM
..576433-XA-9	MASTR Adjustable Rate Mo-MARM 2005-1 3A1		06/01/2024	PAYDOWN		2,193	2,193	2,083	2,091	0	101	0	101	0	2,193	0	0	0	31	11/01/2035	1.A FM
..576433-XW-1	MASTR Adjustable Rate Mo-MARM 2005-2 3A1		06/01/2024	PAYDOWN		5,818	5,818	5,585	5,682	0	135	0	135	0	5,818	0	0	0	126	03/01/2035	1.A FM
..576434-J7-0	MASTR Alternative Loan T-MALT 2005-2 4A3		06/25/2024	PAYDOWN		67,916	67,916	56,455	78,171	0	(10,255)	0	(10,255)	0	67,916	0	0	0	1,728	03/25/2035	1.A FM
..576434-W5-9	MASTR Alternative Loan T-MALT 2005-6 3A1		06/01/2024	PAYDOWN		3,812	3,812	2,778	3,685	0	128	0	128	0	3,812	0	0	0	94	12/01/2035	4.A FM
..57643M-LZ-5	MASTR Asset Securitizati-MASTR 2006-1 1A		06/01/2024	PAYDOWN		849	849	561	580	0	285	16	269	0	849	0	0	0	20	05/01/2036	1.A FM
..57645T-AA-5	MASTR Adjustable Rate Mo-MARM 2007-HF2 A		06/25/2024	PAYDOWN		196,678	196,678	172,509	196,437	0	12,407	0	12,407	0	196,678	0	0	0	1,672	09/25/2037	1.A FM
..57763R-AB-3	Mauser Packaging Solutio-FIRST LIEN		04/16/2024	EXCHANGE OFFER		4,949,000	4,949,000	4,949,000	4,949,000	0	0	0	0	0	4,949,000	0	0	0	260,905	08/15/2026	4.B FE
..585495-AA-2	Mello Mortgage Capital A-MELLO 2021-MTG1		06/01/2024	PAYDOWN		793,748	793,748	803,505	803,080	0	(9,332)	0	(9,332)	0	793,748	0	0	0	8,587	04/01/2051	1.A
..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	1.F FE
..59023N-AW-8	Merrill Lynch Mortgage I-MLMI 2006-AF2 P		05/01/2024	PAYDOWN		1,076	1,076	646	233	0	843	0	843	0	1,076	0	0	0	0	10/01/2036	1.A FM
..59023P-AB-9	Merrill Lynch Mortgage I-MLCC 2006-3 2A1		06/01/2024	PAYDOWN		11,558	11,558	9,930	9,988	0	1,630	59	1,571	0	11,558	0	0	0	353	10/01/2036	5.A FM
..595481-AA-0	Mid-State Capital Corp 2-MDST 2005-1 A		06/01/2024	PAYDOWN		40,000	40,000	38,400	40,000	0	0	0	0	0	40,000	0	0	0	985	01/01/2040	1.E FE
..59549W-AA-1	Mid-State Trust XI-MDST 11 A1		06/15/2024	PAYDOWN		62,286	62,286	62,284	62,286	0	0	0	0	0	62,286	0	0	0	1,302	07/15/2038	1.E FE
..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	1.G FE
..61748H-AW-1	Morgan Stanley Mortgage -MSM 2004-5AR 4A		06/01/2024	PAYDOWN		78,821	78,821	79,706	80,357	0	(1,536)	0	(1,536)	0	78,821	0	0	0	1,902	07/01/2034	1.A FM
..61748H-FK-2	MORGAN STANLEY MORTGAGE -SERIES 2004-10A		06/01/2024	PAYDOWN		203,519	203,519	192,390	200,245	0	3,274	0	3,274	0	203,519	0	0	0	5,017	11/01/2034	2.C FM
..61748H-UF-6	Morgan Stanley Mortgage -MSM 2006-1AR 1A		06/25/2024	PAYDOWN		15,982	16,033	12,350	8,927	0	7,095	0	7,095	0	15,982	0	0	0	228	02/25/2036	1.A FM
..61749L-AP-6	Morgan Stanley Mortgage -MSM 2006-8AR 5A		06/01/2024	PAYDOWN		101,314	101,314	74,149	86,523	0	14,791	0	14,791	0	101,314	0	0	0	4,119	06/01/2036	1.A FM
..61749L-BM-2	Morgan Stanley Mortgage -MSM 2006-8AR 6A		05/01/2024	PAYDOWN		364	364	283	102	0	102	0	102	0	364	0	0	0	13	06/01/2036	1.A FM
..61751D-AE-4	Morgan Stanley Mortgage -MSM 2006-17XS A		06/01/2024	PAYDOWN		30,085	30,085	8,922	9,256	0	21,264	435	20,829	0	30,085	0	0	0	154	10/01/2046	1.A FM
..61751M-AU-8	Morgan Stanley Mortgage -MSM 2007-10XS A		06/01/2024	PAYDOWN		53,482	53,482	48,719	51,253	0	2,229	0	2,229	0	53,482	0	0	0	722	02/01/2037	1.A FM
..61751Q-AB-1	Morgan Stanley Home Equi-MSHEL 2007-1 A2		06/25/2024	PAYDOWN		60,012	60,012	34,394	23,397	0	36,615	0	36,615	0	60,012	0	0	0	426	12/25/2036	1.A FM
..617526-AD-0	Morgan Stanley ABS Capit-MSAC 2007-HE1 A		06/25/2024	PAYDOWN		54,250	54,250	27,515	32,951	0	21,300	0	21,300	0	54,250	0	0	0	284	11/25/2036	1.A FM
..61759X-AC-6	Morgan Stanley Re-REMIC -MSRR 2010-RB 1C		06/01/2024	PAYDOWN		2,921	8,760	5,922	5,542	0	1,366	0	1,366	0	2,921	0	0	0	344	01/01/2037	4.C FM
..618933-AA-3	Mosaic Solar Loan Trust -MSAIC 2023-3A A		06/20/2024	PAYDOWN		883,448	883,448	867,546	867,546	0	15,902	0	15,902	0	883,448	0	0	0	21,803	11/20/2053	1.0 FE
..61915R-AK-2	MortgageIT Trust 2005-3-MHL 2005-3 A1		06/25/2024	PAYDOWN		361	361	207	426	0	(65)	0	(65)	0	361	0	0	0	10	08/25/2035	1.A FM
..61915R-AU-0	MortgageIT Trust 2005-5-MHL 2005-5 A1		06/25/2024	PAYDOWN		35,923	35,923	23,170	32,395	0	3,528	0	3,528	0	35,923	0	0	0	887	12/25/2035	1.A FM
..61946K-AA-2	Mosaic Solar Loan Trust -MSAIC 2022-3A A		06/20/2024	PAYDOWN		141,852	141,852	141,846	141,846	0	6	0	6	0	141,852	0	0	0	3,520	06/20/2053	1.0 FE
..61946Q-AB-7	Mosaic Solar Loan Trust -MSAIC 2022-1A B		06/20/2024	PAYDOWN		661,790	661,790	638,928	638,725	0	23,065	0	23,065	0	661,790	0	0	0	8,888	01/20/2053	1.G FE
..61946U-AB-8	Mosaic Solar Loan Trust -MSAIC 2022-2A B		06/20/2024	PAYDOWN		125,407	125,407	124,110	124,172	0	1,236	0	1,236	0	125,407	0	0	0	2,719	01/21/2053	1.G FE
..62942K-AA-4	NRP Mortgage Trust 2013--NRPMT 2013-1 A1		06/01/2024	PAYDOWN		84,506	84,506	80,800	81,463	0	3,043	0	3,043	0	84,506	0	0	0	1,244	07/01/2043	1.A

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22	
										11	12	13	14	15								
CUSIP Ident-ification	Description	For-ign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid-eration	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 Recogn-ized	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	NAIC Desig-nation, NAIC Desig-nation Modifier and SVO Admini-strative Symbol	
..62946A-AA-2	NP SPE II LLC-NPRL 2016-1A A1 .....	.....	06/20/2024	PAYDOWN	.....	282,261	282,261	282,261	282,266	0	(5)	0	(5)	0	282,261	0	0	0	4,815	04/20/2046	1.6 FE	....
..62946A-AC-8	NP SPE III LLC-NPRL 2017-1A A1 .....	.....	06/20/2024	PAYDOWN	.....	326,092	326,092	326,088	326,092	0	0	0	0	0	326,092	0	0	0	5,900	10/21/2047	1.6 FE	....
..62947A-AB-9	NP SPE II LLC-NPRL 2019-2A A2 .....	.....	06/19/2024	PAYDOWN	.....	62,530	62,530	62,528	62,527	0	3	0	3	0	62,530	0	0	0	608	11/19/2049	1.F FE	....
..62955M-AA-4	NRZ FHT Excess LLC-NZES 2020-FHT1 A .....	.....	06/25/2024	PAYDOWN	.....	77,145	77,145	77,143	77,143	0	2	0	2	0	77,145	0	0	0	1,811	11/25/2025	2.C FE	....
..62960N-AA-5	NXT Capital CLO 2020-1 L-NXTC 2020-1A A .....	.....	04/22/2024	PAYDOWN	.....	5,227,743	5,227,743	5,227,743	5,227,743	0	0	0	0	0	5,227,743	0	0	0	200,928	01/20/2031	1.A FE	....
..638961-AA-0	Navient Private Educatio-NAVSL 2023-A A .....	.....	06/15/2024	PAYDOWN	.....	217,837	217,837	217,521	217,553	0	283	0	283	0	217,837	0	0	0	4,997	10/15/2071	1.A FE	....
..63893X-AD-3	Navient Private Educatio-NAVSL 2017-A B .....	.....	06/15/2024	PAYDOWN	.....	551,538	551,538	528,787	528,872	0	22,666	0	22,666	0	551,538	0	0	0	8,775	12/16/2058	1.B FE	....
..63942A-AB-2	Navient Private Educatio-NAVSL 2020-1A A .....	.....	06/17/2024	PAYDOWN	.....	248,884	248,884	242,039	241,785	0	7,099	0	7,099	0	248,884	0	0	0	6,755	04/15/2069	1.A FE	....
..63942G-AA-1	Navient Private Educatio-NAVSL 2021-FA A .....	.....	06/15/2024	PAYDOWN	.....	199,407	199,407	170,493	0	0	28,914	0	28,914	0	199,407	0	0	0	366	02/18/2070	1.A FE	....
..63942M-AA-8	Navient Private Educatio-NAVSL 2022-A A .....	.....	06/15/2024	PAYDOWN	.....	112,242	112,242	97,146	97,859	0	14,382	0	14,382	0	112,242	0	0	0	1,052	07/15/2070	1.A FE	....
..63942T-AA-3	Navient Student Loan Trust - NAVSL 2023- .....	.....	06/15/2024	PAYDOWN	.....	213,436	213,436	213,436	213,436	0	0	0	0	0	213,436	0	0	0	5,721	03/15/2072	1.A FE	....
..63946T-AA-9	NB Direct Access Insuran Senior Secured .....	.....	05/15/2024	CA_CASH_CLOSE	.....	274,886	274,886	274,886	274,886	0	0	0	0	0	274,886	0	0	0	32,518	07/29/2025	5.B Z	....
..64016N-AA-5	Neighborly Issuer LLC-NBLY 2021-1A A2 .....	.....	04/30/2024	PAYDOWN	.....	4,000	4,000	3,503	3,721	0	279	0	279	0	4,000	0	0	0	72	04/30/2051	2.C FE	....
..64016N-AC-1	Neighborly Issuer 2022-1-NBLY 2022-1A A2 .....	.....	04/30/2024	PAYDOWN	.....	10,000	10,000	8,841	9,070	0	930	0	930	0	10,000	0	0	0	185	01/30/2052	2.C FE	....
..64033N-AA-4	Nelnet Student Loan Trus-NSLT 2014-5A A .....	.....	06/25/2024	PAYDOWN	.....	1,104,118	1,104,118	1,064,094	1,068,806	0	35,313	0	35,313	0	1,104,118	0	0	0	29,224	07/25/2046	1.B FE	....
..64033Q-AB-5	Nelnet Student Loan Trus-NSLT 2015-2A A2 .....	.....	06/25/2024	PAYDOWN	.....	466,377	466,377	450,637	447,399	0	18,978	0	18,978	0	466,377	0	0	0	12,118	09/25/2042	1.B FE	....
..643529-AC-4	New Century Alternative -NCAMT 2006-ALT2 .....	.....	06/01/2024	PAYDOWN	.....	9,473	9,473	1,753	1,786	0	7,715	27	7,688	0	9,473	0	0	0	57	10/01/2036	1.A FM	....
..643529-AD-2	New Century Alternative -NCAMT 2006-ALT2 .....	.....	06/01/2024	PAYDOWN	.....	4,322	4,322	2,874	827	0	3,495	0	3,495	0	4,322	0	0	0	30	10/01/2036	1.A FM	....
..64352V-MP-3	New Century Home Equity -NCHET 2005-A A5 .....	.....	06/01/2024	PAYDOWN	.....	66,646	66,646	62,814	64,009	0	2,637	0	2,637	0	66,646	0	0	0	1,695	08/01/2035	1.A FM	....
..64830Y-AC-1	NRZ Excess Spread-Collat-NZES 2021-FNT1 .....	.....	06/25/2024	PAYDOWN	.....	180,586	180,586	180,584	180,585	0	1	0	1	0	180,586	0	0	0	2,665	03/25/2026	2.C FE	....
..64831Q-AA-1	New Residential Mortgage-NRZT 2022-NQM3 .....	.....	06/01/2024	PAYDOWN	.....	609,198	609,198	600,231	602,491	0	6,706	0	6,706	0	609,198	0	0	0	12,490	04/01/2062	1.A	.....
..64831Q-AB-9	New Residential Mortgage-NRZT 2022-NQM3 .....	.....	06/01/2024	PAYDOWN	.....	152,473	152,473	149,233	150,594	0	1,879	0	1,879	0	152,473	0	0	0	2,862	04/01/2062	1.E	.....
..64831T-AA-5	New Residential Mortgage-NRZT 2021-NQM3 .....	.....	06/01/2024	PAYDOWN	.....	301,816	301,816	280,691	283,914	0	17,902	0	17,902	0	301,816	0	0	0	(3,408)	11/01/2056	1.A	.....
..64831V-AB-8	New Residential Mortgage-NRZT 2022-NQM5 .....	.....	06/01/2024	PAYDOWN	.....	92,550	92,550	91,342	91,785	0	764	0	764	0	92,550	0	0	0	2,363	11/01/2052	1.C FE	....
..64831V-AC-6	New Residential Mortgage-NRZT 2022-NQM5 .....	.....	06/01/2024	PAYDOWN	.....	129,569	129,569	126,698	127,543	0	2,027	0	2,027	0	129,569	0	0	0	3,308	11/01/2052	1.F FE	....
..65535V-KX-5	Nomura Asset Acceptance -NAA 2005-WF1 2A .....	.....	06/01/2024	PAYDOWN	.....	681	681	692	682	0	(1)	0	(1)	0	681	0	0	0	18	03/01/2035	1.A FM	....
..65535V-MJ-4	Nomura Asset Acceptance -NAA 2005-AR3 1A .....	.....	06/25/2024	PAYDOWN	.....	13,310	13,310	10,368	10,618	0	2,966	274	2,692	0	13,310	0	0	0	224	07/25/2035	1.A FM	....
..65535V-NL-8	Nomura Asset Acceptance -NAA 2005-AR4 5A .....	.....	06/25/2024	PAYDOWN	.....	23,195	23,195	13,295	12,115	0	604	5	599	0	12,714	0	10,481	10,481	292	08/25/2035	1.A FM	....
..65535V-SJ-8	Nomura Asset Acceptance -NAA 2006-AP2 A2 .....	.....	06/01/2024	PAYDOWN	.....	40,960	40,960	14,918	15,439	0	26,172	651	25,521	0	40,960	0	0	0	373	01/01/2036	1.A FM	....
..65539C-AK-2	Nomura Resecuritization -NMRR 2011-4RA 1 .....	.....	06/01/2024	PAYDOWN	.....	34,642	35,587	29,569	31,128	0	(13,553)	0	(13,553)	0	34,642	0	0	0	872	12/01/2036	1.A FM	....
..65540E-BR-9	Nomura Resecuritization -NMRR 2014-1R 3A .....	.....	06/26/2024	PAYDOWN	.....	694,937	694,937	580,272	675,065	134,537	109,283	0	243,820	0	694,937	0	6	6	20,788	07/26/2036	6. *	....
..66415F-AA-8	Northeast Energy Center Senior Secured N .....	.....	06/30/2024	SINKING PAYMENT	.....	191,514	191,514	191,514	191,514	0	0	0	0	0	191,514	0	0	0	3,294	12/31/2038	2.C	....
..67098A-AM-1	OBX 2019-INV1 Trust-OBX 2019-INV1 A12 .....	.....	06/01/2024	PAYDOWN	.....	180,977	180,977	165,594	174,925	0	6,052	0	6,052	0	180,977	0	0	0	3,292	11/01/2048	1.A	.....
..67113A-AP-5	OBX 2019-EXP3 Trust-OBX 2019-EXP3 1A8 .....	.....	06/01/2024	PAYDOWN	.....	14,634	14,634	14,657	(38)	0	(38)	0	(38)	0	14,634	0	0	0	214	10/01/2059	1.A	.....
..67113X-AB-6	OBX 2021-J1 Trust-OBX 2021-J1 A2 .....	.....	06/01/2024	PAYDOWN	.....	710,949	710,949	706,616	705,428	0	5,520	0	5,520	0	710,949	0	0	0	5,964	05/01/2051	1.A	.....
..67117D-AA-8	Onslow Bay Mortgage Loan-OBX 2022-NQM7 A .....	.....	06/01/2024	PAYDOWN	.....	70,629	70,629	70,629	70,629	0	0	0	0	0	70,629	0	0	0	1,584	08/01/2062	1.A FE	....
..67117D-AB-6	Onslow Bay Mortgage Loan-OBX 2022-NQM7 A .....	.....	06/01/2024	PAYDOWN	.....	33,388	33,388	33,312	33,388	0	0	0	0	0	33,388	0	0	0	835	08/01/2062	1.C FE	....
..67117D-AC-4	Onslow Bay Mortgage Loan-OBX 2022-NQM7 A .....	.....	06/01/2024	PAYDOWN	.....	48,156	48,156	47,790	33,610	0	68	0	68	0	48,156	0	0	0	1,094	08/01/2062	1.F FE	....
..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	1.A	.....
..67118A-AQ-8	OPG Trust 2021-PORT-OPG 2021-PORT F .....	.....	04/15/2024	PAYDOWN	.....	83,431	83,431	83,222	82,921	.....												

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident-ification	Description	For-eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid-eration	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 Recogn-ized	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	NAIC Desig-nation, NAIC Desig-nation Modifier and SVO Admini-strative Symbol
..67190A-AA-4	Oak Street Investment Gr-OAKIG 2021-1A A		06/20/2024	PAYDOWN		193,741	193,741	185,848	186,854	0	6,887	0	6,887	0	193,741	0	0	0	970	01/20/2051	1.A FE
..67190A-AB-2	Oak Street Investment Gr-OAKIG 2021-1A A		06/20/2024	PAYDOWN		118,397	118,397	118,381	118,382	0	15	0	15	0	118,397	0	0	0	773	01/20/2051	1.A FE
..67190A-AC-0	Oak Street Investment Gr-OAKIG 2021-1A A		06/20/2024	PAYDOWN		11,000	11,000	10,241	10,332	0	668	0	668	0	11,000	0	0	0	128	01/20/2051	2.A FE
..67190A-AD-8	Oak Street Investment Gr-OAKIG 2021-1A A		06/20/2024	PAYDOWN		11,419	11,419	11,169	11,204	0	214	0	214	0	11,419	0	0	0	155	01/20/2051	2.A FE
..67448Q-AC-5	OBX 2019-EXP1 Trust-OBX 2019-EXP1 1A3		06/01/2024	PAYDOWN		28,682	28,682	28,539	28,496	0	186	0	186	0	28,682	0	0	0	549	01/01/2059	1.A
..677071-AF-9	Ohana Military Communiti-UNSECURED		04/01/2024	SINKING PAYMENT		126,178	126,178	127,701	126,491	0	(313)	0	(313)	0	126,178	0	0	0	3,580	10/01/2026	1.D FE
..677071-AM-4	Ohana Military Communiti-UNSECURED		04/01/2024	SINKING PAYMENT		165,641	165,641	170,513	166,033	0	(391)	0	(391)	0	165,641	0	0	0	2,292	10/01/2026	1.D FE
..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	2.C FE
..69144A-AA-7	Oxford Finance Funding 2-OXFIN 2020-1A A		06/15/2024	PAYDOWN		21,224	21,224	21,133	21,160	0	64	0	64	0	21,224	0	0	0	329	02/15/2028	1.F FE
..69145B-AA-4	OXFORD FINANCE FUNDING T-OXFIN 2022-1A A		06/15/2024	PAYDOWN		1,478,325	1,478,325	1,478,325	1,478,325	0	0	0	0	0	1,478,325	0	0	0	23,122	02/15/2030	1.F FE
..69337B-AH-7	PHH Alternative Mortgage-PHAM 2007-1 21		05/01/2024	PAYDOWN		15,963	16,015	13,952	14,904	0	1,066	0	1,066	0	15,963	0	0	0	439	02/01/2037	4.A FM
..693456-AA-3	PMT Loan Trust 2013-J1-PMTLT 2013-J1 A1		06/01/2024	PAYDOWN		52,736	52,736	51,384	51,522	0	1,214	0	1,214	0	52,736	0	0	0	808	09/01/2043	1.A
..693684-AA-0	PSMC 2020-1 Trust-PSMC 2020-1 A1		06/01/2024	PAYDOWN		89,532	89,532	91,532	92,277	0	(2,745)	0	(2,745)	0	89,532	0	0	0	1,426	01/01/2050	1.A
..693696-AA-4	Pvone 2023-1 LLC-PVONE 2023-1A A		06/15/2024	PAYDOWN		1,828,610	1,828,610	1,827,571	1,824,834	0	3,776	0	3,776	0	1,828,610	0	0	0	56,749	07/16/2035	1.A FE
..693699-AA-8	PVONE 2023-1 LLC-PVONE 2023-2A A		06/15/2024	PAYDOWN		4,708,537	4,708,537	4,708,494	4,708,494	0	43	0	43	0	4,708,537	0	0	0	159,400	09/17/2035	1.A FE
..69374X-AA-8	PSMC 2019-2 Trust-PSMC 2019-2 A1		06/01/2024	PAYDOWN		112,958	112,958	115,217	114,724	0	(1,766)	0	(1,766)	0	112,958	0	0	0	1,907	07/15/2026	2.B FE
..69375B-AA-5	PSMC 2019-3 Trust-PSMC 2019-3 A1		06/01/2024	PAYDOWN		14,304	14,304	14,512	14,620	0	(316)	0	(316)	0	14,304	0	0	0	213	11/01/2049	1.A
..693984-AB-2	PRKCM 2023-AFC3 Trust-PRKCM 2023-AFC3 A2		06/01/2024	PAYDOWN		447,054	447,054	447,050	447,051	0	2	0	2	0	447,054	0	0	0	21,748	09/01/2058	1.C FE
..69403B-AA-5	Pacific Beacon LLC-FIRST LIEN		06/11/2024	BARINGSLLC		1,984,221	1,990,137	2,195,241	2,008,346	0	(18,209)	0	(18,209)	0	1,990,137	0	(5,916)	(5,916)	106,773	07/15/2026	2.B FE
..69546V-AA-5	PAGAYA AI Debt Trust 202-PAID 2022-2 A		06/15/2024	PAYDOWN		879,109	879,109	879,109	879,109	0	0	0	0	0	879,109	0	0	0	18,019	01/15/2030	1.F FE
..70215#-AA-8	Partstat (Varian 2020 I Pass-Thru Certif		06/15/2024	SINKING PAYMENT		150,364	150,364	150,364	150,364	0	0	0	0	0	150,364	0	0	0	2,443	03/15/2030	1.E
..70338A-10-3	Patrons' Legacy-PATRL 5.646 05/17/22		05/19/2024	SINKING PAYMENT		348,033	348,033	348,033	348,033	0	0	0	0	0	348,033	0	0	0	31,798	09/17/2025	1.F FE
..70338C-10-9	Patrons' Legacy-PATRL 6.673 12/04/23		05/30/2024	SINKING PAYMENT	(2)	(2)	(2)	(2)	(2)	0	0	0	0	0	(2)	0	0	0	0	09/04/2025	2.A FE
..72703P-AC-7	Planet Fitness Master Is-2019-1A 2A FIXE		06/05/2024	PAYDOWN		27,500	27,500	27,841	27,777	0	(277)	0	(277)	0	27,500	0	0	0	530	12/05/2049	2.B FE
..741011-AA-8	Presidio Petroleum LLC Presidio Finance		04/09/2024	CALL 100		1,154,516	1,154,516	1,154,516	1,154,516	0	0	0	0	0	1,154,516	0	0	0	28,949	12/25/2038	3.B PL
..74166V-AC-4	Primrose Schools 22-1A A2		04/30/2024	PAYDOWN		6,750	6,750	6,750	6,750	0	0	0	0	0	6,750	0	0	0	193	04/30/2052	2.B FE
..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	1.A FE
..74333H-AJ-1	Progress Residential Trust-PROG 2021-SFR		06/01/2024	PAYDOWN		144,124	144,124	144,119	144,120	0	4	0	4	0	144,124	0	0	0	2,105	12/01/2040	2.A FE
..74338*-AA-6	Project Axis Garner NC C Trust Certificat		06/15/2024	SINKING PAYMENT		117,081	117,081	117,081	117,083	0	(2)	0	(2)	0	117,081	0	0	0	1,970	11/15/2039	1.D
..74351#-AA-6	Project Arrow Oak Creek Trust Certificate		06/10/2024	SINKING PAYMENT		124,381	124,381	124,381	124,381	0	0	0	0	0	124,381	0	0	0	2,110	07/10/2040	1.D
..74374C-AC-3	Provident Funding Mortga-PFMT 2020-1 A2		06/01/2024	PAYDOWN		27,000	27,000	27,384	27,367	0	(368)	0	(368)	0	27,000	0	0	0	347	02/01/2050	1.A
..74387L-AC-5	Provident Funding Mortga-PFMT 2019-1 A2		06/01/2024	PAYDOWN		67,861	67,861	68,805	68,707	0	(846)	0	(846)	0	67,861	0	0	0	743	12/01/2049	1.A
..74387Y-AD-5	Provident Funding Mortga-PFMT 2021-1 A2A		06/01/2024	PAYDOWN		687,109	687,109	680,330	680,973	0	6,136	0	6,136	0	687,109	0	0	0	6,403	04/01/2051	1.A
..74922M-AA-9	RALI Series 2006-QA6 Tru-RALI 2006-QA6 A		06/25/2024	PAYDOWN		28,597	28,597	28,430	27,280	0	(1,106)	0	(1,106)	0	28,597	0	0	0	455	07/25/2036	3.B FM
..74922Q-AA-0	RALI Series 2006-QA8 Tru-RALI 2006-QA8 A		06/25/2024	PAYDOWN		2,980	2,980	2,281	3,309	0	(329)	0	(329)	0	2,980	0	0	0	64	09/25/2036	1.A FM
..74923G-AC-7	RALI Series 2007-QA1 Tru-RALI 2007-QA1 A		06/25/2024	PAYDOWN		20,362	22,955	17,038	18,278	0	3,762	0	3,762	0	20,362	0	0	0	506	01/25/2037	1.A FM
..74923H-AQ-4	RALI Series 2007-QS4 Tru-RALI 2007-QA 3A		06/01/2024	PAYDOWN		9,715	10,861	9,908	9,974	0	717	0	717	0	8,715	0	0	0	206	03/01/2037	4.A FM
..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	3,439	09/01/2037	1.A FM
..74927T-AC-5	RBSSP Resecuritization T-RBSSP 2010-9 3A		06/26/2024	PAYDOWN		61,881	61,881	58,091	54,325	0	7,556	0	7,556	0	61,881	0	0	0	1,205	10/26/2034	1.A FM
..74928D-AV-7	RBSSP Resecuritization T-RBSSP 2009-1 7A		06/01/2024	PAYDOWN		34,940	26,455	12,220	19,650	0	11,443	0	11,443	0	34,940	0	0	0	426	06/01/2037	1.A FM
..74928R-AB-0	RBSSP Resecuritization T-RBSSP 2009-10 1		06/01/2024	PAYDOWN		2,393	2,396	1,565	1,629	0	766	0	766	0	2,393	0	0	0	59	08/01/2035	1.A FM
..74928U-AM-9	RBSSP Resecuritization T-RBSSP 2009-12 5		06/01/2024	PAYDOWN		8,342	11,624	8,232	10,374	0	218	0	218	0	8,342	0	0	0	349	08/01/2036	1.A FM
..74928U-AX-5	RBSSP Resecuritization T-RBSSP 2009-12 8		06/01/2024	PAYDOWN		21,304	22,564	9,598	13,405	0	8,424	0	8,424	0	21,304	0	0	0	618	06/01/2036	1.A FM
..74928U-BV-8	RBSSP Resecuritization T-RBSSP 2009-12 1		06/26/2024	PAYDOWN		208,048	208,048	169,559	192,589	0	15,459	0	15,459	0	208,048	0	0	0	6,026	10/25/2035	1.A FM
..74928X-BB-6	RBSSP Resecuritization T-RBSSP 2009-6 3A		06/26/2024	PAYDOWN		40,080	40,080	26,855	31,880	0	8,200	0	8,200	0	40,080	0	0	0	2,619	01/26/2036	1.A FM
..74929F-AK-5	RBSSP Resecuritization T-RBSSP 2010-3 4A		06/01/2024	PAYDOWN		6,641	6,641	6,531	6,641	0	0	0	0	0	6,641	0	0	0	498	12/01/2035	1.A FM

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident- ification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..74930X-BB-2	RBSSP Resecuritization T-RBSSP 2012-1 4B		06/01/2024	PAYDOWN		108,119	108,119	103,253	108,119	0	0	0	0	0	108,119	0	0	0	146,438	01/01/2029	1.A FM
..749357-AA-7	RCKT Mortgage Trust 2019-RCKT 2019-1 A1		06/01/2024	PAYDOWN		162,978	162,978	165,499	166,799	0	(3,821)	0	(3,821)	0	162,978	0	0	0	2,933	09/01/2049	1.A
..749389-AA-0	RCKT Mortgage Trust 2020-RCKT 2020-1 A1		06/01/2024	PAYDOWN		30,028	30,028	28,676	27,569	0	2,458	0	2,458	0	30,028	0	0	0	494	02/01/2050	1.A
..749574-AC-3	RFMSI Series 2006-SA2 Tr-RFMSI 2006-SA2		06/01/2024	PAYDOWN		14,828	12,601	9,134	6,980	0	6,166	0	6,166	0	14,828	0	0	0	352	08/01/2036	1.A FM
..74958T-AB-9	RFMSI Series 2007-SA3 Tr-RFMSI 2007-SA3		06/01/2024	PAYDOWN		24,797	14,285	10,101	10,761	0	5,190	0	5,190	0	24,797	0	0	0	410	07/01/2037	1.A FM
..74958W-AC-0	RFMSI Series 2007-SA1 Tr-RFMSI 2007-SA1		06/01/2024	PAYDOWN		1,768	1,662	943	861	0	8,802	0	8,802	0	1,768	0	0	0	102	02/01/2037	1.A FM
..74958X-AF-1	RFMSI Series 2007-SA2 Tr-RFMSI 2007-SA2		06/01/2024	PAYDOWN		20,643	15,607	14,227	15,045	0	1,058	0	1,058	0	20,643	0	0	0	411	04/01/2037	3.A FM
..74958Y-AE-2	RFMSI Series 2007-S4 Tru-RFMSI 2007-S4 A		06/25/2024	PAYDOWN		2,308	3,313	2,644	2,907	0	248	26	222	0	2,308	0	0	0	56	04/25/2037	3.B FM
..74968R-AA-3	RMF Proprietary Issuance-RPIT 2019-1 A		06/25/2024	PAYDOWN		414,224	414,224	411,017	412,043	0	2,180	0	2,180	0	414,224	0	0	0	7,897	10/25/2063	1.A FE
..74969M-AB-3	RMF Proprietary Issuance-RPIT 2020-1 A		05/25/2024	PAYDOWN		395,277	395,277	395,277	395,277	0	395,277	0	395,277	0	395,277	0	0	0	6,799	04/26/2060	1.A FE
..75003@-AA-5	Renewable Energy Alterna Senior Secured		06/30/2024	SINKING PAYMENT		40,491	40,491	40,491	40,491	0	0	0	0	0	40,491	0	0	0	(63)	09/30/2046	2.C PL
..75086#-AA-3	Rainier Gsa Portfolio I US Govt Lease Ba		06/15/2024	SINKING PAYMENT		66,920	66,920	66,920	66,920	0	0	0	0	0	66,920	0	0	0	3,758	07/15/2036	1.F
..75115B-AC-3	RALI Series 2006-QA5 Tru-RALI 2006-QA5 2		06/01/2024	PAYDOWN		35,524	42,793	30,161	32,040	0	8,267	140	8,127	0	35,524	0	0	0	1,256	07/01/2036	6. FM
..75115D-AA-3	RALI Series 2006-QS13 Tr-RALI 2006-QS13		06/25/2024	PAYDOWN		4,626	5,428	3,935	4,301	0	892	0	892	0	4,626	0	0	0	108	09/25/2036	1.A FM
..75115L-AA-5	RALI Series 2007-QH7 Tru-RALI 2007-QH7 1		06/25/2024	PAYDOWN		6,710	6,710	6,173	6,529	0	181	0	181	0	6,710	0	0	0	497	08/25/2037	1.A FM
..75116C-ET-9	RESIDENTIAL ACCREDIT LOA-SERIES 2007-QS6		06/01/2024	PAYDOWN		2,889	3,524	2,099	2,383	0	901	0	901	0	2,889	0	0	0	36	04/01/2037	1.A FM
..75116F-BH-1	RALI Series 2007-QS9 Tru-RALI 2007-QS9 A		06/01/2024	PAYDOWN		18,595	31,152	28,466	29,448	0	1,334	0	1,334	0	18,595	0	0	0	1,384	07/01/2037	5.A FM
..75156V-AD-7	RAMP Series 2006-RS3 Tru-RAMP 2006-RS3 A		06/25/2024	PAYDOWN		96,650	72,518	56,059	53,564	0	27,614	0	27,614	0	96,650	0	0	0	1,261	05/25/2036	1.A FM
..75458*-AB-5	Rayburn Country Electric Senior Secured		06/30/2024	SINKING PAYMENT		306,743	306,743	306,743	306,743	0	0	0	0	0	306,743	0	0	0	19,008	09/01/2037	2.B FE
..75575R-AA-5	Ready Capital Mortgage F-RQMT 2023-FL11		06/25/2024	PAYDOWN		214,411	214,411	213,875	212,752	0	1,659	0	1,659	0	214,411	0	0	0	7,866	10/25/2039	1.A FE
..758750-AD-5	Regal Rexnord Corp-SENIOR UNSECURED		05/02/2024	EXCHANGE OFFER		26,150,871	25,000,000	25,328,850	25,271,320	0	(17,764)	0	(17,764)	0	26,150,871	0	0	0	827,674	04/15/2028	2.C FE
..75971F-AY-9	RENAISSANCE HOME EQUITY -RANC 2007-3W AF		06/01/2024	PAYDOWN		23,392	18,319	16,842	18,319	0	1,909	0	1,909	0	23,392	0	0	0	750	09/01/2037	1.A FM
..75973V-AA-4	Renew 2024-1-RENEW 2024-1A A		06/20/2024	PAYDOWN		211,904	211,904	212,210	0	0	(306)	0	(306)	0	211,904	0	0	0	4,897	11/20/2059	1.A FE
..759950-DM-7	Renaissance Home Equity -RANC 2004-3 AF5		06/01/2024	PAYDOWN		68,072	68,072	60,074	60,789	0	7,283	0	7,283	0	68,072	0	0	0	1,208	11/01/2034	1.A FM
..759950-EM-6	Renaissance Home Equity -RANC 2004-4 AF5		06/01/2024	PAYDOWN		161,081	161,081	145,426	147,087	0	13,994	0	13,994	0	161,081	0	0	0	2,575	02/01/2035	1.A FM
..76029#-AA-1	Republic Airways Holding Senoir Secured		06/15/2024	SINKING PAYMENT		281,250	281,250	281,250	281,250	0	0	0	0	0	281,250	0	0	0	16,947	12/15/2028	2.B PL
..76042E-AA-7	Republic Finance Issuanc-REPS 2020-A A		06/20/2024	PAYDOWN		1,458,915	1,458,915	1,458,662	1,458,874	0	41	0	41	0	1,458,915	0	0	0	15,529	11/20/2030	1.A FE
..760985-S6-9	RFSC Series 2004-RP1 Tru-RFSC 2004-RP1 A		06/25/2024	PAYDOWN		21,270	24,434	22,277	24,557	0	2,198	0	2,198	0	21,270	0	0	0	1,028	11/25/2042	1.A FM
..76110H-HB-5	RALI Series 2004-QA6 Tru-RALI 2004-QA6 N		06/01/2024	PAYDOWN		9,907	9,907	8,086	8,596	0	1,311	0	1,311	0	9,907	0	0	0	279	12/01/2034	1.A FM
..76110H-T9-0	RALI Series 2005-QA2 Tru-RALI 2005-QA2 N		06/01/2024	PAYDOWN		7,825	7,825	4,297	4,300	0	3,525	0	3,525	0	7,825	0	0	0	163	02/01/2035	1.A FM
..76111B-BU-1	RALI Series 2005-QA8 Tru-RALI 2005-QA8 N		06/01/2024	PAYDOWN		146,560	150,198	120,709	126,956	0	30,100	9,191	20,909	0	146,560	0	0	0	3,590	07/01/2035	1.A FM
..76111B-FL-7	RALI Series 2005-QA9 Tru-RALI 2005-QA9 C		05/01/2024	PAYDOWN		33,336	34,493	33,441	32,917	0	15,329	0	15,329	0	33,336	0	0	0	1,925	08/01/2035	2.B FM
..76111B-FM-5	RESIDENTIAL ACCREDIT LOA-SERIES 2005-QA9		04/25/2024	PAYDOWN		(6,290)	0	(23)	0	0	(1,363)	0	(1,363)	0	(6,290)	0	0	0	(764)	08/01/2035	2.C FM
..76111B-GS-1	RALI Series 2005-QS13 Tr-RALI 2005-QS13		06/25/2024	PAYDOWN		55,819	54,420	43,790	45,306	0	9,351	228	9,123	0	55,819	0	0	0	961	09/25/2035	1.A FM
..76111B-KH-0	RALI Series 2005-QS15 Tr-RALI 2005-QS15		06/01/2024	PAYDOWN		4,908	7,317	6,759	5,207	0	1,853	0	1,853	0	4,908	0	0	0	152	10/01/2035	1.A FM
..76111B-SC-3	RALI Series 2006-QS1 Tru-RALI 2006-QS1 A		06/01/2024	PAYDOWN		19,671	20,814	18,017	19,301	0	1,760	487	1,273	0	19,671	0	0	0	160	01/01/2036	5.A FM
..76111B-UG-1	RALI Series 2006-QS2 Tru-RALI 2006-QS2 1		06/01/2024	PAYDOWN		8,806	9,055	8,575	8,806	0	202	0	202	0	8,806	0	0	0	254	02/01/2036	4.C FM
..76111B-UQ-9	RALI Series 2006-QS2 Tru-RALI 2006-QS2 1		06/01/2024	PAYDOWN		1,881	1,843	1,707	1,614	0	3,141	0	3,141	0	1,881	0	0	0	457	02/01/2036	3.C FM
..76112B-NM-8	GMACM Mortgage Loan Tru-GMACM 2005-AA1		06/01/2024	PAYDOWN		101,812	101,811	90,556	94,039	0	7,247	0	7,247	0	101,812	0	0	0	2,984	05/01/2035	1.A FM
..76971E-AA-2	RMF Buyout Issuance Tru-RBIT 2020-HB1 A		06/25/2024	PAYDOWN		1,610,950	1,610,950	1,610,947	1,615,857	0	(4,908)	0	(4,908)	0	1,610,950	0	0	0	11,732	10/25/2050	1.A FE
..78396N-BC-2	SACO I Inc-SACO 1999-3 1B1		06/01/2024	PAYDOWN		9,932	9,932	9,669	9,858	0	74	0	74	0	9,932	0	0	0	234	04/01/2039	1.A FM
..78398B-AE-1	SCG 2023-NASH Mortgage T-SCG 2023-NASH C		05/15/2024	PAYDOWN		24,700,000	24,700,000	24,638,250	24,638,543	0	61,457	0	61,457	0	24,700,000	0	0	0	752,075	12/15/2040	1.G FE
..78433X-AA-8	Stonepeak 2021-1 ABS-SALTT 2021-1A AA		06/15/2024	PAYDOWN		33,100	33,100	30,860	31,251	0	1,848	0	1,848	0	33,100	0	0	0	295	02/28/2033	1.C FE
..78433X-AC-4	Stonepeak 2021-1 ABS-SALTT 2021-1A B		06/15/2024	PAYDOWN		35,957	35,957	33,098	34,191	0	1,766	0	1,766	0	35,957	0	0	0	531	02/28/2033	2.B FE
..78444@-AA-6	SIP HoldCo LLC Senior Secured Notes		06/16/2024	SINKING PAYMENT		216,953	216,953	216,953	216,953	0	0	0	0	0	216,953	0	0	0	3,345	12/15/2046	2.B PL
..78448R-AE-6	SMB Private Education Lo-SMB 2015-C B		06/15/2024	PAYDOWN		525,838	525,838	503,654	509,290	0	16,547	0	16,547	0	525,838	0	0	0	7,541	09/15/2043	1.A FE

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident-ification	Description	For-eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid-eration	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 Recogn-ized	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	NAIC Desig-nation, NAIC Desig-nation Modifier and SVO Admini-strative Symbol
..78449L-AC-2	SMB 2018-B A2B		06/17/2024	PAYDOWN		68,489	68,489	67,259	67,539	0	951	0	951	0	68,489	0	0	0	1,781	01/15/2037	1.A FE
..78449Y-AA-0	SMB Private Education Lo-SMB 2020-B A1A		06/15/2024	PAYDOWN		221,801	221,801	217,573	218,812	0	2,989	0	2,989	0	221,801	0	0	0	1,190	07/15/2053	1.A FE
..78449Y-AA-8	SMB Private Education Lo-SMB 2021-B A		06/15/2024	PAYDOWN		458,550	458,550	418,140	428,010	0	30,540	0	30,540	0	458,550	0	0	0	2,467	07/17/2051	1.A FE
..78450F-AD-9	SMB Private Education Lo-SMB 2022-A B		06/15/2024	PAYDOWN		436,979	436,979	431,662	433,227	0	3,752	0	3,752	0	436,979	0	0	0	5,328	11/16/2054	1.D FE
..78450F-AE-7	SMB Private Education Lo-SMB 2022-A C		06/15/2024	PAYDOWN		492,512	492,512	492,304	492,356	0	156	0	156	0	492,512	0	0	0	8,452	11/16/2054	1.G FE
..78450P-AB-1	SMB Private Education Lo-SMB 2023-D A1B		06/17/2024	PAYDOWN		314,153	314,153	314,153	314,153	0	0	0	0	0	314,153	0	0	0	15,454	09/15/2053	1.A FE
..78473T-AA-J-9	STARM Mortgage Loan Trus-STARM 2007-2 4A		05/01/2024	PAYDOWN		2,251	2,251	1,277	1,216	0	1,035	0	1,035	0	2,251	0	0	0	47	04/01/2037	1.A FM
..78488L-AA-8	SWC Funding LLC 2018-1-SWC 2018-1A A		05/15/2024	PAYDOWN		9,287,471	9,287,471	9,222,098	9,281,634	0	5,837	0	5,837	0	9,287,471	0	0	0	220,577	08/15/2033	1.F FE
..78518#-AA-5	Saber Midstream LLC Senior Secured Notes		06/30/2024	SINKING PAYMENT		856,817	856,817	854,675	855,148	0	1,668	0	1,668	0	856,817	0	0	0	32,462	03/31/2029	2.C PL
..78518#-AB-3	Saber Midstream LLC Senior Secured Notes		06/30/2024	SINKING PAYMENT		267,982	267,982	267,982	267,982	0	0	0	0	0	267,982	0	0	0	14,167	03/31/2030	2.C PL
..79582M-AA-9	Saluda Grade Alternative-GRADE 2024-FIG5		05/01/2024	PAYDOWN		195,812	195,812	195,812	0	0	0	0	0	0	195,812	0	0	0	1,021	04/01/2054	1.A FE
..81378E-AA-1	SECURITIZED ASSET BACKED-SERIES 2007-BR4		06/25/2024	PAYDOWN		65,828	65,828	28,819	26,174	0	39,653	0	39,653	0	65,828	0	0	0	442	05/25/2037	1.A FM
..81743A-AA-7	SEQUOIA MORTGAGE TRUST 2-SEMT 2019-5 A1		06/01/2024	PAYDOWN		119,586	119,586	121,679	121,908	0	(2,321)	0	(2,321)	0	119,586	0	0	0	1,956	12/01/2049	1.A
..81743C-AE-5	Sequoia Mortgage Trust 2-SEMT 2024-5 A5		06/01/2024	PAYDOWN		65,337	65,337	64,969	0	0	368	0	368	0	65,337	0	0	0	327	06/01/2054	1.A FE
..81745A-AB-3	Sequoia Mortgage Trust 2-SEMT 2013-5 A2		06/01/2024	PAYDOWN		51,903	51,903	49,138	49,550	0	2,354	0	2,354	0	51,903	0	0	0	602	05/01/2043	1.A
..81745C-AA-1	Sequoia Mortgage Trust 2-SEMT 2013-7 A1		06/01/2024	PAYDOWN		40,631	40,631	36,612	37,245	0	3,385	0	3,385	0	40,631	0	0	0	473	06/01/2043	1.A
..81745J-AA-6	Sequoia Mortgage Trust 2-SEMT 2013-11 A1		05/01/2024	PAYDOWN		8,047	8,047	7,939	7,952	0	95	0	95	0	8,047	0	0	0	154	09/01/2043	1.A
..81745M-AA-9	Sequoia Mortgage Trust 2-SEMT 2013-2 A		06/01/2024	PAYDOWN		111,378	111,378	99,773	101,041	0	10,337	0	10,337	0	111,378	0	0	0	1,004	02/01/2043	1.A
..81745R-AB-6	Sequoia Mortgage Trust 2-SEMT 2013-3 A2		06/01/2024	PAYDOWN		54,347	54,347	50,700	50,700	0	3,646	0	3,646	0	54,347	0	0	0	552	03/01/2043	1.A
..81748J-AA-3	Sequoia Mortgage Trust 2-SEMT 2019-4 A1		06/01/2024	PAYDOWN		20,636	20,636	21,068	21,322	0	(686)	0	(686)	0	20,636	0	0	0	321	11/01/2049	1.A
..81748K-AA-0	Sequoia Mortgage Trust 2-SEMT 2020-2 A1		06/01/2024	PAYDOWN		104,800	104,800	107,387	108,964	0	(4,164)	0	(4,164)	0	104,800	0	0	0	1,620	03/01/2050	1.A
..81748M-AA-6	Sequoia Mortgage Trust 2-SEMT 2020-1 A1		06/01/2024	PAYDOWN		50,664	50,664	51,828	51,905	0	(1,241)	0	(1,241)	0	50,664	0	0	0	822	02/01/2050	1.A
..81761T-AA-3	ServiceMaster Funding LL-SERV 2020-1 A2I		04/30/2024	PAYDOWN		7,500	7,500	7,091	7,320	0	180	0	180	0	7,500	0	0	0	107	01/30/2051	2.C FE
..81761T-AC-9	ServiceMaster Funding LL-SERIES 20-1 CLA		04/30/2024	PAYDOWN		12,500	12,500	10,969	11,486	0	1,014	0	1,014	0	12,500	0	0	0	232	01/30/2051	2.C FE
..81761T-AE-5	ServiceMaster Funding LL-SERV 2021-1 A2I		04/30/2024	PAYDOWN		37,500	37,500	31,748	33,176	0	4,324	0	4,324	0	37,500	0	0	0	537	07/30/2051	2.C FE
..81761T-AG-0	ServiceMaster Funding LL-SERV 2021-1 A2I		04/30/2024	PAYDOWN		20,000	20,000	20,000	20,000	0	0	0	0	0	20,000	0	0	0	311	07/30/2051	2.C FE
..817743-AA-5	SERVPRO Master Issuer LL-SPRO 2019-1A A2		04/25/2024	PAYDOWN		45,625	45,625	45,908	45,744	0	(119)	0	(119)	0	45,625	0	0	0	886	10/25/2049	2.C FE
..826525-AB-3	Sierra Timeshare 2020-2 -SRFC 2020-2A B		06/20/2024	PAYDOWN		545,582	545,582	515,745	522,409	0	23,173	0	23,173	0	545,582	0	0	0	5,272	07/20/2037	1.F FE
..82652R-AB-5	Sierra Timeshare 2021-2 -SRFC 2021-2A B		06/20/2024	PAYDOWN		44,485	44,485	40,982	41,482	0	3,003	0	3,003	0	44,485	0	0	0	477	09/20/2038	1.F FE
..82667C-AC-9	Signal Rail I LLC-SRL 2024-1A A		06/17/2024	PAYDOWN		8,983	8,983	8,978	0	0	5	0	5	0	8,983	0	0	0	35	05/17/2054	1.C FE
..826934-AC-5	Sierra Timeshare 2022-3 -SRFC 2022-3A C		06/20/2024	PAYDOWN		225,449	225,449	225,397	225,390	0	59	0	59	0	225,449	0	0	0	7,212	07/20/2039	2.B FE
..82817#-AA-9	Silver Spring Metro Cent Senior Note Tra		06/05/2024	SINKING PAYMENT		126,366	126,366	126,366	126,366	0	0	0	0	0	126,366	0	0	0	2,148	01/05/2029	1.B
..82817#-AA-7	Silver Spring Metro Cent Senior Note Tra		06/05/2024	SINKING PAYMENT		63,980	63,980	63,980	63,980	0	0	0	0	0	63,980	0	0	0	1,125	01/07/2029	1.B
..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	2.C FE
..83206E-AA-5	SMB Private Education Lo-SMB 2024-C A1A		06/15/2024	PAYDOWN		140,924	140,924	140,899	0	0	25	0	25	0	140,924	0	0	0	646	06/17/2052	1.A FE
..83206N-AC-1	SMB Private Education Lo-SMB 2022-B B		06/15/2024	PAYDOWN		19,461	19,461	18,404	0	0	1,057	0	1,057	0	19,461	0	0	0	148	02/16/2055	1.D FE
..83207D-AA-6	SMB Private Education Lo-SMB 2023-C A1A		06/15/2024	PAYDOWN		367,008	367,008	363,725	363,876	0	3,132	0	3,132	0	367,008	0	0	0	8,629	11/15/2052	1.A FE
..83404K-AD-5	SoFi Professional Loan P-SOFI 2017-E B		06/25/2024	PAYDOWN		416,088	416,088	399,184	399,291	0	16,797	0	16,797	0	416,088	0	0	0	6,077	11/26/2040	1.A FE
..83416W-AB-9	SOLAR STAR FUNDING LLC-SECURED		06/30/2024	SINKING PAYMENT		95,426	95,426	95,426	95,418	0	8	0	8	0	95,426	0	0	0	1,885	06/30/2035	2.B FE
..83546D-AL-2	Sonic Capital LLC-SONIC 2020-1AW A21W		05/20/2024	PAYDOWN		17,500	17,500	17,806	0	0	(275)	0	(275)	0	17,500	0	0	0	198	01/20/2050	1.C FE
..83546D-AM-0	Sonic Capital LLC-SONIC 2020-1AW A21W		05/20/2024	PAYDOWN		43,750	43,750	46,495	45,388	0	(1,638)	0	(1,638)	0	43,750	0	0	0	400	01/20/2050	1.C FE
..83611M-HM-3	Soundview Home Loan Trus-SVHE 2005-B M2		06/01/2024	PAYDOWN		28,387	25,138	13,732	22,032	0	(48,959)	0	(48,959)	0	28,387	0	0	0	470	05/01/2035	1.A FM
..83611M-JX-7	Soundview Home Loan Trus-SVHE 2005-OPT4		06/25/2024	PAYDOWN		231,379	0	231,379	177,005	0	231,379	0	0	0	231,379	0	0	0	2,869	12/25/2035	1.A FM
..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	3.A FE
..84858W-AA-4	Spirit Airlines Pass Thr-FIRST LIEN		06/05/2024	SEAPORT GROUP		3,552,400	4,036,818	4,036,818	4,037,782	0	(98)	0	(98)	0	4,037,684	0	(485,284)	(485,284)	110,129	02/15/2030	2.B FE
..85208N-AD-2	Sprint Spectrum Co LLC -FIRST LIEN		06/20/2024	SINKING PAYMENT		1,437,500	1,437,500	1,437,500	1,437,500	0	0	0	0	0	1,437,500	0	0	0	34,054	03/20/2025	1.F FE

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Identification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..85235*-AA-6	St Louis County Control Trust Certificat		06/15/2024	SINKING PAYMENT		308,966	308,966	308,966	308,966	0	0	0	0	0	308,966	0	0	0	10,095	12/15/2036	1.F
..855541-AC-2	SUNTRUST ADJUSTABLE RATE-SERIES 2007-S1		06/01/2024	PAYDOWN		34,186	34,186	28,677	29,370	0	5,402	586	4,816	0	34,185	0	0	0	932	01/01/2037	1.A FM
..85571R-AA-8	Starwood Mortgage Reside-STAR 2022-3 A1		06/01/2024	PAYDOWN		200,080	200,080	198,740	200,059	0	0	0	21	0	200,080	0	0	0	3,702	03/01/2067	1.A FE
..85571R-AB-6	Starwood Mortgage Reside-STAR 2022-3 A2		06/01/2024	PAYDOWN		522,409	522,409	510,473	512,817	0	9,592	0	9,592	0	522,409	0	0	0	9,599	03/01/2067	1.C FE
..85571R-AC-4	Starwood Mortgage Reside-STAR 2022-3 A3		06/01/2024	PAYDOWN		487,875	487,875	475,360	477,814	0	10,061	0	10,061	0	487,875	0	0	0	8,964	03/01/2067	1.F FE
..85573J-AA-4	Starwood Mortgage Reside-STAR 2021-3 A1		06/01/2024	PAYDOWN		232,963	232,963	215,782	218,046	0	14,917	0	14,917	0	232,963	0	0	0	1,169	06/01/2056	1.A
..85573T-AA-2	Starwood Mortgage Reside-STARWOOD MORTGA		06/01/2024	PAYDOWN		1,155,349	1,155,349	1,155,330	1,155,340	0	9	0	9	0	1,155,349	0	0	0	11,773	12/01/2066	1.A FE
..86212V-AA-2	Store Master Funding I-V-STR 2016-1A A1		06/20/2024	PAYDOWN		61,234	61,234	61,202	61,222	0	12	0	12	0	61,234	0	0	0	1,011	10/20/2046	1.C FE
..86212V-AD-6	Store Master Funding I-V-STR 2018-1A A1		04/20/2024	PAYDOWN		10,567,156	10,567,156	10,510,433	10,523,657	0	43,499	0	43,499	0	10,567,156	0	0	0	137,162	10/20/2048	1.A FE
..86212V-AE-4	Store Master Funding I-V-SERIES 18-1A CL		06/20/2024	PAYDOWN		33,125	33,125	33,113	33,119	0	6	0	6	0	33,125	0	0	0	592	10/20/2048	1.A FE
..86212V-AM-2	Store Master Funding I-V-STR 2024-1A A2		06/20/2024	PAYDOWN		8,333	8,333	8,333	0	0	0	0	0	0	8,333	0	0	0	62	05/20/2054	1.A FE
..86213C-AB-1	STORE MASTER FUNDING LLC-SERIES 2015-1A		06/20/2024	PAYDOWN		26,875	26,875	26,739	26,835	0	40	0	40	0	26,875	0	0	0	467	04/20/2045	1.C FE
..863572-LV-3	Structured Asset Securit-SASC 1996-4 A		06/01/2024	PAYDOWN		1,187	1,187	1,112	1,157	0	30	0	30	0	1,187	0	0	0	35	09/01/2031	1.A FM
..863579-C3-0	Structured Adjustable Ra-SARM 2005-21 6A		06/01/2024	PAYDOWN		7,473	7,560	6,638	6,870	0	678	0	678	0	7,473	0	0	0	128	11/01/2035	1.A FM
..863579-J9-0	Structured Adjustable Ra-SARM 2005-22 1A		06/01/2024	PAYDOWN		20,074	19,190	15,007	14,922	0	6,104	1,606	4,498	0	20,074	0	0	0	262	12/01/2035	1.A FM
..863579-PP-5	Structured Adjustable Ra-SARM 2005-11 1A		06/01/2024	PAYDOWN		6,973	6,801	5,522	5,947	0	(20,954)	(17,008)	(3,946)	0	6,972	0	0	0	551	05/01/2035	1.A FM
..863579-SU-3	Structured Adjustable Ra-SARM 2005-12 3A		06/01/2024	PAYDOWN		2,446	2,446	1,878	2,094	0	352	0	352	0	2,446	0	0	0	270	06/01/2035	4.B FM
..863579-UL-0	Structured Adjustable Ra-SARM 2005-15 1A		06/01/2024	PAYDOWN		1,024	1,030	636	625	0	16,326	(1,234)	17,560	0	1,024	0	0	0	807	07/01/2035	1.A FM
..863579-UU-0	Structured Adjustable Ra-SARM 2005-15 4A		05/01/2024	PAYDOWN		44,020	50,002	41,271	41,925	0	6,810	(14,111)	20,921	0	44,020	0	0	0	989	07/01/2035	1.A FM
..863579-VH-8	Structured Adjustable Ra-SARM 2005-17 1A		06/01/2024	PAYDOWN		10,016	10,016	9,587	10,003	0	12	0	12	0	10,016	0	0	0	228	08/01/2035	1.A FM
..863579-VW-5	Structured Adjustable Ra-SARM 2005-17 5A		05/25/2024	PAYDOWN		18,079	17,901	12,509	9,552	0	8,404	0	8,404	0	18,079	0	0	0	533	08/25/2035	1.A FM
..863579-XC-7	Structured Adjustable Ra-SARM 2005 - 18		06/01/2024	PAYDOWN		8,082	8,142	5,381	5,406	0	2,793	0	2,793	0	8,082	0	0	0	160	09/01/2035	1.A FM
..863579-XR-4	Structured Adjustable Ra-SARM 2005-18 8A		05/01/2024	PAYDOWN		188,535	188,618	162,338	168,095	0	22,436	(11,054)	33,490	0	188,535	0	0	0	3,856	09/01/2035	1.A FM
..863579-ZL-5	Structured Adjustable Ra-SARM 2005-20 3A		06/01/2024	PAYDOWN		66,733	66,737	56,692	56,684	0	10,047	0	10,047	0	66,733	0	0	0	2,004	10/01/2035	1.A FM
..86358R-DX-2	Structured Asset Securit-SASC 2001-SB1 A		06/01/2024	PAYDOWN		106,551	106,551	92,450	93,934	0	12,618	0	12,618	0	106,551	0	0	0	1,508	08/01/2031	1.A FM
..86358R-XY-8	Structured Asset Securit-SASC 2002-AL1 A		06/01/2024	PAYDOWN		21,419	21,464	13,804	19,264	0	2,396	287	2,109	0	21,419	0	0	0	334	02/01/2032	6. *
..86358R-XZ-5	Structured Asset Securit-SASC 2002-AL1 A		06/01/2024	PAYDOWN		25,374	28,310	9,212	12,451	176	93,493	(108,638)	202,307	0	25,374	0	0	0	405	02/01/2032	6. *
..86358R-YB-7	Structured Asset Securit-SASC 2002-AL1 A		06/01/2024	PAYDOWN		4,514	5,004	3,531	3,410	976	452	0	1,428	0	4,514	0	0	0	0	02/01/2032	6. *
..86359A-ME-0	Structured Asset Securit-SASC 2003-AL1 A		06/01/2024	PAYDOWN		12,416	12,416	10,827	11,867	0	549	0	549	0	12,416	0	0	0	175	04/01/2031	6. *
..86359A-MG-5	Structured Asset Securit-SASC 2003-AL1 A		06/01/2024	PAYDOWN		4,639	4,639	3,268	4,378	25	236	0	261	0	4,639	0	0	0	0	04/01/2031	6. *
..86359A-IR-0	Structured Asset Securit-SASC 2003-AL2 A		06/01/2024	PAYDOWN		109,405	109,405	94,946	97,462	0	11,943	0	11,943	0	109,405	0	0	0	1,625	01/01/2034	6. *
..86359A-IT-6	Structured Asset Securit-SASC 2003-AL2 A		06/25/2024	PAYDOWN		24,117	24,117	18,750	20,436	0	3,681	0	3,681	0	24,117	0	0	0	0	01/25/2031	6. *
..86359B-UJ-2	Structured Asset Securit-SASC 2005-4XS 1		06/01/2024	PAYDOWN		64,742	64,742	60,534	64,742	0	0	0	0	0	64,742	0	0	0	1,586	03/01/2035	1.A FM
..86359B-LE-9	Structured Adjustable Ra-SARM 2004-2 4A1		06/01/2024	PAYDOWN		3,949	3,949	3,805	3,876	0	73	0	73	0	3,949	0	0	0	125	03/01/2034	1.A FM
..86359F-AB-8	Structured Asset Securit-SASC 2006-S2 A2		06/25/2024	PAYDOWN		3,297	3,297	2,563	1,354	0	1,943	0	1,943	0	3,297	0	0	0	47	06/25/2036	1.A FM
..86359L-NA-3	Structured Asset Mortgage-SAMI 2005-AR6 2		06/25/2024	PAYDOWN		49,926	49,926	35,139	52,370	0	(2,444)	0	(2,444)	0	49,926	0	0	0	1,252	09/25/2045	1.A FM
..86360B-AG-3	Structured Adjustable Ra-SARM 2006-4 4A1		05/01/2024	PAYDOWN		20,985	15,843	20,985	15,843	0	5,142	0	5,142	0	20,985	0	0	0	633	05/01/2036	1.A FM
..86360B-AJ-7	Structured Adjustable Ra-SARM 2006-4 5A1		06/01/2024	PAYDOWN		20,584	20,331	14,772	15,014	0	9,232	(2,497)	11,729	0	20,584	0	0	0	801	05/01/2036	1.A FM
..863931-AA-9	Structured Carbon Level -SCLM3 2023-1 A		05/20/2024	PAYDOWN		3,730,581	3,730,581	3,655,372	3,657,083	0	73,498	0	73,498	0	3,730,581	0	0	0	144,695	09/20/2050	1.C PL
..86744V-AA-9	Helios Issuer LLC-SNVA 2022-B A		06/20/2024	PAYDOWN		98,789	98,789	98,105	98,235	0	554	0	554	0	98,789	0	0	0	2,075	08/20/2049	1.G FE
..86744V-AB-7	Helios Issuer LLC-SNVA 2022-B B		06/20/2024	PAYDOWN		120,474	120,474	114,325	115,450	0	5,025	0	5,025	0	120,474	0	0	0	3,037	08/20/2049	2.C FE
..86744W-AA-7	Sumnova Helios X Issuer -SNVA 2022-C A		05/20/2024	PAYDOWN		84,233	84,233	79,698	80,656	0	3,577	0	3,577	0	84,233	0	0	0	1,649	11/22/2049	1.D FE
..86744Y-AA-3	Sumnova SOL VI Issuer LL-SNVA 2024-1A A		04/30/2024	PAYDOWN		58,595	58,595	56,477	0	0	2,118	0	2,118	0	58,595	0	0	0	708	01/30/2059	1.G FE
..86745C-AA-0	Sumnova Helios XIII Issu-SNVA 2024-A A		06/20/2024	PAYDOWN		310,813	310,813	304,354	0	0	6,459	0	6,459	0	310,813	0	0	0	2,808	02/20/2051	1.D FE
..86745Q-AA-9	Sumnova Sol III Issuer L-SNVA 2021-1 A		04/30/2024	PAYDOWN		215,406	215,406	181,261	0	0	34,145	0	34,145	0	215,406	0	0	0	2,806	04/28/2056	1.G FE
..86745X-AA-4	Sumnova Sol V Issuer LLC-SNVA 2023-1A A		04/30/2024	PAYDOWN		89,116	89,116	84,442	84,884	0	4,232	0	4,232	0	89,116	0	0	0	2,406	04/30/2058	1.G FE

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident- ification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..86745Y-AA-2	Sunnova Helios XII Issue-SNVA 2023-B A		06/20/2024	PAYDOWN		256,804	256,804	245,939	246,664	0	10,140	0	10,140	0	256,804	0	0	0	5,656	08/22/2050	1.D FE
..86746B-AA-1	Helios Issuer LLC-SNVA 2023-GRID1 1A		06/20/2024	PAYDOWN		380,365	380,365	374,893	290,123	0	5,372	0	5,372	0	380,365	0	0	0	8,896	12/20/2050	1.B FE
..86772R-AA-3	Sunrun Jupiter Issuer 20-SUNRN 2022-1A A		04/30/2024	PAYDOWN		62,803	62,803	62,292	62,369	0	434	0	434	0	62,803	0	0	0	1,496	07/30/2057	1.G FE
..86909#-AA-5	Susquehanna (18 Properti Trust Certifica		06/23/2024	SINKING PAYMENT		54,633	54,633	54,633	54,633	0	0	0	0	0	54,633	0	0	0	2,253	12/23/2036	1.G
..869507-AA-1	SUTTONPARK STRUCTURED SE-SERIES 17-1A QL		06/15/2024	PAYDOWN		126,243	126,243	118,479	50,725	0	7,758	0	7,758	0	126,243	0	0	0	1,869	01/15/2071	1.A FE
..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	2.A FE
..872225-AD-9	TBW Mortgage-Backed Trus-TBW 2006-5 A3		06/01/2024	PAYDOWN		188,665	188,665	171,325	178,734	0	9,932	0	9,932	0	188,665	0	0	0	0	11/01/2036	1.A FM
..87222E-AB-4	TBW Mortgage-Backed Trus-TBW 2007-1 A2		06/25/2024	PAYDOWN		10,113	10,113	2,407	2,703	0	7,476	.66	7,410	0	10,113	0	0	0	50	03/25/2037	1.A FM
..87222E-AC-2	TBW Mortgage-Backed Trus-TBW 2007-1 A3		06/01/2024	PAYDOWN		10,831	10,831	3,135	3,235	0	7,713	118	7,595	0	10,831	0	0	0	54	03/01/2037	1.A FM
..87267C-AA-6	TRP 2021 LLC-TRP 2021-1 A		06/17/2024	PAYDOWN		529,263	529,263	462,622	399,976	0	53,061	0	53,061	0	529,263	0	0	0	4,101	06/19/2051	1.F FE
..87407R-AA-4	TAL Advantage VII LLC-TAL 2020-1A A		06/20/2024	PAYDOWN		307,388	307,388	270,283	275,933	0	31,454	0	31,454	0	307,388	0	0	0	4,215	09/20/2045	1.F FE
..87407R-AC-0	TAL Advantage VII LLC-TAL 2020-1A B		06/20/2024	PAYDOWN		111,563	111,563	110,421	110,703	0	859	0	859	0	111,563	0	0	0	2,455	09/20/2045	2.B FE
..87819#-AA-2	TD Bank (Miami, FL) CTL Trust Certificat		06/15/2024	SINKING PAYMENT		46,795	46,795	46,795	46,795	0	0	0	0	0	46,795	0	0	0	1,922	01/15/2038	1.D
..881561-LE-2	Terwin Mortgage Trust Se-TMTS 2004-1HE		06/25/2024	PAYDOWN		5,257	5,257	4,212	5,773	0	(516)	0	(516)	0	5,257	0	0	0	139	10/25/2035	1.A FM
..881561-LS-1	Terwin Mortgage Trust 20-TMTS 2004-19HE		06/25/2024	PAYDOWN		37,814	37,814	29,963	37,782	0	32	0	32	0	37,814	0	0	0	1,628	10/25/2034	1.A FM
..881561-VY-7	Terwin Mortgage Trust Se-TMTS 2005-12AL		06/01/2024	PAYDOWN		36,572	36,572	35,312	35,952	0	621	0	621	0	36,572	0	0	0	0	07/01/2036	1.A FM
..88156E-AB-2	Terwin Mortgage Trust 20-TMTS 2006-17HE		06/25/2024	PAYDOWN		110,202	110,202	95,088	126,892	0	(16,690)	0	(16,690)	0	110,202	0	0	0	2,171	01/25/2038	1.A FM
..88157V-AB-3	Terwin Mortgage Trust 20-TMTS 2007-6ALT		06/25/2024	PAYDOWN		34,311	34,311	17,842	29,998	0	4,313	0	4,313	0	34,311	0	0	0	196	08/25/2038	1.A FM
..88338Q-AA-8	Theorem Funding Trust 20-THRM 2023-1A A		06/15/2024	PAYDOWN		3,017,809	3,017,809	3,017,782	3,017,762	0	47	0	47	0	3,017,809	0	0	0	95,310	04/15/2029	1.G FE
..885220-DX-8	Thornburg Mortgage Secur-TMST 2003-4 M1		06/25/2024	PAYDOWN		9,602	9,602	8,113	9,965	0	(364)	0	(364)	0	9,602	0	0	0	203	09/25/2043	1.A FM
..885220-GB-3	Thornburg Mortgage Secur-TMST 2004-4 1A		06/25/2024	PAYDOWN		3,000	3,000	2,861	2,929	0	71	0	71	0	3,000	0	0	0	77	12/25/2044	1.A FM
..885220-GK-3	Thornburg Mortgage Secur-TMST 2004-4 5A		06/01/2024	PAYDOWN		9,089	9,089	8,646	8,724	0	365	0	365	0	9,089	0	0	0	138	12/01/2044	1.A FM
..885220-HM-8	Thornburg Mortgage Secur-TMST 2005-2 A1		06/25/2024	PAYDOWN		14,682	14,682	14,691	14,673	0	9	0	9	0	14,682	0	0	0	510	07/25/2045	1.A FM
..885220-KW-2	Thornburg Mortgage Secur-TMST 2006-2 A2B		06/25/2024	PAYDOWN		19,583	19,583	17,154	17,848	0	1,940	211	1,729	0	19,583	0	0	0	265	04/25/2036	1.A FM
..89171U-AG-4	Towd Point Mortgage Trus-TPMT 2015-4 M2		06/01/2024	PAYDOWN		1,071,967	1,071,967	1,059,842	1,070,198	0	1,769	0	1,769	0	1,071,967	0	0	0	17,877	04/01/2055	1.A
..89441#-AA-4	Traverse City Control Tr Trust Certifica		06/15/2024	SINKING PAYMENT		98,755	98,755	99,742	100,289	0	(1,534)	0	(1,534)	0	98,755	0	0	0	1,646	11/15/2039	1.A
..89609M-AA-7	Tribute Rail LLC-TRP 2022-1 A		06/17/2024	PAYDOWN		263,555	263,555	259,105	259,917	0	3,638	0	3,638	0	263,555	0	0	0	5,132	05/17/2052	1.F FE
..89655Y-AA-4	TRINITY RAIL LEASING L.P-SERIES 2009-1A		05/30/2024	PAYDOWN		6,472,813	6,472,813	6,614,405	6,506,548	0	(33,735)	0	(33,735)	0	6,472,813	0	0	0	195,480	11/16/2039	2.C FE
..89656C-AA-1	Trinity Rail Leasing 201-TRL 2010-1A A		06/16/2024	PAYDOWN		546,327	546,327	572,438	559,949	0	(13,622)	0	(13,622)	0	546,327	0	0	0	11,898	10/16/2040	1.F FE
..89656R-AA-8	Trinity Rail Leasing 202-TRL 2022-1 A		06/21/2024	PAYDOWN		108,680	108,680	106,467	106,574	0	2,106	0	2,106	0	108,680	0	0	0	2,063	05/20/2052	1.F FE
..89657A-AC-0	Trinity Rail Leasing 201-TRL 2020-1A A		06/17/2024	PAYDOWN		135,924	135,924	135,893	135,924	0	22	0	22	0	135,924	0	0	0	1,114	10/17/2050	1.F FE
..89657B-AB-2	Trinity Rail Leasing 201-TRL 2019-1A A		06/17/2024	PAYDOWN		503,065	503,065	475,362	488,314	0	14,633	0	14,633	0	503,065	0	0	0	7,796	04/17/2049	1.F FE
..89657B-AB-0	Trinity Rail Leasing 201-TRL 2019-2A A1		06/17/2024	PAYDOWN		506,174	506,174	506,054	506,119	0	55	0	55	0	506,174	0	0	0	5,071	10/18/2049	1.F FE
..89680H-AA-0	Triton Container Finance-TCF 2020-1A A		06/20/2024	PAYDOWN		777,963	777,963	670,347	659,301	0	99,544	0	99,544	0	777,963	0	0	0	8,850	09/20/2045	1.F FE
..89680H-AB-8	Triton Container Finance-TCF 2020-1A B		06/20/2024	PAYDOWN		68,000	68,000	62,560	63,455	0	4,545	0	4,545	0	68,000	0	0	0	1,477	09/20/2045	2.B FE
..89680H-AE-2	Triton Container Finance-TCF 2021-1A A		06/20/2024	PAYDOWN		352,580	352,580	306,795	80,816	0	45,677	0	45,677	0	352,580	0	0	0	1,477	03/20/2046	1.F FE
..89683L-AA-8	TRP - TRIP Rail Master F-TRP 2021-2 A		06/17/2024	PAYDOWN		424,240	424,240	370,738	340,514	0	46,397	0	46,397	0	424,240	0	0	0	3,546	06/19/2051	1.F FE
..90253#-AA-1	UA (Portland OR) CTL Pas Trust Certifica		06/15/2024	SINKING PAYMENT		254,964	254,964	257,483	256,125	0	(1,161)	0	(1,161)	0	254,964	0	0	0	8,174	02/15/2032	3.B
..90272#-AA-0	UHC (Senior Note) CTL Pa Trust Certifica		06/15/2024	SINKING PAYMENT		61,223	61,223	61,223	61,211	0	11	0	11	0	61,223	0	0	0	1,432	05/15/2033	1.F
..90319#-AA-1	UOA Fayetteville (Univer Senior Secured		06/15/2024	SINKING PAYMENT		115,206	115,206	116,358	116,132	0	(927)	0	(927)	0	115,206	0	0	0	2,678	03/15/2041	1.C
..90345W-AA-2	US AIRWAYS 2012-1A PTT-FIRST LIEN		04/01/2024	SINKING PAYMENT		133,618	133,618	133,618	133,634	0	(16)	0	(16)	0	133,618	0	0	0	3,942	10/01/2024	1.F FE
..90346W-AA-1	US AIRWAYS 2013-1A PTT-FIRST LIEN		05/15/2024	SINKING PAYMENT		123,356	123,356	123,047	123,274	0	82	0	82	0	123,356	0	0	0	2,436	11/15/2025	2.A FE
..90352W-AD-6	ITE Rail Fund Levered LP-SERIES 21-1A CL		05/28/2024	PAYDOWN		123,750	123,750	120,368	120,607	0	3,144	0	3,144	0	123,750	0	0	0	1,160	02/28/2051	1.F FE
..90378#-AA-1	U.S. Department of Agric Trust Certifica		06/15/2024	SINKING PAYMENT		46,409	46,409	46,409	46,409	0	0	0	0	0	46,409	0	0	0	625	04/15/2038	1.B
..90932P-AA-6	United Airlines 2014-1 C-SECURED NOTE		04/11/2024	SINKING PAYMENT		160,035	160,035	160,035	160,062	0	(27)	0	(27)	0	160,035	0	0	0	3,201	04/11/2026	1.G FE
..91841#-AA-8	Virginia (Lafayette, IN) Trust Certifica		06/15/2024	SINKING PAYMENT		77,590	77,590	77,590	77,590	0	0	0	0	0	77,590	0	0	0	1,429	08/15/2036	1.A

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident-ification	Description	For-ign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid-eration	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 Recogn-ized	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	NAIC Desig-nation, NAIC Desig-nation Modifier and SVO Admini-strative Symbol
..91845#-AA-2	VZ (Senior Note) CTL Pas Trust Certifica .....	.....	06/15/2024	SINKING PAYMENT .....	.....	104,424	104,424	104,424	104,426	0	(2)	0	(2)	0	104,424	0	0	0	1,664	05/15/2035	2.A
..91854*-AA-4	VZ (Irving TX)(Senior No Trust Certifica .....	.....	06/15/2024	SINKING PAYMENT .....	.....	96,120	96,120	96,120	96,120	0	0	0	0	0	96,120	0	0	0	2,414	08/15/2036	2.A
..91855*-AA-3	VA (Ponce, PR) CTL Trust Certificate .....	.....	06/15/2024	SINKING PAYMENT .....	.....	56,717	56,717	56,717	56,717	0	0	0	0	0	56,717	0	0	0	1,982	08/15/2042	1.B
..92212K-AA-4	Vantage Data Centers Iss-VDC 2019-1A A2 .....	.....	06/20/2024	PAYDOWN .....	.....	8,205,621	8,205,621	8,205,621	8,205,621	0	0	0	0	0	8,205,621	0	0	0	150,462	07/15/2044	1.G FE
..92257B-AA-0	Velocity Commercial Capi-VCC 2022-3 A .....	.....	06/01/2024	PAYDOWN .....	.....	424,661	424,661	423,840	423,983	0	678	0	678	0	424,661	0	0	0	9,582	06/01/2052	1.A FE
..92257B-AE-2	Velocity Commercial Capi-VCC 2022-3 M4 .....	.....	06/01/2024	PAYDOWN .....	.....	266,119	266,119	243,185	249,086	0	17,033	0	17,033	0	266,119	0	0	0	9,029	06/01/2052	3.B FE
..92257C-AA-8	Velocity Commercial Capi-VCC 2019-1 A .....	.....	06/01/2024	PAYDOWN .....	.....	15,433	15,433	15,430	15,434	0	(1)	0	(1)	0	15,433	0	0	0	274	03/01/2049	1.A FE
..92257P-AA-9	Velocity Commercial Capi-VCC 2022-5 A .....	.....	06/01/2024	PAYDOWN .....	.....	324,813	324,813	326,995	326,972	0	(2,159)	0	(2,159)	0	324,813	0	0	0	9,594	10/01/2052	1.A FE
..92258X-AA-1	Velocity Commercial Capi-VCC 2022-1 A .....	.....	06/01/2024	PAYDOWN .....	.....	54,300	54,300	53,928	54,018	0	282	0	282	0	54,300	0	0	0	821	02/01/2052	1.A FE
..92258X-AB-9	Velocity Commercial Capi-VCC 2022-1 M1 .....	.....	05/01/2024	PAYDOWN .....	.....	206,770	206,770	205,025	205,406	0	1,365	0	1,365	0	206,770	0	0	0	3,179	02/01/2052	1.D FE
..92259K-AD-2	Velocity Commercial Capi-VCC 2022-4 M1 .....	.....	06/01/2024	PAYDOWN .....	.....	69,234	69,234	69,233	69,233	0	0	0	0	0	69,234	0	0	0	2,286	08/01/2052	1.D FE
..92259U-AA-6	Velocity Commercial Capi-VCC 2022-2 A .....	.....	06/01/2024	PAYDOWN .....	.....	112,674	112,674	112,654	112,659	0	16	0	16	0	112,674	0	0	0	2,332	04/01/2052	1.A FE
..92259U-AB-4	Velocity Commercial Capi-VCC 2022-2 M1 .....	.....	06/01/2024	PAYDOWN .....	.....	117,243	117,243	117,217	117,222	0	20	0	20	0	117,243	0	0	0	2,725	04/01/2052	1.D FE
..92259U-AC-2	Velocity Commercial Capi-VCC 2022-2 M2 .....	.....	05/01/2024	PAYDOWN .....	.....	59,529	59,529	59,526	59,527	0	2	0	2	0	59,529	0	0	0	1,157	04/01/2052	1.G FE
..92259U-AE-8	Velocity Commercial Capi-VCC 2022-2 M4 .....	.....	06/01/2024	PAYDOWN .....	.....	257,025	257,025	241,101	245,385	0	11,640	0	11,640	0	257,025	0	0	0	7,686	04/01/2052	3.A FE
..92259U-AF-5	Velocity Commercial Capi-VCC 2022-2 M5 .....	.....	05/01/2024	PAYDOWN .....	.....	72,840	72,840	65,069	67,105	0	5,736	0	5,736	0	72,840	0	0	0	2,088	04/01/2052	4.A FE
..92259V-AA-4	Velocity Commercial Capi-VCC 2023-1 A .....	.....	06/01/2024	PAYDOWN .....	.....	441,670	441,670	441,568	441,575	0	95	0	95	0	441,670	0	0	0	12,415	01/01/2053	1.A FE
..92537M-AA-8	Verus Securitization Tru-VERUS 2019-INV3 .....	.....	06/01/2024	PAYDOWN .....	.....	716,929	716,929	708,864	716,369	0	560	0	560	0	716,929	0	0	0	10,987	11/01/2059	1.A FE
..92538X-AB-9	Verus Securitization Tru-VERUS 2021-5 A2 .....	.....	06/01/2024	PAYDOWN .....	.....	106,068	106,068	106,554	107,742	0	18,812	0	18,812	0	126,554	0	0	0	644	09/01/2066	1.B FE
..92538Q-AA-8	Verus Securitization Tru-VERUS 2021-7 A1 .....	.....	06/01/2024	PAYDOWN .....	.....	184,346	184,346	170,347	173,698	0	10,648	0	10,648	0	184,346	0	0	0	1,324	10/01/2066	1.A FE
..92539A-AA-2	Verus Securitization Tru-VERUS 2022-6 A1 .....	.....	06/01/2024	PAYDOWN .....	.....	204,273	204,273	202,386	202,914	0	1,359	0	1,359	0	204,273	0	0	0	4,135	06/01/2067	1.A FE
..92539A-AB-0	Verus Securitization Tru-VERUS 2022-6 A2 .....	.....	06/01/2024	PAYDOWN .....	.....	207,900	207,900	203,059	204,086	0	3,814	0	3,814	0	207,900	0	0	0	4,208	06/01/2067	1.B FE
..92539B-AB-8	Verus Securitization Tru-VERUS 2023-1 A2 .....	.....	06/01/2024	PAYDOWN .....	.....	115,586	115,586	115,584	115,586	0	0	0	0	0	115,586	0	0	0	3,133	12/01/2067	1.C FE
..92539G-AB-7	Verus Securitization Tru-VERUS 2023-3 A2 .....	.....	06/01/2024	PAYDOWN .....	.....	303,903	303,903	303,899	303,900	0	3	0	3	0	303,903	0	0	0	8,672	03/01/2068	1.C FE
..92539J-AA-3	Verus Securitization Tru-VERUS 2022-INV1 .....	.....	06/01/2024	PAYDOWN .....	.....	175,831	175,831	175,828	175,831	0	0	0	0	0	175,831	0	0	0	3,666	08/01/2067	1.A FE
..92539J-AB-1	Verus Securitization Tru-VERUS 2022-INV1 .....	.....	06/01/2024	PAYDOWN .....	.....	158,232	158,232	158,231	158,232	0	0	0	0	0	158,232	0	0	0	3,797	08/01/2067	1.B FE
..92539J-AC-9	Verus Securitization Tru-VERUS 2022-INV1 .....	.....	06/01/2024	PAYDOWN .....	.....	175,813	175,813	173,991	174,906	0	907	0	907	0	175,813	0	0	0	4,232	08/01/2067	1.F FE
..92539N-AA-4	Verus Securitization Tru-VERUS 2022-7 A1 .....	.....	06/01/2024	PAYDOWN .....	.....	155,448	155,448	155,447	155,448	0	0	0	0	0	155,448	0	0	0	3,208	07/01/2067	1.A FE
..92539N-AB-2	Verus Securitization Tru-VERUS 2022-7 A2 .....	.....	06/01/2024	PAYDOWN .....	.....	178,763	178,763	176,520	177,044	0	1,720	0	1,720	0	178,763	0	0	0	3,830	07/01/2067	1.B FE
..92539X-AB-0	Verus Securitization Tru-VERUS 2023-6 A2 .....	.....	06/01/2024	PAYDOWN .....	.....	153,208	153,208	153,208	153,208	0	0	0	0	0	153,208	0	0	0	4,479	09/01/2068	1.C FE
..92639H-AA-4	Vista Point Securitizati-VSTA 2024-CES1 .....	.....	06/01/2024	PAYDOWN .....	.....	237,659	237,659	237,656	237,656	0	2	0	2	0	237,659	0	0	0	1,322	05/01/2035	1.A FE
..929227-4T-0	WaMu Mortgage Pass-Throu-WAMU 2003-S4 2A .....	.....	06/01/2024	PAYDOWN .....	.....	6,754	6,754	6,782	6,763	0	(9)	0	(9)	0	6,754	0	0	0	155	06/01/2033	1.A FM
..929227-R5-7	WaMu Mortgage Pass-Throu-WAMU 2003-AR5 A .....	.....	06/01/2024	PAYDOWN .....	.....	64,041	64,041	52,353	58,245	0	5,796	0	5,796	0	64,041	0	0	0	2,035	06/01/2033	1.A FM
..92922F-3N-6	WaMu Mortgage Pass-Throu-WAMU 2005-AR12 .....	.....	06/01/2024	PAYDOWN .....	.....	63,343	63,343	60,272	62,000	0	1,342	0	1,342	0	63,343	0	0	0	1,455	10/01/2035	1.A FM
..92922F-3Q-9	WaMu Mortgage Pass-Throu-WAMU 2005-AR12 .....	.....	06/01/2024	PAYDOWN .....	.....	1,265	1,265	1,231	1,265	0	0	0	0	0	1,265	0	0	0	28	09/01/2035	1.A FM
..92922F-7C-6	WaMu Mortgage Pass-Throu-WAMU 2005-AR16 .....	.....	06/01/2024	PAYDOWN .....	.....	2,512	2,512	2,122	2,143	0	369	0	369	0	2,512	0	0	0	61	12/01/2035	1.A FM
..92922F-BT-8	WaMu Mortgage Pass-Throu-WAMU 2005-AR18 .....	.....	06/01/2024	PAYDOWN .....	.....	184,427	184,427	144,400	148,612	0	(14,042)	0	(14,042)	0	184,427	0	0	0	3,226	01/01/2036	1.A FM
..92922F-GY-8	WaMu Mortgage Pass-Throu-WAMU 2003-S11 3 .....	.....	06/25/2024	PAYDOWN .....	.....	1,824	1,824	1,828	1,824	0	0	0	0	0	1,824	0	0	0	53	11/25/2033	1.A FM
..92922F-J5-8	WaMu Mortgage Pass-Throu-WAMU 2005-AR6 2 .....	.....	06/25/2024	PAYDOWN .....	.....	57,186	57,186	47,554	60,284	0	(3,098)	0	(3,098)	0	57,186	0	0	0	1,234	04/25/2045	1.A FM
..92925C-CC-4	WaMu Mortgage Pass-Throu-WAMU 2006-AR1 1 .....	.....	06/01/2024	PAYDOWN .....	.....	6,984	6,984	5,985	6,984	0	1,000	0	1,000	0	6,984	0	0	0	160	01/01/2046	1.A FM
..92925G-AD-5	WaMu Mortgage Pass-Throu-WAMU 2006-AR16 .....	.....	05/01/2024	PAYDOWN .....	.....	3,341	3,341	3,345	3,366	0	(9,043)	0	(9,043)	0	6,341	0	0	0	(65)	12/01/2036	3.C FM
..92925V-AF-7	WaMu Mortgage Pass-Throu-WAMU 2007-HY1 2 .....	.....	06/01/2024	PAYDOWN .....	.....	42,178	42,178	38,273	41,124	0	(53,883)	0	(53,883)	0	42,178	0	0	0	835	02/01/2037	1.A FM
..92925V-AP-5	WaMu Mortgage Pass-Throu-WAMU 2007-HY1 5 .....	.....	06/01/2024	PAYDOWN .....	.....	25,221	25,221	23,280	21,171	0	(14,950)	0	(14,950)	0	25,221	0	0	0	1,098	02/01/2037	4.A FM
..92927X-AC-8	WAMU MORTGAGE PASS-THROU-SERIES 2007-HY6 .....	.....	06/01/2024	PAYDOWN .....	.....	62,604	62,604	63,213	68,618	0	3,055	0	3,055	0	62,604	0	0	0	1,287	06/01/2037	3.C FM
..92939F-AT-6	WFRBS Commercial Mortgag-WFRBS 2014-C21 .....	.....	05/01/2024	PAYDOWN .....	.....	1,517,359	1,517,359	1,572,363	1,519,781	0	(2,422)	0	(2,422)	0	1,517,359	0	0	0	25,228	08/01/2047	1.A
..92977Y-BW-0	Wachovia Mortgage Loan T-WMLT 2005-B 244 .....	.....	06/01/2024	PAYDOWN .....	.....	23,522	23,580	21,878	22,704	0	867	0	867	0	23,522	0	0	0	543	10/01/2035	1.A FM

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident- ification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..92979D-AC-9	Wachovia Mortgage Loan T-WMLT 2007-A 2A1		06/01/2024	PAYDOWN		40,142	40,142	35,724	35,681	0	(44,021)	(54,821)	10,800	0	40,142	0	0	0	838	03/01/2037	1.A FM
..92981F-AA-4	WEC 99J-73 LLC Senior Secured Note		05/01/2024	CALL 100		55,077	55,077	56,250	56,107	0	69	0	69	0	56,105	0	(1,028)	(1,028)	633	09/15/2039	2.B
..92981G-AA-6	WEC 99J-58 LLC Senior Secured Note		06/15/2024	SINKING PAYMENT		32,589	32,589	33,283	32,961	0	(372)	0	(372)	0	32,589	0	0	0	579	09/15/2030	2.B
..92982F-AA-3	WEC 99J-22 LLC Senior Secured Note		06/18/2024	CALL 100		48,261	48,261	49,289	49,164	0	(7)	0	(7)	0	49,157	0	(896)	(896)	604	09/15/2039	2.B
..92982*-AA-7	WEC 99J-27 LLC Senior Secured Note		06/18/2024	VARIOUS		52,062	52,062	53,172	53,036	0	92	0	92	0	53,029	0	(966)	(966)	629	09/15/2039	2.B
..92982@-AA-5	Wec 2000B-CSF-11 LLC Senior Secured Note		06/15/2024	SINKING PAYMENT		33,515	33,515	34,229	33,898	0	(382)	0	(382)	0	33,515	0	0	0	595	09/15/2030	2.B
..92983*-AA-6	WEC 99J-4 LLC Senior Secured Note		06/15/2024	SINKING PAYMENT		20,021	20,021	20,448	20,315	0	(294)	0	(294)	0	20,021	0	0	0	355	09/15/2034	2.B
..92983@-AA-4	WEC 99J-72 LLC Senior Secured Note		06/18/2024	CALL 100		49,749	49,749	50,808	50,679	0	(7)	0	(7)	0	50,672	0	(923)	(923)	600	09/15/2039	2.B
..92990G-AD-5	WalMu Mortgage Pass-Throu-WAMU 2007-HY5 2		06/01/2024	PAYDOWN		194,879	194,879	186,505	190,008	0	8,032	0	8,032	0	194,879	0	0	0	4,609	05/01/2037	1.A FM
..92990G-AG-8	WalMu Mortgage Pass-Throu-WAMU 2007-HY5 2		06/01/2024	PAYDOWN		86,127	86,127	82,101	83,389	0	(114,097)	0	(114,097)	0	86,127	0	0	0	9,847	05/01/2037	5.B FM
..92990G-AJ-2	WalMu Mortgage Pass-Throu-WAMU 2007-HY5 3		05/01/2024	PAYDOWN		60,319	60,317	54,847	56,808	0	3,509	0	3,509	0	60,319	0	0	0	592	05/01/2037	1.A FM
..933636-AA-0	WalMu Mortgage Pass-Throu-WAMU 2007-HY4 1		05/01/2024	PAYDOWN		13,484	13,687	12,174	13,416	0	235	0	235	0	13,484	0	0	0	234	04/01/2037	3.A FM
..933636-AG-7	WalMu Mortgage Pass-Throu-WAMU 2007-HY4 3		06/01/2024	PAYDOWN		13,210	15,162	14,357	14,828	0	232	0	232	0	13,210	0	0	0	313	04/01/2037	3.C FM
..933636-AL-6	WAMU MORTGAGE PASS-THROU-SERIES 2007-HY4		05/01/2024	PAYDOWN		49,910	50,887	48,758	50,792	0	32	0	32	0	49,910	0	0	0	1,680	11/01/2036	1.G FM
..933638-AA-6	WalMu Mortgage Pass-Throu-WAMU 2006-AR19		06/01/2024	PAYDOWN		27,149	23,167	22,393	22,661	0	(15,019)	0	(15,019)	0	27,149	0	0	0	1,410	01/01/2047	1.A FM
..93363E-AB-1	WalMu Mortgage Pass-Throu-WAMU 2006-AR10		06/01/2024	PAYDOWN		13,271	12,893	12,358	12,977	0	(59)	0	(59)	0	13,271	0	0	0	665	09/01/2036	4.A FM
..93363N-AB-1	WalMu Mortgage Pass-Throu-WAMU 2006-AR12		06/01/2024	PAYDOWN		6,257	6,585	6,224	6,608	0	(43)	0	(43)	0	6,257	0	0	0	136	10/01/2036	4.A FM
..93363P-AA-8	WalMu Mortgage Pass-Throu-WAMU 2006-AR14		05/01/2024	PAYDOWN		6,107	6,012	5,595	5,633	0	(2,907)	0	(2,907)	0	6,107	0	0	0	364	11/01/2036	1.C FM
..93363P-AC-4	WalMu Mortgage Pass-Throu-WAMU 2006-AR14		05/01/2024	PAYDOWN		67,332	66,286	62,252	66,290	0	(118,103)	0	(118,103)	0	67,332	0	0	0	3,726	11/01/2036	1.G FM
..93363P-AD-2	WalMu Mortgage Pass-Throu-WAMU 2006-AR14		06/01/2024	PAYDOWN		1,400	1,376	1,260	1,297	0	(789)	0	(789)	0	1,400	0	0	0	142	11/01/2036	1.A FM
..93364F-AH-4	WalMu Mortgage Pass-Throu-WAMU 2007-HY7 3		06/01/2024	PAYDOWN		48,891	46,011	46,466	46,898	0	(919)	0	(919)	0	48,891	0	0	0	523	07/01/2037	5.A FM
..939336-TX-1	Washington Mutual MSC Mo-WAMMS 2003-MS7		06/01/2024	PAYDOWN		2	2	1	2	0	0	0	0	0	2	0	0	0	0	03/01/2033	1.A FM
..939336-X9-9	WalMu Mortgage Pass-Throu-WAMU 2005-AR1 A		06/25/2024	PAYDOWN		14,033	13,997	11,716	12,949	0	1,055	0	1,055	0	14,033	0	0	0	293	01/25/2045	1.A FM
..93934F-KP-6	Washington Mutual Mortga-WMALT 2006-1 3A		06/01/2024	PAYDOWN		25	101	102	107	0	(1)	0	(1)	0	25	0	0	0	2	02/01/2036	4.B FM
..93934N-AC-9	Washington Mutual Mortga-WMALT 2006-5 1A		06/01/2024	PAYDOWN		1,212	4,280	3,595	3,907	0	144	108	36	0	1,212	0	0	0	110	07/01/2036	4.C FM
..93934N-AR-6	Washington Mutual Mortga-WMALT 2006-5 2C		06/25/2024	PAYDOWN		1,278	2,492	1,969	593	0	1,866	0	1,866	0	1,278	0	0	0	202	07/25/2036	1.A FM
..93936N-AA-1	Washington Mutual Mortga-WMALT 2007-4 1A		06/01/2024	PAYDOWN		3,701	6,121	6,325	6,127	0	37	0	37	0	3,701	0	0	0	108	06/01/2037	3.C FM
..94354X-AA-8	WAVE 2019-1 LLC-WAAV 2019-1 A		06/15/2024	PAYDOWN		147,921	147,921	147,914	147,824	0	96	0	96	0	147,921	0	0	0	2,572	09/15/2044	2.A FE
..94984D-AC-8	Wells Fargo Mortgage Bac-WFMB 2006-AR13		05/01/2024	PAYDOWN		2,387	3,131	2,450	2,940	0	(20,850)	(6,395)	(14,455)	0	2,387	0	0	0	597	09/01/2036	1.A FM
..94985A-AA-7	Wells Fargo Mortgage Bac-WFMB 2006-AR15		06/01/2024	PAYDOWN		1,220	2,239	2,086	2,249	0	(56)	0	(56)	0	1,255	0	(35)	(35)	125	10/01/2036	4.A FM
..94986C-AA-2	Wells Fargo Mortgage Bac-WFMB 2007-AR4		05/01/2024	PAYDOWN		1,819	1,845	1,363	1,683	0	3,170	(12,604)	15,774	0	1,819	0	0	0	1,277	08/01/2037	1.A FM
..94986M-AA-0	Wells Fargo Mortgage Bac-WFMB 2007-AR10		06/01/2024	PAYDOWN		224,127	225,683	226,952	227,570	0	11,533	0	11,533	0	224,127	0	0	0	6,407	01/01/2038	4.A FM
..94986M-AF-9	Wells Fargo Mortgage Bac-WFMB 2007-AR10		06/01/2024	PAYDOWN		20,287	15,263	12,608	13,412	0	270	0	270	0	17,817	0	2,470	2,470	418	01/01/2038	1.A FM
..94989D-AV-1	Wells Fargo Commercial M-WFCM 2015-C27 A		04/01/2024	PAYDOWN		168,530	168,530	165,074	168,058	0	472	0	472	0	168,530	0	0	0	2,327	02/01/2048	1.A FM
..95002F-AA-2	Wells Fargo Mortgage Bac-WFMB 2019-4 A1		06/01/2024	PAYDOWN		60,976	60,976	62,062	62,585	0	(1,609)	0	(1,609)	0	60,976	0	0	0	967	09/01/2049	1.A
..95002K-AA-1	Wells Fargo Mortgage Bac-WFMB 2020-1 A1		06/01/2024	PAYDOWN		47,562	47,562	48,127	48,413	0	(851)	0	(851)	0	47,562	0	0	0	580	12/01/2049	1.A
..95058X-AE-8	Wendy's Funding LLC-WEN 2018-1A A21		06/15/2024	PAYDOWN		20,244	19,938	19,356	20,244	0	306	0	306	0	20,244	0	0	0	393	03/15/2048	2.B FE
..95058X-AG-3	Wendy's Funding LLC-WEN 2019-1A A21		06/15/2024	PAYDOWN		62,905	62,905	62,905	62,905	0	0	0	0	0	62,905	0	0	0	1,190	06/15/2049	2.B FE
..96034L-AA-9	Westgate Resorts 2020-1 -WESTR 2020-1A A		06/11/2024	PAYDOWN		688,406	688,406	687,501	688,367	0	39	0	39	0	688,406	0	0	0	7,734	03/01/2034	1.A FE
..96038F-AA-8	Westin (St Louis MO) Lea Trust Certifica		06/15/2024	SINKING PAYMENT		26,512	26,512	26,512	26,512	0	0	0	0	0	26,512	0	0	0	685	07/15/2047	1.D PL
..96042@-AA-4	Westkin Portfolio (LAS & Trust Certifica		06/15/2024	SINKING PAYMENT		89,502	89,502	90,397	90,181	0	(678)	0	(678)	0	89,502	0	0	0	1,655	11/15/2038	1.D PL
..96928*-CQ-8	William Blair & Company, Trust Certificat		06/15/2024	SINKING PAYMENT		43,190	43,190	43,190	43,190	0	0	0	0	0	43,190	0	0	0	1,201	06/15/2033	3.A
..96928*-CR-6	William Blair & Company, Trust Certificat		06/15/2024	SINKING PAYMENT		52,880	52,880	52,880	52,880	0	0	0	0	0	52,880	0	0	0	1,470	05/15/2034	3.A
..96928*-CX-3	William Blair & Company, Trust Certifica		06/15/2024	SINKING PAYMENT		110,080	110,080	111,189	110,613	0	(533)	0	(533)	0	110,080	0	0	0	2,843	01/15/2035	1.F
..96928*-DA-2	William Blair & Company, Trust Certifica		06/15/2024	SINKING PAYMENT		213,640	213,640	215,942	214,391	0	(751)	0	(751)	0	213,640	0	0	0	4,792	08/15/2031	1.A
..96928*-DJ-3	William Blair & Company, Trust Certifica		06/15/2024	SINKING PAYMENT		150,225	150,225	150,225	150,226	0	0	0	0	0	150,225	0	0	0	3,722	09/15/2031	1.A

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident-ification	Description	For-ign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid-eration	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 Recogn-ized	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	NAIC Desig-nation, NAIC Desig-nation Modifier and SVO Admini-strative Symbol
..96928*-DZ-7	William Blair & Company, Trust Certifica		06/15/2024	SINKING PAYMENT		210,392	210,392	212,326	210,900	0	(507)	0	(507)	0	210,392	0	0	0	5,248	10/15/2029	1.E
..96928*-EN-3	William Blair & Company, Trust Certifica		06/15/2024	SINKING PAYMENT		124,009	124,009	125,344	124,542	0	(533)	0	(533)	0	124,009	0	0	0	2,154	02/15/2034	1.A
..96928*-EZ-6	William Blair & Company, Trust Certifica		06/15/2024	SINKING PAYMENT		146,332	146,332	146,332	146,332	0	0	0	0	0	146,332	0	0	0	2,057	09/15/2033	2.A
..96928*-FH-5	William Blair & Company, Trust Certifica		06/15/2024	SINKING PAYMENT		390,527	390,527	390,527	390,527	0	0	0	0	0	390,527	0	0	0	10,453	04/15/2025	2.A
..96928*-FK-8	William Blair & Company, Trust Certifica		06/15/2024	SINKING PAYMENT		134,377	134,377	134,377	134,383	0	(6)	0	(6)	0	134,377	0	0	0	3,104	11/15/2032	1.C
..96928*-FQ-5	William Blair & Company, Trust Certifica		06/15/2024	SINKING PAYMENT		152,590	152,590	152,590	152,590	0	0	0	0	0	152,590	0	0	0	2,555	09/15/2033	1.A
..96928*-FV-4	William Blair & Company, Trust Certifica		06/15/2024	SINKING PAYMENT		62,906	62,906	62,906	62,906	0	0	0	0	0	62,906	0	0	0	1,073	09/15/2044	1.E
..96928*-FX-0	William Blair & Company, Trust Certifica		06/15/2024	SINKING PAYMENT		236,146	236,146	236,146	236,146	0	0	0	0	0	236,146	0	0	0	3,951	02/15/2036	1.B
..96928*-FY-8	William Blair & Company, Trust Certifica		06/15/2024	SINKING PAYMENT		87,894	87,894	87,894	87,894	0	0	0	0	0	87,894	0	0	0	2,554	01/15/2035	3.A
..96930@-AA-9	William Blair & Company Trust Certificat		06/15/2024	SINKING PAYMENT		68,395	68,395	68,395	68,395	0	0	0	0	0	68,395	0	0	0	1,247	08/15/2035	3.A
..97063Q-AA-0	WILLIS ENGINE STRUCTURED-SERIES 17-A CLA		06/15/2024	PAYDOWN		118,616	118,616	118,515	118,560	0	56	0	56	0	118,616	0	0	0	2,321	08/15/2042	2.B FE
..97064E-AA-6	Willis Engine Structured-WESTF 2018-A A		06/15/2024	PAYDOWN		86,981	86,981	86,976	86,981	0	(1)	0	(1)	0	86,981	0	0	0	1,723	09/15/2043	1.G FE
..97064F-AA-3	Willis Engine Structured-WESTF 2020-A A		06/15/2024	PAYDOWN		166,823	166,823	166,820	166,823	0	0	0	0	0	166,823	0	0	0	2,245	03/15/2045	1.F FE
..97650W-AF-5	Wintrust Financial Corp-SUBORDINATED		06/13/2024	MATURITY	5,000,000	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	2.B FE
..97652P-AL-5	WinWater Mortgage Loan T-WIN 2014-1 A11		06/01/2024	PAYDOWN	35,361	35,361	35,140	35,143	35,143	0	218	0	218	0	35,361	0	0	0	516	06/01/2044	1.A
..98920M-AA-0	ZAXBY'S FUNDING LLC-ZAXBY 2021-1A A2		04/30/2024	PAYDOWN	45,003	45,003	40,973	41,824	41,824	0	3,179	0	3,179	0	45,003	0	0	0	729	07/30/2051	2.B FE
..G7256K-AB-0	Prop 2017-1 Ltd-ABS SSNR 5.30 03/15/42		06/15/2024	PAYDOWN	107,229	107,229	107,165	107,229	107,229	0	0	0	0	0	107,229	0	0	0	3,118	03/15/2042	2.B FE
..00908@-AB-1	Air Canada 2015-2 Class -2ND LIEN	A	06/15/2024	SINKING PAYMENT		108,493	108,493	108,493	108,512	0	(19)	0	(19)	0	108,493	0	0	0	2,238	12/15/2027	2.B FE
..00908@-AA-1	AIR CANADA 2013-1A PTT-FIRST LIEN	A	05/15/2024	SINKING PAYMENT		71,542	71,542	71,541	71,550	0	(8)	0	(8)	0	71,542	0	0	0	1,476	05/15/2025	2.B FE
..00909@-AA-9	AIR CANADA 2015-1A PTT-FIRST LIEN	A	04/30/2024	SINKING PAYMENT		325,681	325,681	325,722	325,722	0	(41)	0	(41)	0	325,681	0	0	0	5,862	03/15/2027	1.F FE
..335934-AL-9	First Quantum Minerals L-SENIOR UNSECURE	A	04/10/2024	CALL 100	4,600,000	4,600,000	4,766,750	4,650,989	4,650,989	0	(6,648)	0	(6,648)	0	4,644,341	0	(44,341)	(44,341)	148,542	04/01/2025	4.B FE
..000825-AA-7	ACAM 2019-FL1 Ltd-ACAM 2019-FL1 A	D	04/16/2024	PAYDOWN	200,140	200,140	200,140	200,140	200,140	0	0	0	0	0	200,140	0	0	0	4,886	11/17/2034	1.A FE
..000844-AA-8	ABPCI Direct Lending Fun-ABPCI 2020-8A A	D	06/05/2024	PAYDOWN	28,897,315	28,000,000	28,030,000	28,000,000	28,000,000	0	0	0	0	0	28,897,315	0	0	0	1,325,624	04/20/2032	1.A FE
..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	251,550	0	(1,093)	0	(1,093)	0	249,326	0	7,126	7,126	16,593	07/24/2029	4.A FE
..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	253,153	0	(1,330)	0	(1,330)	0	251,823	0	5,403	5,403	17,295	07/24/2029	4.A FE
..00652X-AB-4	Adani Transmission Ltd-FIRST LIEN	D	05/21/2024	SINKING PAYMENT		33,360	33,360	30,417	30,676	0	2,684	0	2,684	0	33,360	0	0	0	709	05/21/2036	2.C FE
..01448T-AA-2	ALESCO Preferred Funding-ALESC 5A A1	D	06/24/2024	PAYDOWN	80,010	80,010	68,381	84,982	84,982	0	(4,972)	0	(4,972)	0	80,010	0	0	0	3,330	12/23/2034	1.A FE
..01449T-AA-1	ALESCO Preferred Funding-ALESC 9A A1	D	06/24/2024	PAYDOWN	609,852	609,852	445,197	473,952	473,952	0	135,900	0	135,900	0	609,852	0	0	0	27,665	06/23/2036	1.A FE
..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	4,500,000	0	0	0	0	0	4,500,000	0	7,200	7,200	248,918	07/20/2035	2.C FE
..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	2,930,773	0	69,227	0	69,227	0	3,000,000	0	0	0	102,625	07/22/2032	1.A FE
..03330P-AA-7	ANCHORAGE CREDIT FUNDING-SERIES 18-5A CL	D	04/25/2024	PAYDOWN	2,686,797	2,686,797	2,686,797	2,686,797	2,686,797	0	0	0	0	0	2,686,797	0	0	0	55,079	04/25/2036	1.A FE
..03665L-AA-1	Antares CLO 2018-3 LTD-ANTR 2018-3A A1	D	04/22/2024	PAYDOWN	1,069,533	1,069,533	1,069,533	1,069,606	1,069,606	0	(73)	0	(73)	0	1,069,533	0	0	0	40,770	01/20/2031	1.A FE
..03768Q-AQ-1	Apidos CLO XXXII-APID 2019-32A E	D	06/25/2024	PAYDOWN	2,250,000	2,250,000	2,222,550	2,188,823	2,188,823	0	61,177	0	61,177	0	2,250,000	0	0	0	143,135	01/20/2033	3.C FE
..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	6,780,469	0	119,531	0	119,531	0	6,900,000	0	0	0	286,107	10/15/2032	1.C FE
..05682Q-AL-0	Bain Capital Credit CLO -BCC 2017-1A C2	D	05/10/2024	PAYDOWN	9,001,250	9,001,250	8,989,998	9,012,502	9,012,502	0	(11,252)	0	(11,252)	0	9,001,250	0	0	0	376,029	07/20/2030	1.F FE
..09077C-AA-0	Birch Grove CLO 4 Ltd-BGCLO 2022-4A A1	D	06/21/2024	PAYDOWN	10,000,000	10,000,000	9,845,000	9,803,015	9,803,015	0	196,985	0	196,985	0	10,000,000	0	0	0	346,021	04/15/2034	1.A FE
..09628V-AN-4	BlueMountain CLO 2016-3 -BLUM 2016-3A A	D	04/02/2024	PAYDOWN	8,000,000	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	1.A FE
..09630Q-AS-0	BlueMountain CLO XXX Ltd-BLUEN 2020-30A	D	05/23/2024	DEUTSCHE BANK SECURI	6,686,550	6,750,000	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	2.A FE
..10901A-AA-4	Brigade Debt Funding II -BDF 2018-2A A	D	04/25/2024	PAYDOWN	578,459	578,459	578,459	578,459	578,459	0	0	0	0	0	578,459	0	0	0	13,738	10/25/2035	1.A FE
..10901U-AA-0	Brigade Debt Funding I L-BDF 2018-1A A	D	04/25/2024	PAYDOWN	643,441	643,441	643,441	643,441	643,441	0	0	0	0	0	643,441	0	0	0	14,072	04/25/2036	1.A FE
..12553B-AA-9	CIFC Funding 2019-I Ltd-CIFC 2019-1A E	D	06/11/2024	BROINSTONE																	

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident-ification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
28851Q-AE-3	Ellington Clo I Ltd-EQLO 2017-1A AR	D	04/15/2024	PAYDOWN		5,400,020	5,400,020	5,400,020	5,400,020	0	0	0	0	0	5,400,020	0	0	0	247,707	10/15/2029	1.A FE
28852E-AA-7	Ellington Clo II Ltd-EQLO 2017-2A A	D	05/15/2024	PAYDOWN		290,374	290,374	290,374	290,374	0	0	0	0	0	290,374	0	0	0	10,724	02/15/2029	1.A FE
28852L-AA-1	Ellington Clo III Ltd-EQLO 2018-3A A1	D	04/22/2024	PAYDOWN		2,118,025	2,118,025	2,118,025	2,119,080	0	(1,055)	0	(1,055)	0	2,118,025	0	0	0	87,078	07/20/2030	1.A FE
29002G-AB-7	Elmwood CLO 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	1.A FE
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	198,598	10/20/2034	1.F FE
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	112,789	10/20/2034	2.C FE
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	1.A FE
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	1.F FE
30260L-AA-3	FEL Energy VI Sarl-SECURED	D	06/01/2024	SINKING PAYMENT		31,714	31,714	28,542	28,703	0	3,011	0	3,011	0	31,714	0	0	0	912	12/01/2040	2.C FE
30312U-AA-1	FS Rialto 2019-FL1-FSRIA 2019-FL1 A	D	04/10/2024	VARIOUS		20,196	0	0	0	0	0	0	0	0	0	0	20,196	20,196	14,086	12/16/2036	1.A FE
34960J-AS-4	Fortress Credit Opportun-FCO 2015-6A A1T	D	04/10/2024	PAYDOWN		2,284,998	2,284,998	2,136,473	2,280,780	0	4,218	0	4,218	0	2,284,998	0	0	0	92,527	07/10/2030	1.A FE
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	1.B FE
34961W-AC-9	Fortress Credit Opportun-FCO 2018-11A A1	D	04/15/2024	PAYDOWN		3,082,265	3,082,265	2,831,831	3,055,408	0	26,856	0	26,856	0	3,082,265	0	0	0	119,735	04/15/2031	1.A FE
36361W-AW-6	Gallatin CLO IX 2018-1 L-GALL 2018-1A B3	D	04/22/2024	PAYDOWN		375,204	375,204	375,204	375,078	0	126	0	126	0	375,204	0	0	0	52,174	01/21/2028	1.A FE
36655L-AB-1	Garrison Funding 2018-2 -GRIML 2018-2RA	D	05/20/2024	PAYDOWN		639,742	639,742	639,742	639,742	0	0	0	0	0	639,742	0	0	0	23,238	11/20/2029	1.A FE
38090A-AA-6	GoldenTree Loan Manageme-GLM 2022-16A XR	D	04/22/2024	PAYDOWN		298,277	298,277	298,277	298,277	0	0	0	0	0	298,277	0	0	0	0	01/20/2034	1.A FE
38172H-AA-2	Golub Capital Partners C-GOCAP 2019-45A	D	04/22/2024	PAYDOWN		54,563	54,563	54,563	54,563	0	0	0	0	0	54,563	0	0	0	2,157	10/20/2031	1.A FE
38175J-AA-5	Golub Capital Partners C-GOCAP 2013-17A	D	04/25/2024	PAYDOWN		1,093,644	1,093,644	1,093,644	1,093,644	0	0	0	0	0	1,093,644	0	0	0	43,485	10/25/2030	1.A FE
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	1.A FE
38218J-AA-4	Goodgreen 2022-1-GOODG 2022-1A A	D	06/15/2024	PAYDOWN		288,805	288,805	288,708	288,805	0	0	0	0	0	288,805	0	0	0	9,299	10/15/2056	1.A FE
390556-AL-2	Great Lakes CLO 2014-1 L-GRTLK 2014-1A A	D	04/15/2024	PAYDOWN		1,766,111	1,766,111	1,766,111	1,767,048	0	(937)	0	(937)	0	1,766,111	0	0	0	40,383	10/15/2029	1.A FE
390556-AN-8	Great Lakes CLO 2014-1 L-GRTLK 2014-1A B	D	04/15/2024	PAYDOWN		930,356	930,356	930,356	933,650	0	(3,294)	0	(3,294)	0	930,356	0	0	0	35,821	10/15/2029	1.A FE
39809J-AC-8	Greystone CRE Notes 2019-GSTNE 2019-FL2	D	05/07/2024	PERFTRUSTCP		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	1.B FE
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	6. *
40170F-AA-4	Guggenheim MM CLO 2018-1-GPIM 2018-1A A1	D	04/15/2024	PAYDOWN		5,069,788	5,069,788	5,069,788	5,069,788	0	0	0	0	0	5,069,788	0	0	0	275,720	01/15/2031	1.A FE
40170F-AJ-5	Guggenheim MM CLO 2018-1-GPIM 2018-1A A2	D	04/15/2024	PAYDOWN		1,622,332	1,622,332	1,622,332	1,622,332	0	(60)	0	(60)	0	1,622,332	0	0	0	36,908	01/15/2031	1.A FE
43133A-AA-5	Hildene TruPS Financials-HITR 2018-1A A1	D	04/10/2024	PAYDOWN		4,018,692	4,018,692	3,938,318	3,964,632	0	54,060	0	54,060	0	4,018,692	0	0	0	142,749	10/10/2038	1.B FE
45082D-AA-5	Iberia, Lineas Aereas De Senior Secured	D	04/15/2024	SINKING PAYMENT		167,647	167,647	167,647	167,647	0	0	0	0	0	167,647	0	0	0	5,647	10/15/2037	1.G PL
45082E-AA-3	Iberia, Lineas Aereas De Senior Secured	D	04/15/2024	SINKING PAYMENT		127,505	127,505	127,505	127,505	0	0	0	0	0	127,505	0	0	0	3,825	04/15/2034	2.B Z
46651N-AA-2	JOL Air Ltd-JOLAR 2019-1 A	D	06/15/2024	PAYDOWN		302,600	302,600	303,284	302,657	0	(57)	0	(57)	0	302,600	0	0	0	5,002	04/15/2044	2.A FE
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	1.C FE
49255P-AA-1	Kestrel Aircraft Funding-KSTRL 2018-1A A	D	06/15/2024	PAYDOWN		203,212	203,212	197,479	200,820	0	2,392	0	2,392	0	203,212	0	0	0	3,047	12/15/2038	2.B FE
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	1.G FE
540543-AA-3	Logan CLO I Ltd-LOGN1 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	212,125	07/20/2034	1.A FE
55312H-AA-7	MMcapS Funding XVII Ltd-MMCAP 17A A1	D	06/03/2024	PAYDOWN		10,581	10,581	10,083	10,504	0	77	0	77	0	10,581	0	0	0	325	12/01/2035	1.A FE
55446M-AA-5	MACH 1 Cayman 2019-1 Ltd	D	06/15/2024	PAYDOWN		60,946	60,946	60,944	60,946	0	0	0	0	0	60,946	0	0	0	927	10/15/2039	2.A FE
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	367,336	07/15/2033	1.C FE
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	334,465	01/18/2034	1.A FE
59283B-AA-4	Mexico Generadora de Ene-SECURED	D	06/06/2024	SINKING PAYMENT		27,687	27,687	28,086	28,036	0	(349)	0	(349)	0	27,687	0	0	0	761	12/06/2032	2.B FE
60688H-AA-3	MMcapS Funding XVIII Ltd-SECURED	D	05/30/2024	SINKING PAYMENT		355,814	355,814	273,760	276,352	0	79,462	0	79,462	0	355,814	0	0	0	10,411	12/26/	

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Ident-ification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
71429M-AB-1	Perrigo Finance Unlimite-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	3.C FE
71429M-AC-9	Perrigo Finance Unlimite-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	06/15/2030	3.C FE
74040T-AC-7	Preferred Term Securitie-PRETSL FLOAT 12	D.....	05/30/2024	PAYDOWN		5,910	5,910	5,642	5,740	0	170	0	170	0	5,910	0	0	0	117	12/23/2031	3.A FE
74041E-AA-3	Preferred Term Securitie-SECURED	D.....	06/30/2024	PAYDOWN		42,967	42,967	35,640	39,475	0	3,492	0	3,492	0	42,967	0	0	0	383	03/23/2035	1.A FE
74041N-AC-9	Preferred Term Securitie-SECURED	D.....	05/30/2024	PAYDOWN		40,803	40,803	39,273	39,725	0	1,078	0	1,078	0	40,803	0	0	0	665	12/24/2033	1.A FE
74041N-AD-7	Preferred Term Securitie-SECURED	D.....	05/30/2024	PAYDOWN		115,610	115,610	111,274	112,250	0	3,360	0	3,360	0	115,610	0	0	0	1,884	12/24/2033	1.A FE
74042H-AA-5	Preferred Term Securitie-SECURED	D.....	05/30/2024	PAYDOWN		17,534	17,534	13,525	14,982	0	2,553	0	2,553	0	17,534	0	0	0	266	12/22/2035	1.A FE
74042H-AB-3	Preferred Term Securitie-SECURED	D.....	05/30/2024	PAYDOWN		4,115	4,115	3,501	4,115	0	0	0	0	0	4,115	0	0	0	63	12/22/2035	1.B FE
74042J-AA-1	Preferred Term Securitie-SECURED	D.....	06/24/2024	PAYDOWN		43,941	43,941	37,116	39,753	0	4,188	0	4,188	0	43,941	0	0	0	4,371	03/22/2038	1.A FE
74042M-AA-4	Preferred Term Securitie-SECURED	D.....	06/30/2024	VARIOUS		7,778,172	7,778,172	6,759,418	7,148,322	0	25,515	0	25,515	0	7,173,837	0	604,335	604,335	118,012	09/22/2036	1.A FE
74043C-AA-5	Preferred Term Securitie-SECURED	D.....	05/30/2024	PAYDOWN		362,964	362,964	277,251	303,714	0	59,250	0	59,250	0	362,964	0	0	0	5,456	03/22/2037	1.E FE
74951P-DQ-8	RESI Finance LP 2005-A-RESIF 2005-A B3	D.....	05/10/2024	PAYDOWN		2,731	536,818	237,968	(18,975)	0	21,705	0	21,705	0	2,731	0	0	0	13,551	03/10/2037	1.A FM
75009L-AA-4	Rad CLO 16 Ltd-RAD 2022-16A A1	D.....	05/21/2024	PAYDOWN		26,397,315	25,500,000	25,500,000	25,500,000	0	0	0	0	0	26,397,315	0	0	0	1,173,583	10/15/2034	1.A FE
75973H-AA-5	Renew 2023-1-RENEW 2023-1A A	C.....	06/20/2024	PAYDOWN		452,638	452,638	425,571	429,394	0	23,245	0	23,245	0	452,638	0	0	0	7,641	11/20/2058	1.A FE
761923-AA-9	REVL 2023-2 Ltd-REVL 2023-2A A1	C.....	06/01/2024	PAYDOWN		529,161	529,161	529,161	529,161	0	0	0	0	0	529,161	0	0	0	23,831	10/01/2048	1.E PL
761923-AB-7	REVL 2023-2 Ltd-REVL 2023-2A A2	C.....	06/01/2024	PAYDOWN		1,280,175	1,280,175	1,280,175	1,280,175	0	0	0	0	0	1,280,175	0	0	0	56,832	02/01/2049	1.E PL
77879R-AB-2	Rotor Engines Securitiza-ROTOR 2011-1A A	D.....	06/15/2024	PAYDOWN		463,001	463,001	453,741	456,943	0	6,058	0	6,058	0	463,001	0	0	0	19,279	06/15/2046	5.A FE
83438J-AA-4	Soloso CDO 2007-1 Ltd-SERIES 2007-1A CLA	D.....	04/08/2024	PAYDOWN		206,811	206,811	190,524	193,046	0	13,764	0	13,764	0	206,811	0	0	0	6,721	10/07/2037	1.E FE
84859B-AB-7	Spirit Loyalty Cayman Lt-FIRST LIEN	D.....	04/01/2024	SIMC 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	5.B FE
85572R-AA-7	Start Ltd/Bermuda-STARR 2018-1 A	D.....	06/15/2024	PAYDOWN		332,262	332,262	331,243	331,736	0	526	0	526	0	332,262	0	0	0	5,672	05/15/2043	1.G FE
85573L-AA-9	START Ireland-STARR 2019-1 A	D.....	06/15/2024	PAYDOWN		94,929	94,929	94,925	94,929	0	1	0	1	0	94,929	0	0	0	1,620	03/15/2044	2.A FE
87244C-AJ-5	TIAA Churchill Middle Ma-CHMIL 2016-1A A	D.....	04/22/2024	PAYDOWN		1,790,950	1,790,950	1,790,950	1,790,950	0	0	0	0	0	1,790,950	0	0	0	72,057	10/20/2030	1.A FE
87248K-AJ-3	TICOP CLO V 2016-1 Ltd-TICOP 2016-5A AIR	D.....	04/17/2024	PAYDOWN		607,262	607,262	591,473	596,541	0	10,721	0	10,721	0	607,262	0	0	0	22,296	07/17/2031	1.A FE
87249Q-AC-4	TICOP CLO XI Ltd-TICOP 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	1.B FE
87268R-AA-2	TruPS Financials Note Se-TFINS 2019-2A A	D.....	05/28/2024	PAYDOWN		2,759	2,759	2,759	2,759	0</											

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Identification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..98944P-AB-3	Zephyrus Capital Aviatio-ZCAP 2018-1 A	C.....	06/15/2024	PAYDOWN		284,325	284,325	280,113	282,602	0	1,723	0	1,723	0	284,325	0	0	0	5,706	10/15/2038	2.B FE
..D63035-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	3.B FE
..G0457J-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	115	08/15/2026	5.C FE
..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	12,651	7,354	20,005	8,859	08/28/2025	4.B Z
..P4900*-AA-4	Gran Americas Usme Provi Senior Secured	D.....	05/31/2024	SINKING PAYMENT		163,922	163,922	163,922	163,922	0	0	0	0	0	163,922	0	0	0	7,180	03/31/2031	2.B PL
..P4900*-AB-2	Gran Americas Usme Provi Senior Secured	D.....	05/31/2024	SINKING PAYMENT		14,578	14,578	14,578	14,578	0	0	0	0	0	14,578	0	0	0	642	03/31/2031	2.B PL
..R0000V-AB-8	Adevinta ASA-SECURED	B.....	05/29/2024	CALL 100.65625		217,740	216,320	194,159	214,808	0	1,350	0	1,350	(16,204)	199,954	11,388	6,397	17,785	221	11/15/2025	3.C FE
..U2214W-AB-3	Ardagh Packaging Finance-FIRST LIEN	D.....	05/23/2024	DEUTSCHE BANK AG		530,548	650,580	517,995	593,592	0	9,876	0	9,876	(43,474)	559,993	31,639	(61,085)	(29,446)	461	08/15/2026	4.C FE
..Y5008*-AA-2	Knausen Holding LLC Senior Secured Notes	D.....	04/15/2024	SINKING PAYMENT		752,400	752,400	752,400	752,400	0	0	0	0	0	752,400	0	0	0	21,287	07/15/2027	2.B FE
..72303#-AA-7	.....		05/30/2024	PRINCIPAL REPAYMENT		536,742	0	0	0	0	0	0	0	0	536,742	0	0	0	0	12/31/2031	1.E PL
..83416W-AA-1	Solar Star Funding LLC	D.....	06/30/2024	SINKING PAYMENT		75,226	0	0	0	0	0	0	0	0	75,226	0	0	0	0	06/30/2035	2.B Z
1109999999. Subtotal - Bonds - Industrial and Miscellaneous (Unaffiliated)						1,203,369,100	1,217,513,604	1,199,256,020	1,191,714,579	141,651	6,056,998	(296,247)	6,494,896	(148,114)	1,217,586,251	111,630	(14,328,786)	(14,217,156)	37,311,228	XXX	XXX
..25746U-DD-8	Dominion Energy Inc-D 4.65 PERP	D.....	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	2.C FE
..62582P-AA-8	Muenchener Rueckversiche-SUBORDINATED	D.....	05/15/2024	GOLDMAN		194,963	195,000	195,000	195,000	0	0	0	0	0	195,000	0	(37)	(37)	5,537	05/23/2042	1.F FE
1309999999. Subtotal - Bonds - Hybrid Securities						3,187,463	3,195,000	2,970,000	2,969,951	0	32	0	32	0	2,969,982	0	217,481	217,481	71,800	XXX	XXX
..06761C-AL-3	Barings CLO Ltd 2016-II-BABSN 2016-2A AR	D.....	04/22/2024	PAYDOWN		1,075,511	1,075,511	1,052,388	1,054,393	0	21,118	0	21,118	0	1,075,511	0	0	0	37,026	01/20/2032	1.A
..06763B-AE-9	Babson CLO Ltd/Cayman Is-BABSN LP-2A C	D.....	05/23/2024	VARIOUS		20,054,000	20,000,000	20,000,000	20,000,000	0	0	0	0	0	20,000,000	0	54,000	54,000	948,115	01/20/2034	1.F
..06763C-AE-7	Babson CLO Ltd/Cayman Is-BABSN LP-2A D	D.....	04/20/2024	PAYDOWN		3,316,050	3,316,050	3,316,050	3,316,050	0	0	0	0	0	3,316,050	0	0	0	37,334	01/20/2034	2.C
..067930-AA-5	Barings Private Credit C-BPCC 2023-1A 1A1	D.....	04/15/2024	PAYDOWN		4,395,080	4,395,080	4,395,080	4,395,080	0	0	0	0	0	4,395,080	0	0	0	226,209	07/15/2031	1.A
1509999999. Subtotal - Bonds - Parent, Subsidiaries and Affiliates						28,840,641	28,786,641	28,763,518	28,765,523	0	21,118	0	21,118	0	28,786,641	0	54,000	54,000	1,248,684	XXX	XXX
..00177#-AA-1	AMF Levered II, LLC - Revolver	D.....	06/07/2024	CA_CASH_CLOSE		1,602,967	1,602,967	1,602,967	1,602,967	0	0	0	0	0	1,602,967	0	0	0	42,155	03/26/2031	1.C PL
..00221*-AB-9	ASC Communications LLC 2022 Term Loan	D.....	04/18/2024	VARIOUS		733,786	733,786	721,972	721,972	0	0	0	0	0	721,972	0	11,814	11,814	39,398	07/15/2027	4.B
..00233#-AA-3	ATL II MRO Holdings Inc. - Senior Term L	D.....	06/28/2024	CA_CASH_CLOSE		3,183	3,183	3,103	3,103	0	0	0	0	0	3,103	0	80	80	528	11/01/2028	5.B GI
..00233#-AB-1	ATL II MRO HLDGS INC 1ST AMEND TERM LN	D.....	06/28/2024	CA_CASH_CLOSE		2,463	2,463	2,401	0	0	0	0	0	0	2,401	0	62	62	58	11/08/2028	4.C Z
..00241#-AA-5	AMF ENDEAVOUR, LLC, - Senior Secured Loa	D.....	06/07/2024	CA_CASH_CLOSE		2,271,364	2,271,364	2,271,364	2,271,364	0	0	0	0	0	2,271,364	0	0	0	62,166	10/02/2033	1.F PL
..00242*-AC-2	AirX Climate Solutions Inc - Term Loan	D.....	06/28/2024	CA_CASH_CLOSE		1,467	1,467	1,430	1,430	0	0	0	0	0	1,430	0	37	37	87	11/07/2029	4.C Z
..00452#-AA-7	Accommodations Plus Technologies LLC/Ter	D.....	04/04/2024	VARIOUS		6,340	6,340	6,340	6,340	0	0	0	0	0	6,340	0	0	0	(1,800)	05/11/2025	4.B PL
..00453#-AB-6	Accurus Aerospace Corporation - 2022 A-1	D.....	06/28/2024	CA_CASH_CLOSE		19,994	19,994	19,694	19,694	0	0	0	0	0	19,694	0	300	300	1,884	04/05/2028	5.A
..00517#-AA-2	AD BIDCO INC INITIAL TERM LN	D.....	06/28/2024	CA_CASH_CLOSE		1,503	1,503	1,465	0	0	0	0	0	0	1,465	0	38	38	7	03/13/2030	5.B GI
..00751#-AA-7	ADVANCED BIOLOGICS LLC TERM A LN	D.....	04/01/2024	CA_CASH_CLOSE		1,093	1,093	1,065	1,065	0	0	0	0	0	1,065	0	27	27	57	10/17/2028	4.C Z
..00777Y-AC-0	Adviser Investments - 2022 Delayed Draw	D.....	05/30/2024	CA_CASH_CLOSE		453	453	453	453	0	0	0	0	0	453	0	0	0	37	08/31/2028	4.C Z
..00777Y-AD-8	Adviser Investments - 2022 1st Lien Term	D.....	06/30/2024	CA_CASH_CLOSE		1,095	1,095	1,073	1,073	0	0	0	0	0	1,073	0	22	22	84	08/31/2028	4.C Z
..00797*-AA-5	Aero Operating LLC/Term Loan 1/20	D.....	04/01/2024	CA_CASH_CLOSE		1,095	1,095	1,095	1,095	0	0	0	0	0	1,095	0	0	0	459	02/07/2026	3.A PL
..00797*-AB-3	Aero Operating LLC/Delayed Draw Term Loa	D.....	04/01/2024	CA_CASH_CLOSE		6	6	6	6	0	0	0	0	0	6	0	0	0	161	02/07/2026	3.A PL
..00843#-AA-7	AffiniPay Midco, LLC/Term Loan 2/20	D.....	04/01/2024	VARIOUS		736	736	736	736	0	0	0	0	0	736	0	0	0	9,432	03/02/2026	3.B PL
..00843#-AB-5	AFFINIPAY MIDCO LLC - INCREMENTAL TERM	D.....	04/01/2024	CA_CASH_CLOSE		74	74	74	74	0	0	0	0	0	74	0	0	0	3	03/02/2026	3.B PL
..00843#-AC-3	AFFINIPAY MIDCO LLC - 2ND AMENDMENT TL	D.....	04/01/2024	VARIOUS		183	183	183	183	0	0	0	0	0	183	0	0	0	2,383	03/02/2026	3.B PL
..00910#-AG-0	Air Comm Corporation LLC - 2021 Incremen	D.....	06/28/2024	CA_CASH_CLOSE		12,500	12,500	12,500	12,500	0	0	0	0	0	12,500	0	0	0	1,655	06/01/2027	4.B PL
..00911#-AA-6	Air Comm Corporation LLC - 2023 Increme	D.....	06/28/2024	CA_CASH_CLOSE		648	648	648	648	0	0	0	0	0	648	0	0	0	44	07/01/2027	4.B PL
..02124T-AA-1	Qatar Airways Senior Term Loa	D.....	05/15/2024	CA_CASH_CLOSE		585,051	585,051	582,718	582,718	0	0	0	0	0	582,718	0	2,333	2,333	17,256	05/06/2031	1.D PL
..03233#-AA-1	Amtech Software - Term Loan	D.....	06/21/2024	CA_CASH_CLOSE		2,672,727	2,672,727	2,672,727	2,672,727	0	0	0	0	0	2,672,727	0	0	0	227,490	11/02/2027	5.A
..03233#-AC-7	Amtech Software - Delayed Draw Term Loan	D.....	06/21/2024	CA_CASH_CLOSE		904,545	904,545	904,545	904,545	0	0	0	0	0	904,545	0	0	0	97,137	11/02/2027	5.A
..03272*-AA-3	ANAQUA PARENT HOLDINGS INC. - TERM LOAN	D.....	06/28/2024	CA_CASH_CLOSE		376	376	376	376	0	0	0	0	0	376	0	0	0	198	04/10/2026	3.B PL
..03272*-AB-1	ANAQUA PARENT HOLDINGS INC. - DELAYED D	D.....	06/28/2024	CA_CASH_CLOSE		105	105	105	105	0	0	0	0	0	105	0	0	0	22	04/10/2026	3.B PL
..04250#-AC-9	ARMSTRONG TRANS GROUP LLC / MAXFRB LLC T	D.....	05/24/2024	CA_CASH_CLOSE		793,897	793,897	776,128	771,987	0	0	0	0	0	776,128	0	17,770	17,770	70,244	10/31/2024	4.C
..04940J-AB-9	Atlas Securitized Products Funding 1 LP	D.....	06/03/2024	CA_CASH_CLOSE		26,232,172	26,232,172	25,964,227	0	0	0	0	0	0	25,964,227	0	267,946	267,946	0	05/25/2063	1.G PL
..04940J-AC-7	Atlas Securitized Products Funding 1 LP	D.....	06/03/2024	CA_CASH_CLOSE		12,834,821	12,834,821	12,780,730	0	0	0	0	0	0	12,780,730	0	54,091	54,091	0	05/25/2063	1.G PL

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STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Identification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..049650-AA-1	Atreides Funding Trust - Pass-Through In ...		06/18/2024	CA_CASH_CLOSE		2,091,374	2,091,374	2,091,374	2,091,374	0	0	0	0	0	2,091,374	0	0	0	5,249	11/18/2083	1.G PL
..054640-AA-2	Axiom Merger Sub Inc./Facility B Term Lo ...		04/29/2024	CA_CASH_CLOSE		3,516	3,516	3,389	3,439	0	0	0	0	0	3,439	0	77	77	486	04/10/2026	3.B PL
..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	75,051	10/20/2027	1.E PL
..05631*-AC-0	BREDIF MM LSA LLC - Term Loan Series 202		04/11/2024	CA_CASH_CLOSE		6,347,367	6,347,367	6,347,367	6,347,367	0	0	0	0	0	6,347,367	0	0	0	120,266	10/20/2027	1.E PL
..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	30,548	10/01/2025	1.E PL
..056340-AB-7	BSI3 Hold Teal Inc. - First Lien Term Lo ...		06/28/2024	CA_CASH_CLOSE		114,583	114,583	114,583	114,583	0	0	0	0	0	114,583	0	0	0	9,747	08/21/2028	2.C PL
..066830-AB-5	BANYAN SOFTWARE HOLDINGS LLC - DELAYED		04/15/2024	VARIOUS		(600)	(600)	(600)	(600)	0	0	0	0	0	(600)	0	0	0	(10,057)	10/30/2026	3.B PL
..07363*-AD-8	BEACON MOBILITY CORP AMEND NO 4 DDTL		05/30/2024	CA_CASH_CLOSE		13,201	13,201	13,201	13,201	0	0	0	0	0	13,201	0	0	0	1,105	06/28/2024	4.C
..088900-AA-2	Beyond Risk - Term Loan		04/18/2024	BANK LOANS BARINGS		1,558,773	1,564,248	1,532,963	1,534,138	0	0	0	0	0	1,534,138	0	24,635	24,635	113,349	10/08/2027	4.C
..088900-AB-0	Beyond Risk - Delayed Draw Term Loan		06/28/2024	CA_CASH_CLOSE		8,001	8,001	8,001	8,001	0	0	0	0	0	8,001	0	0	0	0	0	0
..091730-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	98,704	11/22/2026	4.C
..10483*-AC-9	BRAGG LIVE FOOD PRODUCTS LLC - TERM LOAN		06/28/2024	CA_CASH_CLOSE		125,211	125,211	125,211	125,211	0	0	0	0	0	125,211	0	0	0	28,903	12/29/2025	3.A PL
..10947U-AC-2	BrightSign - Term Loan		06/28/2024	CA_CASH_CLOSE		5,580	5,580	5,524	5,526	0	0	0	0	0	5,526	0	54	54	1,106	10/14/2027	3.A PL
..124640-AA-0	CAI Software - Term Loan		06/28/2024	CA_CASH_CLOSE		9,873	9,873	9,676	9,676	0	0	0	0	0	9,676	0	197	197	1,477	12/10/2028	5.A
..127560-AA-7	Cogeneity Global - Term Loan		06/28/2024	CA_CASH_CLOSE		11,122	11,122	10,900	10,900	0	0	0	0	0	10,900	0	222	222	5,340	02/14/2028	4.C
..127560-AB-5	CGI PARENT LLC 1st AMEND TERM LOAN		06/28/2024	CA_CASH_CLOSE		1,223	1,223	1,186	1,186	0	0	0	0	0	1,186	0	37	37	102	02/14/2028	4.C
..12759*-AA-2	CELIF SPV LLC - Revolving Senior Secured		06/04/2024	CA_CASH_CLOSE		14,285,714	14,285,714	14,285,714	14,285,714	0	0	0	0	0	14,285,714	0	0	0	512,181	12/20/2029	1.F PL
..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	69,871	02/07/2028	1.F PL
..14318*-AA-6	CARLYLE SECURED LENDING III SPV, - Senio		06/21/2024	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	17,291	09/30/2030	2.A PL
..000000-00-0	Kellermeyer Bergensons Services, LLC - 2		06/30/2024	BANK LOANS BARINGS		144,484	144,484	144,484	0	0	0	0	0	0	144,484	0	0	0	0	11/09/2026	4.A Z
..16117L-BW-8	Charter Communications O-CHTR TL B1 1L U		06/28/2024	CA_CASH_CLOSE		19,235	19,235	16,349	17,303	0	0	0	0	0	17,303	0	1,931	1,931	1,125	04/30/2025	2.C FE
..16117L-CB-3	Charter Communications I TL B-4 due Dece		06/28/2024	CA_CASH_CLOSE		13,532	13,532	13,464	13,464	0	0	0	0	0	13,464	0	68	68	304	11/30/2030	2.C FE
..185390-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	327,758	07/14/2028	5.A
..185390-AA-8	Cleaver-Brooks Inc - 2022 Fixed PIK Term		05/15/2024	CA_CASH_CLOSE		728,688	728,688	713,795	690,763	0	0	0	0	0	713,795	0	14,893	14,893	0	07/14/2029	5.B GI
..20470*-AB-5	Comply365 - 2023 Incremental Term Loan		06/28/2024	CA_CASH_CLOSE		918	918	900	900	0	0	0	0	0	900	0	18	18	37	12/21/2029	4.C Z
..23344U-AC-4	DS Admiral Bidco LLC-DSADBI TL 1L USD		04/22/2024	CA_CASH_CLOSE		(39,375)	(39,375)	(39,375)	(39,375)	0	0	0	0	0	(39,375)	0	0	0	2,190	03/16/2028	3.A PL
..23345U-AB-5	Disa Holdings Corp. - Delayed Draw Term		04/01/2024	CA_CASH_CLOSE		178	178	178	178	0	0	0	0	0	178	0	0	0	8	09/09/2028	3.A PL
..23345U-AD-1	Disa Holdings Corp. - Term Loan A		04/01/2024	CA_CASH_CLOSE		1,066	1,066	1,034	1,034	0	0	0	0	0	1,034	0	32	32	61	09/09/2028	3.A PL
..233630-AB-5	DRS Holdings III Inc./Term Loan 11/19		05/09/2024	CA_CASH_CLOSE		1,248	1,248	1,248	1,248	0	0	0	0	0	1,248	0	0	0	72	11/01/2025	3.A PL
..233630-AC-3	DRS HOLDINGS III INC. - 2021 TERM LOAN		05/09/2024	CA_CASH_CLOSE		880	880	880	880	0	0	0	0	0	880	0	0	0	76	11/01/2025	3.A PL
..243600-AA-6	DECOPAC INC. - TERM B LOAN		06/28/2024	CA_CASH_CLOSE		1,493	1,493	1,493	1,493	0	0	0	0	0	1,493	0	0	0	1,775	05/15/2028	3.B PL
..248230-AA-1	DENALI HOLDCO LLC		04/02/2024	CA_CASH_CLOSE		938	938	938	938	0	0	0	0	0	938	0	0	0	654	09/15/2027	3.B PL
..254030-AN-6	DILIGENT CORPORATION (FKA DIAMOND MERGER		04/30/2024	CA_CASH_CLOSE		2,714,250	2,714,250	2,714,250	2,714,250	0	0	0	0	0	2,714,250	0	0	0	403,414	08/04/2025	3.C PL
..254030-AR-7	DILIGENT CORPORATION		04/30/2024	CA_CASH_CLOSE		37,519	37,519	37,519	37,519	0	0	0	0	0	37,519	0	0	0	2,654	08/04/2025	3.C PL
..254030-AT-3	DILIGENT CORPORATION (FKA DIAMOND MERGER		04/30/2024	CA_CASH_CLOSE		181,875	181,875	180,056	180,389	0	0	0	0	0	180,389	0	1,486	1,486	51,211	08/04/2025	3.C PL
..254030-AU-0	DILIGENT CORPORATION (FKA DIAMOND MERGER		04/30/2024	CA_CASH_CLOSE		181,875	181,875	181,875	181,875	0	0	0	0	0	181,875	0	0	0	27,270	08/04/2025	3.C PL
..254030-AW-6	Diligent Corporation - 2022 Delayed Draw		04/30/2024	CA_CASH_CLOSE		59,976	59,976	59,976	59,976	0	0	0	0	0	59,976	0	0	0	9,404	08/04/2025	3.C PL
..26745L-AC-2	Dwyer Instruments Inc - Term Loan		06/28/2024	CA_CASH_CLOSE		6,752	6,752	6,617	6,617	0	0	0	0	0	6,617	0	135	135	954	07/01/2027	5.A
..26745L-AE-8	Dwyer Instruments Inc - 2023 Incremental		06/30/2024	CA_CASH_CLOSE		(899)	(899)	(881)	(881)	0	0	0	0	0	(881)	0	(18)	(18)	0	07/21/2027	4.C Z
..267890-AA-6	DYNAMIC INC AEROSPACE HOLDINGS LLC - TER		04/01/2024	CA_CASH_CLOSE		3,364	3,364	3,364	3,364	0	0	0	0	0	3,364	0	0	0	1,004	12/30/2026	2.C PL
..268690-AA-1	Standard Elevator Systems - Term Loan		06/28/2024	CA_CASH_CLOSE		7,458	7,458	7,308	7,310	0	0	0	0	0	7,310	0	147	147	791	12/02/2027	5.B GI
..268690-AB-9	Standard Elevator Systems - Delayed Draw		06/28/2024	CA_CASH_CLOSE		1,943	1,943	1,943	1,943	0	0	0	0	0	1,943	0	0	0	414	12/02/2027	5.B GI
..268870-AB-7	EP HEALTH ADVISORS LLC - DELAYED DRAW T		06/13/2024	CA_CASH_CLOSE		(1,305)	(1,305)	(1,305)	(1,305)	0	0	0	0	0	(1,305)	0	0	0	487	09/04/2026	1.G PL
..268880-AA-0	EPS Nass Parent Inc. - Term Loan		06/30/2024	CA_CASH_CLOSE		2,285	2,285	2,285	2,285	0	0	0	0	0	2,285	0	0	0	444	04/19/2028	2.C PL
..268880-AB-8	EPS Nass Parent Inc. - Delayed Draw Term		05/23/2024	CA_CASH_CLOSE		25,078	25,078	25,078	25,078	0	0	0	0	0	25,078	0	0	0	1,245	04/19/2028	3.A PL
..28619*-AA-2	ELEMICA PARENT INC. - DELAYED DRAW TERM		05/17/2024	CA_CASH_CLOSE		229,209	229,209	229,209	229,209	0	0	0	0	0	229,209	0	0	0	24,534	09/18/2025	3.B PL

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Identification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..28619*-AB-0	Elemica Parent Inc./Term Loan 9/19		05/17/2024	CA_CASH_CLOSE		1,168,948	1,168,948	1,139,724	1,150,829	0	0	0	0	0	1,150,829	0	18,118	18,118	190,888	09/18/2025	3.B PL
..28619*-AC-8	ELEMICA PARENT INC. - AMENDMENT NO. 1 T		05/17/2024	CA_CASH_CLOSE		128,488	128,488	128,488	128,488	0	0	0	0	0	128,488	0	0	0	13,752	09/18/2025	3.B PL
..28619*-AD-6	ELEMICA PARENT INC. - AMENDMENT NO. 1 D		05/17/2024	CA_CASH_CLOSE		332,994	332,994	332,994	332,994	0	0	0	0	0	332,994	0	0	0	53,804	09/18/2025	5.B GI
..28622@-AB-3	ELEVATION SERVICES PARENT HOLDINGS LLC		04/04/2024	CA_CASH_CLOSE		(1,153)	(1,153)	(1,153)	(1,153)	0	0	0	0	0	(1,153)	0	0	0	141	12/18/2026	3.A PL
..28931@-AB-9	Macon County Georgia School District - B		06/13/2024	CA_CASH_CLOSE		3,871,043	3,871,043	3,832,843	3,796,848	0	0	0	0	0	3,847,890	0	23,152	23,152	229,335	03/06/2025	2.B PL
..29251@-AB-9	Encina Business Credit SPV LLC Revolving		06/26/2024	CA_CASH_CLOSE		8,480,000	8,480,000	8,480,000	0	0	0	0	0	0	8,480,000	0	0	0	148,517	07/07/2028	2.B PL
..29427*-AA-2	Goldcup 17308 AB/USD Term Loan 10/18		06/28/2024	CA_CASH_CLOSE		7,344	7,344	7,178	7,266	0	0	0	0	0	7,266	0	78	78	668	04/09/2026	3.C PL
..29643*-AC-6	EShipping LLC DDTL		06/28/2024	CA_CASH_CLOSE		737	737	737	737	0	0	0	0	0	737	0	0	0	1,086	11/05/2027	4.C
..29668@-AA-6	ESSENTIAL SERVICES HOLDING CORPORATION -		04/02/2024	CA_CASH_CLOSE		16,375	16,375	16,375	16,375	0	0	0	0	0	16,375	0	0	0	212	11/16/2026	3.B PL
..29668@-AB-4	ESSENTIAL SERVICES HOLDING CORPORATION -		06/17/2024	CA_CASH_CLOSE		1,357,265	1,357,265	1,357,265	1,357,265	0	0	0	0	0	1,357,265	0	0	0	0	11/16/2026	3.B PL
..29668@-AC-2	ESSENTIAL SERVICES HOLDING CORPORATION -		06/17/2024	CA_CASH_CLOSE		1,021,906	1,021,906	1,021,906	1,021,906	0	0	0	0	0	1,021,906	0	0	0	0	11/16/2026	3.B PL
..30301*-AA-1	FS CREIT FINANCE MM-1 LLC - Secured Term		06/30/2024	CA_CASH_CLOSE		(101,250)	(101,250)	(101,250)	(101,250)	0	0	0	0	0	(101,250)	0	0	0	(1,975)	09/20/2029	1.F PL
..30319*-AA-1	FSS Buyer LLC Initial Term Loan		06/28/2024	CA_CASH_CLOSE		18,633	18,633	18,260	18,278	0	0	0	0	0	18,278	0	355	355	4,029	08/31/2028	4.C
..31168@-AA-9	Fasanara Apex 3 12/22/25		05/15/2024	CA_CASH_CLOSE		4,854,818	4,854,818	4,858,987	4,858,987	0	0	0	0	0	4,858,987	0	(4,169)	(4,169)	140,085	12/22/2025	2.C PL
..34960@-AC-7	Fortis Payment Systems LLC - 2022 Term L		06/28/2024	CA_CASH_CLOSE		3,129	3,129	3,019	3,019	0	0	0	0	0	3,019	0	110	110	338	02/13/2026	4.C
..34960@-AD-5	FORTIS PAYMENT SYSTEMS LLC 10TH AMEND DO		06/28/2024	CA_CASH_CLOSE		1,070	1,070	1,048	0	0	0	0	0	0	1,048	0	21	21	21	02/13/2026	4.C
..34960@-AE-3	Fortis Payment Systems LLC 10TH AMEND TE		06/28/2024	CA_CASH_CLOSE		22	22	22	0	0	0	0	0	0	22	0	0	0	1	02/13/2026	4.C
..34962@-AB-6	Fortis Payment Systems LLC - 2022 Delaye		06/28/2024	CA_CASH_CLOSE		1,838	1,838	1,838	1,838	0	0	0	0	0	1,838	0	0	0	473	02/13/2026	4.C
..35042@-AC-6	FOUNDATION CONSUMER BRANDS LLC - TERM L		05/02/2024	CA_CASH_CLOSE		2,387	2,387	2,387	2,387	0	0	0	0	0	2,387	0	0	0	243	10/01/2026	2.C PL
..35042@-AA-2	Foundation Finance Trust - Fixed Class A		06/15/2024	CA_CASH_CLOSE		5,322,875	5,322,875	5,306,854	5,306,854	0	0	0	0	0	5,306,854	0	16,021	16,021	263,625	10/15/2042	1.A PL
..36457W-AD-3	GALWAY BORROWER LLC - CLOSING DATE TERM		04/04/2024	CA_CASH_CLOSE		937	937	937	937	0	0	0	0	0	937	0	0	0	25	09/29/2028	3.B PL
..000000-00-0	GLOBAL CRITICAL LOGISTICS LLC USD 7TH AM		04/18/2024	BANK LOANS BARINGS		1,290,103	1,309,749	1,290,103	0	0	0	0	0	0	1,290,103	0	0	0	0	0	4.C Z
..38870@-AG-8	GraphPad Software Inc. ProteinMetrics In		06/28/2024	CA_CASH_CLOSE		3,187,500	3,187,500	3,155,625	3,156,109	0	0	0	0	0	3,156,109	0	31,391	31,391	263,081	04/27/2027	5.A
..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	100,232	04/27/2027	4.C Z
..40348@-AB-9	Gutter Buyer, Inc. - Term Loan Tranche A		06/13/2024	CA_CASH_CLOSE		859,114	845,343	1,339,923	1,319,511	0	0	0	0	0	1,341,652	0	(482,537)	(482,537)	84,855	03/08/2025	3.B PL
..40476@-AB-5	Hanley Wood LLC - 2021 Incremental Term		06/28/2024	CA_CASH_CLOSE		20,254	20,254	19,849	19,854	0	0	0	0	0	19,854	0	401	401	1,614	12/10/2024	4.C
..40476@-AC-3	Hanley Wood LLC - 2021 Delayed Draw Term		06/28/2024	CA_CASH_CLOSE		2,743	2,743	2,743	2,743	0	0	0	0	0	2,743	0	0	0	227	12/10/2024	4.C
..40487*-AC-2	HV Voyage L.P. - 1st Lien Term Loan (Par		05/30/2024	CA_CASH_CLOSE		72,922	72,922	72,922	72,922	0	0	0	0	0	72,922	0	0	0	0	0	1.6 PL
..40490@-AA-9	HTI Technology & Industries - 2022 Term		06/10/2024	CA_CASH_CLOSE		15,758	15,758	15,521	15,521	0	0	0	0	0	15,521	0	236	236	2,259	07/07/2025	5.A
..40490@-AB-7	HTI Technology & Industries - 2022 Delay		06/10/2024	CA_CASH_CLOSE		3,385	3,385	51	51	0	0	0	0	0	51	0	3,334	3,334	443	07/07/2025	5.A
..40490@-AB-1	HTI Technology & Industries - 2023 Incre		06/10/2024	CA_CASH_CLOSE		6,546	6,546	6,350	6,350	0	0	0	0	0	6,350	0	196	196	920	07/27/2025	5.A
..40490@-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	1,148	07/27/2025	5.A
..40494@-AA-3	HXSG Intermediary 2 LLC - Term Loan		06/28/2024	CA_CASH_CLOSE		3,113	3,113	3,051	3,051	0	0	0	0	0	3,051	0	62	62	231	11/28/2029	4.C Z
..40494@-AB-1	HXSG INTERMEDIARY 2 LLC INITIAL DDTL		06/28/2024	CA_CASH_CLOSE		140	140	140	0	0	0	0	0	0	140	0	0	0	9	11/28/2029	4.C Z
..41902@-AA-9	Sigma Electric Manufacturing Corporation		04/05/2024	CA_CASH_CLOSE		1,639,032	1,639,032	1,606,120	1,627,887	0	73	0	73	0	1,627,887	0	11,145	11,145	247,521	10/31/2024	3.A Z
..41902@-AB-7	Sigma Electric Manufacturing Corporation		04/05/2024	CA_CASH_CLOSE		728,355	728,355	721,072	725,136	0	11	0	11	0	725,136	0	3,220	3,220	74,922	10/31/2024	3.A Z
..42258@-AA-7	HEAVY CONSTR SYS SPECIALISTS LLC INITIAL		06/28/2024	VARIOUS		2,498,931	2,509,449	2,459,260	2,460,246	0	0	0	0	0	2,460,246	0	38,685	38,685	113,327	11/16/2026	3.A
..42328@-AG-3	Helios Software Holdings EUR TLB (Mar'21		05/02/2024	CA_CASH_CLOSE		149,292	149,292	124,655	143,337	0	0	0	0	(18,681)	124,655	14,186	10,450	24,636	2,040	03/11/2028	4.B FE
..42981@-AA-9	HIGH STREET BUYER INC. - DELAYED DRAW I		06/28/2024	CA_CASH_CLOSE		197	197	197	197	0	0	0	0	0	197	0	0	0	802	04/14/2028	3.B PL
..42983@-AC-3	HIGH STREET BUYER INC. - DELAYED DRAW T		06/28/2024	CA_CASH_CLOSE		598	598	598	598	0	0	0	0	0	598	0	0	0	730	04/14/2028	3.B PL
..44961*-AB-1	Implus Footcare LLC/Initial Term Loan 0		05/17/2024	CA_CASH_CLOSE		197	197	197	197	0	0	0	0	0	197	0	0	0	725	07/31/2025	3.C PL
..45054@-AA-6	ITI Intermodal - Term Loan		06/28/2024	CA_CASH_CLOSE		3,237	3,237	3,168	3,168	0	0	0	0	0	3,168	0	69	69	253	12/20/2027	3.A PL
..45054@-AB-4	ITI Intermodal INC - Delayed Draw Term L		06/28/2024	CA_CASH_CLOSE		462	462	462	462	0	0	0	0	0	462	0	0	0	41	12/21/2027	3.A PL
..45054@-AD-0	ITI Intermodal Inc. - 2023 Incremental T		06/28/2024	CA_CASH_CLOSE		945	945	916	916	0	0	0	0	0	916	0	28	28	112	12/20/2027	3.A PL
..45054@-AE-8	ITI Intermodal Inc. - 2023 Columbia Dela		06/28/2024	CA_CASH_CLOSE		499	499	499	499	0	0	0	0	0	499	0	0	0	74	12/21/2027	3.A PL
..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	5.A

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Identification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..45321*-AA-5	Implus Footcare LLC/Spenco Incremental		05/17/2024	CA_CASH_CLOSE		(343)	(343)	(342)	(344)	0	1	0	1	0	(343)	0	0	0	140	07/31/2025	3.C PL
..45686@-AB-0	Infrastripe LLC		06/28/2024	CA_CASH_CLOSE		6,245	6,245	6,141	6,183	0	0	0	0	0	6,183	0	62	62	377	09/30/2024	3.A PL
..45686@-AC-8	Infrastripe LLC Delayed Draw		06/28/2024	CA_CASH_CLOSE		4,148	4,148	4,148	4,148	0	0	0	0	0	4,148	0	0	0	250	09/30/2024	3.A PL
..46126#-AA-6	IntraPac International LLC/U.S. Term Loa		06/28/2024	CA_CASH_CLOSE		2,826	2,826	2,762	2,789	0	0	0	0	0	2,789	0	37	37	595	01/11/2026	3.B PL
..46126#-AB-4	INTRAPAC PARENT INC. - FIRST AMENDMENT T		06/28/2024	CA_CASH_CLOSE		366	366	366	366	0	0	0	0	0	366	0	0	0	1,050	01/11/2026	3.B PL
..47235#-AA-2	JEFFERIES DIRECT LENDING FUND II SPE LLC		06/03/2024	CA_CASH_CLOSE		2,362,799	2,362,799	2,362,799	2,362,799	0	0	0	0	0	2,362,799	0	0	0	39,254	06/17/2031	2.C PL
..47236#-AA-1	JEFFERIES DIRECT LENDING OFFSHORE FD II		06/25/2024	CA_CASH_CLOSE		2,193,438	2,193,438	2,193,438	2,193,438	0	0	0	0	0	2,193,438	0	0	0	41,254	06/17/2031	2.C PL
..47236#-AA-5	JEFFERIES DIRECT LENDING OFFSHORE FUND I		06/03/2024	CA_CASH_CLOSE		425,545	425,545	425,545	425,545	0	0	0	0	0	425,545	0	0	0	9,305	06/17/2031	2.C PL
..47236@-AA-3	JEFFERIES DIRECT LENDING FD II C SPE LLC		06/03/2024	CA_CASH_CLOSE		382,136	382,136	382,136	382,136	0	0	0	0	0	382,136	0	0	0	6,177	06/17/2031	2.C PL
..47237#-AA-0	JEFFERIES DIRECT LENDING OFFSHORE FUND I		06/25/2024	CA_CASH_CLOSE		2,168,813	2,168,813	2,168,813	2,168,813	0	0	0	0	0	2,168,813	0	0	0	26,297	06/17/2031	2.B PL
..48458@-AD-6	Kano Laboratories LLC - 2024 Incremental		06/28/2024	CA_CASH_CLOSE		4,396	4,396	4,308	0	0	0	0	0	0	4,308	0	88	88	108	11/19/2026	4.C Z
..48773#-AC-4	KELLERMAYER BERGENSONS SERVICES LLC - 2		05/20/2024	CA_CASH_CLOSE		638,256	638,256	638,256	638,256	0	0	0	0	0	638,256	0	0	0	33,620	11/07/2026	4.A PL
..48773#-AD-2	KELLERMAYER BERGENSONS SERVICES LLC - A		05/14/2024	CA_CASH_CLOSE		900,662	900,662	882,649	884,216	0	0	0	0	0	884,216	0	16,446	16,446	87,505	11/07/2026	4.B PL
..48773#-AF-7	Kellermeyer Bergensons Services, LLC - 2		06/30/2024	CA_CASH_CLOSE		1,287,815	1,287,815	1,287,815	0	0	0	0	0	0	1,287,815	0	0	0	0	11/07/2026	6. *
..49375@-AA-0	DistroKid Senior Term Loa		06/28/2024	CA_CASH_CLOSE		17,414	17,414	17,065	17,080	0	0	0	0	0	17,080	0	334	334	2,902	09/30/2027	5.A
..50541#-AE-7	LABORATORIES BIDCO LLC - DELAYED DRAW TE		04/15/2024	CA_CASH_CLOSE		(403)	(403)	(403)	(403)	0	0	0	0	0	(403)	0	0	0	179	07/23/2027	5.B GI
..51206#-AA-9	LAKERS BUYER INC. - TERM LOAN		06/03/2024	CA_CASH_CLOSE		(1,177)	(1,177)	(1,177)	(1,177)	0	0	0	0	0	(1,177)	0	0	0	376	03/22/2027	3.C PL
..51206#-AB-7	LAKERS BUYER INC. - INITIAL DELAYED DRA		06/03/2024	CA_CASH_CLOSE		(427)	(427)	(427)	(427)	0	0	0	0	0	(427)	0	0	0	242	03/22/2027	3.C PL
..52172*-AA-1	LeadsOnline - Term Loan		06/30/2024	CA_CASH_CLOSE		5,379	5,379	5,293	4,871	0	0	0	0	0	5,293	0	87	87	558	02/07/2028	5.A
..53173#-AA-4	LIDO ADVISORS LLC - INITIAL TERM LOAN		04/04/2024	CA_CASH_CLOSE		558	558	558	558	0	0	0	0	0	558	0	0	0	9	06/15/2027	2.C PL
..53173#-AB-2	LIDO ADVISORS LLC - DELAYED DRAW TERM L		04/04/2024	CA_CASH_CLOSE		698	698	698	698	0	0	0	0	0	698	0	0	0	39	06/15/2027	2.C PL
..53186*-AB-1	LIFE EXTENSION INSTITUTE INC RESTATEMENT		04/18/2024	VARIOUS		1,425,639	1,425,639	1,425,639	1,425,639	0	0	0	0	0	1,425,639	0	0	0	104,852	02/19/2026	5.A
..55183*-AC-7	Lynx Franchising LLC - 2021-09 Increment		06/28/2024	CA_CASH_CLOSE		7,378	7,378	7,231	7,231	0	0	0	0	0	7,231	0	148	148	1,372	12/23/2026	4.C
..55343@-AC-2	MUX VENTURE SENIOR TL L+1.682 04/30/2031		04/20/2024	CA_CASH_CLOSE		1,895,727	1,895,727	1,895,727	1,895,926	0	0	0	0	0	1,895,926	0	(199)	(199)	35,210	04/30/2031	1.D PL
..55343@-AF-5	MJX Venture Mgmt III LLC Senior TL		04/30/2024	CA_CASH_CLOSE		25,000	25,000	25,000	25,000	0	0	0	0	0	25,000	0	0	0	492	07/30/2032	1.F PL
..55343@-AG-3	MJX Venture Mgmt III LLC Senior TL		04/15/2024	CA_CASH_CLOSE		278,037	278,037	278,037	278,012	0	0	0	0	0	278,012	0	25	25	0	10/15/2031	1.C PL
..56629@-AA-9	MARCO NE YELLOWSTONE BUYER INC. - TERM LO		06/28/2024	CA_CASH_CLOSE		1,633	1,633	1,600	1,602	0	0	0	0	0	1,602	0	30	30	584	06/23/2028	3.C PL
..56629@-AB-7	MARCO NE YELLOWSTONE BUYER INC. - DELAYED		06/28/2024	CA_CASH_CLOSE		270	270	270	270	0	0	0	0	0	270	0	0	0	145	06/23/2028	3.C PL
..57233#-AB-1	Marshall Excelsior - Term Loan		06/28/2024	CA_CASH_CLOSE		1,144	1,144	1,124	1,124	0	0	0	0	0	1,124	0	20	20	254	02/18/2028	4.C
..59509#-AA-6	Micromeritics Instrument Corp./Term Loan		06/28/2024	CA_CASH_CLOSE		17,918	17,918	17,918	17,918	0	0	0	0	0	17,918	0	0	0	1,249	12/18/2025	2.B PL
..60510M-A#-5	Mission Lane Credit Card Master Trust -		04/16/2024	CA_CASH_CLOSE		2,666,667	2,666,667	2,666,667	0	0	0	0	0	0	2,666,667	0	0	0	58,262	10/15/2027	2.B PL
..60510M-A@-7	Mission Lane Credit Card Master Trust -		04/16/2024	CA_CASH_CLOSE		12,666,667	12,666,667	12,666,667	0	0	0	0	0	0	12,666,667	0	0	0	185,505	10/15/2027	1.F PL
..60510M-B*-8	Mission Lane Credit Card Master Trust -		04/16/2024	CA_CASH_CLOSE		1,333,333	1,333,333	1,333,333	0	0	0	0	0	0	1,333,333	0	0	0	70,442	10/15/2027	3.A PL
..60937@-AA-8	MONICA HOLDCO (US) INC. - TERM LOAN		06/28/2024	CA_CASH_CLOSE		11,874	11,874	11,874	11,874	0	0	0	0	0	11,874	0	0	0	4,541	01/07/2028	2.C PL
..62900*-AB-7	NCWS INTERMEDIATE INC. - CLOSING DATE T		05/23/2024	CA_CASH_CLOSE		279,366	279,366	279,366	279,366	0	0	0	0	0	279,366	0	0	0	9,805	12/29/2026	3.A PL
..62903@-AA-4	NAW Buyer LLC - Term Loan		06/28/2024	CA_CASH_CLOSE		4,285	4,285	4,178	4,178	0	0	0	0	0	4,178	0	107	107	364	09/13/2029	4.C Z
..62907@-AA-0	NEFCO Holding Company, LLC - Term Loan		04/01/2024	CA_CASH_CLOSE		1,308	1,308	1,282	1,282	0	0	0	0	0	1,282	0	26	26	161	08/05/2028	3.B PL
..62907@-AF-9	NEFCO Holding Company LLC - 2023 Amendme		04/01/2024	CA_CASH_CLOSE		84	84	82	82	0	0	0	0	0	82	0	2	2	3	08/05/2028	4.C Z
..63086*-AA-3	Narda-MITEQ - Incremental Term Loan		04/18/2024	VARIOUS		813,700	813,700	799,460	799,486	0	0	0	0	0	799,486	0	14,213	14,213	51,367	12/06/2027	5.B GI
..65172*-AA-3	NEWPOINT JV SUB MM, LLC, - Term Loan Ser		04/15/2024	CA_CASH_CLOSE		500,000	500,000	500,000	500,000	0	0	0	0	0	500,000	0	0	0	9,959	01/08/2028	1.E PL
..65343@-AA-5	NEXT HOLDCO LLC CLOSING DT TERM LN		06/28/2024	CA_CASH_CLOSE		4,610	4,610	4,540	4,540	0	0	0	0	0	4,540	0	69	69	265	11/09/2030	3.B PL
..65658#-AA-2	NORTH HAVEN FALCON BUYER LLC - TERM LOA		05/22/2024	CA_CASH_CLOSE		708	708	708	708	0	0	0	0	0	708	0	0	0	90	05/19/2027	3.B PL
..65658#-AB-0	NORTH HAVEN FALCON BUYER LLC - DELAYED		04/04/2024	CA_CASH_CLOSE		236	236	236	236	0	0	0	0	0	236	0	0	0	21	05/19/2027	3.B PL
..65716*-AB-4	NORTH AMERICAN SCIENCE ASSOCIATES INC.		06/28/2024	CA_CASH_CLOSE		611	611	611	611	0	0	0	0	0	611	0	0	0	53	09/15/2027	2.C PL
..65716@-AA-4	NORTH AMERICAN SCIENCE ASSOCIATES INC.		06/28/2024	CA_CASH_CLOSE		1,926	1,926	1,926	1,926	0	0	0	0	0	1,926	0	0	0	141	09/15/2027	2.C PL
..65716@-AB-2	NORTH AMERICAN SCIENCE ASSOCIATES INC.		06/28/2024	CA_CASH_CLOSE		142	142	142	142	0	0	0	0	0	142	0	0	0	72	09/15/2027	2.C PL

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Identification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..66703*-AA-9	Northstar Recycling - Senior Term Loan		04/18/2024	VARIOUS		1,263,722	1,263,722	1,238,447	1,239,509	0	0	0	0	0	1,239,509	0	24,213	24,213	64,861	10/01/2027	4.B
..67008*-AA-9	NOVIPAK BUYER LLC INITIAL TERM LN		04/30/2024	CA_CASH_CLOSE		(1,481)	(1,481)	(1,481)	(1,481)	0	0	0	0	0	(1,481)	0	0	0	4,767	12/01/2026	3.C PL
..67100*-AA-2	OC III LVS XXVI LP - Secured Loan Facili		05/15/2024	CA_CASH_CLOSE		4,098,175	4,098,175	4,098,175	4,098,175	0	0	0	0	0	4,098,175	0	0	0	37,889	11/20/2030	1.F PL
..67115E-AC-4	Omega Holdings - Senior Term Loan		05/30/2024	CA_CASH_CLOSE		1,015	1,015	995	995	0	0	0	0	0	995	0	20	20	0	03/31/2029	4.C
..67117*-AA-7	OA BUYER INC INITIAL TERM LN		06/28/2024	CA_CASH_CLOSE		9,361	9,361	9,174	9,174	0	0	0	0	0	9,174	0	187	187	764	12/20/2028	4.C
..68144*-AB-6	Olympia Acquisition, Inc-2022 2nd Amendn		06/30/2024	CA_CASH_CLOSE		(1)	(1)	(1)	(1)	0	0	0	0	0	(1)	0	0	0	0	02/26/2027	4.C PL
..68687*-AA-3	ORO Funding I LLC - Term Loan		06/17/2024	CA_CASH_CLOSE		17,939	17,939	17,939	17,939	0	0	0	0	0	17,939	0	0	0	403	05/25/2029	1.E PL
..69429*-AA-4	PDQ (PDQ TOPCO LP) First Lien Term		06/28/2024	CA_CASH_CLOSE		11,093	11,093	11,093	11,093	0	0	0	0	0	11,093	0	0	0	1,877	08/27/2027	5.A
..69429*-AB-2	PDQ (PDQ TOPCO LP) DDTL		06/28/2024	CA_CASH_CLOSE		7,596	7,596	7,596	7,596	0	0	0	0	0	7,596	0	0	0	877	08/27/2027	5.A
..69451*-AA-7	PPW AERO BUYER INC INITIAL TERM LN		05/30/2024	CA_CASH_CLOSE		3,813	3,813	3,661	3,661	0	0	0	0	0	3,661	0	153	153	476	02/15/2029	5.B GI
..70559*-AA-4	Pegasus Global Enterprise Holdings LLC/		06/28/2024	CA_CASH_CLOSE		4,139	4,139	4,032	4,078	0	0	0	0	0	4,078	0	61	61	496	05/29/2025	3.A PL
..70559*-AB-2	Pegasus Global Enterprise Holdings LLC/		06/28/2024	CA_CASH_CLOSE		1,190	1,190	1,190	1,190	0	0	0	0	0	1,190	0	0	0	142	05/29/2025	3.A PL
..70559*-AD-8	Pegasus Global Enterprise Holdings LLC		06/28/2024	CA_CASH_CLOSE		1,196	1,196	1,196	1,196	0	0	0	0	0	1,196	0	0	0	253	05/29/2025	3.A PL
..70559*-AE-6	PEGASUS GLOBAL ENTERPRISE HOLDINGS LLC		06/28/2024	CA_CASH_CLOSE		1,120	1,120	1,120	1,120	0	0	0	0	0	1,120	0	0	0	234	05/29/2025	3.A PL
..70559*-AF-3	PEGASUS GLOBAL ENTERPRISE HOLDINGS LLC		06/28/2024	CA_CASH_CLOSE		519	519	519	519	0	0	0	0	0	519	0	0	0	17	05/29/2025	3.A PL
..71667*-AA-3	Petroleum Service Group LLC/Delayed Draw		04/03/2024	CA_CASH_CLOSE		53,183	53,183	53,183	53,183	0	0	0	0	0	53,183	0	0	0	10,126	07/23/2025	3.B PL
..71667*-AB-1	Petroleum Service Group LLC/Term Loan 7/		04/03/2024	CA_CASH_CLOSE		2,665,193	2,665,193	2,605,831	2,629,933	0	0	0	0	0	2,629,933	0	35,260	35,260	439,702	07/23/2025	3.B PL
..73103*-AA-9	Polara - Term Loan		06/28/2024	CA_CASH_CLOSE		90,844	90,844	89,027	89,036	0	0	0	0	0	89,036	0	1,807	1,807	8,182	12/03/2027	5.A
..73103*-AB-7	Polara - 2022 Incremental Term Loan		06/28/2024	CA_CASH_CLOSE		86,887	86,887	85,149	85,149	0	0	0	0	0	85,149	0	1,738	1,738	7,811	12/03/2027	5.A
..74066*-AA-4	PREMIER SPECIALTIES INC. - TERM LOAN		04/30/2024	CA_CASH_CLOSE		(739)	(739)	(739)	(739)	0	0	0	0	0	(739)	0	0	0	224	08/20/2027	3.A PL
..74276G-AC-0	Process Insights - Term Loan		06/30/2024	CA_CASH_CLOSE		1,139	1,139	1,111	1,111	0	0	0	0	0	1,111	0	28	28	126	06/30/2029	5.B GI
..74309*-AA-7	PRODUCTION RESOURCE GROUP L.L.C. - DELA		05/20/2024	CA_CASH_CLOSE		13,571	13,571	13,571	13,571	0	0	0	0	0	13,571	0	0	0	85	08/21/2024	4.C PL
..74309*-AB-5	PRG 9/20 Last Out		05/20/2024	CA_CASH_CLOSE		8,835	8,835	8,835	8,835	0	0	0	0	0	8,835	0	0	0	0	08/21/2024	4.C PL
..74309*-AC-3	PRODUCTION RESOURCE GROUP L.L.C. - DELA		05/30/2024	CA_CASH_CLOSE		763	763	763	763	0	0	0	0	0	763	0	0	0	0	08/21/2024	5.B GI
..74309*-AD-1	PRODUCTION RESOURCE GROUP L.L.C. - SECO		05/21/2024	CA_CASH_CLOSE		3,432	3,432	3,432	3,432	0	0	0	0	0	3,432	0	0	0	0	08/21/2024	5.B GI
..74588B-AB-6	Puma Buyer TL 2029		04/30/2024	CA_CASH_CLOSE		50,000	50,000	46,500	46,500	0	0	0	0	0	46,500	0	3,500	3,500	4,130	07/14/2029	4.B PL
..74923*-AB-3	RoadOne IntermodalLogistics - Term Loan		06/28/2024	CA_CASH_CLOSE		6,123	6,123	5,891	5,891	0	0	0	0	0	5,891	0	233	233	805	12/30/2028	4.B PL
..74923*-AC-1	R1 HLDGS LLC DELAYED DRAW TERM LN		06/28/2024	CA_CASH_CLOSE		555	555	555	555	0	0	0	0	0	555	0	0	0	48	12/30/2028	4.B PL
..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	1.F Z
..75046T-AB-0	Radius Aerospace Inc-RADAER TL 1L USD		06/28/2024	CA_CASH_CLOSE		1,584	1,584	1,557	1,569	0	0	0	0	0	1,569	0	15	15	356	03/29/2025	3.C PL
..75279*-AA-4	RANDYS HLDGS INC INITIAL TERM LN		06/28/2024	CA_CASH_CLOSE		6,205	6,205	6,019	6,019	0	0	0	0	0	6,019	0	186	186	1,174	10/31/2028	3.B PL
..75279*-AB-2	RANDYS HLDGS INC DELAYED DRAW TERM LOAN		06/28/2024	CA_CASH_CLOSE		165	165	165	0	0	0	0	0	0	165	0	0	0	6	11/01/2028	4.C Z
..75445*-AA-1	RAWILINGS SPORTING GOODS COMPANY INC - T		06/28/2024	CA_CASH_CLOSE		2,117	2,117	2,117	2,117	0	0	0	0	0	2,117	0	0	0	765	12/31/2026	3.B PL
..75645*-AA-9	Red Cedar Holdings BLP CI A Ln		04/12/2024	CA_CASH_CLOSE		4,533,900	4,533,900	4,533,900	4,533,900	0	0	0	0	0	4,533,900	0	0	0	101,687	08/10/2030	1.D PL
..75734*-AB-9	Reddy Ice Holdings Inc./Term Loan 7/19		04/22/2024	CA_CASH_CLOSE		4,488,566	4,488,566	4,345,277	4,404,894	0	157	0	157	0	4,404,894	0	83,672	83,672	237,571	07/01/2025	3.C PL
..75734*-AC-7	Reddy Ice Holdings Inc./Delayed Draw Te		04/22/2024	CA_CASH_CLOSE		423,026	423,026	423,026	423,026	0	0	0	0	0	423,026	0	0	0	22,283	07/01/2025	3.C PL
..75988*-AA-6	RENOVATION ACQUISITION INC TERM LOAN		06/28/2024	CA_CASH_CLOSE		24,272	24,272	23,665	23,677	0	0	0	0	0	23,677	0	595	595	2,329	11/15/2027	4.C
..76028*-AA-4	REPAIRIFY INC. - INITIAL TERM LOAN		06/28/2024	CA_CASH_CLOSE		1,875	1,875	1,875	1,875	0	0	0	0	0	1,875	0	0	0	324	06/14/2027	2.A PL
..76252*-AA-1	Rialto Management Group LLC/Term Loan 1		04/19/2024	CA_CASH_CLOSE		(244,196)	(244,196)	(241,754)	(242,986)	0	(1,256)	0	(1,256)	0	(242,986)	0	(1,210)	(1,210)	5,020	12/02/2024	2.B PL
..76252*-AB-9	RIALTO MANAGEMENT GROUP LLC - TERM LOAN		04/19/2024	CA_CASH_CLOSE		12,116	12,116	12,116	12,116	0	0	0	0	0	12,116	0	0	0	746	12/02/2024	2.B PL
..77260*-AA-7	Rock Labor LLC - Term Loan		06/28/2024	CA_CASH_CLOSE		656	656	636	636	0	0	0	0	0	636	0	20	20	52	09/14/2029	4.C Z
..78013*-AA-5	ROYAL BUYER LLC INITIAL TERM LN		06/28/2024	CA_CASH_CLOSE		9,101	9,101	8,919	8,919	0	0	0	0	0	8,919	0	182	182	755	08/31/2028	5.B GI
..78029*-AE-9	ROYAL HOLDCO CORP 2023-2 INCREMENTAL TER		04/18/2024	VARIOUS		1,222,391	1,247,338	1,237,430	1,237,430	0	0	0	0	0	1,237,430	0	(15,038)	(15,038)	44,775	12/30/2026	4.C Z
..78432*-AB-8	SFE Intermediate HoldCo LLC/Incremental		06/28/2024	CA_CASH_CLOSE		909	909	891	901	0	0	0	0	0	901	0	8	8	409	07/31/2024	2.B PL
..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	15,429	01/27/2027	4.A
..78459*-AA-8	SEI HLDG I CORP CLOSING DT TERM LOAN		04/18/2024	BANK LOANS BARINGS		2,032,019	2,011,900	1,941,483	1,941,483	0	0	0	0	0	1,941,483	0	90,535	90,535	122,802	03/27/2028	4.C Z

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Identification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..78494*-AA-7	SPC RECEIVABLES FDG II TR SEC0 REV LN FA		05/31/2024	CA_CASH_CLOSE		8,913,729	8,913,729	8,913,729	8,913,729	0	0	0	0	0	8,913,729	0	0	0	281,058	10/19/2029	1.6 PL
..78503@-AA-4	SPV FACILITY I LLC - Senior Secured Revo		06/03/2024	CA_CASH_CLOSE		9,500,000	9,500,000	9,500,000	7,900,000	0	0	0	0	0	9,500,000	0	0	0	267,912	03/31/2033	1.6 PL
..78642#-AA-4	SAFE HOME SECURITY INC. - TERM LOAN		04/01/2024	CA_CASH_CLOSE		1,440	1,440	1,440	1,440	0	0	0	0	0	1,440	0	0	0	167	08/04/2024	2.C PL
..78642#-AB-2	SAFE HOME SECURITY INC. - DELAYED DRAW T		04/01/2024	CA_CASH_CLOSE		113	113	113	113	0	0	0	0	0	113	0	0	0	44	08/04/2024	2.C PL
..79400@-AA-6	Saldon Holdings Inc./First Amendment Te		06/28/2024	CA_CASH_CLOSE		875	875	866	870	0	0	0	0	0	870	0	5	5	152	03/13/2025	3.B PL
..79400@-AC-2	SALDON HOLDINGS INC. - SECOND AMENMENT		06/28/2024	CA_CASH_CLOSE		469	469	469	469	0	0	0	0	0	469	0	0	0	69	03/13/2025	5.B GI
..80586#-AA-8	Scaled Agile Inc. - 2021 Delayed Draw Te		06/28/2024	CA_CASH_CLOSE		425	425	425	425	0	0	0	0	0	425	0	0	0	36	12/15/2028	2.C PL
..80586#-AB-6	Scaled Agile Inc. - 2021 Unitranche Term		06/28/2024	CA_CASH_CLOSE		8,740	8,740	8,565	8,566	0	0	0	0	0	8,566	0	174	174	957	12/16/2028	2.C PL
..816307-@-1	SelectQuote Inc./Term Loan 10/19		06/28/2024	CA_CASH_CLOSE		17,330	17,330	17,330	17,330	0	0	0	0	0	17,330	0	0	0	2,255	11/05/2024	3.C PL
..82419*-AB-9	Shermco Intermediate Holdings Inc. - 201		04/01/2024	CA_CASH_CLOSE		1,558	1,558	1,519	1,519	0	0	0	0	0	1,519	0	39	39	122	06/05/2026	3.B PL
..82419*-AC-7	Shermco Intermediate Holdings Inc. - 202		04/01/2024	CA_CASH_CLOSE		112	112	91	91	0	0	0	0	0	91	0	21	21	12	03/06/2025	3.B PL
..82565#-AA-9	SHUR-CO ACQUISITION INC. - TERM LOAN		05/10/2024	CA_CASH_CLOSE		1,641,115	1,641,115	1,641,115	1,641,115	0	0	0	0	0	1,641,115	0	0	0	213,296	06/30/2027	4.C
..83176*-AA-2	Smartling Inc. - Term Loan		06/28/2024	CA_CASH_CLOSE		7,586	7,586	7,586	7,586	0	0	0	0	0	7,586	0	0	0	635	11/08/2027	4.B
..83176*-AB-0	Smartling Inc. - Delayed Draw Term Loan		06/28/2024	CA_CASH_CLOSE		1,084	1,084	1,084	1,084	0	0	0	0	0	1,084	0	0	0	189	11/08/2027	4.C Z
..83425*-AA-1	SOLO BUYER LP INITIAL TERM LN		06/28/2024	CA_CASH_CLOSE		5,652	5,652	5,510	5,510	0	0	0	0	0	5,511	0	141	141	1,617	12/01/2029	5.B GI
..84724@-AB-3	Sparus Holdings LLC - 1st Lien Term Loan		06/28/2024	CA_CASH_CLOSE		3,226	3,226	3,153	3,153	0	0	0	0	0	3,153	0	73	73	505	03/19/2027	4.C
..84724@-AB-1	Sparus Holdings LLC - Delayed Draw Term		06/28/2024	CA_CASH_CLOSE		823	823	823	823	0	0	0	0	0	823	0	0	0	126	03/19/2027	4.C
..84724@-AA-5	Spatial Business Systems - Senior Term L		06/28/2024	CA_CASH_CLOSE		2,539	2,539	2,476	2,476	0	0	0	0	0	2,476	0	63	63	271	09/30/2028	5.A
..84724@-AB-3	Spatial Business Systems - Delayed Draw		06/28/2024	CA_CASH_CLOSE		2,344	2,344	2,344	2,344	0	0	0	0	0	2,344	0	0	0	388	10/03/2028	4.C Z
..84967#-AA-9	SPRING INSURANCE SOLUTIONS LLC - INITIA		04/30/2024	CA_CASH_CLOSE		1,108	1,108	1,108	1,108	0	0	0	0	0	1,108	0	0	0	357	11/24/2025	3.A PL
..84967#-AB-7	SPRING INSURANCE SOLUTIONS LLC - DELAYE		04/30/2024	CA_CASH_CLOSE		188	188	188	188	0	0	0	0	0	188	0	0	0	19	11/24/2025	3.A PL
..85789#-AA-2	STEALTH HOLDING LLC - U.S. INITIAL TERM		04/01/2024	CA_CASH_CLOSE		572	572	572	572	0	0	0	0	0	572	0	0	0	296	03/02/2026	4.A PL
..85789#-AB-0	STEALTH HOLDING LLC - DELAYED DRAW TERM		04/01/2024	CA_CASH_CLOSE		681	681	681	681	0	0	0	0	0	681	0	0	0	117	03/02/2026	4.A PL
..86602@-AH-2	Summit Buyer L.L.C.		05/31/2024	CA_CASH_CLOSE		901,093	901,093	901,093	330,468	0	0	0	0	0	901,093	0	0	0	49,210	01/14/2026	3.B PL
..86738*-AA-6	Sunk Rock Foundry Partners LP/Term Loan		04/05/2024	CA_CASH_CLOSE		1,129,257	1,129,257	1,106,582	1,121,582	0	41	0	41	0	1,121,582	0	7,675	7,675	116,873	10/31/2024	3.A Z
..86822@-AA-1	SUPERJET BUYER LLC INITIAL TERM LN		06/28/2024	CA_CASH_CLOSE		11,587	11,587	11,356	11,356	0	0	0	0	0	11,356	0	232	232	1,835	12/30/2027	5.A
..87300*-AB-0	THG Acquisition LLC - 2019 Term Loan		06/28/2024	CA_CASH_CLOSE		1,063	1,063	1,063	1,063	0	0	0	0	0	1,063	0	0	0	117	12/02/2026	4.C
..87300*-AC-8	THG ACQUISITION LLC Delayed Draw Term Ln		06/28/2024	CA_CASH_CLOSE		298	298	298	298	0	0	0	0	0	298	0	0	0	49	12/02/2026	4.C
..87300*-AD-6	THG Acquisition LLC - 2020 Term Loan		06/28/2024	CA_CASH_CLOSE		875	875	875	875	0	0	0	0	0	875	0	0	0	138	12/02/2026	3.A PL
..87300*-AE-4	THG Acquisition LLC - 2020 Delayed Draw		06/28/2024	CA_CASH_CLOSE		1,459	1,459	1,459	1,459	0	0	0	0	0	1,459	0	0	0	73	12/02/2026	3.A PL
..87326#-AA-8	TA/WEG HOLDINGS LLC - DELAYED DRAW INC0		04/01/2024	CA_CASH_CLOSE		2,027	2,027	2,027	2,027	0	0	0	0	0	2,027	0	0	0	0	10/04/2027	3.B PL
..87326#-AB-6	TA/WEG HOLDINGS LLC - 2021 DELAYED DRAW		04/01/2024	CA_CASH_CLOSE		606	606	606	606	0	0	0	0	0	606	0	0	0	0	10/04/2027	3.B Z
..87326#-AC-4	TA/WEG HOLDINGS LLC - AUGUST 2021 DELAY		04/01/2024	CA_CASH_CLOSE		392	392	392	392	0	0	0	0	0	392	0	0	0	0	10/04/2027	3.B PL
..87338*-AA-8	TSYL Corp Buyer Inc Initial Term Ln A		05/31/2024	CA_CASH_CLOSE		1,494	1,494	1,464	1,464	0	0	0	0	0	1,464	0	30	30	159	12/19/2028	5.B GI
..87338*-AB-6	TSYL Corp Buyer Inc Initial Term Ln B		05/31/2024	CA_CASH_CLOSE		99	99	97	97	0	0	0	0	0	97	0	2	2	5	12/19/2028	5.B GI
..87338*-AC-4	Technosylva - Delayed Draw Term Loan		05/31/2024	CA_CASH_CLOSE		2,876	2,876	2,876	2,876	0	0	0	0	0	2,876	0	0	0	211	12/19/2028	4.C Z
..87339@-AA-5	TS OPCO HLDG LLC / TRYSTAR LLC 5TH AMEN		06/28/2024	CA_CASH_CLOSE		1,702	1,702	1,659	1,659	0	0	0	0	0	1,659	0	43	43	373	09/28/2027	4.C
..87339@-AB-3	TS OPCO HLDG LLC/TRYSTAR LLC 6TH AMEND T		06/28/2024	CA_CASH_CLOSE		1,777	1,777	1,733	1,733	0	0	0	0	0	1,733	0	44	44	428	09/28/2027	4.C
..87339@-AC-1	TS Opco Hldg LLC 7th AMEND TERM LN		06/28/2024	CA_CASH_CLOSE		2,789	2,789	2,733	0	0	0	0	0	0	2,733	0	56	56	76	09/28/2027	4.C Z
..87583F-AN-8	Tank Holding Corp. - 2022 Term Loan		06/28/2024	CA_CASH_CLOSE		11,846	11,846	11,579	11,579	0	0	0	0	0	11,579	0	267	267	1,433	03/31/2028	4.B PL
..88033#-AA-0	Tencarva Machinery Company - Senior Term		06/28/2024	CA_CASH_CLOSE		6,238	6,238	6,120	6,120	0	0	0	0	0	6,120	0	117	117	1,122	12/20/2027	5.A
..88033#-AB-8	Tencarva Machinery Company		06/28/2024	CA_CASH_CLOSE		1,007	1,007	1,007	1,007	0	0	0	0	0	1,007	0	0	0	63	12/20/2027	5.A
..88233F-AK-6	Vistra Operations Co LLC-VST TL B3 1L US		06/28/2024	CA_CASH_CLOSE		8,276	8,276	8,193	0	0	0	0	0	0	8,193	0	83	83	162	12/20/2030	2.C FE
..88675#-AA-3	TIKEHAU GREEN DIAMOND CFO LLC - Class A		05/17/2024	CA_CASH_CLOSE		3,333,333	3,333,333	3,333,333	3,333,333	0	0	0	0	0	3,333,333	0	0	0	139,070	12/21/2030	1.F PL
..88675#-AB-1	TIKEHAU GREEN DIAMOND CFO LLC - Class B		05/17/2024	CA_CASH_CLOSE		416,667	416,667	416,667	416,667	0	0	0	0	0	416,667	0	0	0	21,280	12/21/2030	2.C PL
..89617*-AD-0	Trident Maritime Systems Inc. - 2023 Inc		04/01/2024	CA_CASH_CLOSE		288	288	282	282	0	0	0	0	0	282	0	6	6	8	02/26/2027	5.B Z

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										11	12	13	14	15							
CUSIP Identification	Description	For- eign	Disposal Date	Name of Purchaser	Number of Shares of Stock	Consid- eration	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 Recogn- ized	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	NAIC Desig- nation, NAIC Desig- nation Modifier and SVO Admini- strative Symbol
..89668@-AA-2	Trintech Inc - 2023 Term Loan		04/30/2024	CA_CASH_CLOSE		3,132	3,132	3,038	3,038	0	0	0	0	0	3,038	0	94	94	446	07/25/2029	4.C Z
..90139@-AA-1	Twin Brook Capital Funding XIII WSPV, LL		06/12/2024	CA_CASH_CLOSE		1,731,419	1,731,419	1,731,419	1,731,419	0	0	0	0	0	1,731,419	0	0	0	43,883	10/18/2028	1.E PL
..90140*-AA-0	Twin Brook Capital Funding XIV WSPV, LLC		06/12/2024	CA_CASH_CLOSE		997,614	997,614	997,614	997,614	0	0	0	0	0	997,614	0	0	0	22,887	10/18/2028	1.E PL
..90380@-AA-7	US SALT INVESTORS LLC - INITIAL TERM LO		06/28/2024	CA_CASH_CLOSE		8,438	8,438	8,438	8,438	0	0	0	0	0	8,438	0	0	0	692	07/19/2028	3.B PL
..91860*-AA-6	VPC ASSET BACKED OPPORTUNISTIC CREDIT Ho		05/10/2024	CA_CASH_CLOSE		753,620	753,620	753,620	753,620	0	0	0	0	0	753,620	0	0	0	18,186	06/14/2029	1.F PL
..928432-#-0	Visual Edge Technology, Inc./Last Out T		06/30/2024	CA_CASH_CLOSE		(14,162)	(14,162)	(1,399)	(1,399)	0	0	0	0	0	(14,126)	0	(36)	(36)	(72)	12/31/2025	5.B PL
..92846*-AB-1	VITAL BUYER LLC 2023 INCREMENTAL TERM LO		06/28/2024	CA_CASH_CLOSE		25,000	25,000	24,250	24,250	0	0	0	0	0	24,250	0	750	750	1,722	06/01/2028	4.C
..92943H-AB-5	W.R. Grace & Co. TL B		06/28/2024	CA_CASH_CLOSE		872	872	870	870	0	0	0	0	0	870	0	2	2	20	09/22/2028	4.A FE
..92974*-AC-3	WSHP FC Acquisition LLC/Third Amendment		04/30/2024	CA_CASH_CLOSE		996	996	996	996	0	0	0	0	0	996	0	0	0	161	03/30/2027	3.B PL
..92975@-AA-4	TA/WEG Holdings LLC/Term Loan 9/19		04/01/2024	CA_CASH_CLOSE		3,131	3,131	3,131	3,131	0	0	0	0	0	3,131	0	0	0	0	10/02/2025	3.B PL
..92975@-AB-2	TA/WEG Holdings LLC/Initial Delayed Dra		04/01/2024	CA_CASH_CLOSE		1,931	1,931	1,931	1,931	0	0	0	0	0	1,931	0	0	0	0	10/02/2025	3.B PL
..92991#-AA-2	W50 Holdings LLC		06/28/2024	CA_CASH_CLOSE		5,017	5,017	4,917	0	0	0	0	0	0	4,917	0	100	100	0	03/22/2030	4.B PL
..93000#-AA-9	WVEC Holdings II Corp - Term Loan		06/28/2024	CA_CASH_CLOSE		4,503	4,503	4,391	4,391	0	0	0	0	0	4,391	0	113	113	1,139	10/03/2028	5.A
..93279#-AA-3	WALNUT PARENT INC. - INITIAL TERM LOAN		05/31/2024	CA_CASH_CLOSE		1,231	1,231	1,231	1,231	0	0	0	0	0	1,231	0	0	0	97	11/09/2027	3.C PL
..94979@-AA-6	WELLNESS ACQUISITIONCO INC. - TERM LOAN		04/30/2024	CA_CASH_CLOSE		1,072	1,072	1,072	1,072	0	0	0	0	0	1,072	0	0	0	252	01/20/2027	2.C PL
..95483#-AA-0	WEST NR ACQUISITIONCO LLC 2ND AMEND TERM		05/30/2024	CA_CASH_CLOSE		231	231	226	226	0	0	0	0	0	226	0	5	5	27	12/27/2027	4.C Z
..95483#-AB-8	WEST NR ACQUISITIONCO LLC 2ND AMEND FUND		06/30/2024	CA_CASH_CLOSE		585	585	573	573	0	0	0	0	0	573	0	12	12	45	12/27/2027	4.C Z
..96222*-AA-4	WHLV IP (RP), LP Senior Secured		06/12/2024	CA_CASH_CLOSE		1,616,393	1,616,393	1,616,393	1,616,393	0	0	0	0	0	1,616,393	0	0	0	18,827	03/31/2026	1.G PL
..96811*-AA-5	Wildcat BuyerCo Inc./Term Loan 2/20		06/28/2024	CA_CASH_CLOSE		1,230	1,230	1,230	1,230	0	0	0	0	0	1,230	0	0	0	207	02/27/2026	3.A PL
..96811*-AB-3	Wildcat BuyerCo Inc./Delayed Draw Term		04/23/2024	CA_CASH_CLOSE		322	322	322	322	0	0	0	0	0	322	0	0	0	58	02/27/2026	2.C PL
..97383*-AA-1	WINEBOW HOLDINGS INC. (VINTNER GROUP I		06/28/2024	CA_CASH_CLOSE		938	938	938	938	0	0	0	0	0	938	0	0	0	111	07/01/2025	4.A PL
..97959@-AA-3	Woodland Foods Inc - Term Loan		06/30/2024	CA_CASH_CLOSE		4,353	4,353	4,267	4,267	0	0	0	0	0	4,267	0	86	86	501	12/02/2027	5.A
..98415D-A@-3	XIFIN Inc./Term Loan 02/20		04/29/2024	CA_CASH_CLOSE		(813)	(813)	(813)	(813)	0	0	0	0	0	(813)	0	0	0	(9)	02/06/2026	3.B PL
..98876*-AA-3	ZB Holdco LLC - Term Loan		04/19/2024	VARIOUS		460,480	469,878	460,480	460,480	0	0	0	0	0	460,480	0	0	0	39,707	02/09/2028	5.A
..98876*-AB-1	ZB Holdco LLC - Delayed Draw Term Loan		06/28/2024	CA_CASH_CLOSE		599	599	599	599	0	0	0	0	0	599	0	0	0	0	02/09/2028	5.A
..000000-00-0	ZB Holdco LLC - 2023 Incremental Term Lo		04/19/2024	VARIOUS		405,483	413,758	404,448	404,448	0	0	0	0	0	404,448	0	1,034	1,034	12,259	02/09/2028	4.C Z
..98876*-AE-5	ZB Holdco LLC - 2023 Incremental Delayed		06/28/2024	CA_CASH_CLOSE		962	962	962	0	0	0	0	0	0	962	0	0	0	48	02/09/2028	3.B PL
..000000-00-0	Kings III - Delayed Draw Term Loan		06/28/2024	CA_CASH_CLOSE		883	883	883	883	0	0	0	0	0	883	0	0	0	108	07/07/2028	5.B GI
..000000-00-0	Dwyer Instruments Inc - 2022 Upsize Dela		06/28/2024	CA_CASH_CLOSE		1,689	1,689	1,689	1,689	0	0	0	0	0	1,689	0	0	0	96	07/21/2027	4.C Z
..000000-00-0	SBP Holding LP - Delayed Draw Term Loan		05/31/2024	CA_CASH_CLOSE		726	726	726	726	0	0	0	0	0	726	0	0	0	82	01/31/2028	4.C Z
..000000-00-0	ROYAL HOLDCO CORP DDTL A		06/28/2024	CA_CASH_CLOSE		2,834	2,834	2,834	2,834	0	0	0	0	0	2,834	0	0	0	28	12/30/2027	2.C PL
..000000-00-0	Checkout Holding Corp. - 2023 Exit Term		05/30/2024	CA_CASH_CLOSE		405	405	2,439	(2,340)	0	0	0	0	0	2,439	0	(2,034)	(2,034)	4	04/24/2027	5.B GI
..000000-00-0	CyrusOne LP Senior Term Lo		05/15/2024	CA_CASH_CLOSE		5,328,905	12,650,707	12,271,186	0	0	0	0	0	0	4,949,384	0	379,521	379,521	29,567	04/15/2025	2.B Z
..06784#-AA-0	Project Maple Term Loan		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	1.F Z
..09300#-AA-9	UCIT Online Security Inc.-CAD Term Loan		04/01/2024	CA_CASH_CLOSE		703	703	703	703	0	0	0	0	0	703	0	0	0	72	03/02/2026	4.A PL
..07740*-AA-7	SCL XL I FUND L.P. - Senior Secured Revo		05/28/2024	CA_CASH_CLOSE		5,789,474	5,789,474	5,789,474	5,789,474	0	0	0	0	0	5,789,474	0	0	0	136,420	10/05/2029	1.G PL
..09152@-AA-6	290419 LTD USD FIRST AMENDMENT UK INCREM		06/28/2024	CA_CASH_CLOSE		3,898	3,820	3,820	3,820	0	0	0	0	0	3,820	0	78	78	278	12/21/2029	4.C Z
..09341J-AN-0	Veritas US Inc. - 2021 USD Term Loan B		06/28/2024	VARIOUS		28,469	30,606	30,453	30,377	0	0	0	0	0	30,453	0	(1,984)	(1,984)	32,455	09/01/2025	5.A FE
..14741@-AA-1	Cascade Services - Term Loan		06/28/2024	CA_CASH_CLOSE		1,084	1,084	1,057	1,057	0	0	0	0	0	1,057	0	27	27	57	09/30/2029	4.C Z
..25822C-0@-3	Dorel Industries Inc. - Asset Backed Fir	A	04/02/2024	CA_CASH_CLOSE		18,750	18,750	18,750	18,750	0	0	0	0	0	18,750	0	0	0	0	12/08/2026	4.A PL
..04800#-AA-5	IntraPac Canada Corporation/Canadian Ter		06/28/2024	CA_CASH_CLOSE		1,440	1,440	1,408	1,420	0	0	0	0	0	1,420	0	20	20	602	01/11/2026	3.B PL
..08655*-AA-6	Syntax Systems Ltd - Senior Term Loan	A	06/21/2024	CA_CASH_CLOSE		1,315,302	1,315,302	1,302,149	1,302,149	0	0	0	0	0	1,302,149	0	13,153	13,153	98,821	10/29/2028	4.C
..03979*-AA-9	RTI Surgical	C	06/28/2024	CA_CASH_CLOSE		7,964	7,964	7,964	7,964	0	0	0	0	0	7,964	0	0	0	1,524	07/20/2026	3.B PL
..07116#-AA-4	OSP HAMILTON PURCHASER LLC INITIAL TERM	C	06/28/2024	CA_CASH_CLOSE		10,799	10,799	10,583	10,584	0	0	0	0	0	10,584	0	216	216	909	12/27/2027	5.A
..000000-00-0	NF Holdco LLC - Term Loan	C	06/28/2024	CA_CASH_CLOSE		1,465	1,421	1,421	1,421	0	0	0	0	0	1,421	0	44	44	262	04/02/2029	4.C Z
..02757#-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	45,478	04/28/2025	3.B PL
..02757@-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	45,365	04/28/2025	3.B PL

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE D - PART 4

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

1	2	3	4	5	6	7	8	9	10	Change In Book/Adjusted Carrying Value					16	17	18	19	20	21	22
										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	NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol
..G2757@-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	17,752	04/28/2025	3.B PL
..G3166*-AA-5	CIP VIII Holdings SPV L.P - Term Loan	C.....	04/19/2024	CA_CASH_CLOSE .....	.....	1,112,266	1,112,266	1,112,266	1,112,266	0	0	0	0	0	1,112,266	0	0	0	44,080	12/14/2026	1.F PL
..G4288@-AC-0	HARBORVEST DOVER STR X INVT LP 2ND AME	C.....	06/30/2024	CA_CASH_CLOSE .....	.....	90,620	90,620	90,620	90,620	0	0	0	0	0	90,620	0	0	0	0	01/05/2028	1.G PL
..G4701*-AA-1	IFM USIDF (INTERMEDIATE) B, L.P. - Secur	D.....	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	147,556	11/01/2035	1.G PL
..G5471*-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)	1,119,420	05/07/2026	1.G PL
..G6684@-AA-9	OHA Credit Solutions Master Fund I SPV,	C.....	05/03/2024	CA_CASH_CLOSE .....	.....	1,000,000	1,000,000	1,000,000	1,000,000	0	0	0	0	0	1,000,000	0	0	0	29,753	12/16/2032	1.F PL
..G7349*-AA-6	Radius Aerospace Europe Limited/U.K. Ter	C.....	06/28/2024	CA_CASH_CLOSE .....	.....	2,033	2,033	2,033	2,033	0	0	0	0	0	2,033	0	0	0	365	03/29/2025	5.B GI
..G7741*-AA-6	STEPSTONE GROUP EUROPE ALTERNATIVE INVES	D.....	06/05/2024	CA_CASH_CLOSE .....	.....	1,024,602	1,024,602	1,024,602	1,024,602	0	0	0	0	0	1,024,602	0	0	0	24,030	02/28/2034	1.E PL
..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	0	(133,385)	890,035	97,773	76,761	174,534	36,317	02/27/2026	4.C FE
..L5581@-AA-9	ION Trading Technologies EUR TLB (Mar'21	B.....	06/28/2024	CA_CASH_CLOSE .....	.....	2,706	2,706	2,570	2,612	0	0	0	0	(43)	2,570	(39)	176	137	105	04/01/2028	5.B GI
..O8506*-AD-6	SIMULATION SOFTWARE INVT CO PTY LTD FACI	D.....	05/09/2024	CA_CASH_CLOSE .....	.....	855,700	855,700	842,864	842,864	0	0	0	0	0	842,864	0	12,836	12,836	85,913	09/30/2025	4.C
..W8000*-AE-4	Samh-nllsbyggnadsbolaget i Norden AB - T	D.....	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)	0	07/21/2027	4.A PL
..B6S16B-7K-0	WNEC Holdings II Corp .....	.....	04/02/2024	PRINCIPAL REPAYMENT .....	.....	470	0	0	0	0	0	0	0	0	470	0	0	0	0	10/03/2028	4.C
1909999999. Subtotal - Bonds - Unaffiliated Bank Loans						284,574,406	293,151,321	292,040,833	191,080,318	0	(973)	0	(973)	(152,109)	284,892,093	111,920	(429,607)	(317,687)	9,542,106	XXX	XXX
2509999997. Total - Bonds - Part 4						1,570,722,785	1,593,213,265	1,575,997,402	1,466,332,156	142,051	6,023,799	(296,247)	6,462,097	(300,223)	1,585,983,773	223,550	(15,484,540)	(15,260,990)	49,587,840	XXX	XXX
2509999998. Total - Bonds - Part 5						XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2509999999. Total - Bonds						1,570,722,785	1,593,213,265	1,575,997,402	1,466,332,156	142,051	6,023,799	(296,247)	6,462,097	(300,223)	1,585,983,773	223,550	(15,484,540)	(15,260,990)	49,587,840	XXX	XXX
..857477-60-8	State Street Corp-PREFERRED STOCK .....	.....	05/30/2024	CALL 25 .....	.....	19,800,000	495,000	19,800.00	357,602	(138,586)	0	0	(138,586)	0	357,602	0	137,398	137,398	7,301	.....	2.A FE
4019999999. Subtotal - Preferred Stocks - Industrial and Miscellaneous (Unaffiliated) Perpetual Preferred						495,000	XXX	357,602	496,188	(138,586)	0	0	(138,586)	0	357,602	0	137,398	137,398	7,301	XXX	XXX
4509999997. Total - Preferred Stocks - Part 4						495,000	XXX	357,602	496,188	(138,586)	0	0	(138,586)	0	357,602	0	137,398	137,398	7,301	XXX	XXX
4509999998. Total - Preferred Stocks - Part 5						XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
4509999999. Total - Preferred Stocks						495,000	XXX	357,602	496,188	(138,586)	0	0	(138,586)	0	357,602	0	137,398	137,398	7,301	XXX	XXX
..12008@-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	.....	.....
..14233@-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	.....	.....
..29273V-10-0	ENERGY TRANSFER EQUITY L P LTD PARTNERSH .....	.....	06/06/2024	RILY .....	.....	63,993,000	976,606	843,612	883,103	(39,491)	0	0	(39,491)	0	843,612	0	132,994	132,994	20,644	.....	.....
..60819@-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	.....	.....
..67034@-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	.....	.....
..67058H-10-2	NUSTAR ENERGY LP-COMMON STOCK LTD PART .....	.....	05/03/2024	MERGER .....	.....	186,038,000	2,743,886	3,409,523	2,111,550	(317,517)	0	0	(317,517)	0	2,743,888	0	0	0	84,655	.....	.....
..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	.....	.....
..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	.....	.....
..87612@-10-1	TARGA RES CORP COMMON STK .....	.....	05/01/2024	VARIOUS .....	.....	4,548,000	511,298	324,033	395,085	(71,052)	0	0	(71,052)	0	324,033	0	187,265	187,265	5,685	.....	.....
5019999999. Subtotal - Common Stocks - Industrial and Miscellaneous (Unaffiliated) Publicly Traded						5,601,347	XXX	5,742,686	4,717,043	(589,847)	0	0	(589,847)	0	5,077,051	0	524,298	524,298	116,642	XXX	XXX
5989999997. Total - Common Stocks - Part 4						5,601,347	XXX	5,742,686	4,717,043	(589,847)	0	0	(589,847)	0	5,077,051	0	524,298	524,298	116,642	XXX	XXX
5989999998. Total - Common Stocks - Part 5						XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
5989999999. Total - Common Stocks						5,601,347	XXX	5,742,686	4,717,043	(589,847)	0	0	(589,847)	0	5,077,051	0	524,298	524,298	116,642	XXX	XXX
5999999999. Total - Preferred and Common Stocks						6,096,347	XXX	6,100,288	5,213,231	(728,433)	0	0	(728,433)	0	5,434,653	0	661,696	661,696	123,943	XXX	XXX
6009999999 - Totals						1,576,819,132	XXX	1,582,997,690	1,471,545,387	(586,382)	6,023,799	(296,247)	5,733,664	(300,223)	1,591,418,426	223,550	(14,822,844)	(14,599,294)	49,711,783	XXX	XXX

SCHEDULE DB - PART A - SECTION 1

Showing all Options, Caps, Floors, Collars, Swaps and Forwards Open as of Current Statement Date

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 Quarter-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		2,560,103	4073.94000000	182,785	60,400	70,381	91,416		55,214				(29,826)			
141936 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	04/06/2021	04/06/2026		643,934	4073.94000000	44,408	14,655	17,306	22,198		17,311				(7,244)			
141931 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A.	04/20/2021	04/20/2028		2,131,255	4134.94000000	166,598	55,334	64,892	83,440		89,829				(27,224)			
141935 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A.	04/20/2021	04/20/2026		1,033,297	4134.94000000	75,627	24,990	28,092	37,790		35,573				(12,353)			
141929 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	05/06/2021	05/06/2026		2,934,227	4201.62000000	207,762	67,890	76,316	103,347		75,942				(34,462)			
141934 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	05/06/2021	05/06/2028		3,525,201	4201.62000000	272,205	89,247	99,539	135,658		72,626				(45,196)			
139414 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	05/20/2021	05/20/2026		3,238,121	4159.12000000	233,956	78,390	89,588	118,282		81,779				(38,803)			
141933 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	05/20/2021	05/19/2028		4,387,198	4159.12000000	347,178	117,072	134,261	176,266		89,265				(57,606)			
142030 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	06/04/2021	06/05/2026		3,793,322	4229.89000000	273,975	91,734	104,752	138,306		92,670				(45,495)			
142031 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	06/04/2021	06/06/2028		3,756,297	4229.89000000	293,447	98,537	111,053	148,401		68,595				(48,748)			
142042 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	06/18/2021	06/19/2026		4,246,800	4166.45000000	309,339	103,647	116,980	156,119		118,682				(51,405)			
142043 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	06/18/2021	06/20/2028		5,895,992	4166.45000000	470,057	158,509	179,802	238,382		182,575				(78,049)			
142044 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	07/06/2021	07/06/2026		4,766,527	4343.54000000	342,979		(57,355)	57,697		210,832				(57,355)			
142045 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	07/06/2021	07/06/2028		3,597,757	4343.54000000	273,908		(45,775)	46,138		166,999				(45,775)			
142024 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	CITIBANK N.A.	07/20/2021	07/20/2026		4,182,637	4323.06000000	291,144		(48,679)	48,916		183,498				(48,679)			
142025 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	CITIBANK N.A.	07/20/2021	07/20/2028		2,039,052	4323.06000000	148,573		(24,837)	24,971		89,951				(24,837)			
142046 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	08/06/2021	08/06/2026		4,064,101	4436.52000000	280,227		(46,899)	46,875		163,794				(46,899)			
142047 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	08/06/2021	08/04/2028		3,826,358	4436.52000000	286,658		(47,929)	48,069		163,586				(47,929)			
142048 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	CITIBANK N.A.	08/20/2021	08/20/2026		1,809,340	4441.67000000	123,509		(20,701)	20,537		64,787				(20,701)			
142049 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	CITIBANK N.A.	08/20/2021	08/18/2028		2,137,781	4441.67000000	164,799		(27,621)	27,403		87,674				(27,621)			
142050 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A.	09/03/2021	09/04/2026		1,540,167	4535.43000000	127,053		(21,267)	21,166		48,266				(21,267)			
142051 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A.	09/03/2021	09/06/2028		2,111,925	4535.43000000	180,586		(30,203)	30,156		62,258				(30,203)			
142217 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	09/20/2021	09/18/2026		1,174,913	4357.73000000	79,948		(13,384)	13,281		44,418				(13,384)			
142219 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	09/20/2021	09/20/2028		1,873,140	4357.73000000	136,949		(22,909)	22,811		73,409				(22,909)			
142231 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	10/06/2021	10/06/2026		1,802,792	4363.55000000	124,817		(20,893)	20,702		68,592				(20,893)			
142232 Call Options - S&P 500 - USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	10/06/2021	10/06/2028		2,272,939	4363.55000000	175,701		(29,368)	29,292		94,913				(29,368)			

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-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	.....	.....2,142,631	..4536.19000000	151,478	.....	.....(25,359)	25,061	.....	.....72,349	.....	.....	.....(25,359)	.....	.....	.....	.....
142243 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.10/20/2021	.10/20/2028	.....	.....2,133,408	..4536.19000000	162,937	.....	.....(27,249)	27,067	.....	.....74,557	.....	.....	.....(27,249)	.....	.....	.....	.....
143735 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.11/05/2021	.11/06/2028	.....	.....3,225,894	..4697.53000000	236,840	.....	.....(39,612)	39,253	.....	.....127,033	.....	.....	.....(39,612)	.....	.....	.....	.....
143737 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.11/05/2021	.11/06/2026	.....	.....1,317,530	..4697.53000000	90,049	.....	.....(15,074)	14,872	.....	.....49,402	.....	.....	.....(15,074)	.....	.....	.....	.....
143909 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.11/19/2021	.11/20/2026	.....	.....1,146,967	..4697.96000000	78,046	.....	.....(13,066)	12,860	.....	.....41,404	.....	.....	.....(13,066)	.....	.....	.....	.....
143911 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.11/19/2021	.11/20/2028	.....	.....2,303,354	..4697.96000000	177,394	.....	.....(29,647)	29,449	.....	.....95,069	.....	.....	.....(29,647)	.....	.....	.....	.....
144235 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.12/06/2021	.12/04/2026	.....	.....729,148	..4591.67000000	49,819	.....	.....(8,342)	8,181	.....	.....23,635	.....	.....	.....(8,342)	.....	.....	.....	.....
144237 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.12/06/2021	.12/06/2028	.....	.....752,619	..4591.67000000	55,909	.....	.....(9,353)	9,222	.....	.....26,250	.....	.....	.....(9,353)	.....	.....	.....	.....
144701 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.12/20/2021	.12/18/2026	.....	.....1,060,073	..4568.02000000	72,432	.....	.....(12,128)	11,873	.....	.....35,498	.....	.....	.....(12,128)	.....	.....	.....	.....
144703 Call Options – S&P 500 – USD	Liability Hedge	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.12/20/2021	.12/20/2028	.....	.....1,687,120	..4568.02000000	130,889	.....	.....(21,882)	21,623	.....	.....61,038	.....	.....	.....(21,882)	.....	.....	.....	.....
145280 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.01/06/2022	.01/06/2027	.....	.....840,780	..4696.05000000	40,249	.....	.....19,939	20,554	.....	.....26,076	.....	.....	.....(9,785)	.....	.....	.....	.....
145291 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.01/06/2022	.01/05/2029	.....	.....2,075,217	..4696.05000000	109,154	.....	.....54,229	54,310	.....	.....59,921	.....	.....	.....(26,611)	.....	.....	.....	.....
145768 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.01/20/2022	.01/20/2027	.....	.....1,067,105	..4482.73000000	53,186	.....	.....26,401	27,701	.....	.....36,307	.....	.....	.....(12,978)	.....	.....	.....	.....
145772 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.01/20/2022	.01/19/2029	.....	.....2,284,303	..4482.73000000	130,052	.....	.....64,947	69,133	.....	.....85,827	.....	.....	.....(31,906)	.....	.....	.....	.....
146459 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.02/04/2022	.02/05/2027	.....	.....875,187	..4500.53000000	46,034	.....	.....22,908	24,293	.....	.....28,848	.....	.....	.....(11,277)	.....	.....	.....	.....
146461 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.02/04/2022	.02/06/2029	.....	.....2,205,498	..4500.53000000	122,524	.....	.....61,077	63,432	.....	.....72,963	.....	.....	.....(30,057)	.....	.....	.....	.....
147150 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.02/18/2022	.02/19/2027	.....	.....1,589,414	..4348.87000000	85,480	.....	.....42,558	44,389	.....	.....54,798	.....	.....	.....(20,980)	.....	.....	.....	.....
147153 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.02/18/2022	.02/20/2029	.....	.....2,507,570	..4348.87000000	139,306	.....	.....69,435	71,830	.....	.....80,879	.....	.....	.....(34,220)	.....	.....	.....	.....
147912 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.03/04/2022	.03/04/2027	.....	.....2,313,933	..4328.87000000	132,195	.....	.....66,011	69,567	.....	.....81,211	.....	.....	.....(32,558)	.....	.....	.....	.....
147914 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.03/04/2022	.03/02/2029	.....	.....3,147,487	..4328.87000000	190,357	.....	.....95,281	99,591	.....	.....105,161	.....	.....	.....(46,956)	.....	.....	.....	.....
148494 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.03/18/2022	.03/19/2027	.....	.....3,484,463	..4463.12000000	203,186	.....	.....101,363	100,327	.....	.....96,769	.....	.....	.....(50,080)	.....	.....	.....	.....
148496 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.03/18/2022	.03/20/2029	.....	.....2,690,653	..4463.12000000	164,848	.....	.....82,387	80,428	.....	.....61,642	.....	.....	.....(40,673)	.....	.....	.....	.....
149383 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.04/06/2022	.04/06/2029	.....	.....1,256,634	..4481.15000000	76,495	.....	.....38,234	37,775	.....	.....33,789	.....	.....	.....(18,906)	.....	.....	.....	.....
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	.....	.....3,034,169	..4481.15000000	161,388	.....	.....80,480	89,949	.....	.....106,306	.....	.....	.....(39,844)	.....	.....	.....	.....
150021 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.04/20/2022	.04/20/2027	.....	.....3,978,366	..4459.45000000	247,661	.....	.....123,893	121,614	.....	.....99,341	.....	.....	.....(61,303)	.....	.....	.....	.....
150023 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPRO8K5P83	.04/20/2022	.04/20/2029	.....	.....2,397,649	..4459.45000000	150,675	.....	.....75,491	76,642	.....	.....60,531	.....	.....	.....(37,318)	.....	.....	.....	.....
150452 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.05/06/2022	.05/06/2027	.....	.....2,560,850	..4123.34000000	155,622	.....	.....78,041	81,788	.....	.....65,977	.....	.....	.....(38,557)	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-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	.....	1,806,435	..4123.34000000	116,192	58,345	58,558	49,327	.....	48,124	.....	.....	.....(28,800)	.....	.....	.....	.....
151098 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIISFPUBM8MPRO8K5P83	.05/20/2022	.05/20/2027	.....	5,069,803	..3901.36000000	351,866	182,144	199,712	164,224	.....	200,833	.....	.....	.....(86,184)	.....	.....	.....	.....
151099 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIISFPUBM8MPRO8K5P83	.05/20/2022	.05/18/2029	.....	1,272,358	..3901.36000000	90,354	46,752	49,209	42,148	.....	41,191	.....	.....	.....(22,131)	.....	.....	.....	.....
151704 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIISFPUBM8MPRO8K5P83	.06/06/2022	.06/04/2027	.....	4,053,241	..4121.43000000	287,336	147,779	158,794	139,365	.....	153,483	.....	.....	.....(70,464)	.....	.....	.....	.....
151705 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIISFPUBM8MPRO8K5P83	.06/06/2022	.06/06/2029	.....	1,853,944	..4121.43000000	130,682	67,058	68,338	63,241	.....	52,352	.....	.....	.....(32,038)	.....	.....	.....	.....
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	.....	3,972,298	..3674.84000000	261,765	135,127	151,780	132,321	.....	124,795	.....	.....	.....(63,686)	.....	.....	.....	.....
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	.....	1,273,169	..3674.84000000	86,044	44,550	51,015	43,662	.....	41,564	.....	.....	.....(20,919)	.....	.....	.....	.....
153829 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIISFPUBM8MPRO8K5P83	.07/06/2022	.07/06/2029	.....	4,331,917	..3845.08000000	317,612	.....	.....(77,334)	5,047	.....	221,637	.....	.....	.....(77,334)	.....	.....	.....	.....
153837 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.07/06/2022	.07/06/2027	.....	4,143,069	..3845.08000000	293,781	.....	.....(71,511)	4,710	.....	239,170	.....	.....	.....(71,511)	.....	.....	.....	.....
154458 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIISFPUBM8MPRO8K5P83	.07/20/2022	.07/20/2027	.....	2,557,974	..3959.90000000	184,369	.....	.....(44,908)	6,473	.....	141,019	.....	.....	.....(44,908)	.....	.....	.....	.....
154462 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIISFPUBM8MPRO8K5P83	.07/20/2022	.07/20/2029	.....	1,734,536	..3959.90000000	128,937	.....	.....(31,393)	4,556	.....	84,200	.....	.....	.....(31,393)	.....	.....	.....	.....
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	.....	2,584,672	..4145.19000000	183,241	.....	.....(44,612)	10,546	.....	138,173	.....	.....	.....(44,612)	.....	.....	.....	.....
155103 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.08/05/2022	.08/06/2027	.....	1,336,139	..4145.19000000	97,484	.....	.....(23,721)	5,638	.....	74,767	.....	.....	.....(23,721)	.....	.....	.....	.....
155746 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIISFPUBM8MPRO8K5P83	.08/19/2022	.08/20/2027	.....	1,556,207	..4228.48000000	112,181	.....	.....(27,628)	7,913	.....	61,414	.....	.....	.....(27,628)	.....	.....	.....	.....
155753 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIISFPUBM8MPRO8K5P83	.08/19/2022	.08/20/2029	.....	1,396,739	..4228.48000000	103,203	.....	.....(25,417)	7,280	.....	32,255	.....	.....	.....(25,417)	.....	.....	.....	.....
156500 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.09/06/2022	.09/06/2027	.....	1,564,291	..3908.19000000	110,816	.....	.....(27,000)	11,248	.....	79,971	.....	.....	.....(27,000)	.....	.....	.....	.....
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	.....	987,646	..3908.19000000	73,017	.....	.....(17,778)	7,441	.....	78,779	.....	.....	.....(17,778)	.....	.....	.....	.....
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	.....	1,181,616	..3855.93000000	92,347	.....	.....(22,435)	11,326	.....	94,274	.....	.....	.....(22,435)	.....	.....	.....	.....
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	.....	908,253	..3855.93000000	71,167	.....	.....(17,289)	8,729	.....	77,600	.....	.....	.....(17,289)	.....	.....	.....	.....
158076 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIISFPUBM8MPRO8K5P83	.10/06/2022	.10/06/2027	.....	2,932,137	..3744.52000000	282,047	.....	.....(67,961)	42,291	.....	167,543	.....	.....	.....(67,961)	.....	.....	.....	.....
158083 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIISFPUBM8MPRO8K5P83	.10/06/2022	.10/05/2029	.....	2,188,606	..3744.52000000	222,688	.....	.....(53,534)	33,707	.....	84,314	.....	.....	.....(53,534)	.....	.....	.....	.....
158729 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.10/20/2022	.10/20/2027	.....	6,530,815	..3665.78000000	659,610	.....	.....(158,457)	113,105	.....	520,411	.....	.....	.....(158,457)	.....	.....	.....	.....
158732 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIISFPUBM8MPRO8K5P83	.10/20/2022	.10/19/2029	.....	3,668,206	..3665.78000000	382,590	.....	.....(91,896)	65,638	.....	134,944	.....	.....	.....(91,896)	.....	.....	.....	.....
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	.....	11,680,363	..3770.55000000	1,019,060	.....	.....(244,808)	196,219	.....	1,176,715	.....	.....	.....(244,808)	.....	.....	.....	.....
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	.....	7,664,623	..3770.55000000	708,308	.....	.....(170,092)	136,558	.....	781,316	.....	.....	.....(170,092)	.....	.....	.....	.....
160843 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIISFPUBM8MPRO8K5P83	.11/18/2022	.11/19/2027	.....	12,068,585	..3965.34000000	1,195,890	.....	.....(287,464)	253,300	.....	938,625	.....	.....	.....(287,464)	.....	.....	.....	.....
160847 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIISFPUBM8MPRO8K5P83	.11/18/2022	.11/20/2029	.....	7,589,428	..3965.34000000	781,510	.....	.....(187,511)	166,495	.....	584,292	.....	.....	.....(187,511)	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
161965 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	12/06/2022	12/06/2027	.....	8,250,589	..3941.26000000	804,247	.....	(193,267)	190,834	.....	710,799	.....	.....	.....(193,267)	.....	.....	.....	.....
161970 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	12/06/2022	12/06/2029	.....	10,495,862	..3941.26000000	1,078,741	.....	(258,802)	257,204	.....	1,053,939	.....	.....	.....(258,802)	.....	.....	.....	.....
162533 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJISFPUBM8MPRO8K5P83	12/20/2022	12/20/2027	.....	6,695,471	..3821.62000000	659,185	.....	(158,490)	169,132	.....	512,460	.....	.....	.....(158,490)	.....	.....	.....	.....
162536 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJISFPUBM8MPRO8K5P83	12/20/2022	12/20/2029	.....	10,151,085	..3821.62000000	1,043,108	.....	(250,301)	269,113	.....	776,278	.....	.....	.....(250,301)	.....	.....	.....	.....
163351 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIVZ7FF32TWEFA76	01/06/2023	01/06/2028	.....	11,272,223	..3895.08000000	516,268	541,593	653,430	284,824	.....	828,460	.....	.....	.....(265,256)	.....	.....	.....	.....
163356 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIVZ7FF32TWEFA76	01/06/2023	01/04/2030	.....	13,719,968	..3895.08000000	684,626	720,137	805,289	378,714	.....	829,130	.....	.....	.....(352,676)	.....	.....	.....	.....
163386 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	01/06/2023	07/05/2024	11	4,284,588	..3895.08000000	539,858	.....	(177,924)	6,972	.....	179,335	.....	.....	.....(177,924)	.....	.....	.....	.....
163922 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIVZ7FF32TWEFA76	01/20/2023	01/20/2028	.....	5,705,912	..3972.61000000	263,613	276,749	334,559	156,157	.....	402,415	.....	.....	.....(135,037)	.....	.....	.....	.....
163924 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJISFPUBM8MPRO8K5P83	01/20/2023	01/18/2030	.....	18,090,591	..3972.61000000	891,866	939,596	1,099,296	530,162	.....	1,258,266	.....	.....	.....(458,304)	.....	.....	.....	.....
163954 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJISFPUBM8MPRO8K5P83	01/20/2023	07/19/2024	.....	4,043,828	..3972.61000000	500,343	.....	(164,806)	19,386	.....	172,715	.....	.....	.....(164,806)	.....	.....	.....	.....
164600 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIVZ7FF32TWEFA76	02/06/2023	02/04/2028	.....	5,580,626	..4111.08000000	257,825	270,297	319,588	165,106	.....	356,014	.....	.....	.....(131,327)	.....	.....	.....	.....
164603 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIVZ7FF32TWEFA76	02/06/2023	02/06/2030	.....	20,840,541	..4111.08000000	1,025,355	1,079,134	1,247,531	659,159	.....	1,217,658	.....	.....	.....(523,915)	.....	.....	.....	.....
164628 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A. B4TYDEB6KMZ0031MB27	02/06/2023	08/06/2024	.....	6,804,276	..4111.08000000	819,228	.....	(269,367)	58,624	.....	270,631	.....	.....	.....(269,367)	.....	.....	.....	.....
165236 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	02/17/2023	08/20/2024	17	6,934,453	..4079.09000000	835,601	.....	(272,880)	81,111	.....	262,697	.....	.....	.....(272,880)	.....	.....	.....	.....
165308 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJISFPUBM8MPRO8K5P83	02/17/2023	02/18/2028	.....	8,592,432	..4079.09000000	391,815	409,629	469,898	262,563	.....	529,243	.....	.....	.....(198,593)	.....	.....	.....	.....
165310 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJISFPUBM8MPRO8K5P83	02/17/2023	02/20/2030	.....	16,958,688	..4079.09000000	827,584	869,947	998,266	557,604	.....	1,006,691	.....	.....	.....(421,177)	.....	.....	.....	.....
165834 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	03/06/2023	09/06/2024	11	4,453,262	..4048.42000000	498,762	.....	(163,116)	63,594	.....	135,992	.....	.....	.....(163,116)	.....	.....	.....	.....
165863 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	03/06/2023	03/06/2028	.....	9,177,411	..4048.42000000	431,338	452,539	530,664	311,140	.....	598,815	.....	.....	.....(218,213)	.....	.....	.....	.....
165865 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIVZ7FF32TWEFA76	03/06/2023	03/06/2030	.....	13,812,465	..4048.42000000	661,617	693,367	776,055	476,721	.....	642,144	.....	.....	.....(334,468)	.....	.....	.....	.....
166386 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIVZ7FF32TWEFA76	03/20/2023	03/20/2028	.....	10,912,967	..3951.57000000	538,009	568,681	706,560	412,794	.....	660,007	.....	.....	.....(272,333)	.....	.....	.....	.....
166390 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	03/20/2023	03/20/2030	.....	13,135,985	..3951.57000000	650,231	685,913	820,645	497,894	.....	988,375	.....	.....	.....(328,754)	.....	.....	.....	.....
166443 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	03/20/2023	09/20/2024	12	4,741,884	..3951.57000000	401,640	.....	(131,334)	61,453	.....	131,855	.....	.....	.....(131,334)	.....	.....	.....	.....
167376 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJISFPUBM8MPRO8K5P83	04/06/2023	10/04/2024	.....	3,676,167	..4105.02000000	433,677	.....	(141,992)	78,414	.....	98,654	.....	.....	.....(141,992)	.....	.....	.....	.....
167410 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIVZ7FF32TWEFA76	04/06/2023	04/06/2028	.....	17,613,170	..4105.02000000	864,807	913,857	1,139,218	705,914	.....	1,084,608	.....	.....	.....(435,399)	.....	.....	.....	.....
167414 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIVZ7FF32TWEFA76	04/06/2023	04/05/2030	.....	19,509,223	..4105.02000000	963,756	1,016,922	1,228,038	785,531	.....	1,072,939	.....	.....	.....(484,872)	.....	.....	.....	.....
167991 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIVZ7FF32TWEFA76	04/20/2023	04/20/2028	.....	15,613,951	..4129.79000000	757,277	798,024	969,854	647,053	.....	1,027,028	.....	.....	.....(379,191)	.....	.....	.....	.....
167995 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIVZ7FF32TWEFA76	04/20/2023	04/18/2030	.....	14,700,848	..4129.79000000	721,812	760,581	907,264	616,694	.....	887,410	.....	.....	.....(361,420)	.....	.....	.....	.....
168016 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	04/20/2023	10/18/2024	9	3,716,811	..4129.79000000	422,226	.....	(138,783)	86,610	.....	83,866	.....	.....	.....(138,783)	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
170976 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A. E570DZIWZFF32WIEFA76	.05/05/2023	.05/05/2028		15,646,372	..4136.25000000	765,108	806,870	982,854	687,383		923,604			(381,510)				
170979 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPR08K5P83	.05/05/2023	.05/06/2030		15,930,319	..4136.25000000	767,841	807,742	963,542	688,131		904,789			(382,570)				
171015 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	.05/05/2023	.11/06/2024	9	3,722,625	..4136.25000000	418,419		(136,144)	100,024		95,288			(136,144)				
171609 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A. E570DZIWZFF32WIEFA76	.05/19/2023	.05/20/2030		20,432,234	..4191.98000000	974,618	1,023,562	1,206,285	911,257		935,643			(483,461)				
171636 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPR08K5P83	.05/19/2023	.11/20/2024		2,088,258	..4191.98000000	243,742		(79,156)	64,612		58,046			(79,156)				
171734 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A. E570DZIWZFF32WIEFA76	.05/19/2023	.05/19/2028		15,669,739	..4191.98000000	756,848	796,105	946,950	708,753		793,854			(375,576)				
172334 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A. E570DZIWZFF32WIEFA76	.06/06/2023	.06/06/2028		19,270,434	..4283.85000000	920,163	966,730	1,147,181	908,334		927,323			(454,192)				
172337 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPR08K5P83	.06/06/2023	.06/06/2030		17,649,477	..4283.85000000	831,290	871,424	1,014,110	818,790		789,376			(410,203)				
172357 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/06/2023	.12/06/2024	10	4,283,850	..4283.85000000	472,080		(154,528)	138,695		106,215			(154,528)				
172868 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPR08K5P83	.06/20/2023	.06/20/2028		17,848,623	..4388.71000000	846,025	887,362	1,035,174	867,800		788,572			(415,919)				
172870 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A. E570DZIWZFF32WIEFA76	.06/20/2023	.06/20/2030		9,849,798	..4388.71000000	459,001	480,894	563,330	470,293		372,251			(225,639)				
172889 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE 529900RLNSGA90UPEH54	.06/20/2023	.12/20/2024	8	3,510,968	..4388.71000000	390,416		(127,778)	124,677		99,895			(127,778)				
173429 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJFXT09	.07/06/2023	.07/05/2024		53,459,892	..1242.07000000	3,715,463		(1,831,493)	72,045		10,133,386			(1,831,493)				
173431 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	.07/06/2023	.07/05/2024		11,358,299	..509.30000000	749,648		(369,530)	14,536		309,933			(369,530)				
173433 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPR08K5P83	.07/06/2023	.07/05/2024		35,320,558	..4411.59000000	3,154,126		(1,554,789)	61,160		1,170,325			(1,554,789)				
173450 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPR08K5P83	.07/06/2023	.07/05/2024		40,238,615	..4411.59000000	3,593,308		(1,771,279)	69,676		1,586,348			(1,771,279)				
173462 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RHI G C71XBU11	.07/06/2023	.07/05/2024		32,100,705	..4411.59000000	2,824,862		(1,392,482)	54,776		1,367,949			(1,392,482)				
173478 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON ROMUWSPUBM8MPR08K5P83	.07/06/2023	.07/05/2024		64,052,663	..4411.59000000	5,718,622		(2,818,927)	110,887		2,748,913			(2,818,927)				
173482 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RHI G C71XBU11	.07/06/2023	.07/05/2024		46,418,338	..4411.59000000	4,084,814		(2,013,561)	79,207		2,200,481			(2,013,561)				
173493 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RHI G C71XBU11	.07/06/2023	.07/05/2024		58,191,264	..4411.59000000	5,120,831		(2,524,253)	99,296		3,275,374			(2,524,253)				
173500 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL W22LROWP21HZNB6K528	.07/06/2023	.07/05/2024		51,691,277	..177.31000000	4,300,075		(2,119,671)	83,381		3,518,332			(2,119,671)				
173508 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RHI G C71XBU11	.07/06/2023	.07/05/2024		52,068,401	..4411.59000000	4,582,019		(2,258,652)	88,848		3,341,327			(2,258,652)				
173514 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL W22LROWP21HZNB6K528	.07/06/2023	.07/05/2024		25,582,286	..86.88000000	2,155,414		(1,062,486)	41,795		375,177			(1,062,486)				
173518 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	.07/06/2023	.07/05/2024		89,247,208	..4411.59000000	7,907,303		(3,897,811)	153,327		6,832,024			(3,897,811)				
173530 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	.07/06/2023	.07/05/2024		59,171,224	..4411.59000000	5,242,570		(2,584,263)	101,656		5,214,865			(2,584,263)				
173538 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJFXT09	.07/06/2023	.07/05/2024		17,545,575	..4411.59000000	587,777		(289,738)	11,397		2,036,523			(289,738)				

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
173539 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWEFA76	.07/06/2023	.07/06/2028	.....	16,509,643	..4411.59000000	789,161	.....	.....(389,175)	15,135	.....	1,164,761	.....	.....	.....(389,175)	.....	.....	.....	.....
173541 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWEFA76	.07/06/2023	.07/05/2030	.....	14,571,363	..4411.59000000	690,683	.....	.....(340,611)	13,246	.....	950,568	.....	.....	.....(340,611)	.....	.....	.....	.....
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	..4411.59000000	447,867	.....	.....(146,290)	156,631	.....	89,609	.....	.....	.....(146,290)	.....	.....	.....	.....
173552 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBM8MPRO8K5P83	.07/06/2023	.07/05/2024	.....	92,074,134	..4411.59000000	8,222,220	.....	.....(4,053,046)	159,434	.....	1,837,893	.....	.....	.....(4,053,046)	.....	.....	.....	.....
173555 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.07/06/2023	.07/05/2024	389	2,737,328	..70.37000000	193,717	.....	.....(95,522)	3,725	.....	187,902	.....	.....	.....(95,522)	.....	.....	.....	.....
173556 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBM8MPRO8K5P83	.07/06/2023	.07/05/2024	.....	73,279,913	..4411.59000000	6,543,896	.....	.....(3,225,736)	126,890	.....	1,470,035	.....	.....	.....(3,225,736)	.....	.....	.....	.....
173566 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RH1GCT1XBU11	.07/06/2023	.07/05/2024	.....	28,000,413	..4411.59000000	1,346,820	.....	.....(663,899)	26,116	.....	760,401	.....	.....	.....(663,899)	.....	.....	.....	.....
173838 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJUFXT09	.07/14/2023	.07/12/2024	.....	1,393,454	..4471.78914150	76,578	.....	.....(37,836)	2,978	.....	131,749	.....	.....	.....(37,836)	.....	.....	.....	.....
174110 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBM8MPRO8K5P83	.07/20/2023	.07/19/2024	.....	75,164,825	..4534.87000000	6,485,973	.....	.....(3,194,427)	377,300	.....	1,674,925	.....	.....	.....(3,194,427)	.....	.....	.....	.....
174116 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.07/20/2023	.07/19/2024	.....	58,890,728	..4534.87000000	5,055,281	.....	.....(2,489,793)	294,075	.....	2,430,915	.....	.....	.....(2,489,793)	.....	.....	.....	.....
174135 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.07/20/2023	.07/19/2024	.....	54,369,681	..4534.87000000	4,667,695	.....	.....(2,298,901)	271,528	.....	2,503,508	.....	.....	.....(2,298,901)	.....	.....	.....	.....
174150 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.07/20/2023	.07/19/2024	.....	49,321,405	..4534.87000000	4,233,871	.....	.....(2,085,237)	246,292	.....	2,726,660	.....	.....	.....(2,085,237)	.....	.....	.....	.....
174153 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.07/20/2023	.07/19/2024	.....	51,657,563	..4534.87000000	4,434,871	.....	.....(2,184,232)	257,984	.....	3,460,661	.....	.....	.....(2,184,232)	.....	.....	.....	.....
174156 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.07/20/2023	.07/19/2024	.....	50,863,709	..4534.87000000	4,368,563	.....	.....(2,151,575)	254,127	.....	4,092,947	.....	.....	.....(2,151,575)	.....	.....	.....	.....
174160 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	.07/20/2023	.07/19/2024	.....	31,135,872	..4534.87000000	2,581,158	.....	.....(1,271,254)	150,150	.....	3,024,048	.....	.....	.....(1,271,254)	.....	.....	.....	.....
174161 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	.07/20/2023	.07/19/2024	.....	20,517,215	..88.73000000	1,764,485	.....	.....(869,032)	102,643	.....	190,111	.....	.....	.....(869,032)	.....	.....	.....	.....
174170 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUJSFPUBM8MPRO8K5P83	.07/20/2023	.07/19/2024	.....	85,929,753	..4534.87000000	7,414,878	.....	.....(3,651,925)	431,336	.....	1,684,043	.....	.....	.....(3,651,925)	.....	.....	.....	.....
174172 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWEFA76	.07/20/2023	.07/20/2028	.....	10,400,394	..4534.87000000	.....	.....	.....(473,437)	28,902	.....	768,044	.....	.....502,339	(473,437)	.....	.....	.....	.....
174176 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWEFA76	.07/20/2023	.07/19/2030	.....	12,993,512	..4534.87000000	.....	.....	.....(601,276)	36,706	.....	934,159	.....	.....637,981	(601,276)	.....	.....	.....	.....
174179 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJUFXT09	.07/20/2023	.07/19/2024	.....	24,291,529	..4534.87000000	1,146,560	.....	.....(564,696)	66,697	.....	668,349	.....	.....	.....(564,696)	.....	.....	.....	.....
174181 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJUFXT09	.07/20/2023	.07/19/2024	.....	13,086,849	..4534.87000000	.....	.....	.....(395,651)	24,437	.....	173,954	.....	.....420,088	(395,651)	.....	.....	.....	.....
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	..4534.87000000	383,032	.....	.....(125,783)	142,409	.....	84,608	.....	.....	.....(125,783)	.....	.....	.....	.....
174183 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.07/20/2023	.07/19/2024	2,123	38,795,702	..182.74000000	3,184,500	.....	.....(1,569,935)	183,721	.....	2,582,566	.....	.....	.....(1,569,935)	.....	.....	.....	.....
174188 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.07/20/2023	.07/19/2024	338	2,495,454	..73.83000000	166,972	.....	.....(82,316)	9,633	.....	128,785	.....	.....	.....(82,316)	.....	.....	.....	.....
174196 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.07/20/2023	.07/19/2024	103	46,709,161	..4534.87000000	3,839,531	.....	.....(1,892,860)	221,511	.....	1,692,169	.....	.....	.....(1,892,860)	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
174198 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGFU57RNE97	.07/20/2023	.07/19/2024	.....	40,365,295	1273.42000000	2,777,132		(1,367,774)	161,551		6,543,009			(1,367,774)				
174199 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCCEMIK50	.07/20/2023	.07/19/2024	.....	8,188,697	519.60000000	540,454		(266,181)	31,439		110,980			(266,181)				
174676 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	.....	43,705,560	180.19000000	3,565,524		(1,740,900)	380,974		2,826,078			(1,740,900)				
174686 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	.....	21,075,524	85.75000000	1,649,175		(805,225)	176,213		659,768			(805,225)				
174697 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/04/2023	.02/06/2025	.....	4,925,833	4478.03000000	548,735		(177,724)	222,892		122,438			(177,724)				
174705 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	.....	50,472,548	4478.03000000	4,305,354		(2,102,129)	460,024		1,583,657			(2,102,129)				
174713 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGFU57RNE97	.08/04/2023	.08/06/2024	.....	45,819,727	1257.07000000	3,198,217		(1,560,621)	342,666		8,224,176			(1,560,621)				
174714 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	.....	47,087,381	4478.03000000	4,016,596		(1,961,141)	429,171		1,751,996			(1,961,141)				
174715 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCCEMIK50	.08/04/2023	.08/06/2024	.....	10,625,339	517.99000000	699,147		(341,160)	74,909		204,474			(341,160)				
174724 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	.....	48,732,430	4478.03000000	4,156,920		(2,029,655)	444,164		1,981,808			(2,029,655)				
174734 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	.....	46,123,709	4478.03000000	3,934,394		(1,921,005)	420,387		2,016,958			(1,921,005)				
174740 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	.....	46,916,679	4478.03000000	4,002,035		(1,954,031)	427,615		2,241,645			(1,954,031)				
174753 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	.....	46,290,605	4478.03000000	3,948,630		(1,927,956)	421,908		2,677,850			(1,927,956)				
174762 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	.....	52,758,358	4478.03000000	4,500,336		(2,197,331)	480,858		3,588,364			(2,197,331)				
174771 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	.....	49,706,133	4478.03000000	4,239,978		(2,070,209)	453,039		4,021,198			(2,070,209)				
174774 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	.....	30,450,604	4478.03000000	2,597,464		(1,268,236)	277,537		2,958,964			(1,268,236)				
174777 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32WEFA76	.08/04/2023	.08/04/2028	.....	18,175,824	4478.03000000	885,163		(436,519)	87,304		1,303,157			(436,519)				
174779 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIWSPUBM8PRO8K5P83	.08/04/2023	.08/06/2030	.....	12,413,995	4478.03000000	615,734		(303,650)	60,730		874,552			(303,650)				
174782 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32WEFA76	.08/04/2023	.08/06/2024	.....	16,420,632	4478.03000000	525,460		(256,407)	56,299		1,533,971			(256,407)				
174789 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	GOLDMAN SACHS INTERNATIONAL W22LROWP21HZNB6K528	.08/04/2023	.08/06/2024	.....	2,434,010	72.16000000	197,269		(96,261)	21,136		142,419			(96,261)				
174799 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIWSPUBM8PRO8K5P83	.08/04/2023	.08/06/2024	.....	89,894,379	4478.03000000	8,061,728		(3,933,848)	863,757		1,753,519			(3,933,848)				
174818 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIWSPUBM8PRO8K5P83	.08/04/2023	.08/06/2024	.....	70,805,946	4478.03000000	6,349,877		(3,098,523)	680,344		1,444,238			(3,098,523)				
174823 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP517OUK5573	.08/04/2023	.08/06/2024	.....	32,284,068	4478.03000000	1,481,041		(722,697)	158,683		895,827			(722,697)				
175024 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIWSPUBM8PRO8K5P83	.08/11/2023	.08/11/2024	.....	1,278,375	4469.21784133	62,197		(30,506)	7,560		140,983			(30,506)				

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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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 Quarter-end (b)
175304 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGOFU57RNE97	.08/18/2023	.08/20/2024	.....	35,259,793	1226.67000000	2,464,660		(1,201,639)	358,865		7,403,013			(1,201,639)				
175305 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCMIK50	.08/18/2023	.08/20/2024	.....	7,360,918	508.53000000	485,821		(236,861)	70,738		274,607			(236,861)				
175351 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA ES71P3U8RHIGC71XBU11	.08/18/2023	.08/20/2024	.....	2,002,777	69.84000000	172,639		(84,170)	25,137		146,274			(84,170)				
175362 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWIFA76	.08/18/2023	.08/18/2028	.....	22,097,696	4369.71000000	1,082,787		(533,977)	148,327		1,602,644			(533,977)				
175364 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWIFA76	.08/18/2023	.08/20/2030	.....	14,097,552	4369.71000000	696,419		(343,440)	95,400		960,781			(343,440)				
175372 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/18/2023	.08/20/2024	141	61,455,820	4369.71000000	5,574,005		(2,719,817)	809,376		2,540,271			(2,719,817)				
175384 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/18/2023	.08/20/2024	111	48,503,781	4369.71000000	4,399,263		(2,146,606)	638,797		2,305,883			(2,146,606)				
175385 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.08/18/2023	.08/20/2024	.....	26,255,234	4369.71000000	1,308,609		(638,010)	190,539		716,610			(638,010)				
175387 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/18/2023	.08/20/2024	120	52,496,691	4369.71000000	4,761,417		(2,323,318)	691,384		3,089,620			(2,323,318)				
175399 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWIFA76	.08/18/2023	.08/20/2024	.....	13,952,290	4369.71000000	435,311		(212,235)	63,383		701,900			(212,235)				
175400 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/18/2023	.08/20/2024	114	49,769,249	4367.71000000	4,514,040		(2,202,611)	655,463		3,740,300			(2,202,611)				
175404 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/18/2023	.08/20/2024	1,808	31,693,243	175.33000000	2,563,225		(1,250,717)	372,194		2,102,206			(1,250,717)				
175408 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/18/2023	.08/20/2024	116	50,688,636	4369.71000000	4,597,428		(2,243,300)	667,572		4,890,081			(2,243,300)				
175419 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/18/2023	.08/20/2024	2,062	17,145,389	83.13000000	1,383,923		(675,281)	200,953		752,661			(675,281)				
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	4369.71000000	458,955		(148,582)	198,128		94,446			(148,582)				
175432 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/18/2023	.08/20/2024	158	69,041,418	4369.71000000	6,262,014		(3,055,529)	909,279		1,342,482			(3,055,529)				
175434 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/18/2023	.08/20/2024	143	62,486,853	4369.71000000	5,667,519		(2,765,447)	822,955		1,301,369			(2,765,447)				
175438 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.08/18/2023	.08/20/2024	141	61,634,148	4369.71000000	5,590,179		(2,725,479)	813,955		2,122,546			(2,725,479)				
175910 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2023	.09/06/2024	2,069	36,786,381	177.83000000	2,982,959		(1,465,466)	572,074		2,420,210			(1,465,466)				
175967 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2023	.09/06/2024	2,363	19,890,491	84.16000000	1,536,219		(754,713)	294,617		765,415			(754,713)				
175973 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2023	.09/06/2024	219	1,548,938	70.72000000	107,979		(53,048)	20,708		91,208			(53,048)				
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	4465.48000000	450,117		(147,741)	206,922		108,052			(147,741)				
175985 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2023	.09/06/2024	159	71,001,132	4465.48000000	6,283,521		(3,086,964)	1,205,059		1,362,884			(3,086,964)				
175989 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2023	.09/06/2024	152	67,875,296	4465.48000000	6,006,888		(2,951,060)	1,152,006		1,369,295			(2,951,060)				

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE DB - PART A - SECTION 1

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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 Quarter-end (b)
175992 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2023	.09/06/2024	81	36,170,388	..4465.48000000	3,201,039	.....	.....(1,572,604)	613,898	.....	.....1,107,750	.....	.....	.....(1,572,604)	.....	.....	.....	.....
175997 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2023	.09/06/2024	112	50,069,195	..4465.48000000	4,431,068	.....	.....(2,176,892)	849,794	.....	.....1,875,241	.....	.....	.....(2,176,892)	.....	.....	.....	.....
176006 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2023	.09/06/2024	112	49,838,329	..4465.48000000	4,410,637	.....	.....(2,166,854)	845,876	.....	.....2,046,294	.....	.....	.....(2,166,854)	.....	.....	.....	.....
176014 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2023	.09/06/2024	107	47,656,406	..4465.48000000	4,217,539	.....	.....(2,071,989)	808,843	.....	.....2,119,090	.....	.....	.....(2,071,989)	.....	.....	.....	.....
176024 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2023	.09/06/2024	105	46,846,547	..4465.48000000	4,145,867	.....	.....(2,036,779)	795,098	.....	.....2,392,779	.....	.....	.....(2,036,779)	.....	.....	.....	.....
176036 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2023	.09/06/2024	112	49,826,183	..4465.48000000	4,409,562	.....	.....(2,166,326)	845,669	.....	.....3,047,728	.....	.....	.....(2,166,326)	.....	.....	.....	.....
176040 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMVCMCFXT09	.09/06/2023	.09/06/2024	.....	.....44,820,899	..1251.62000000	3,146,427	.....	.....(1,544,117)	605,082	.....	.....8,464,868	.....	.....	.....(1,544,117)	.....	.....	.....	.....
176042 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L10CEMIK50	.09/06/2023	.09/06/2024	.....	.....9,627,469	..505.07000000	637,338	.....	.....(312,775)	122,565	.....	.....448,320	.....	.....	.....(312,775)	.....	.....	.....	.....
176046 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2023	.09/06/2024	115	51,543,964	..4465.48000000	4,561,583	.....	.....(2,241,011)	874,824	.....	.....3,804,921	.....	.....	.....(2,241,011)	.....	.....	.....	.....
176053 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2023	.09/06/2024	94	41,975,512	..4465.48000000	3,714,786	.....	.....(1,824,997)	712,425	.....	.....3,727,778	.....	.....	.....(1,824,997)	.....	.....	.....	.....
176056 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/06/2023	.09/06/2024	84	37,510,032	..4465.48000000	3,319,596	.....	.....(1,630,849)	636,635	.....	.....3,995,490	.....	.....	.....(1,630,849)	.....	.....	.....	.....
176065 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	.09/06/2023	.09/06/2024	.....	.....29,235,625	..4465.48000000	1,420,851	.....	.....(697,286)	273,241	.....	.....841,501	.....	.....	.....(697,286)	.....	.....	.....	.....
176069 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC 4PQUH3JPFGNF3BB653	.09/06/2023	.09/06/2024	.....	.....17,112,153	..4465.48000000	586,947	.....	.....(288,046)	112,874	.....	.....1,847,940	.....	.....	.....(288,046)	.....	.....	.....	.....
176071 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.09/06/2023	.09/06/2028	.....	.....17,149,201	..4465.48000000	874,609	.....	.....(431,314)	165,337	.....	.....1,281,177	.....	.....	.....(431,314)	.....	.....	.....	.....
176074 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.09/06/2023	.09/06/2030	.....	.....18,278,088	..4465.48000000	939,494	.....	.....(463,312)	177,603	.....	.....1,303,673	.....	.....	.....(463,312)	.....	.....	.....	.....
176415 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUWSFPU8MPRO8K5P83	.09/15/2023	.09/15/2024	.....	.....705,893	..4465.13073992	35,049	.....	.....(17,153)	7,649	.....	.....93,517	.....	.....	.....(17,153)	.....	.....	.....	.....
176715 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/20/2023	.09/20/2024	1,743	31,259,701	..179.35000000	2,459,294	.....	.....(1,207,942)	565,975	.....	.....2,037,990	.....	.....	.....(1,207,942)	.....	.....	.....	.....
176721 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/20/2023	.09/20/2024	2,178	18,214,000	..83.63000000	1,374,272	.....	.....(675,007)	316,271	.....	.....739,341	.....	.....	.....(675,007)	.....	.....	.....	.....
176728 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/20/2023	.09/20/2024	161	1,146,091	..71.02000000	80,527	.....	.....(39,553)	18,532	.....	.....65,967	.....	.....	.....(39,553)	.....	.....	.....	.....
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	..4402.20000000	687,190	.....	.....(225,522)	333,526	.....	.....136,206	.....	.....	.....(225,522)	.....	.....	.....	.....
176739 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/20/2023	.09/20/2024	145	63,831,900	..4402.20000000	5,438,515	.....	.....(2,671,260)	1,251,603	.....	.....1,220,400	.....	.....	.....(2,671,260)	.....	.....	.....	.....
176745 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/20/2023	.09/20/2024	141	62,071,020	..4402.20000000	5,288,487	.....	.....(2,597,570)	1,217,076	.....	.....1,247,297	.....	.....	.....(2,597,570)	.....	.....	.....	.....
176748 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/20/2023	.09/20/2024	122	53,706,840	..4402.20000000	4,575,854	.....	.....(2,247,543)	1,053,073	.....	.....1,748,014	.....	.....	.....(2,247,543)	.....	.....	.....	.....
176755 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/20/2023	.09/20/2024	123	54,335,122	..4402.20000000	4,629,384	.....	.....(2,273,835)	1,065,392	.....	.....2,127,181	.....	.....	.....(2,273,835)	.....	.....	.....	.....
176766 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/20/2023	.09/20/2024	104	45,818,714	..4402.20000000	3,903,781	.....	.....(1,917,438)	898,404	.....	.....1,980,577	.....	.....	.....(1,917,438)	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
176774 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/20/2023	.09/20/2024	 111	 48,712,940	.. 4402.20000000	 4,150,371	.....	..... (2,038,556)	 955,154	.....	..... 2,629,154	.....	.....	..... (2,038,556)	.....	.....	.....	.....
176780 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/20/2023	.09/20/2024	 106	 46,444,971	.. 4402.20000000	 3,957,139	.....	..... (1,943,645)	 910,684	.....	..... 3,094,002	.....	.....	..... (1,943,645)	.....	.....	.....	.....
176786 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/20/2023	.09/20/2024	 111	 48,864,420	.. 4402.20000000	 4,163,277	.....	..... (2,044,895)	 958,124	.....	..... 4,295,639	.....	.....	..... (2,044,895)	.....	.....	.....	.....
176789 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.09/20/2023	.09/20/2024	 77	 33,896,940	.. 4402.20000000	 2,888,039	.....	..... (1,418,531)	 664,645	.....	..... 3,684,634	.....	.....	..... (1,418,531)	.....	.....	.....	.....
176794 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32WIFA76	.09/20/2023	.09/20/2028	.....	..... 19,904,336	.. 4402.20000000	 1,100,710	.....	..... (542,816)	 250,298	.....	..... 1,651,112	.....	.....	..... (542,816)	.....	.....	.....	.....
176797 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32WIFA76	.09/20/2023	.09/20/2030	.....	..... 16,076,508	.. 4402.20000000	 901,892	.....	..... (444,769)	 205,088	.....	..... 1,259,226	.....	.....	..... (444,769)	.....	.....	.....	.....
176799 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUISFPUM8PRO8K5P83	.09/20/2023	.09/20/2024	.....	..... 37,589,737	.. 1236.49000000	 2,631,282	.....	..... (1,290,755)	 607,219	.....	..... 7,692,624	.....	.....	..... (1,290,755)	.....	.....	.....	.....
176801 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJFXT09	.09/20/2023	.09/20/2024	.....	..... 13,691,679	.. 4402.20000000	 455,933	.....	..... (223,654)	 105,215	.....	..... 707,942	.....	.....	..... (223,654)	.....	.....	.....	.....
176802 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	.09/20/2023	.09/20/2024	.....	..... 8,260,357	.. 505.76000000	 547,662	.....	..... (268,651)	 126,383	.....	..... 392,522	.....	.....	..... (268,651)	.....	.....	.....	.....
176834 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA E571P3U3RHHG71XBU11	.09/20/2023	.09/20/2024	.....	..... 28,159,475	.. 4402.20000000	 1,348,839	.....	..... (661,662)	 311,271	.....	..... 750,487	.....	.....	..... (661,662)	.....	.....	.....	.....
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	.. 4308.50000000	 388,200	.....	..... (126,509)	 200,546	.....	..... 89,578	.....	.....	..... (126,509)	.....	.....	.....	.....
177511 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.10/06/2023	.10/04/2024	 106	 45,670,100	.. 4308.50000000	 4,114,920	.....	..... (2,022,541)	 1,120,173	.....	..... 915,165	.....	.....	..... (2,022,541)	.....	.....	.....	.....
177514 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.10/06/2023	.10/04/2024	 118	 50,840,300	.. 4308.50000000	 4,580,760	.....	..... (2,251,508)	 1,246,985	.....	..... 1,339,744	.....	.....	..... (2,251,508)	.....	.....	.....	.....
177523 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.10/06/2023	.10/04/2024	 124	 53,425,400	.. 4308.50000000	 4,813,680	.....	..... (2,365,991)	 1,310,391	.....	..... 1,864,481	.....	.....	..... (2,365,991)	.....	.....	.....	.....
177526 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJFXT09	.10/06/2023	.10/04/2024	.....	..... 42,905,021	.. 1214.70000000	 2,990,480	.....	..... (1,467,595)	 816,343	.....	..... 9,801,562	.....	.....	..... (1,467,595)	.....	.....	.....	.....
177529 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	.10/06/2023	.10/04/2024	.....	..... 8,828,621	.. 494.62000000	 583,572	.....	..... (286,391)	 159,304	.....	..... 634,318	.....	.....	..... (286,391)	.....	.....	.....	.....
177531 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.10/06/2023	.10/04/2024	 99	 42,837,649	.. 4308.50000000	 3,859,713	.....	..... (1,897,103)	 1,050,700	.....	..... 1,640,442	.....	.....	..... (1,897,103)	.....	.....	.....	.....
177546 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.10/06/2023	.10/04/2024	 108	 46,746,622	.. 4308.50000000	 4,211,916	.....	..... (2,070,216)	 1,146,577	.....	..... 1,926,178	.....	.....	..... (2,070,216)	.....	.....	.....	.....
177560 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.10/06/2023	.10/04/2024	 122	 52,369,214	.. 4308.50000000	 4,718,517	.....	..... (2,319,217)	 1,284,485	.....	..... 2,497,544	.....	.....	..... (2,319,217)	.....	.....	.....	.....
177570 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.10/06/2023	.10/04/2024	 108	 46,423,097	.. 4308.50000000	 4,182,766	.....	..... (2,055,888)	 1,138,642	.....	..... 2,742,656	.....	.....	..... (2,055,888)	.....	.....	.....	.....
177579 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.10/06/2023	.10/04/2024	 114	 49,266,836	.. 4308.50000000	 4,438,989	.....	..... (2,181,826)	 1,208,392	.....	..... 4,632,669	.....	.....	..... (2,181,826)	.....	.....	.....	.....
177590 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.10/06/2023	.10/04/2024	 184	 79,276,400	.. 4308.50000000	 7,142,880	.....	..... (3,510,826)	 1,944,451	.....	..... 8,615,852	.....	.....	..... (3,510,826)	.....	.....	.....	.....
177593 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.10/06/2023	.10/04/2024	.....	..... 73,931,298	.. 4308.50000000	 6,877,000	.....	..... (3,374,927)	 1,877,287	.....	..... 1,421,261	.....	.....	..... (3,374,927)	.....	.....	.....	.....
177594 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32WIFA76	.10/06/2023	.10/06/2028	.....	..... 28,835,985	.. 4308.50000000	 1,603,281	.....	..... (790,659)	 434,862	.....	..... 2,336,383	.....	.....	..... (790,659)	.....	.....	.....	.....
177597 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32WIFA76	.10/06/2023	.10/04/2030	.....	..... 27,912,359	.. 4308.50000000	 1,599,378	.....	..... (788,734)	 433,804	.....	..... 1,998,339	.....	.....	..... (788,734)	.....	.....	.....	.....
177598 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.10/06/2023	.10/04/2024	.....	..... 31,934,184	.. 4308.50000000	 1,669,317	.....	..... (819,227)	 455,691	.....	..... 906,497	.....	.....	..... (819,227)	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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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 Quarter-end (b)
177600 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	10/06/2023	10/04/2024	.....	15,614,459	..4308.50000000	424,713	.....	(208,430)	115,938	.....	1,822,825	.....	.....	.....(208,430)	.....	.....	.....	.....
177479 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	10/09/2023	10/04/2024	2,242	38,053,352	..169.70000000	3,083,286	.....	(1,537,372)	837,014	.....	2,660,842	.....	.....	.....(1,537,372)	.....	.....	.....	.....
177488 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	10/09/2023	10/04/2024	2,775	21,302,298	..76.77000000	1,814,733	.....	(904,853)	492,642	.....	1,092,502	.....	.....	.....(904,853)	.....	.....	.....	.....
177499 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	10/09/2023	10/04/2024	232	1,588,530	..68.52000000	127,277	.....	(63,462)	34,552	.....	97,584	.....	.....	.....(63,462)	.....	.....	.....	.....
177770 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A.	10/13/2023	10/13/2024	.....	1,367,847	..4375.57485903	68,096	.....	(33,270)	20,128	.....	238,834	.....	.....	.....(33,270)	.....	.....	.....	.....
177903 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	10/20/2023	10/18/2024	1,637	30,045,998	..183.59000000	2,656,172	.....	(1,306,700)	824,075	.....	2,033,436	.....	.....	.....(1,306,700)	.....	.....	.....	.....
177925 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	10/20/2023	10/18/2024	86	574,398	..66.57000000	46,162	.....	(22,710)	14,322	.....	30,530	.....	.....	.....(22,710)	.....	.....	.....	.....
177932 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	10/20/2023	04/17/2025	10	4,224,160	..4224.16000000	500,140	.....	(163,696)	270,371	.....	204,290	.....	.....	.....(163,696)	.....	.....	.....	.....
177939 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	10/20/2023	10/18/2024	138	58,293,408	..4224.16000000	5,432,922	.....	(2,672,718)	1,685,560	.....	1,577,377	.....	.....	.....(2,672,718)	.....	.....	.....	.....
177949 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	10/20/2023	10/18/2024	104	44,033,320	..4224.16000000	4,103,888	.....	(2,018,901)	1,273,228	.....	1,591,888	.....	.....	.....(2,018,901)	.....	.....	.....	.....
177959 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	10/20/2023	10/18/2024	147	61,983,381	..4224.16000000	5,776,826	.....	(2,841,901)	1,792,256	.....	2,576,565	.....	.....	.....(2,841,901)	.....	.....	.....	.....
177970 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	10/20/2023	10/18/2024	104	43,750,470	..4224.16000000	4,077,526	.....	(2,005,933)	1,265,050	.....	3,016,130	.....	.....	.....(2,005,933)	.....	.....	.....	.....
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	.....	35,345,118	..1196.46000000	2,445,882	.....	(1,201,140)	760,941	.....	8,768,584	.....	.....	.....(1,201,140)	.....	.....	.....	.....
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	.....	7,651,762	..492.53000000	501,956	.....	(246,504)	156,164	.....	599,842	.....	.....	.....(246,504)	.....	.....	.....	.....
177980 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	10/20/2023	10/20/2028	.....	25,497,560	..4224.16000000	1,455,911	.....	(717,983)	450,734	.....	2,259,320	.....	.....	.....(717,983)	.....	.....	.....	.....
177984 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	10/20/2023	10/18/2030	.....	30,461,212	..4224.16000000	1,812,442	.....	(893,807)	561,112	.....	2,545,674	.....	.....	.....(893,807)	.....	.....	.....	.....
177987 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A.	10/20/2023	10/18/2024	.....	13,212,998	..4224.16000000	402,996	.....	(197,906)	125,377	.....	1,236,303	.....	.....	.....(197,906)	.....	.....	.....	.....
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	.....	16,480,710	..74.75000000	1,573,907	.....	(772,925)	489,660	.....	913,022	.....	.....	.....(772,925)	.....	.....	.....	.....
178004 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	10/20/2023	10/18/2024	.....	72,956,407	..4224.16000000	7,035,916	.....	(3,455,245)	2,188,952	.....	1,428,711	.....	.....	.....(3,455,245)	.....	.....	.....	.....
178011 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	10/20/2023	10/18/2024	.....	52,541,392	..4224.16000000	5,067,092	.....	(2,488,381)	1,576,429	.....	2,668,788	.....	.....	.....(2,488,381)	.....	.....	.....	.....
178025 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A.	10/20/2023	10/18/2024	.....	48,792,077	..4224.16000000	4,586,455	.....	(2,252,347)	1,426,897	.....	4,715,239	.....	.....	.....(2,252,347)	.....	.....	.....	.....
178031 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A.	10/20/2023	10/18/2024	.....	80,679,356	..4224.16000000	7,583,859	.....	(3,724,332)	2,359,423	.....	8,839,488	.....	.....	.....(3,724,332)	.....	.....	.....	.....
178036 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A.	10/20/2023	10/18/2024	.....	23,572,584	..4224.16000000	1,308,278	.....	(642,478)	407,020	.....	795,370	.....	.....	.....(642,478)	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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178390 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHIGC71XBU11	11/06/2023	05/06/2025	4,703,317	4365.98000000	536,507		(175,424)	307,138		213,364			(175,424)				
178397 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJISFPUBMIPRO8K5P83	11/06/2023	11/06/2024	51,696,594	4365.98000000	4,562,224		(2,234,745)	1,641,899		1,813,743			(2,234,745)				
178406 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJISFPUBMIPRO8K5P83	11/06/2023	11/06/2024	49,921,490	4365.98000000	4,405,571		(2,158,010)	1,585,522		1,960,388			(2,158,010)				
178421 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJISFPUBMIPRO8K5P83	11/06/2023	11/06/2024	43,057,215	4365.98000000	3,799,799		(1,861,281)	1,367,510		1,907,574			(1,861,281)				
178431 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJISFPUBMIPRO8K5P83	11/06/2023	11/06/2024	51,713,051	4365.98000000	4,564,711		(2,235,963)	1,642,794		2,761,428			(2,235,963)				
178435 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJISFPUBMIPRO8K5P83	11/06/2023	11/06/2024	33,391,840	4365.98000000	2,947,498		(1,443,792)	1,060,775		2,117,231			(1,443,792)				
178444 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	11/06/2023	11/06/2024	18,621,821	4365.98000000	601,485		(294,629)	216,468		2,364,197			(294,629)				
178447 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZWZ7FF32TWIFA76	11/06/2023	11/06/2028	37,538,719	4365.98000000	2,102,168		(1,036,686)	748,717		3,181,643			(1,036,686)				
178450 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZWZ7FF32TWIFA76	11/06/2023	11/06/2030	43,943,432	4365.98000000	2,561,902		(1,263,404)	912,458		3,521,787			(1,263,404)				
178461 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2023	11/06/2024	1,872	183.35000000	2,804,529		(1,376,526)	1,006,557		2,267,568			(1,376,526)				
178469 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2023	11/06/2024	2,602	78.97000000	1,831,887		(899,132)	657,472		982,063			(899,132)				
178477 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2023	11/06/2024	146	69.31000000	79,237		(38,891)	28,439		60,073			(38,891)				
178503 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	11/06/2023	11/06/2024	31,886,501	4365.98000000	1,543,307		(755,968)	555,421		1,038,307			(755,968)				
178508 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2023	11/06/2024	134	4365.98000000	4,996,190		(2,452,243)	1,793,153		1,110,049			(2,452,243)				
178509 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	11/06/2023	11/06/2024	42,250,102	1225.02000000	2,847,657		(1,394,887)	1,024,844		9,424,763			(1,394,887)				
178510 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	BFMBT61CT2L1QCEMIK50	11/06/2023	11/06/2024	11,133,582	499.30000000	722,569		(353,941)	260,046		748,706			(353,941)				
178512 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2023	11/06/2024	134	4365.98000000	4,996,190		(2,452,243)	1,793,153		1,154,783			(2,452,243)				
178514 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2023	11/06/2024	187	4365.98000000	6,972,295		(3,422,160)	2,502,385		2,197,018			(3,422,160)				
178519 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2023	11/06/2024	183	4365.98000000	6,834,244		(3,354,402)	2,452,838		7,413,830			(3,354,402)				
178527 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2023	11/06/2024	113	4365.98000000	4,213,205		(2,067,937)	1,512,137		5,135,650			(2,067,937)				
178529 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/06/2023	11/06/2024	95	4365.98000000	3,542,075		(1,738,531)	1,271,265		4,668,374			(1,738,531)				
178677 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJISFPUBMIPRO8K5P83	11/10/2023	11/08/2024	1,175,658	4377.96069682	54,090		(26,528)	19,983		226,237			(26,528)				
178947 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2023	11/20/2024	1,753	183.37000000	2,555,746		(1,254,150)	1,015,296		1,934,724			(1,254,150)				
178958 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2023	11/20/2024	1,852	82.34000000	1,257,290		(616,975)	499,471		612,313			(616,975)				

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
178976 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2023	11/20/2024	188	1,355,545	72.12000000	89,655	(43,996)	35,617		78,848			(43,996)				
178984 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2023	11/20/2024	110	49,839,921	4547.38000000	4,091,859	(2,007,948)	1,625,533		2,073,014			(2,007,948)				
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	4547.38000000	337,099	(110,560)	201,272		61,823			(110,560)				
179006 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2023	11/20/2024	111	50,348,319	4547.38000000	4,133,598	(2,028,430)	1,642,114		2,469,680			(2,028,430)				
179012 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2023	11/20/2024	156	70,939,128	4547.38000000	5,824,104	(2,857,992)	2,313,685		1,326,636			(2,857,992)				
179022 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2023	11/20/2024	122	55,478,036	4547.38000000	4,554,748	(2,235,096)	1,809,420		1,084,280			(2,235,096)				
179023 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2023	11/20/2024	90	40,736,340	4547.38000000	3,344,454	(1,641,184)	1,328,619		2,781,283			(1,641,184)				
179025 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2023	11/20/2024	105	47,878,455	4547.38000000	3,930,822	(1,928,925)	1,561,560		1,690,286			(1,928,925)				
179037 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2023	11/20/2024	121	55,149,715	4547.38000000	4,527,793	(2,221,869)	1,798,712		5,421,774			(2,221,869)				
179038 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZFF32WFEA76	11/20/2023	11/20/2028		36,129,319	4547.38000000	2,066,597	(1,019,144)	815,315		2,983,769			(1,019,144)				
179048 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZIWZFF32WFEA76	11/20/2023	11/20/2030		57,521,044	4547.38000000	3,416,750	(1,684,973)	1,347,978		4,490,913			(1,684,973)				
179049 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	11/20/2023	11/20/2024	83	37,743,254	4547.38000000	3,098,722	(1,520,598)	1,230,999		4,059,487			(1,520,598)				
179053 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHIGC71XBU11	11/20/2023	11/20/2024		13,914,188	4547.38000000	414,643	(203,020)	165,174		801,958			(203,020)				
179057 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHIGC71XBU11	11/20/2023	11/20/2024		27,764,868	4547.38000000	1,266,078	(619,905)	504,344		713,924			(619,905)				
179061 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	11/20/2023	11/20/2024		34,534,766	1259.07000000	2,317,283	(1,134,603)	923,093		6,640,275			(1,134,603)				
179063 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	BFM8T61CT2L1QCEMIK50	11/20/2023	11/20/2024		9,381,654	503.00000000	607,931	(297,659)	242,170		581,634			(297,659)				
179101 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP517OUK5573	11/20/2023	11/20/2024		59,596,710	4547.38000000	5,062,591	(2,478,779)	2,016,691		1,564,851			(2,478,779)				
179446 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	1,842	34,595,845	187.84000000	2,875,006	(1,410,473)	1,268,153		2,009,778			(1,410,473)				
179457 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	1,878	16,182,101	86.18000000	1,370,728	(672,477)	604,622		538,659			(672,477)				
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	4549.34000000	335,972	(109,971)	210,673		66,118			(109,971)				
179472 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	142	64,600,628	4549.34000000	5,277,856	(2,589,306)	2,328,041		1,188,591			(2,589,306)				
179479 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	132	60,051,288	4549.34000000	4,906,176	(2,406,961)	2,164,094		1,584,259			(2,406,961)				
179487 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	107	48,701,595	4549.34000000	3,978,909	(1,952,045)	1,755,080		1,729,235			(1,952,045)				
179507 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	118	53,709,463	4549.34000000	4,388,050	(2,152,769)	1,935,551		2,222,697			(2,152,769)				
179521 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUWSPFUM8MPR08K5P83	12/06/2023	12/06/2024		39,056,540	1260.04000000	2,597,260	(1,271,063)	1,148,788		7,528,305			(1,271,063)				

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
179522 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	111	50,336,263	4549.34000000	4,112,461	(2,017,565)	1,813,990		2,427,661			(2,017,565)				
179525 Call Options - S&P U.S. Retiree	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	BFBMT61CT2L1QCEMIK50	12/06/2023	12/06/2024		8,884,743	509.49000000	561,516	(274,798)	248,363		464,073			(274,798)				
179527 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHIGC71XBU11	12/06/2023	12/06/2024		22,348,709	4549.34000000	1,041,450	(509,671)	460,641		579,384			(509,671)				
179531 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	108	49,132,872	4549.34000000	4,014,144	(1,969,331)	1,770,622		2,738,690			(1,969,331)				
179535 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	79	36,066,986	4549.34000000	2,946,664	(1,445,628)	1,299,761		3,172,118			(1,445,628)				
179541 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZVZ7FF32TWEFA76	12/06/2023	12/06/2028		46,937,687	4549.34000000	2,651,979	(1,307,825)	1,162,511		4,047,388			(1,307,825)				
179546 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	146	66,420,364	4549.34000000	5,426,528	(2,662,244)	2,393,619		6,872,670			(2,662,244)				
179547 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZVZ7FF32TWEFA76	12/06/2023	12/06/2030		70,330,138	4549.34000000	4,128,379	(2,035,913)	1,809,700		5,746,462			(2,035,913)				
179554 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	4PQUHN3JPF6GNF3BB653	12/06/2023	12/06/2024		48,669,647	4549.34000000	4,172,792	(2,042,107)	1,845,658		944,536			(2,042,107)				
179558 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	4PQUHN3JPF6GNF3BB653	12/06/2023	12/06/2024		14,728,925	4549.34000000	447,760	(219,127)	198,047		1,505,087			(219,127)				
179559 Call Options - Ishares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	12/06/2023	12/06/2024		676,641	72.57000000	47,839	(23,412)	21,159		38,168			(23,412)				
179783 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUWSPFU8MPRO8K5P83	12/15/2023	12/15/2024		1,990,571	4685.23984322	99,532	(48,439)	46,742		265,628			(48,439)				
180049 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	91	42,627,566	4698.35000000	3,567,910	(1,750,036)	1,710,642		1,519,472			(1,750,036)				
180063 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	219	102,901,758	4698.35000000	8,612,836	(4,224,538)	4,129,442		4,477,181			(4,224,538)				
180068 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	12/20/2023	12/20/2024		22,808,684	4698.35000000	1,050,879	(514,065)	505,230		601,557			(514,065)				
180077 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	96	45,104,160	4698.35000000	3,775,200	(1,851,710)	1,810,027		2,442,989			(1,851,710)				
180078 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	12/20/2023	12/20/2024		16,386,355	4698.35000000	504,700	(246,887)	242,644		939,693			(246,887)				
180081 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	72	33,828,684	4698.35000000	2,831,447	(1,388,806)	1,357,543		2,788,674			(1,388,806)				
180082 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	1,722	32,395,250	188.10000000	2,640,187	(1,294,994)	1,265,843		1,898,730			(1,294,994)				
180094 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	107	50,272,345	4698.35000000	4,207,775	(2,063,885)	2,017,426		4,949,635			(2,063,885)				
180100 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZVZ7FF32TWEFA76	12/20/2023	12/20/2028		54,736,341	4698.35000000	3,065,235	(1,511,623)	1,461,235		4,328,498			(1,511,623)				
180105 Call Options - Ishares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	1,794	16,082,971	89.63000000	1,309,893	(642,494)	628,031		348,055			(642,494)				
180106 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	E570DZVZ7FF32TWEFA76	12/20/2023	12/20/2030		76,504,302	4698.35000000	4,414,298	(2,176,914)	2,104,350		5,696,925			(2,176,914)				
180124 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGOFU57PNE97	12/20/2023	12/20/2024		39,590,854	1292.08000000	2,632,792	(1,287,899)	1,265,765		6,558,556			(1,287,899)				

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
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	4698.35000000	338,422	(110,757)	220,871		61,343			(110,757)				
180129 Call Options - S&P U.S. Retiree	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	BFMBT61CT2L1QCCEMIK50	12/20/2023	12/20/2024		9,155,039	514.87000000	566,697	(277,215)	272,450		410,178			(277,215)				
Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	127	59,669,045	4698.35000000	4,994,275	(2,449,658)	2,394,515		1,069,636			(2,449,658)				
180133 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	149	70,005,415	4698.35000000	5,859,425	(2,874,009)	2,809,313		1,437,498			(2,874,009)				
180136 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	93	43,694,655	4698.35000000	3,657,225	(1,793,844)	1,753,464		1,222,065			(1,793,844)				
180149 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHIGC71XBU11	12/20/2023	12/20/2024		924,215	73.47000000	68,854	(33,682)	33,103		47,467			(33,682)				
180157 Call Options - Ishares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGOFU57RNE97	01/05/2024	01/06/2025		46,576,850	1291.44000000	3,074,072	(1,448,117)	1,625,955		7,855,841			(1,448,117)				
180473 Call Options - S&P Equal Weight	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	BFMBT61CT2L1QCCEMIK50	01/05/2024	01/06/2025		8,456,288	516.20000000	524,290	(246,980)	277,310		379,580			(246,980)				
Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	W22LR0WP2IHZNBB6K528	01/05/2024	01/06/2025		37,091,436	189.35000000	2,918,735	(1,374,941)	1,543,793		2,007,081			(1,374,941)				
180474 Call Options - S&P U.S. Retiree	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUWSPU8MIPR08K5P83	01/05/2024	01/06/2025		47,881,518	4697.24000000	4,037,848	(1,902,127)	2,135,721		1,323,179			(1,902,127)				
Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUWSPU8MIPR08K5P83	01/05/2024	01/06/2025		43,258,847	4697.24000000	3,648,451	(1,718,692)	1,929,759		1,520,885			(1,718,692)				
180481 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/05/2024	01/06/2025	1,835	16,453,535	89.66000000	1,365,317	(645,150)	720,167		364,837			(645,150)				
180499 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/05/2024	01/06/2025	151	1,117,209	74.17000000	74,712	(35,303)	39,408		55,092			(35,303)				
180503 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	01/05/2024	01/06/2025		35,316,640	4697.24000000	2,983,465	(1,405,434)	1,578,031		2,812,434			(1,405,434)				
180510 Call Options - Ishares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/05/2024	07/03/2025	7	3,288,068	4697.24000000	340,312	(107,996)	232,316		69,760			(107,996)				
180524 Call Options - Ishares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	01/05/2024	01/06/2025		24,767,973	4697.24000000	1,079,471	(508,511)	570,960		645,135			(508,511)				
180526 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	ES70DZIWZ7FF32TWEFA76	01/05/2024	01/05/2029		60,445,980	4697.24000000	3,348,707	(1,605,545)	1,743,163		4,603,372			(1,605,545)				
180537 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/05/2024	01/06/2025	143	67,170,532	4697.24000000	5,427,422	(2,564,606)	2,862,816		1,196,098			(2,564,606)				
180539 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	ES70DZIWZ7FF32TWEFA76	01/05/2024	01/06/2031		102,482,500	4697.24000000	5,913,240	(2,835,115)	3,078,125		7,241,264			(2,835,115)				
180544 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGOFU57RNE97	01/05/2024	01/06/2025		17,094,461	4697.24000000	459,841	(216,619)	243,222		1,159,311			(216,619)				
180545 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/05/2024	01/06/2025	127	59,654,948	4697.24000000	4,820,158	(2,277,657)	2,542,501		1,205,473			(2,277,657)				
180551 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/05/2024	01/06/2025	216	101,448,876	4697.24000000	8,197,134	(3,873,371)	4,323,763		4,344,235			(3,873,371)				
180558 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/05/2024	01/06/2025	97	45,399,200	4697.24000000	3,668,284	(1,733,365)	1,934,919		2,459,281			(1,733,365)				
180560 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	01/05/2024	01/06/2025	110	51,669,640	4697.24000000	4,174,940	(1,972,774)	2,202,166		4,830,076			(1,972,774)				
180562 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	01/12/2024	01/12/2025		939,135	4783.45000000	41,437	(18,710)	22,727		116,850			(18,710)				

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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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 Quarter-end (b)
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	4839.81000000	3,559,539	(1,557,915)	2,001,624		1,622,820			(1,557,915)				
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	4839.81000000	4,698,722	(2,056,504)	2,642,218		2,525,920			(2,056,504)				
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	4839.81000000	3,554,669	(1,555,783)	1,998,886		2,273,354			(1,555,783)				
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	4839.81000000	5,691,893	(2,491,189)	3,200,704		5,691,495			(2,491,189)				
180848 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	4PQUHN3JPFGFNF3BB653	01/19/2024	01/17/2025		58,808,525	4839.81000000	4,495,870	(1,960,699)	2,535,171		1,156,835			(1,960,699)				
180849 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGQFU57RNE97	01/19/2024	01/19/2029		30,600,543	4839.81000000	1,621,829	(715,382)	906,447		2,510,071			(715,382)				
180854 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGQFU57RNE97	01/19/2024	01/17/2031		77,737,735	4839.81000000	4,361,087	(1,923,658)	2,437,429		6,933,662			(1,923,658)				
180856 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	01/19/2024	01/17/2025		14,339,415	4839.81000000	421,579	(183,855)	237,724		626,426			(183,855)				
180859 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC MORGAN STANLEY & CO. INTERNATIONAL PLC	G5GSEF7VJP5I70UK5573	01/19/2024	01/17/2025		18,784,706	4839.81000000	779,957	(340,148)	439,809		472,136			(340,148)				
180863 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	PLC	4PQUHN3JPFGFNF3BB653	01/19/2024	01/17/2025		43,099,400	4839.81000000	3,294,918	(1,436,950)	1,857,968		1,151,042			(1,436,950)				
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	187.93000000	2,243,362	(981,859)	1,261,503		1,655,337			(981,859)				
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	88.32000000	1,217,675	(532,944)	684,731		387,329			(532,944)				
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	73.93000000	114,159	(49,964)	64,195		82,372			(49,964)				
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	4839.81000000	292,128	(85,002)	207,126		50,531			(85,002)				
180896 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	BFM8T61CT2L1QCEMIK50	01/19/2024	01/17/2025		5,554,494	515.69000000	341,601	(148,976)	192,625		262,709			(148,976)				
180897 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	01/19/2024	01/17/2025		30,326,908	1331.27000000	1,992,478	(868,942)	1,123,536		4,206,982			(868,942)				
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	4839.81000000	4,587,810	(2,007,961)	2,579,849		1,022,774			(2,007,961)				
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	188.55000000	3,404,509	(1,324,494)	2,080,015		2,502,448			(1,324,494)				
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	86.52000000	1,932,536	(751,836)	1,180,700		732,354			(751,836)				
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	75.21000000	162,840	(63,352)	99,489		124,232			(63,352)				
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	4954.23000000	6,082,052	(2,366,168)	3,715,884		1,297,896			(2,366,168)				
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	4954.23000000	5,196,690	(2,021,726)	3,174,964		1,246,734			(2,021,726)				
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	4954.23000000	3,695,424	(1,437,672)	2,257,752		1,201,470			(1,437,672)				

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE DB - PART A - SECTION 1

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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 Quarter-end (b)
181385 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	02/06/2024	02/06/2025	.....	25,062,639	..4954.23000000	.....	.....390,977	(151,450)	239,527	.....	.....598,035	.....	.....	.....(151,450)	.....	.....	.....	.....
181386 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	02/06/2024	02/06/2025	107	52,929,755	..4954.23000000	.....	.....4,112,603	(1,599,971)	2,512,631	.....	.....1,867,091	.....	.....	.....(1,599,971)	.....	.....	.....	.....
181399 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	02/06/2024	02/06/2025	120	59,450,760	..4954.23000000	.....	.....4,619,280	(1,797,090)	2,822,190	.....	.....2,945,048	.....	.....	.....(1,797,090)	.....	.....	.....	.....
181400 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A.	02/06/2024	02/06/2029	.....	41,505,951	..4954.23000000	.....	.....2,137,556	(837,454)	1,300,103	.....	.....3,206,662	.....	.....	.....(837,454)	.....	.....	.....	.....
181402 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A.	02/06/2024	02/06/2031	.....	79,357,783	..4954.23000000	.....	.....4,317,063	(1,691,343)	2,625,721	.....	.....6,609,097	.....	.....	.....(1,691,343)	.....	.....	.....	.....
181403 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	02/06/2024	02/06/2025	76	37,756,682	..4954.23000000	.....	.....2,933,666	(1,141,317)	1,792,350	.....	.....2,402,186	.....	.....	.....(1,141,317)	.....	.....	.....	.....
181411 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	02/06/2024	02/06/2025	132	65,395,836	..4954.23000000	.....	.....5,081,208	(1,976,799)	3,104,409	.....	.....5,183,024	.....	.....	.....(1,976,799)	.....	.....	.....	.....
181417 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG	02/06/2024	02/06/2025	.....	8,110,491	..515.55000000	.....	.....502,039	(194,471)	307,568	.....	.....407,449	.....	.....	.....(194,471)	.....	.....	.....	.....
181418 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A.	02/06/2024	02/06/2025	.....	51,199,691	..1362.57000000	.....	.....3,368,940	(1,305,001)	2,063,938	.....	.....6,043,923	.....	.....	.....(1,305,001)	.....	.....	.....	.....
181419 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A.	02/06/2024	02/06/2025	.....	22,087,163	..4954.23000000	.....	.....700,163	(271,217)	428,946	.....	.....1,540,232	.....	.....	.....(271,217)	.....	.....	.....	.....
181421 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	02/06/2024	08/06/2025	.....	3,694,660	..4954.23000000	.....	.....392,151	(101,456)	290,696	.....	.....64,841	.....	.....	.....(101,456)	.....	.....	.....	.....
181425 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	02/06/2024	02/06/2025	.....	99,871,911	..4954.23000000	.....	.....8,132,570	(3,150,254)	4,982,316	.....	.....4,045,683	.....	.....	.....(3,150,254)	.....	.....	.....	.....
181468 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	02/09/2024	02/09/2025	.....	1,119,734	..4993.90739631	.....	.....52,631	(19,773)	32,858	.....	.....98,879	.....	.....	.....(19,773)	.....	.....	.....	.....
181776 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	02/20/2024	02/20/2025	95	47,267,345	..4975.51000000	.....	.....3,795,535	(1,331,037)	2,464,498	.....	.....1,185,185	.....	.....	.....(1,331,037)	.....	.....	.....	.....
181779 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A.	02/20/2024	02/20/2029	.....	27,738,664	..4975.51000000	.....	.....1,398,029	(494,098)	903,931	.....	.....1,936,621	.....	.....	.....(494,098)	.....	.....	.....	.....
181784 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A.	02/20/2024	02/20/2031	.....	55,268,008	..4975.51000000	.....	.....2,956,838	(1,045,020)	1,911,819	.....	.....4,002,553	.....	.....	.....(1,045,020)	.....	.....	.....	.....
181787 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	02/20/2024	02/20/2025	2,131	39,946,857	..187.47000000	.....	.....2,959,737	(1,037,935)	1,921,802	.....	.....2,088,628	.....	.....	.....(1,037,935)	.....	.....	.....	.....
181793 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	02/20/2024	02/20/2025	109	54,248,981	..4975.51000000	.....	.....4,356,156	(1,527,638)	2,828,517	.....	.....1,845,296	.....	.....	.....(1,527,638)	.....	.....	.....	.....
181808 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	02/20/2024	02/20/2025	2,435	21,178,304	..86.96000000	.....	.....1,719,398	(602,967)	1,116,431	.....	.....592,803	.....	.....	.....(602,967)	.....	.....	.....	.....
181814 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	02/20/2024	02/20/2025	200	99,641,454	..4975.51000000	.....	.....8,001,140	(2,805,879)	5,195,261	.....	.....3,929,084	.....	.....	.....(2,805,879)	.....	.....	.....	.....
181828 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	02/20/2024	08/20/2025	6	2,985,306	..4975.51000000	.....	.....307,188	(72,015)	235,173	.....	.....51,828	.....	.....	.....(72,015)	.....	.....	.....	.....
181830 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	02/20/2024	02/20/2025	69	34,297,584	..4975.51000000	.....	.....2,754,072	(965,812)	1,788,261	.....	.....1,709,956	.....	.....	.....(965,812)	.....	.....	.....	.....
181832 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	02/20/2024	02/20/2025	123	61,198,773	..4975.51000000	.....	.....4,914,219	(1,723,343)	3,190,876	.....	.....1,115,041	.....	.....	.....(1,723,343)	.....	.....	.....	.....
181844 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	02/20/2024	02/20/2025	146	1,113,790	..76.38000000	.....	.....79,036	(27,717)	51,319	.....	.....47,971	.....	.....	.....(27,717)	.....	.....	.....	.....
181853 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A.	02/20/2024	02/20/2025	.....	20,721,749	..4975.51000000	.....	.....955,273	(333,296)	621,977	.....	.....497,197	.....	.....	.....(333,296)	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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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 Quarter-end (b)
181867 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	02/20/2024	02/20/2025		6,980,531	517.24000000		439,773	(153,437)	286,336		343,226			(153,437)				
181868 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	02/20/2024	02/20/2025		42,729,051	1368.74000000		2,875,665	(1,003,323)	1,872,342		4,867,988			(1,003,323)				
181869 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	02/20/2024	02/20/2025		16,234,929	4975.51000000		451,331	(157,470)	293,861		427,527			(157,470)				
181878 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	02/20/2024	02/20/2025		65,276,252	4975.51000000		5,508,010	(1,921,751)	3,586,259		1,073,250			(1,921,751)				
181884 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	02/20/2024	02/20/2025		62,395,362	4975.51000000		5,241,210	(1,828,664)	3,412,546		4,543,901			(1,828,664)				
182202 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	03/06/2024	03/06/2029		43,838,652	5104.76000000		2,183,165	(681,865)	1,501,300		2,337,196			(681,865)				
182204 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	03/06/2024	03/06/2031		73,621,521	5104.76000000		3,857,768	(1,204,892)	2,652,876		3,519,957			(1,204,892)				
182206 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/06/2024	03/06/2025	2,268	45,093,299	198.81000000		3,472,554	(1,078,018)	2,394,536		2,017,438			(1,078,018)				
182220 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/06/2024	03/06/2025	172	1,349,120	78.58000000		87,904	(27,289)	60,615		47,909			(27,289)				
182231 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/06/2024	09/05/2025	4	2,041,904	5104.76000000		211,540	(43,700)	167,840		32,690			(43,700)				
182240 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/06/2024	03/06/2025	148	75,550,448	5104.76000000		6,059,120	(1,880,991)	4,178,129		1,184,502			(1,880,991)				
182248 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/06/2024	03/06/2025	131	66,872,356	5104.76000000		5,363,140	(1,664,931)	3,698,209		1,168,324			(1,664,931)				
182249 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	03/06/2024	03/06/2025		50,269,144	5104.76000000		4,252,770	(1,312,149)	2,940,620		2,280,102			(1,312,149)				
182256 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	03/06/2024	03/06/2025		24,154,215	89.65000000		2,171,705	(670,058)	1,501,647		575,936			(670,058)				
182257 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/06/2024	03/06/2025	93	47,474,268	5104.76000000		3,807,420	(1,181,974)	2,625,446		1,130,656			(1,181,974)				
182262 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/06/2024	03/06/2025	116	58,971,208	5104.76000000		4,729,471	(1,468,215)	3,261,256		1,909,692			(1,468,215)				
182272 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	03/06/2024	03/06/2025	191	97,276,307	5104.76000000		7,801,526	(2,421,902)	5,379,624		6,356,552			(2,421,902)				
182279 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	03/06/2024	03/06/2025		133,854,538	5104.76000000		11,324,094	(3,493,935)	7,830,159		5,138,853			(3,493,935)				
182292 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	03/06/2024	03/06/2025		8,863,281	520.97000000		557,500	(172,011)	385,489		398,340			(172,011)				
182293 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/06/2024	03/06/2025		48,914,664	1398.28000000		3,291,957	(1,015,700)	2,276,257		4,731,945			(1,015,700)				
182296 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	03/06/2024	03/06/2025		25,715,456	5104.76000000		1,445,209	(445,905)	999,304		590,660			(445,905)				
182300 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	03/06/2024	03/06/2025		18,264,456	5104.76000000		503,551	(155,366)	348,185		1,052,026			(155,366)				
182519 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	03/15/2024	03/14/2025		1,396,661	5160.01000000		60,554	(16,989)	43,565		92,265			(16,989)				
182744 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/20/2024	03/20/2025		80,854,470	5224.62000000		6,904,972	(1,864,152)	5,040,820		1,193,396			(1,864,152)				
182753 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	03/20/2024	03/20/2025		85,327,218	5224.62000000		7,304,010	(1,971,881)	5,332,128		5,378,101			(1,971,881)				

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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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 Quarter-end (b)
182764 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.03/20/2024	.03/20/2025	.....	1,573,725	5224.62000000	.....	135,026	(36,453)	98,572	.....	126,211	.....	.....	(36,453)	.....	.....	.....	.....
182767 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.03/20/2024	.03/20/2025	2,103	42,516,432	202.18000000	.....	3,141,733	(854,482)	2,287,250	.....	1,679,860	.....	.....	(854,482)	.....	.....	.....	.....
182777 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZWZ7FF32TWEFA76	.03/20/2024	.03/20/2025	.....	18,424,934	5224.62000000	.....	521,426	(140,771)	380,655	.....	392,145	.....	.....	(140,771)	.....	.....	.....	.....
182780 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.03/20/2024	.03/20/2025	3,062	27,184,699	88.79000000	.....	1,781,901	(484,638)	1,297,263	.....	699,564	.....	.....	(484,638)	.....	.....	.....	.....
182781 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZWZ7FF32TWEFA76	.03/20/2024	.03/20/2029	.....	23,117,461	5224.62000000	.....	1,246,031	(341,378)	904,653	.....	1,167,999	.....	.....	(341,378)	.....	.....	.....	.....
182784 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGQFUS7RNE97	.03/20/2024	.03/20/2031	.....	71,515,666	5224.62000000	.....	3,954,816	(1,083,511)	2,871,305	.....	4,199,744	.....	.....	(1,083,511)	.....	.....	.....	.....
182789 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.03/20/2024	.03/20/2025	93	48,536,302	5224.62000000	.....	3,936,325	(1,070,594)	2,865,731	.....	1,422,597	.....	.....	(1,070,594)	.....	.....	.....	.....
182790 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.03/20/2024	.03/20/2025	157	1,252,607	79.85000000	.....	80,474	(21,887)	58,587	.....	39,415	.....	.....	(21,887)	.....	.....	.....	.....
182804 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.03/20/2024	.03/20/2025	260	135,800,674	5224.62000000	.....	11,013,521	(2,995,436)	8,018,085	.....	4,812,697	.....	.....	(2,995,436)	.....	.....	.....	.....
182824 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.03/20/2024	.03/20/2025	98	50,960,630	5224.62000000	.....	4,132,939	(1,124,069)	3,008,871	.....	2,195,834	.....	.....	(1,124,069)	.....	.....	.....	.....
182831 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	.03/20/2024	.03/20/2025	.....	8,437,055	521.83000000	.....	534,066	(144,183)	389,883	.....	383,351	.....	.....	(144,183)	.....	.....	.....	.....
182832 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.03/20/2024	.03/20/2025	.....	53,119,497	1426.80000000	.....	3,617,438	(976,609)	2,640,829	.....	4,304,072	.....	.....	(976,609)	.....	.....	.....	.....
182833 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RHHG71XBU11	.03/20/2024	.03/20/2025	.....	22,696,844	5224.62000000	.....	1,066,752	(287,994)	778,758	.....	461,731	.....	.....	(287,994)	.....	.....	.....	.....
182837 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.03/20/2024	.09/19/2025	7	3,657,234	5224.62000000	.....	384,013	(69,501)	314,512	.....	56,215	.....	.....	(69,501)	.....	.....	.....	.....
182839 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.03/20/2024	.03/20/2025	99	51,723,738	5224.62000000	.....	4,194,828	(1,140,901)	3,053,927	.....	844,531	.....	.....	(1,140,901)	.....	.....	.....	.....
182843 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.03/20/2024	.03/20/2025	91	47,544,042	5224.62000000	.....	3,855,852	(1,048,707)	2,807,145	.....	1,085,258	.....	.....	(1,048,707)	.....	.....	.....	.....
183356 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.04/05/2024	.04/04/2025	2,419	52,037,123	215.14000000	.....	4,104,629	(920,983)	3,183,646	.....	1,414,198	.....	.....	(920,983)	.....	.....	.....	.....
183364 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.04/05/2024	.04/04/2025	257	2,029,902	78.97000000	.....	134,693	(30,222)	104,471	.....	63,681	.....	.....	(30,222)	.....	.....	.....	.....
183381 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.04/05/2024	.10/06/2025	3	1,561,302	5204.34000000	.....	167,997	(24,923)	143,074	.....	23,947	.....	.....	(24,923)	.....	.....	.....	.....
183385 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.04/05/2024	.04/04/2025	241	125,424,594	5204.34000000	.....	10,535,556	(2,363,934)	8,171,622	.....	1,872,854	.....	.....	(2,363,934)	.....	.....	.....	.....
183395 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.04/05/2024	.04/04/2025	107	55,686,438	5204.34000000	.....	4,677,612	(1,049,547)	3,628,065	.....	1,198,327	.....	.....	(1,049,547)	.....	.....	.....	.....
183413 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC ROYAL BANK OF CANADA G5GSEF7VJP5170UK5573	.04/05/2024	.04/04/2025	.....	648,438	266.23000000	.....	18,610	(4,136)	14,475	.....	11,358	.....	.....	(4,136)	.....	.....	.....	.....
183416 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ES71P3U3RHHG71XBU11	.04/05/2024	.04/04/2025	.....	28,624,148	5204.34000000	.....	1,385,409	(307,869)	1,077,540	.....	561,125	.....	.....	(307,869)	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE DB - PART A - SECTION 1

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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 Quarter-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		30,140,606	87.19000000		2,772,424	(616,094)	2,156,330		870,076			(616,094)				
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		11,325,091	520.20000000		715,746	(159,055)	556,691		565,552			(159,055)				
183430 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	04/05/2024	04/04/2025		56,267,973	1422.99000000		3,809,342	(846,520)	2,962,821		4,738,615			(846,520)				
183443 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	04/05/2024	04/04/2025		21,346,269	5204.34000000		593,426	(131,873)	461,554		950,792			(131,873)				
183449 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	04/05/2024	04/06/2029		30,875,127	5204.34000000		1,664,169	(382,987)	1,281,182		1,801,137			(382,987)				
183452 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	04/05/2024	04/04/2031		78,645,201	5204.34000000		4,294,028	(988,215)	3,305,813		3,550,854			(988,215)				
183455 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/05/2024	04/04/2025	97	50,483,139	5204.34000000		4,240,539	(951,478)	3,289,061		1,461,579			(951,478)				
183467 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/05/2024	04/04/2025	341	177,434,166	5204.34000000		14,904,314	(3,344,181)	11,560,133		6,351,541			(3,344,181)				
183475 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/05/2024	04/04/2025	97	50,482,098	5204.34000000		4,240,452	(951,459)	3,288,993		2,184,082			(951,459)				
183477 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/05/2024	04/04/2025	99	51,498,818	5204.34000000		4,325,856	(970,621)	3,355,234		3,028,896			(970,621)				
183483 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/05/2024	04/04/2025	100	52,043,400	5204.34000000		4,371,600	(980,885)	3,390,715		3,582,241			(980,885)				
183621 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	04/12/2024	04/12/2025		1,480,638	5161.54000000		74,423	(15,050)	59,373		110,771			(15,050)				
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	221.03000000		3,387,741	(630,496)	2,757,245		928,223			(630,496)				
183826 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/19/2024	10/20/2025	4	1,986,892	4967.23000000		224,520	(27,551)	196,969		32,569			(27,551)				
183827 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG	04/19/2024	04/17/2025		23,508,611	81.99000000		2,234,826	(410,859)	1,823,967		965,279			(410,859)				
183836 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/19/2024	04/17/2025	91	45,201,793	4967.23000000		3,991,351	(742,835)	3,248,516		1,167,433			(742,835)				
183840 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	04/19/2024	04/20/2029		28,050,131	4967.23000000		1,528,732	(293,182)	1,235,551		1,927,518			(293,182)				
183844 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CITIBANK N.A.	04/19/2024	04/18/2031		75,745,710	4967.23000000		4,196,312	(804,772)	3,391,540		3,856,321			(804,772)				
183849 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/19/2024	04/17/2025	128	63,769,299	4967.23000000		5,630,875	(1,047,968)	4,582,907		3,029,754			(1,047,968)				
183851 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	04/19/2024	04/17/2025		167,728	261.21000000		4,797	(882)	3,915		4,503			(882)				
183858 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	04/19/2024	04/17/2025		102,060,018	4967.23000000		9,372,172	(1,723,018)	7,649,154		1,648,329			(1,723,018)				
183863 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	04/19/2024	04/17/2025	245	1,862,047	76.12000000		104,208	(20,095)	84,113		79,729			(20,095)				
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		7,633,998	514.38000000		490,866	(90,243)	400,623		468,662			(90,243)				
183875 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	04/19/2024	04/17/2025		19,724,534	4967.23000000		968,854	(178,118)	790,736		453,305			(178,118)				

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
183876 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6KMZ0031MB27	.04/19/2024	.04/17/2025	.....	48,817,145	1366.11000000	.....	3,353,738	(616,565)	2,737,173	.....	6,040,981	.....	.....	(616,565)	.....	.....	.....	.....
183880 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.04/19/2024	.04/17/2025	.....	31,442	261.21000000	.....	899	(165)	734	.....	859	.....	.....	(165)	.....	.....	.....	.....
183883 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	.04/19/2024	.04/17/2025	.....	14,850,913	4967.23000000	.....	374,243	(68,802)	305,441	.....	749,368	.....	.....	(68,802)	.....	.....	.....	.....
183885 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ...	02RNE81BXP4ROTDBPU41	.04/19/2024	.04/17/2025	.....	41,158,209	4967.23000000	.....	3,786,555	(696,136)	3,090,420	.....	1,350,199	.....	.....	(696,136)	.....	.....	.....	.....
183893 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.04/19/2024	.04/17/2025	.....	87,088,826	4967.23000000	.....	8,000,342	(1,470,815)	6,529,527	.....	3,507,140	.....	.....	(1,470,815)	.....	.....	.....	.....
183899 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.04/19/2024	.04/17/2025	.....	48,490,412	4967.23000000	.....	4,454,854	(818,998)	3,635,856	.....	2,536,071	.....	.....	(818,998)	.....	.....	.....	.....
183905 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ...	02RNE81BXP4ROTDBPU41	.04/19/2024	.04/17/2025	.....	69,345,795	4967.23000000	.....	6,379,813	(1,172,890)	5,206,923	.....	5,003,279	.....	.....	(1,172,890)	.....	.....	.....	.....
184304 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GCT1XBU11	.05/06/2024	.05/06/2025	.....	27,071,786	5180.74000000	.....	1,248,009	(175,340)	1,072,669	.....	569,824	.....	.....	(175,340)	.....	.....	.....	.....
184318 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	ROMUWSPFUM8MPR08K5P83	.05/06/2024	.05/06/2025	.....	18,406,314	5180.74000000	.....	517,217	(72,667)	444,551	.....	940,922	.....	.....	(72,667)	.....	.....	.....	.....
184324 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A.	E570DZVZ7FF32TWIFA76	.05/06/2024	.05/04/2029	.....	28,800,434	5180.74000000	.....	1,558,103	(226,245)	1,331,858	.....	1,534,330	.....	.....	(226,245)	.....	.....	.....	.....
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	.....	10,958,068	520.85000000	.....	701,316	(98,532)	602,784	.....	578,880	.....	.....	(98,532)	.....	.....	.....	.....
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	.....	51,255,630	1412.21000000	.....	3,459,755	(486,081)	2,973,674	.....	4,918,918	.....	.....	(486,081)	.....	.....	.....	.....
184329 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A.	E570DZVZ7FF32TWIFA76	.05/06/2024	.05/06/2031	.....	80,553,405	5180.74000000	.....	4,406,271	(639,815)	3,766,457	.....	3,804,056	.....	.....	(639,815)	.....	.....	.....	.....
184330 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.05/06/2024	.05/06/2025	.....	86,118	264.16000000	.....	2,472	(347)	2,124	.....	1,903	.....	.....	(347)	.....	.....	.....	.....
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	5180.74000000	.....	272,505	(25,858)	246,647	.....	39,722	.....	(25,858)	.....	.....	.....	.....
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	5180.74000000	.....	9,049,985	(1,292,855)	7,757,130	.....	1,679,784	.....	(1,292,855)	.....	.....	.....	.....
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	5180.74000000	.....	3,086,170	(440,881)	2,645,289	.....	866,995	.....	(440,881)	.....	.....	.....	.....
184350 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.05/06/2024	.05/06/2025	.....	1,049,949	264.16000000	.....	30,133	(4,234)	25,900	.....	22,916	.....	.....	(4,234)	.....	.....	.....	.....
184355 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.05/06/2024	.05/06/2025	.....	29,255,040	84.67000000	.....	2,624,464	(368,726)	2,255,738	.....	1,042,625	.....	.....	(368,726)	.....	.....	.....	.....
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	5180.74000000	.....	6,101,859	(871,694)	5,230,164	.....	2,388,370	.....	(871,694)	.....	.....	.....	.....
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	5180.74000000	.....	5,762,213	(823,173)	4,939,040	.....	3,114,579	.....	(823,173)	.....	.....	.....	.....
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	215.20000000	.....	4,018,367	(574,052)	3,444,315	.....	1,466,634	.....	(574,052)	.....	.....	.....	.....
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	5180.74000000	.....	4,536,169	(648,024)	3,888,145	.....	2,654,703	.....	(648,024)	.....	.....	.....	.....
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	5180.74000000	.....	6,736,129	(962,304)	5,773,825	.....	3,135,862	.....	(962,304)	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-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	..5180.74000000	.....	.....6,799,166	 (971,309)	5,827,857	.....	.....5,417,435	.....	.....	..... (971,309)	.....	.....	.....	.....
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	79.46000000	.....	.....144,690	 (20,670)	124,020	.....	.....74,278	.....	.....	..... (20,670)	.....	.....	.....	.....
184503 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	.05/10/2024	.05/09/2025	.....	.....1,373,169	..5187.45000000	.....	.....67,888	 (8,486)	59,402	.....	.....106,457	.....	.....	..... (8,486)	.....	.....	.....	.....
184782 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5170UK5573	.05/20/2024	.05/20/2025	.....	..... 22,448,288	..5308.13000000	.....	.....1,009,346	 (102,881)	906,465	.....	.....426,884	.....	.....	..... (102,881)	.....	.....	.....	.....
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	.....	..... 14,507,073	..5308.13000000	.....	.....427,959	 (43,621)	384,338	.....	.....421,922	.....	.....	..... (43,621)	.....	.....	.....	.....
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	..5308.13000000	.....	.....3,486,633	 (363,989)	3,122,644	.....	.....1,824,830	.....	.....	..... (363,989)	.....	.....	.....	.....
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	.....	..... 1,231,870	266.78000000	.....	.....35,354	 (3,604)	31,751	.....	.....22,289	.....	.....	..... (3,604)	.....	.....	.....	.....
184823 Call Options – Ishares U.S. Real Estate – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	.05/20/2024	.05/20/2025	.....	..... 20,077,220	87.72000000	.....	.....1,741,498	 (177,508)	1,563,990	.....	.....631,550	.....	.....	..... (177,508)	.....	.....	.....	.....
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	..5308.13000000	.....	.....3,665,039	 (382,614)	3,282,425	.....	.....2,063,075	.....	.....	..... (382,614)	.....	.....	.....	.....
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	..5308.13000000	.....	.....3,982,085	 (415,712)	3,566,373	.....	.....2,375,022	.....	.....	..... (415,712)	.....	.....	.....	.....
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	..5308.13000000	.....	.....7,327,335	 (764,942)	6,562,394	.....	.....5,172,300	.....	.....	..... (764,942)	.....	.....	.....	.....
184854 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUISFPUBMPRO8K5P83	.05/20/2024	.05/18/2029	.....	..... 28,210,224	..5308.13000000	.....	.....1,514,889	 (161,865)	1,353,024	.....	.....1,321,848	.....	.....	..... (161,865)	.....	.....	.....	.....
184861 Call Options – S&P 500 – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWEFA76	.05/20/2024	.05/20/2031	.....	..... 74,371,308	..5308.13000000	.....	.....4,082,985	 (436,264)	3,646,721	.....	.....3,049,219	.....	.....	..... (436,264)	.....	.....	.....	.....
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	..5308.13000000	.....	.....3,237,865	 (338,019)	2,899,846	.....	.....955,749	.....	.....	..... (338,019)	.....	.....	.....	.....
184872 Call Options – S&P U.S. Retiree Spending Index – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L1QCEMIK50	.05/20/2024	.05/20/2025	.....	..... 8,660,981	525.47000000	.....	.....555,169	 (56,587)	498,581	.....	.....409,138	.....	.....	..... (56,587)	.....	.....	.....	.....
184873 Call Options – S&P Equal Weight Energy – USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A. B4TYDEB6GMZ0031MB27	.05/20/2024	.05/20/2025	.....	..... 46,276,498	1439.08000000	.....	.....3,169,940	 (323,107)	2,846,833	.....	.....3,789,905	.....	.....	..... (323,107)	.....	.....	.....	.....
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	224.56000000	.....	.....3,681,267	 (384,308)	3,296,959	.....	.....961,795	.....	.....	..... (384,308)	.....	.....	.....	.....
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	..5308.13000000	.....	.....6,876,935	 (717,922)	6,159,013	.....	.....2,709,767	.....	.....	..... (717,922)	.....	.....	.....	.....
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	..5308.13000000	.....	.....3,811,130	 (397,865)	3,413,265	.....	.....1,887,863	.....	.....	..... (397,865)	.....	.....	.....	.....
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	81.70000000	.....	.....111,833	 (11,675)	100,158	.....	.....41,932	.....	.....	..... (11,675)	.....	.....	.....	.....
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	..5308.13000000	.....	.....220,184	 (15,268)	204,916	.....	.....31,188	.....	.....	..... (15,268)	.....	.....	.....	.....
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	..5308.13000000	.....	.....8,375,469	 (874,362)	7,501,107	.....	.....1,505,191	.....	.....	..... (874,362)	.....	.....	.....	.....
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	.....	..... 22,233,527	87.13000000	.....	.....1,877,040	 (93,592)	1,783,448	.....	.....732,601	.....	.....	..... (93,592)	.....	.....	.....	.....
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	.....	..... 23,072,006	5352.96000000	.....	.....582,352	 (29,037)	553,315	.....	.....418,919	.....	.....	..... (29,037)	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
185345 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC BNP PARIBAS LONDON	06/06/2024	06/06/2025	.....	2,327,127	264.85000000	.....	66,790	(3,330)	63,459	.....	50,477	.....	.....	(3,330)	.....	.....	.....	.....
185349 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	 ROMUIISFPUBM8PRO8K5P83	06/06/2024	12/05/2025	.....	2,339,008	5352.96000000	.....	258,694	(8,576)	250,119	.....	33,493	.....	.....	(8,576)	.....	.....	.....	.....
185357 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ... JPMORGAN CHASE	06/06/2024	06/06/2025	.....	43,764,515	5352.96000000	.....	3,632,455	(181,120)	3,451,335	.....	0	.....	.....	(181,120)	.....	.....	.....	.....
185367 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK, N.A. 7H6GLXDRUGOFU57RNE97	06/06/2024	06/06/2025	.....	15,733,852	5352.96000000	.....	464,149	(23,143)	441,005	.....	589,679	.....	.....	(23,143)	.....	.....	.....	.....
185369 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE BNP PARIBAS LONDON	06/06/2024	06/06/2025	89	47,801,023	5352.96000000	.....	3,728,472	(215,104)	3,513,368	.....	1,785,846	.....	.....	(215,104)	.....	.....	.....	.....
185370 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	 ROMUIISFPUBM8PRO8K5P83	06/06/2024	06/06/2029	.....	31,638,823	5352.96000000	.....	1,695,841	(102,215)	1,593,626	.....	1,700,652	.....	.....	(102,215)	.....	.....	.....	.....
185372 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CITIBANK N.A. E570DZVZ7FF32TWEFA76	06/06/2024	06/06/2031	.....	92,684,199	5352.96000000	.....	5,069,826	(305,579)	4,764,247	.....	3,842,519	.....	.....	(305,579)	.....	.....	.....	.....
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	219.43000000	.....	4,107,196	(236,954)	3,870,242	.....	1,391,486	.....	.....	(236,954)	.....	.....	.....	.....
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	82.16000000	.....	183,512	(10,587)	172,925	.....	74,266	.....	.....	(10,587)	.....	.....	.....	.....
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	5352.96000000	.....	4,005,407	(231,081)	3,774,326	.....	2,067,128	.....	.....	(231,081)	.....	.....	.....	.....
185410 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFMBT61CT2L1QCEMIK50	06/06/2024	06/06/2025	.....	9,212,548	523.47000000	.....	584,997	(29,169)	555,828	.....	482,471	.....	.....	(29,169)	.....	.....	.....	.....
185415 Call Options - S&P Equal Weight Energy - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	 ROMUIISFPUBM8PRO8K5P83	06/06/2024	06/06/2025	.....	56,652,620	1449.93000000	.....	3,846,713	(191,803)	3,654,910	.....	4,327,048	.....	.....	(191,803)	.....	.....	.....	.....
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	5352.96000000	.....	9,269,166	(534,760)	8,734,406	.....	1,634,548	.....	.....	(534,760)	.....	.....	.....	.....
185418 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC G5GSEF7VJP5I70UK5573	06/06/2024	06/06/2025	.....	245,154	264.85000000	.....	7,036	(351)	6,685	.....	5,396	.....	.....	(351)	.....	.....	.....	.....
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	5352.96000000	.....	8,710,670	(502,539)	8,208,131	.....	3,365,352	.....	.....	(502,539)	.....	.....	.....	.....
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	5352.96000000	.....	3,978,451	(229,526)	3,748,925	.....	2,220,969	.....	.....	(229,526)	.....	.....	.....	.....
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	5352.96000000	.....	4,798,714	(276,849)	4,521,865	.....	2,837,404	.....	.....	(276,849)	.....	.....	.....	.....
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	5352.96000000	.....	6,037,484	(348,316)	5,689,167	.....	4,331,962	.....	.....	(348,316)	.....	.....	.....	.....
185735 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIISFPUBM8PRO8K5P83	06/14/2024	06/13/2025	.....	1,090,737	5417.66000000	.....	49,658	(1,379)	48,279	.....	54,057	.....	.....	(1,379)	.....	.....	.....	.....
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	.....	13,491,957	5473.17000000	.....	399,362	(4,425)	394,937	.....	407,662	.....	.....	(4,425)	.....	.....	.....	.....
186120 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON ROMUIISFPUBM8PRO8K5P83	06/20/2024	06/20/2029	.....	22,181,244	5473.17000000	.....	1,191,133	(26,107)	1,165,026	.....	1,127,911	.....	.....	(26,107)	.....	.....	.....	.....
186121 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	 ROMUIISFPUBM8PRO8K5P83	06/20/2024	06/20/2031	.....	70,189,078	5473.17000000	.....	3,828,814	(83,919)	3,744,895	.....	3,169,978	.....	.....	(83,919)	.....	.....	.....	.....
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	218.16000000	.....	3,392,807	(65,246)	3,327,560	.....	1,151,818	.....	.....	(65,246)	.....	.....	.....	.....
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	78.50000000	.....	111,296	(2,140)	109,155	.....	60,979	.....	.....	(2,140)	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-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	..5473.17000000	.....	.....223,304	 (2,863)	220,441	.....	.....30,015	.....	.....	..... (2,863)	.....	.....	.....	.....
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	..5473.17000000	.....	.....7,920,066	 (152,309)	7,767,757	.....	.....1,306,581	.....	.....	..... (152,309)	.....	.....	.....	.....
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	.....	.....18,593,960	..86.77000000	.....	.....1,564,228	 (17,332)	1,546,896	.....	.....580,042	.....	.....	..... (17,332)	.....	.....	.....	.....
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	..5473.17000000	.....	.....3,180,162	 (61,157)	3,119,005	.....	.....866,964	.....	.....	..... (61,157)	.....	.....	.....	.....
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	.....	.....1,692,752	..265.06000000	.....	.....48,581	 (538)	48,043	.....	.....38,115	.....	.....	..... (538)	.....	.....	.....	.....
186183 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3PHIGC71XBU11	.06/20/2024	.06/20/2025	.....	.....23,141,444	..5473.17000000	.....	.....1,087,648	 (12,052)	1,075,596	.....	.....348,218	.....	.....	..... (12,052)	.....	.....	.....	.....
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	..5473.17000000	.....	.....3,496,407	 (67,239)	3,429,168	.....	.....1,886,366	.....	.....	..... (67,239)	.....	.....	.....	.....
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	..5473.17000000	.....	.....3,688,962	 (70,942)	3,618,021	.....	.....1,688,193	.....	.....	..... (70,942)	.....	.....	.....	.....
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	..5473.17000000	.....	.....4,144,277	 (79,698)	4,064,579	.....	.....2,046,259	.....	.....	..... (79,698)	.....	.....	.....	.....
186221 Call Options - S&P U.S. Retiree Spending Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG	BFMBT61CT2L1QCEMIK50	.06/20/2024	.06/20/2025	.....	.....7,539,960	..522.02000000	.....	.....477,279	 (5,288)	471,991	.....	.....424,661	.....	.....	..... (5,288)	.....	.....	.....	.....
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	..5473.17000000	.....	.....4,418,571	 (84,973)	4,333,598	.....	.....2,894,855	.....	.....	..... (84,973)	.....	.....	.....	.....
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	.....	.....48,963,458	..1479.53000000	.....	.....3,373,582	 (37,380)	3,336,202	.....	.....3,194,052	.....	.....	..... (37,380)	.....	.....	.....	.....
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	.....	.....86,399	..265.06000000	.....	.....2,480	 (27)	2,452	.....	.....1,911	.....	.....	..... (27)	.....	.....	.....	.....
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	..5473.17000000	.....	.....10,056,376	 (193,392)	9,862,984	.....	.....3,620,310	.....	.....	..... (193,392)	.....	.....	.....	.....
0159999999. Subtotal - Purchased Options - Hedging Other - Call Options and Warrants											746,314,852	704,176,461	(491,131,982)	713,500,744	XXX	964,710,845	1,560,408	0	(524,735,896)	0	0	XXX	XXX
0219999999. Subtotal - Purchased Options - Hedging Other											746,314,852	704,176,461	(491,131,982)	713,500,744	XXX	964,710,845	1,560,408	0	(524,735,896)	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											746,314,852	704,176,461	(491,131,982)	713,500,744	XXX	964,710,845	1,560,408	0	(524,735,896)	0	0	XXX	XXX
0449999999. Subtotal - 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											746,314,852	704,176,461	(491,131,982)	713,500,744	XXX	964,710,845	1,560,408	0	(524,735,896)	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
163387 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.01/06/2023	.07/05/2024	11	4,464,112	..4058.28385200	 (439,252)	.....	.....144,767	 (5,673)	.....	.....0	.....	.....	.....144,767	.....	.....	.....	.....
163955 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	ROMUWSPU8M1PR08K5P83	.01/20/2023	.07/19/2024	.....	.....4,217,308	..4143.03496900	 (399,368)	.....	.....131,547	 (15,474)	.....	.....0	.....	.....	.....131,547	.....	.....	.....	.....
164629 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6GKMZ0031MB27	.02/06/2023	.08/06/2024	.....	.....7,077,128	..4275.93430800	 (653,884)	.....	.....215,001	 (46,792)	.....	.....0	.....	.....	.....215,001	.....	.....	.....	.....
165238 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.02/17/2023	.08/20/2024	17	7,200,043	..4235.31914700	 (677,076)	.....	.....221,111	 (65,723)	.....	.....0	.....	.....	.....221,111	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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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 Quarter-end (b)
165835 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.03/06/2023	.09/06/2024	11	4,591,313	4173.92102000	(415,217)	135,793	(52,942)		0			135,793				
166444 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.03/20/2023	.09/20/2024	12	4,876,079	4063.39943100	(322,068)	105,314	(49,278)		0			105,314				
167377 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUIISFPUBM8MPRO8K5P83	.04/06/2023	.10/04/2024		3,777,261	4217.90805000	(372,359)	121,916	(67,327)		0			121,916				
168018 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.04/20/2023	.10/18/2024	9	3,803,041	4225.60112800	(368,739)	121,202	(75,639)		0			121,202				
171017 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/05/2023	.11/06/2024	9	3,821,275	4245.86062500	(358,227)	116,559	(85,635)		0			116,559				
171637 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUIISFPUBM8MPRO8K5P83	.05/19/2023	.11/20/2024		2,148,818	4313.54742000	(206,236)	66,976	(54,670)		0			66,976				
172359 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.06/06/2023	.12/06/2024	10	4,395,658	4395.65848500	(401,140)	131,307	(117,853)		0			131,307				
172893 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.06/20/2023	.12/20/2024	8	3,617,350	4521.68791300	(323,112)	105,750	(103,184)		0			105,750				
173441 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUIISFPUBM8MPRO8K5P83	.07/06/2023	.07/05/2024		36,493,163	4558.05000000	(2,390,142)	1,178,192	(46,346)		0			1,178,192				
173454 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUIISFPUBM8MPRO8K5P83	.07/06/2023	.07/05/2024		41,828,061	4585.85000000	(2,568,028)	1,265,879	(49,796)		0			1,265,879				
173465 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	.07/06/2023	.07/05/2024		33,471,370	4599.96000000	(1,945,303)	958,914	(37,721)		0			958,914				
173479 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUIISFPUBM8MPRO8K5P83	.07/06/2023	.07/05/2024		66,806,951	4601.29000000	(3,952,690)	1,948,432	(76,645)		0			1,948,432				
173487 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	.07/06/2023	.07/05/2024		48,623,204	4621.14000000	(2,682,980)	1,322,543	(52,025)		0			1,322,543				
173499 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	.07/06/2023	.07/05/2024		61,473,203	4660.40000000	(3,072,499)	1,514,552	(59,578)		0			1,514,552				
173505 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	W22LR0WP21HZNB6K528	.07/06/2023	.07/05/2024		55,215,881	189.40000000	(2,586,511)	1,274,990	(50,154)		0			1,274,990				
173512 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	.07/06/2023	.07/05/2024		55,416,456	4695.26000000	(2,520,111)	1,242,259	(48,866)		0			1,242,259				
173519 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	W22LR0WP21HZNB6K528	.07/06/2023	.07/05/2024		27,187,068	92.33000000	(1,292,268)	637,008	(25,058)		0			637,008				
173523 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6QKMZ0031MB27	.07/06/2023	.07/05/2024		96,092,490	4749.96000000	(3,807,286)	1,876,757	(73,825)		0			1,876,757				
173533 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6QKMZ0031MB27	.07/06/2023	.07/05/2024		64,395,998	4801.13000000	(2,198,803)	1,083,874	(42,636)		0			1,083,874				
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	4518.35000000	(385,812)	126,020	(134,929)		0			126,020				
173554 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUIISFPUBM8MPRO8K5P83	.07/06/2023	.07/05/2024		93,915,579	4499.82000000	(6,999,476)	3,450,309	(135,724)		0			3,450,309				
173557 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUIISFPUBM8MPRO8K5P83	.07/06/2023	.07/05/2024		74,752,790	4500.26000000	(5,566,342)	2,743,863	(107,935)		0			2,743,863				
173561 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/06/2023	.07/05/2024	389	2,927,156	75.25000000	(85,967)	42,390	(1,653)		0			42,390				
173569 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	.07/06/2023	.07/05/2024		28,762,055	4531.59000000	(870,813)	429,257	(16,886)		0			429,257				
174112 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUIISFPUBM8MPRO8K5P83	.07/20/2023	.07/19/2024		76,848,499	4636.45000000	(5,360,004)	2,639,873	(311,801)		0			2,639,873				
174123 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.07/20/2023	.07/19/2024		61,334,731	4723.07000000	(3,476,421)	1,712,183	(202,229)		0			1,712,183				

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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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 Quarter-end (b)
174140 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.07/20/2023	.07/19/2024	56,886,944	..4744.83000000	(3,056,721)	.....	1,505,475	(177,815)	.....	0	.....	.....	1,505,475	.....	.....	.....	.....
174151 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.07/20/2023	.07/19/2024	52,063,689	..4787.01000000	(2,514,033)	.....	1,238,194	(146,246)	.....	0	.....	.....	1,238,194	.....	.....	.....	.....
174154 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.07/20/2023	.07/19/2024	55,139,280	..4840.52000000	(2,306,063)	.....	1,135,766	(134,148)	.....	0	.....	.....	1,135,766	.....	.....	.....	.....
174158 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.07/20/2023	.07/19/2024	54,983,619	..4902.19000000	(1,925,070)	.....	948,122	(111,985)	.....	0	.....	.....	948,122	.....	.....	.....	.....
174166 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC BANK OF AMERICA, N.A.	G5GSEF7VJP5170UK5573 B4TYDEB6GMZ0031MB27	.07/20/2023	.07/19/2024	34,180,959	..4978.38000000	(852,189)	.....	419,714	(49,573)	.....	0	.....	.....	419,714	.....	.....	.....	.....
174167 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	UBS AG BNP PARIBAS LONDON	BFM8T61CT2L1QCMIK50	.07/20/2023	.07/19/2024	21,782,054	..94.20000000	(1,144,853)	.....	563,855	(66,598)	.....	0	.....	.....	563,855	.....	.....	.....	.....
174173 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROMUJWSFPUBMPRO8K5P83		.07/20/2023	.07/19/2024	87,622,627	..4624.21000000	(6,278,028)	.....	3,092,011	(365,204)	.....	0	.....	.....	3,092,011	.....	.....	.....	.....
174180 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCJFXT09	.07/20/2023	.07/19/2024	24,961,962	..4660.03000000	(728,746)	.....	358,917	(42,392)	.....	0	.....	.....	358,917	.....	.....	.....	.....
174186 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/20/2023	.01/17/2025	3,642,196	..4652.78000000	(323,289)	.....	106,164	(120,197)	.....	0	.....	.....	106,164	.....	.....	.....	.....
174187 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/20/2023	.07/19/2024	2,123	..194.97000000	(1,951,037)	.....	961,847	(112,560)	.....	0	.....	.....	961,847	.....	.....	.....	.....
174191 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/20/2023	.07/19/2024	2,657,018	..78.61000000	(75,374)	.....	37,159	(4,349)	.....	0	.....	.....	37,159	.....	.....	.....	.....
174197 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.07/20/2023	.07/19/2024	48,409,382	..4699.94000000	(2,731,148)	.....	1,346,436	(157,566)	.....	0	.....	.....	1,346,436	.....	.....	.....	.....
174680 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	2,426	..191.94000000	(2,185,399)	.....	1,067,042	(233,508)	.....	0	.....	.....	1,067,042	.....	.....	.....	.....
174692 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	2,458	..90.87000000	(999,582)	.....	488,055	(106,805)	.....	0	.....	.....	488,055	.....	.....	.....	.....
174701 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/04/2023	.02/06/2025	5,059,813	..4599.83000000	(463,023)	.....	149,964	(188,077)	.....	0	.....	.....	149,964	.....	.....	.....	.....
174710 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	52,072,488	..4619.98000000	(3,263,561)	.....	1,593,465	(348,709)	.....	0	.....	.....	1,593,465	.....	.....	.....	.....
174718 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	48,857,825	..4646.40000000	(2,874,225)	.....	1,403,367	(307,109)	.....	0	.....	.....	1,403,367	.....	.....	.....	.....
174729 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	50,735,365	..4662.08000000	(2,872,343)	.....	1,402,448	(306,908)	.....	0	.....	.....	1,402,448	.....	.....	.....	.....
174736 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	48,162,388	..4675.96000000	(2,632,783)	.....	1,285,481	(281,311)	.....	0	.....	.....	1,285,481	.....	.....	.....	.....
174745 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	49,182,766	..4694.32000000	(2,565,942)	.....	1,252,845	(274,169)	.....	0	.....	.....	1,252,845	.....	.....	.....	.....
174758 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	48,998,556	..4739.99000000	(2,263,655)	.....	1,105,251	(241,870)	.....	0	.....	.....	1,105,251	.....	.....	.....	.....
174768 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	56,388,151	..4786.12000000	(2,286,573)	.....	1,116,441	(244,319)	.....	0	.....	.....	1,116,441	.....	.....	.....	.....
174772 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	53,777,058	..4844.78000000	(1,825,728)	.....	891,429	(195,078)	.....	0	.....	.....	891,429	.....	.....	.....	.....
174775 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	.08/04/2023	.08/06/2024	33,450,016	..4919.12000000	(887,332)	.....	433,248	(94,811)	.....	0	.....	.....	433,248	.....	.....	.....	.....
174792 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	W22LR0WP21HZNB6K528	.08/04/2023	.08/06/2024	2,596,930	..76.99000000	(103,754)	.....	50,629	(11,117)	.....	0	.....	.....	50,629	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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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 Quarter-end (b)
174802 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	.08/04/2023	.08/06/2024	.....	91,665,355	..4566.25000000	 (6,886,808)	.....	3,360,527	 (737,872)	.....	0	.....	.....	3,360,527	.....	.....	.....	.....
174820 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	.08/04/2023	.08/06/2024	.....	72,264,589	..4570.28000000	 (5,382,668)	.....	2,626,558	 (576,714)	.....	0	.....	.....	2,626,558	.....	.....	.....	.....
174824 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	.08/04/2023	.08/06/2024	.....	33,184,814	..4602.97000000	 (924,787)	.....	451,264	 (99,084)	.....	0	.....	.....	451,264	.....	.....	.....	.....
175356 Call Options - Ishares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA	.08/18/2023	.08/20/2024	.....	2,161,933	..75.39000000	 (85,519)	.....	41,694	 (12,452)	.....	0	.....	.....	41,694	.....	.....	.....	.....
175375 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.08/18/2023	.08/20/2024	141	64,030,807	..4552.80000000	 (3,982,236)	.....	1,943,119	 (578,242)	.....	0	.....	.....	1,943,119	.....	.....	.....	.....
175386 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.08/18/2023	.08/20/2024	111	50,841,663	..4580.33000000	 (2,968,362)	.....	1,448,402	 (431,022)	.....	0	.....	.....	1,448,402	.....	.....	.....	.....
175388 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	.08/18/2023	.08/20/2024	.....	26,977,271	..4489.88000000	 (872,510)	.....	425,390	 (127,041)	.....	0	.....	.....	425,390	.....	.....	.....	.....
175395 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.08/18/2023	.08/20/2024	120	55,630,723	..4630.58000000	 (2,876,817)	.....	1,403,734	 (417,730)	.....	0	.....	.....	1,403,734	.....	.....	.....	.....
175403 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.08/18/2023	.08/20/2024	114	53,566,656	..4703.12000000	 (2,299,332)	.....	1,121,952	 (333,876)	.....	0	.....	.....	1,121,952	.....	.....	.....	.....
175409 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.08/18/2023	.08/20/2024	116	55,661,208	..4798.38000000	 (1,829,784)	.....	892,837	 (265,695)	.....	0	.....	.....	892,837	.....	.....	.....	.....
175416 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.08/18/2023	.08/20/2024	1,808	33,817,213	..187.08000000	 (1,541,912)	.....	752,371	 (223,894)	.....	0	.....	.....	752,371	.....	.....	.....	.....
175423 Call Options - Ishares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.08/18/2023	.08/20/2024	2,062	18,199,316	..88.24000000	 (860,054)	.....	419,660	 (124,885)	.....	0	.....	.....	419,660	.....	.....	.....	.....
175427 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.08/18/2023	.02/20/2025	9	4,035,384	..4483.76000000	 (394,659)	.....	127,767	 (170,372)	.....	0	.....	.....	127,767	.....	.....	.....	.....
175433 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.08/18/2023	.08/20/2024	158	70,401,482	..4455.79000000	 (5,392,066)	.....	2,631,041	 (782,958)	.....	0	.....	.....	2,631,041	.....	.....	.....	.....
175435 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.08/18/2023	.08/20/2024	143	63,805,313	..4461.91000000	 (4,830,254)	.....	2,356,906	 (701,379)	.....	0	.....	.....	2,356,906	.....	.....	.....	.....
175441 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.08/18/2023	.08/20/2024	141	63,785,139	..4522.21000000	 (4,246,550)	.....	2,070,396	 (618,316)	.....	0	.....	.....	2,070,396	.....	.....	.....	.....
175964 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.09/06/2023	.09/06/2024	2,069	39,243,910	..189.71000000	 (1,793,499)	.....	881,109	 (343,959)	.....	0	.....	.....	881,109	.....	.....	.....	.....
175970 Call Options - Ishares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.09/06/2023	.09/06/2024	2,363	21,065,107	..89.13000000	 (954,819)	.....	469,083	 (183,116)	.....	0	.....	.....	469,083	.....	.....	.....	.....
175978 Call Options - Ishares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.09/06/2023	.09/06/2024	219	1,650,784	..75.37000000	 (51,033)	.....	25,071	 (9,787)	.....	0	.....	.....	25,071	.....	.....	.....	.....
175982 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.09/06/2023	.03/06/2025	9	4,138,290	..4598.10000000	 (375,039)	.....	123,098	 (172,408)	.....	0	.....	.....	123,098	.....	.....	.....	.....
175988 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.09/06/2023	.09/06/2024	159	72,392,700	..4553.00000000	 (5,380,401)	.....	2,643,280	 (1,031,858)	.....	0	.....	.....	2,643,280	.....	.....	.....	.....
175991 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.09/06/2023	.09/06/2024	152	69,273,544	..4557.47000000	 (5,100,816)	.....	2,505,925	 (978,239)	.....	0	.....	.....	2,505,925	.....	.....	.....	.....
175994 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.09/06/2023	.09/06/2024	81	37,302,525	..4605.25000000	 (2,478,357)	.....	1,217,565	 (475,301)	.....	0	.....	.....	1,217,565	.....	.....	.....	.....
176000 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.09/06/2023	.09/06/2024	112	51,986,868	..4636.51000000	 (3,220,342)	.....	1,582,087	 (617,600)	.....	0	.....	.....	1,582,087	.....	.....	.....	.....
176010 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.09/06/2023	.09/06/2024	112	51,931,537	..4653.03000000	 (3,096,899)	.....	1,521,442	 (583,926)	.....	0	.....	.....	1,521,442	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE DB - PART A - SECTION 1

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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 Quarter-end (b)
176018 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/06/2023	09/06/2024	107	49,824,780	4668.66000000	(2,864,093)	1,407,070	(549,278)		0			1,407,070				
176029 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/06/2023	09/06/2024	105	49,296,573	4699.02000000	(2,634,560)	1,294,305	(505,258)		0			1,294,305				
176041 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/06/2023	09/06/2024	112	52,950,334	4745.47000000	(2,519,160)	1,237,611	(483,127)		0			1,237,611				
176050 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/06/2023	09/06/2024	115	55,450,957	4803.96000000	(2,257,071)	1,108,852	(432,863)		0			1,108,852				
176055 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/06/2023	09/06/2024	94	45,812,028	4873.62000000	(1,527,030)	750,198	(292,855)		0			750,198				
176057 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/06/2023	09/06/2024	84	41,636,112	4956.68000000	(1,072,764)	527,027	(205,736)		0			527,027				
176066 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHIGC71XBU11	09/06/2023	09/06/2024		30,086,412	4595.43000000	(906,304)	444,771	(174,289)		0			444,771				
176718 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	1,743	33,340,776	191.29000000	(1,450,129)	712,267	(333,728)		0			712,267				
176724 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	2,178	19,313,853	88.68000000	(821,078)	403,293	(188,960)		0			403,293				
176732 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	161	1,221,453	75.69000000	(37,439)	18,389	(8,616)		0			18,389				
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	4509.17000000	(594,622)	195,143	(288,599)		0			195,143				
176740 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	145	65,082,960	4488.48000000	(4,647,685)	2,282,824	(1,069,604)		0			2,282,824				
176747 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	141	63,349,749	4492.89000000	(4,481,544)	2,201,220	(1,031,369)		0			2,201,220				
176750 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	122	55,500,606	4549.23000000	(3,465,776)	1,702,301	(797,603)		0			1,702,301				
176759 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	123	56,519,413	4579.17000000	(3,293,778)	1,617,820	(758,020)		0			1,617,820				
176771 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	104	47,853,089	4597.66000000	(2,668,959)	1,310,925	(614,226)		0			1,310,925				
176777 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	111	51,416,485	4646.52000000	(2,544,311)	1,249,701	(585,540)		0			1,249,701				
176783 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	106	49,631,086	4704.19000000	(2,115,566)	1,039,112	(486,870)		0			1,039,112				
176788 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	111	53,301,312	4801.92000000	(1,728,381)	848,937	(397,764)		0			848,937				
176791 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	09/20/2023	09/20/2024	77	37,717,141	4898.33000000	(914,529)	449,193	(210,467)		0			449,193				
176835 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHIGC71XBU11	09/20/2023	09/20/2024		28,919,784	4521.06000000	(887,023)	435,122	(204,698)		0			435,122				
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	4406.73000000	(327,970)	106,881	(169,431)		0			106,881				
177512 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	106	46,610,956	4397.26000000	(3,523,440)	1,731,820	(959,159)		0			1,731,820				
177516 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	118	52,218,068	4425.26000000	(3,722,074)	1,829,452	(1,013,231)		0			1,829,452				
177525 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	124	55,343,432	4463.18000000	(3,632,456)	1,785,403	(988,835)		0			1,785,403				
177539 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	99	44,525,404	4478.25000000	(2,825,585)	1,388,815	(769,187)		0			1,388,815				
177551 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	108	48,728,674	4491.18000000	(3,002,590)	1,475,815	(817,372)		0			1,475,815				

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
177564 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	122	54,940,575	4520.05000000	(3,168,407)	1,557,317	(862,511)		0			1,557,317				
177573 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	108	49,250,288	4570.89000000	(2,509,228)	1,233,321	(683,068)		0			1,233,321				
177584 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	114	54,060,533	4727.72000000	(1,797,322)	883,409	(489,271)		0			883,409				
177592 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/06/2023	10/04/2024	200	88,210,888	4406.73000000	(2,390,344)	1,174,888	(650,705)		0			1,174,888				
177595 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	10/06/2023	10/04/2024		75,395,167	4393.81000000	(5,955,076)	2,922,488	(1,625,620)		0			2,922,488				
177601 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	10/06/2023	10/04/2024		32,853,853	4432.58000000	(1,121,326)	550,297	(306,100)		0			550,297				
177483 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/09/2023	10/04/2024	2,242	40,759,916	181.77000000	(1,791,669)	893,353	(486,381)		0			893,353				
177493 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/09/2023	10/04/2024	2,775	22,553,742	81.28000000	(1,148,776)	572,797	(311,856)		0			572,797				
177502 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/09/2023	10/04/2024	232	1,691,233	72.95000000	(70,014)	34,910	(19,007)		0			34,910				
177906 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/20/2023	10/18/2024	1,637	32,176,827	196.61000000	(1,718,410)	845,369	(533,136)		0			845,369				
177928 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/20/2023	10/18/2024	86	606,582	70.30000000	(27,525)	13,541	(8,540)		0			13,541				
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	4448.89000000	(365,680)	119,687	(197,683)		0			119,687				
177940 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/20/2023	10/18/2024	138	59,919,738	4342.01000000	(4,414,482)	2,171,698	(1,369,590)		0			2,171,698				
177954 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/20/2023	10/18/2024	104	45,675,750	4381.72000000	(3,088,887)	1,519,573	(958,325)		0			1,519,573				
177964 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/20/2023	10/18/2024	147	64,642,520	4405.38000000	(4,146,009)	2,039,623	(1,286,296)		0			2,039,623				
177975 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	10/20/2023	10/18/2024	104	46,869,851	4525.34000000	(2,243,473)	1,103,673	(696,036)		0			1,103,673				
177995 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGQFU57RNE97	10/20/2023	10/18/2024		17,501,522	79.38000000	(1,053,116)	517,171	(327,636)		0			517,171				
178006 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJSPFUBMPRO8K5P83	10/20/2023	10/18/2024		74,430,160	4309.49000000	(6,102,803)	2,997,006	(1,898,650)		0			2,997,006				
178020 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJSPFUBMPRO8K5P83	10/20/2023	10/18/2024		55,299,835	4445.93000000	(3,396,801)	1,668,124	(1,056,783)		0			1,668,124				
178028 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6KMZ0031MB27	10/20/2023	10/18/2024		53,685,884	4647.84000000	(1,858,978)	912,919	(578,349)		0			912,919				
178033 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BANK OF AMERICA, N.A.	B4TYDEB6KMZ0031MB27	10/20/2023	10/18/2024		89,868,700	4705.29000000	(2,605,943)	1,279,744	(810,738)		0			1,279,744				
178037 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCJFXTO9	10/20/2023	10/18/2024		24,381,131	4369.05000000	(832,112)	408,639	(258,879)		0			408,639				
178395 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XB011	11/06/2023	05/06/2025		4,943,180	4588.64000000	(392,727)	128,412	(224,827)		0			128,412				
178399 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJSPFUBMPRO8K5P83	11/06/2023	11/06/2024		53,593,842	4526.21000000	(3,384,576)	1,657,889	(1,218,075)		0			1,657,889				
178412 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJSPFUBMPRO8K5P83	11/06/2023	11/06/2024		51,973,243	4545.42000000	(3,141,060)	1,538,606	(1,130,436)		0			1,538,606				

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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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 Quarter-end (b)
178428 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	.11/06/2023	.11/06/2024	.....	45,055,055	..4568.56000000	(2,579,558)	.....	1,263,562	(928,357)	.....	0	.....	.....	1,263,562	.....	.....	.....	.....
178434 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	.11/06/2023	.11/06/2024	.....	54,608,924	..4610.47000000	(2,823,533)	.....	1,383,070	(1,016,161)	.....	0	.....	.....	1,383,070	.....	.....	.....	.....
178439 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	.11/06/2023	.11/06/2024	.....	35,615,703	..4656.75000000	(1,636,534)	.....	801,634	(588,972)	.....	0	.....	.....	801,634	.....	.....	.....	.....
178464 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/06/2023	.11/06/2024	1,872	36,728,466	..196.18000000	(1,692,453)	.....	830,694	(607,428)	.....	0	.....	.....	830,694	.....	.....	.....	.....
178474 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/06/2023	.11/06/2024	2,602	21,790,092	..83.74000000	(1,215,187)	.....	596,441	(436,135)	.....	0	.....	.....	596,441	.....	.....	.....	.....
178484 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/06/2023	.11/06/2024	146	1,080,284	..74.03000000	(40,713)	.....	19,983	(14,612)	.....	0	.....	.....	19,983	.....	.....	.....	.....
178506 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	WELLS FARGO BANK, N.A.	.11/06/2023	.11/06/2024	.....	32,945,129	..4510.93000000	(918,331)	.....	449,832	(330,498)	.....	0	.....	.....	449,832	.....	.....	.....	.....
178511 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/06/2023	.11/06/2024	134	59,662,562	..4452.43000000	(4,259,056)	.....	2,090,441	(1,528,593)	.....	0	.....	.....	2,090,441	.....	.....	.....	.....
178513 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/06/2023	.11/06/2024	134	59,709,328	..4455.92000000	(4,230,380)	.....	2,076,366	(1,518,301)	.....	0	.....	.....	2,076,366	.....	.....	.....	.....
178515 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/06/2023	.11/06/2024	187	83,937,942	..4488.66000000	(5,528,094)	.....	2,713,314	(1,984,056)	.....	0	.....	.....	2,713,314	.....	.....	.....	.....
178524 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/06/2023	.11/06/2024	183	87,853,894	..4792.97000000	(2,520,706)	.....	1,237,220	(904,692)	.....	0	.....	.....	1,237,220	.....	.....	.....	.....
178528 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/06/2023	.11/06/2024	113	54,772,343	..4847.11000000	(1,308,314)	.....	642,150	(469,559)	.....	0	.....	.....	642,150	.....	.....	.....	.....
178530 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/06/2023	.11/06/2024	95	46,429,160	..4887.28000000	(960,165)	.....	471,271	(344,607)	.....	0	.....	.....	471,271	.....	.....	.....	.....
178951 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/20/2023	.11/20/2024	1,753	34,202,819	..195.12000000	(1,572,362)	.....	771,586	(624,637)	.....	0	.....	.....	771,586	.....	.....	.....	.....
178972 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/20/2023	.11/20/2024	1,852	16,148,493	..87.21000000	(798,074)	.....	391,629	(317,043)	.....	0	.....	.....	391,629	.....	.....	.....	.....
178980 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/20/2023	.11/20/2024	188	1,455,350	..77.43000000	(37,028)	.....	18,170	(14,710)	.....	0	.....	.....	18,170	.....	.....	.....	.....
178989 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/20/2023	.11/20/2024	110	52,057,815	..4749.74000000	(2,717,238)	.....	1,333,397	(1,079,451)	.....	0	.....	.....	1,333,397	.....	.....	.....	.....
178990 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/20/2023	05/20/2025	7	3,254,153	..4648.79000000	(292,215)	.....	95,840	(174,473)	.....	0	.....	.....	95,840	.....	.....	.....	.....
179011 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/20/2023	.11/20/2024	111	52,996,616	..4786.57000000	(2,515,877)	.....	1,234,586	(999,458)	.....	0	.....	.....	1,234,586	.....	.....	.....	.....
179017 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/20/2023	.11/20/2024	156	72,350,772	..4637.87000000	(4,909,632)	.....	2,409,244	(1,950,402)	.....	0	.....	.....	2,409,244	.....	.....	.....	.....
179024 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/20/2023	.11/20/2024	122	56,632,034	..4641.97000000	(3,808,596)	.....	1,868,946	(1,513,004)	.....	0	.....	.....	1,868,946	.....	.....	.....	.....
179029 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/20/2023	.11/20/2024	90	43,738,591	..4882.52000000	(1,589,901)	.....	780,193	(631,605)	.....	0	.....	.....	780,193	.....	.....	.....	.....
179032 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/20/2023	.11/20/2024	105	49,683,512	..4718.82000000	(2,796,133)	.....	1,372,113	(1,110,793)	.....	0	.....	.....	1,372,113	.....	.....	.....	.....
179041 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/20/2023	.11/20/2024	121	61,078,269	..5036.22000000	(1,351,765)	.....	663,335	(537,002)	.....	0	.....	.....	663,335	.....	.....	.....	.....
179052 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	.11/20/2023	.11/20/2024	83	42,204,504	..5084.88000000	(782,773)	.....	384,121	(310,965)	.....	0	.....	.....	384,121	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE DB - PART A - SECTION 1

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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 Quarter-end (b)
179059 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHIGC71XB	11/20/2023	11/20/2024	28,495,108	4666.98000000	(819,064)		401,035	(326,275)		0			401,035				
179102 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5I7OUK5573	11/20/2023	11/20/2024	61,265,462	4674.71000000	(3,998,194)		1,957,622	(1,592,687)		0			1,957,622				
179453 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	1,842	199.96000000	(1,854,664)		909,895	(818,085)		0			909,895				
179462 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	1,878	91.56000000	(852,480)		418,225	(376,026)		0			418,225				
179470 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	06/06/2025	7	4658.52000000	(288,078)		94,295	(180,641)		0			94,295				
179473 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	142	4638.96000000	(4,457,380)		2,186,782	(1,966,132)		0			2,186,782				
179481 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	132	4678.09000000	(3,824,040)		1,876,067	(1,686,768)		0			1,876,067				
179494 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	107	4723.12000000	(2,813,969)		1,380,528	(1,241,230)		0			1,380,528				
179513 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	118	4752.24000000	(2,906,753)		1,426,047	(1,282,157)		0			1,426,047				
179526 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	111	4786.36000000	(2,513,306)		1,233,023	(1,108,609)		0			1,233,023				
179530 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHIGC71XB	12/06/2023	12/06/2024	22,943,172	4670.35000000	(679,401)		332,489	(300,504)		0			332,489				
179534 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	108	4824.12000000	(2,233,548)		1,095,774	(985,209)		0			1,095,774				
179540 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	79	4988.81000000	(1,025,402)		503,060	(452,301)		0			503,060				
179548 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/06/2023	12/06/2024	146	5070.69000000	(1,437,370)		705,171	(634,018)		0			705,171				
179555 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	4PQUHN3JPF6FNF3B8653	12/06/2023	12/06/2024	49,682,015	4643.97000000	(3,520,620)		1,722,943	(1,557,198)		0			1,722,943				
179565 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPPFMYMCUFXT09	12/06/2023	12/06/2024	725,965	77.86000000	(25,103)		12,285	(11,103)		0			12,285				
180055 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	91	4883.93000000	(2,524,801)		1,238,398	(1,210,521)		0			1,238,398				
180069 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	219	4925.75000000	(5,582,300)		2,738,081	(2,676,445)		0			2,738,081				
180070 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5I7OUK5573	12/20/2023	12/20/2024	23,431,337	4826.61000000	(675,904)		330,636	(324,954)		0			330,636				
180079 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	96	4983.07000000	(2,155,104)		1,057,064	(1,033,269)		0			1,057,064				
180087 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	72	5139.99000000	(1,096,002)		537,582	(525,481)		0			537,582				
180095 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	107	5233.02000000	(1,258,748)		617,407	(603,509)		0			617,407				
180099 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	1,722	200.50000000	(1,668,846)		818,558	(800,132)		0			818,558				
180122 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	1,794	95.06000000	(805,674)		395,178	(386,282)		0			395,178				
180128 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	06/20/2025	7	4802.65000000	(292,474)		95,720	(190,883)		0			95,720				

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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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 Quarter-end (b)
180134 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	127	60,844,557	4790.91000000	(4,239,514)	2,079,453	(2,032,644)		0			2,079,453				
180137 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	149	71,587,497	4804.53000000	(4,848,609)	2,378,210	(2,324,676)		0			2,378,210				
180151 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	12/20/2023	12/20/2024	93	45,044,829	4843.53000000	(2,807,391)	1,377,006	(1,346,009)		0			1,377,006				
180161 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHIGC71XBU11	12/20/2023	12/20/2024		992,396	78.89000000	(32,070)	15,688	(15,418)		0			15,688				
180490 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	GOLDMAN SACHS INTERNATIONAL	W22LR0WP21HZNB6K528	01/05/2024	01/06/2025		39,395,081	201.11000000	(1,895,753)	893,041	(1,002,713)		0			893,041				
180501 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJSPFUM8MPRO8K5P83	01/05/2024	01/06/2025		49,351,528	4841.45000000	(3,114,693)	1,467,252	(1,647,441)		0			1,467,252				
180509 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUJSPFUM8MPRO8K5P83	01/05/2024	01/06/2025		44,954,577	4881.37000000	(2,598,126)	1,223,911	(1,374,216)		0			1,223,911				
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	95.04000000	(851,488)	402,351	(449,136)		0			402,351				
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	78.98000000	(37,356)	17,652	(19,704)		0			17,652				
180538 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	01/05/2024	01/06/2025		38,526,930	5124.22000000	(1,208,098)	569,104	(638,994)		0			569,104				
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	4816.55000000	(288,197)	91,457	(196,740)		0			91,457				
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	4789.78000000	(4,579,718)	2,164,043	(2,415,675)		0			2,164,043				
180548 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	01/05/2024	01/06/2025		25,436,732	4824.07000000	(675,506)	318,213	(357,292)		0			318,213				
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	4802.46000000	(3,967,734)	1,874,863	(2,092,871)		0			1,874,863				
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	4922.71000000	(5,230,711)	2,471,654	(2,759,056)		0			2,471,654				
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	4984.24000000	(2,022,998)	955,922	(1,067,076)		0			955,922				
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	5206.89000000	(1,218,360)	575,709	(642,651)		0			575,709				
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	5038.24000000	(2,389,496)	1,045,818	(1,343,678)		0			1,045,818				
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	5075.02000000	(2,896,577)	1,267,754	(1,628,823)		0			1,267,754				
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	5121.49000000	(1,954,808)	855,567	(1,099,241)		0			855,567				
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	5292.82000000	(1,920,758)	840,664	(1,080,094)		0			840,664				
180850 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	4PQUHN3JPF6GFNF3B8653	01/19/2024	01/17/2025		60,131,769	4948.71000000	(3,643,146)	1,588,816	(2,054,330)		0			1,588,816				
180862 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	01/19/2024	01/17/2025		19,282,482	4968.06000000	(479,026)	208,909	(270,118)		0			208,909				
180865 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	4PQUHN3JPF6GFNF3B8653	01/19/2024	01/17/2025		44,422,532	4988.39000000	(2,454,480)	1,070,426	(1,384,054)		0			1,070,426				

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE DB - PART A - SECTION 1

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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 Quarter-end (b)
180871 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.01/19/2024	01/17/2025	1,573	31,441,683	199.86000000	(1,356,086)	593,522	(762,563)		0			593,522				
180877 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.01/19/2024	01/17/2025	1,750	16,356,385	93.49000000	(762,796)	333,856	(428,941)		0			333,856				
180889 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.01/19/2024	01/17/2025	228	1,813,298	79.42000000	(47,490)	20,785	(26,705)		0			20,785				
180894 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.01/19/2024	07/18/2025	6	2,966,610	4944.35000000	(252,342)	73,425	(178,917)		0			73,425				
180901 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.01/19/2024	01/17/2025	122	60,214,808	4935.64000000	(3,830,800)	1,676,638	(2,154,162)		0			1,676,638				
181322 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.02/06/2024	02/06/2025	2,448	49,031,288	200.33000000	(2,019,209)	785,555	(1,233,654)		0			785,555				
181346 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.02/06/2024	02/06/2025	2,753	25,299,150	91.90000000	(1,194,759)	464,810	(729,948)		0			464,810				
181357 Call Options - iShares MSCI EAFE - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.02/06/2024	02/06/2025	324	2,642,747	81.47000000	(59,038)	22,968	(36,070)		0			22,968				
181365 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.02/06/2024	02/06/2025	158	79,818,914	5051.83000000	(5,094,236)	1,981,867	(3,112,369)		0			1,981,867				
181372 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.02/06/2024	02/06/2025	135	68,366,835	5064.21000000	(4,250,340)	1,653,557	(2,596,783)		0			1,653,557				
181381 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.02/06/2024	02/06/2025	96	49,001,664	5104.34000000	(2,790,336)	1,085,555	(1,704,781)		0			1,085,555				
181390 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	MORGAN STANLEY & CO. INTERNATIONAL PLC	4PQUHNSJPFQGNF3BB653	.02/06/2024	02/06/2025		25,709,259	5082.05000000		0	0		0							
181391 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.02/06/2024	02/06/2025	107	55,189,902	5165.78000000	(2,728,523)	1,061,508	(1,667,015)		0			1,061,508				
181401 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.02/06/2024	02/06/2025	120	63,071,280	5255.94000000	(2,489,160)	968,386	(1,520,774)		0			968,386				
181407 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.02/06/2024	02/06/2025	76	40,765,874	5349.08000000	(1,243,687)	483,845	(759,842)		0			483,845				
181412 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.02/06/2024	02/06/2025	132	72,059,724	5459.07000000	(1,564,200)	608,538	(955,662)		0			608,538				
181422 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUWSPUBM8MPR08K5P83	.02/06/2024	.08/06/2025		3,777,790	5065.70000000	(339,650)	87,873	(251,777)		0			87,873				
181430 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMUWSPUBM8MPR08K5P83	.02/06/2024	02/06/2025		104,795,525	5198.47000000	(5,156,387)	1,997,392	(3,158,995)		0			1,997,392				
181780 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.02/20/2024	02/20/2025	95	48,708,970	5127.26000000	(2,888,950)	1,013,111	(1,875,839)		0			1,013,111				
181800 Call Options - SPDR Gold shares - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.02/20/2024	02/20/2025	2,131	42,335,529	198.68000000	(1,777,121)	623,209	(1,153,911)		0			623,209				
181801 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.02/20/2024	02/20/2025	109	56,511,177	5182.99000000	(2,963,054)	1,039,098	(1,923,955)		0			1,039,098				
181817 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.02/20/2024	02/20/2025	2,435	22,381,396	91.90000000	(1,110,546)	389,452	(721,094)		0			389,452				
181823 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.02/20/2024	02/20/2025	200	104,484,033	5217.32000000	(5,059,665)	1,774,348	(3,285,317)		0			1,774,348				
181829 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CB0E	529900RLNSGA90UPEH54	.02/20/2024	08/20/2025	6	3,052,476	5087.46000000	(264,978)	62,119	(202,859)		0			62,119				

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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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 Quarter-end (b)
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	5084.97000000	(4,054,326)	1,421,791	(2,632,535)		0			1,421,791				
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	5284.99000000	(1,496,049)	524,642	(971,407)		0			524,642				
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	81.76000000	(37,330)	13,091	(24,239)		0			13,091				
181854 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	02/20/2024	02/20/2025		21,266,748	5106.37000000	(629,941)	219,787	(410,154)		0			219,787				
181879 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMJUSFPUBMPRO8K5P83	02/20/2024	02/20/2025		66,568,786	5074.03000000	(4,678,349)	1,632,281	(3,046,068)		0			1,632,281				
181887 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	02/20/2024	02/20/2025		68,266,823	5443.71000000	(2,046,568)	714,050	(1,332,518)		0			714,050				
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	211.12000000	(2,168,361)	673,145	(1,495,216)		0			673,145				
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	83.79000000	(44,982)	13,964	(31,018)		0			13,964				
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	5215.02000000	(184,056)	38,023	(146,033)		0			38,023				
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	5205.83000000	(5,113,992)	1,587,585	(3,526,407)		0			1,587,585				
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	5217.58000000	(4,433,564)	1,376,354	(3,057,210)		0			1,376,354				
182253 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHHG71XBU11	03/06/2024	03/06/2025		53,290,358	5411.56000000	(2,490,836)	768,522	(1,722,314)		0			768,522				
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	5259.94000000	(2,912,574)	904,178	(2,008,396)		0			904,178				
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	5318.14000000	(3,235,194)	1,004,332	(2,230,862)		0			1,004,332				
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		25,520,215	94.72000000	(1,449,495)	447,227	(1,002,268)		0			447,227				
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	5563.68000000	(3,058,297)	949,417	(2,108,881)		0			949,417				
182286 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHHG71XBU11	03/06/2024	03/06/2025		140,574,064	5361.02000000	(7,319,166)	2,258,255	(5,060,911)		0			2,258,255				
182298 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RHHG71XBU11	03/06/2024	03/06/2025		26,404,642	5241.57000000	(1,038,904)	320,544	(718,361)		0			320,544				
182746 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	03/20/2024	03/20/2025		82,447,380	5327.55000000	(5,902,376)	1,593,479	(4,308,897)		0			1,593,479				
182759 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	03/20/2024	03/20/2025		93,493,096	5724.62000000	(2,935,256)	792,438	(2,142,818)		0			792,438				
182765 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCUFXT09	03/20/2024	03/20/2025		1,786,177	5929.94000000	(33,363)	9,007	(24,356)		0			9,007				
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	214.15000000	(1,922,051)	522,756	(1,399,295)		0			522,756				
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	93.87000000	(1,028,726)	279,791	(748,935)		0			279,791				
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	86.63000000	(27,609)	7,509	(20,100)		0			7,509				
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	5433.60000000	(2,757,899)	750,088	(2,007,811)		0			750,088				

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE DB - PART A - SECTION 1

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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	..5481.15000000		(7,038,755)	1,900,270	(5,138,485)		0			1,900,270				
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	..5542.28000000	.....	.....(2,331,484)	634,112	(1,697,372)	.....	.....0	.....	.....	.....634,112	.....	.....	.....	.....
182834 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	.03/20/2024	.03/20/2025	.....	.....23,300,559	..5363.59000000	.....	.....(710,411)	191,791	(518,620)	.....	.....0	.....	.....	.....191,791	.....	.....	.....	.....
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	..5337.47000000	.....	.....(334,894)	60,612	(274,282)	.....	.....0	.....	.....	.....60,612	.....	.....	.....	.....
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	..5338.52000000	.....	.....(3,487,275)	948,462	(2,538,813)	.....	.....0	.....	.....	.....948,462	.....	.....	.....	.....
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	..5385.54000000	.....	.....(2,951,130)	802,643	(2,148,488)	.....	.....0	.....	.....	.....802,643	.....	.....	.....	.....
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	..228.87000000	.....	.....(2,585,650)	580,160	(2,005,491)	.....	.....0	.....	.....	.....580,160	.....	.....	.....	.....
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	..84.70000000	.....	.....(58,864)	13,208	(45,656)	.....	.....0	.....	.....	.....13,208	.....	.....	.....	.....
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	..5316.23000000	.....	.....(147,060)	21,817	(125,243)	.....	.....0	.....	.....	.....21,817	.....	.....	.....	.....
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	..5307.39000000	.....	.....(8,971,466)	2,012,988	(6,958,478)	.....	.....0	.....	.....	.....2,012,988	.....	.....	.....	.....
183397 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE 529900RLNSGA90UPEH54	.04/05/2024	.04/04/2025	107	57,290,154	..5354.22000000	.....	.....(3,684,117)	826,630	(2,857,487)	.....	.....0	.....	.....	.....826,630	.....	.....	.....	.....
183417 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA ES71P3U3RH1GC71XBU11	.04/05/2024	.04/04/2025	.....	.....29,334,039	..5333.41000000	.....	.....(961,771)	213,727	(748,044)	.....	.....0	.....	.....	.....213,727	.....	.....	.....	.....
183418 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC MORGAN STANLEY & CO. INTERNATIONAL PLC 4PQUHNGJPF6GNF3B8653	.04/05/2024	.04/04/2025	.....	.....739,238	..303.51000000	.....	.....(454)	101	(353)	.....	.....0	.....	.....	.....101	.....	.....	.....	.....
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	..5408.35000000	.....	.....(3,037,036)	681,440	(2,355,596)	.....	.....0	.....	.....	.....681,440	.....	.....	.....	.....
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	..5459.87000000	.....	.....(9,712,556)	2,179,272	(7,533,285)	.....	.....0	.....	.....	.....2,179,272	.....	.....	.....	.....
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	..5518.68000000	.....	.....(2,466,031)	553,320	(1,912,711)	.....	.....0	.....	.....	.....553,320	.....	.....	.....	.....
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	..5650.35000000	.....	.....(1,903,867)	427,184	(1,476,684)	.....	.....0	.....	.....	.....427,184	.....	.....	.....	.....
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	..5749.75000000	.....	.....(1,523,300)	341,793	(1,181,507)	.....	.....0	.....	.....	.....341,793	.....	.....	.....	.....
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	..236.44000000	.....	.....(2,146,777)	399,539	(1,747,238)	.....	.....0	.....	.....	.....399,539	.....	.....	.....	.....
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	..5074.52000000	.....	.....(198,036)	24,301	(173,735)	.....	.....0	.....	.....	.....24,301	.....	.....	.....	.....
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	..5126.68000000	.....	.....(3,103,100)	577,521	(2,525,579)	.....	.....0	.....	.....	.....577,521	.....	.....	.....	.....
183841 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	UBS AG BFM8T61CT2L10CEMIK50	.04/19/2024	.04/17/2025	.....	.....25,065,530	..87.42000000	.....	.....(1,446,816)	265,988	(1,180,828)	.....	.....0	.....	.....	.....265,988	.....	.....	.....	.....
183855 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC 65GSEF7VJP5170UK5573	.04/19/2024	.04/17/2025	.....	.....191,024	..297.49000000	.....	.....(117)	22	(96)	.....	.....0	.....	.....	.....22	.....	.....	.....	.....
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	..5266.75000000	.....	.....(3,391,928)	631,275	(2,760,652)	.....	.....0	.....	.....	.....631,275	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

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183862 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.04/19/2024	.04/17/2025		104,080,783	..5065.58000000		(8,108,669)	1,490,730		(6,617,939)			1,490,730				
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	..81.44000000	.....	(37,916)	7,057	.....	(30,859)	.....	.....	.....7,057	.....	.....	.....	.....
183879 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.04/19/2024	.04/17/2025	.....	20,229,478	..5094.39000000	.....	(670,224)	123,217	.....	(547,008)	.....	.....	.....123,217	.....	.....	.....	.....
183888 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ...	02RNE81BXP4R0TD8PU41	.04/19/2024	.04/17/2025	.....	42,849,786	..5171.38000000	.....	(2,766,243)	508,557	.....	(2,257,686)	.....	.....	.....508,557	.....	.....	.....	.....
183896 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.04/19/2024	.04/17/2025	.....	91,495,489	..5218.57000000	.....	(5,386,807)	990,332	.....	(4,396,474)	.....	.....	.....990,332	.....	.....	.....	.....
183902 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.04/19/2024	.04/17/2025	.....	51,724,682	..5298.54000000	.....	(2,594,277)	476,942	.....	(2,117,335)	.....	.....	.....476,942	.....	.....	.....	.....
183908 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	SOCIETE GENERAL ...	02RNE81BXP4R0TD8PU41	.04/19/2024	.04/17/2025	.....	75,926,709	..5438.62000000	.....	(2,815,439)	517,602	.....	(2,297,838)	.....	.....	.....517,602	.....	.....	.....	.....
184309 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	.05/06/2024	.05/06/2025	.....	27,786,474	..5317.51000000	.....	(831,104)	116,767	.....	(714,337)	.....	.....	.....116,767	.....	.....	.....	.....
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	..5292.13000000	.....	(238,210)	22,604	.....	(215,606)	.....	.....	.....22,604	.....	.....	.....	.....
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	..5283.32000000	.....	(7,659,232)	1,094,176	.....	(6,565,056)	.....	.....	.....1,094,176	.....	.....	.....	.....
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	..5337.72000000	.....	(2,373,846)	339,121	.....	(2,034,725)	.....	.....	.....339,121	.....	.....	.....	.....
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	.....	1,201,424	..302.27000000	.....	(630)	89	.....	(541)	.....	.....	.....89	.....	.....	.....	.....
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	.....	31,127,749	..90.09000000	.....	(1,664,901)	233,912	.....	(1,430,989)	.....	.....	.....233,912	.....	.....	.....	.....
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	..5493.66000000	.....	(3,262,652)	466,093	.....	(2,796,559)	.....	.....	.....466,093	.....	.....	.....	.....
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	..5402.48000000	.....	(4,158,423)	594,060	.....	(3,564,362)	.....	.....	.....594,060	.....	.....	.....	.....
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	..5522.15000000	.....	(2,414,650)	344,950	.....	(2,069,700)	.....	.....	.....344,950	.....	.....	.....	.....
184396 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	CBOE	529900RLNSGA90UPEH54	.05/06/2024	.05/06/2025	162	87,979,612	..5447.03000000	.....	(4,202,388)	600,341	.....	(3,602,047)	.....	.....	.....600,341	.....	.....	.....	.....
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	..5666.18000000	.....	(2,571,798)	367,400	.....	(2,204,399)	.....	.....	.....367,400	.....	.....	.....	.....
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	..230.16000000	.....	(2,437,065)	348,152	.....	(2,088,913)	.....	.....	.....348,152	.....	.....	.....	.....
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	..85.23000000	.....	(62,598)	8,943	.....	(53,656)	.....	.....	.....8,943	.....	.....	.....	.....
184783 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.05/20/2024	.05/20/2025	.....	23,038,662	..5447.73000000	.....	(655,336)	66,797	.....	(588,539)	.....	.....	.....66,797	.....	.....	.....	.....
184816 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	.05/20/2024	.05/20/2025	.....	1,411,447	..305.67000000	.....	(739)	75	.....	(664)	.....	.....	.....75	.....	.....	.....	.....
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	..5634.58000000	.....	(1,885,438)	196,831	.....	(1,688,606)	.....	.....	.....196,831	.....	.....	.....	.....
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	..5662.71000000	.....	(1,859,566)	194,130	.....	(1,665,435)	.....	.....	.....194,130	.....	.....	.....	.....
184836 Call Options - iShares U.S. Real Estate - USD	LIABILITY HEDGE	Exhibit 5 ...	Equity/Index	BNP PARIBAS LONDON	ROMUJISFPUBM8PR08K5P83	.05/20/2024	.05/20/2025	.....	21,409,293	..93.54000000	.....	(1,066,703)	108,727	.....	(957,975)	.....	.....	.....108,727	.....	.....	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
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	..5687.66000000	(1,906,325)	199,012	(1,707,313)		0			199,012				
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	..5773.65000000	(2,833,937)	295,851	(2,538,087)		0			295,851				
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	..5483.83000000	(2,386,924)	249,184	(2,137,739)		0			249,184				
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	..5547.00000000	(4,480,100)	467,703	(4,012,397)		0			467,703				
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	..241.11000000	(2,245,929)	234,465	(2,011,464)		0			234,465				
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	..5614.94000000	(2,151,735)	224,632	(1,927,103)		0			224,632				
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	87.01000000	(51,961)	5,424	(46,536)		0			5,424				
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	..5422.25000000	(191,516)	13,280	(178,236)		0			13,280				
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	..5413.23000000	(7,024,749)	733,353	(6,291,396)		0			733,353				
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		23,703,343	92.89000000	(1,143,334)	57,008	(1,086,325)		0			57,008				
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		2,666,904	303.52000000	(1,396)	70	(1,327)		0			70				
185350 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BNP PARIBAS LONDON	ROMJWSFPUBMPRO8K5P83	.06/06/2024	.12/05/2025		2,389,297	..5468.05000000	(226,767)	7,517	(219,250)		0			7,517				
185355 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGOFU57RNE97	.06/06/2024	.06/06/2025		23,674,175	..5492.67000000	(215,507)	10,746	(204,761)		0			10,746				
185362 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	SOCIETE GENERAL	02RNE8IBXP4ROTD8PU41	.06/06/2024	.06/06/2025		45,204,348	..5529.07000000	(2,726,529)	135,949	(2,590,580)		976,423			135,949				
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	..5659.15000000	(2,098,421)	121,063	(1,977,358)		0			121,063				
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	..235.78000000	(2,390,966)	137,940	(2,253,026)		0			137,940				
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	87.83000000	(78,294)	4,517	(73,777)		0			4,517				
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	..5685.91000000	(2,120,267)	122,323	(1,997,944)		0			122,323				
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	..5458.95000000	(7,756,458)	447,488	(7,308,970)		0			447,488				
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	..5594.38000000	(5,622,829)	324,394	(5,298,435)		0			324,394				
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	..5718.57000000	(1,950,969)	112,556	(1,838,413)		0			112,556				
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	..5744.26000000	(2,212,996)	127,673	(2,085,324)		0			127,673				
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	..5846.50000000	(2,128,657)	122,807	(2,005,849)		0			122,807				
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	..233.39000000	(2,062,218)	39,658	(2,022,560)		0			39,658				

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
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	83.77000000	(52,887)	1,017	(51,870)		0			1,017				
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	5591.39000000	(193,092)	2,476	(190,616)		0			2,476				
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	5581.54000000	(6,607,836)	127,074	(6,480,762)		0			127,074				
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	5657.62000000	(2,306,198)	44,350	(2,261,848)		0			44,350				
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		19,766,127	92.24000000	(985,958)	10,925	(975,033)		0			10,925				
186175 Call Options - First Trust Barclays Edge Index - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	BARCLAYS BANK PLC	G5GSEF7VJP5170UK5573	06/20/2024	06/20/2025		1,935,112	303.01000000	(1,016)	11	(1,004)		0			11				
186187 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	ROYAL BANK OF CANADA	ES71P3U3RH1GCT1XBU11	06/20/2024	06/20/2025		23,743,111	5615.47000000	(717,385)	7,949	(709,436)		0			7,949				
186198 Call Options - S&P 500 - USD	LIABILITY HEDGE	Exhibit 5	Equity/Index	CBOE	529900RLNSGA90UPEH54	06/20/2024	06/20/2025	82	48,208,471	5871.07000000	(1,595,845)	30,689	(1,565,155)		0			30,689				
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	5802.11000000	(1,980,107)	38,079	(1,942,028)		0			38,079				
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	5832.21000000	(2,075,885)	39,921	(2,035,965)		0			39,921				
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	5987.10000000	(1,487,419)	28,604	(1,458,815)		0			28,604				
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	5723.84000000	(6,391,955)	122,922	(6,269,032)		0			122,922				
0649999999. Subtotal - Written Options - Hedging Other - Call Options and Warrants										(406,946,199)	(357,890,107)	284,295,292	(369,181,045)	XXX	976,423	0	0	284,295,292	0	0	XXX	XXX
0709999999. Subtotal - Written Options - Hedging Other										(406,946,199)	(357,890,107)	284,295,292	(369,181,045)	XXX	976,423	0	0	284,295,292	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										(406,946,199)	(357,890,107)	284,295,292	(369,181,045)	XXX	976,423	0	0	284,295,292	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										(406,946,199)	(357,890,107)	284,295,292	(369,181,045)	XXX	976,423	0	0	284,295,292	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 [1.14158%]/ Receive USDQuarterly FIXED 2.434%	Portfolio Hedge	Exhibit 5	Interest	MORGAN STANLEY CAPITAL SERVICES / MORGAN STANLEY/CLEARED THROUGH CME	9R7GPTS07KV3UQJZ0078	06/04/2015	06/23/2030		72,000,000	2.434% [SOFR]	19,376	(1,189,905)	(5,871,133)		(5,871,133)	(1,190,794)				881,081		

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
Interest Rate Swap /169504 /Pay USD[Quarterly] SOFR [1.14158%]/ Receive USDQuarterly FIXED 1.618%	Portfolio Hedge	Exhibit 5 ...	Interest ...	MORGAN STANLEY CAPITAL SERVICES / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	10/06/2016	06/23/2030	.....	162,000,000	1.618% [SOFR]	47,172		(3,401,282)	(17,800,142)		(17,800,142)	(1,741,581)				1,982,433		
Interest Rate Swap /169501 /Pay USD[Quarterly] SOFR [4.67118%]/ Receive USDQuarterly FIXED 2.233%	Portfolio Hedge	Exhibit 5 ...	Interest ...	MORGAN STANLEY CAPITAL SERVICES / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	10/25/2017	10/25/2025	.....	64,000,000	2.233% [SOFR]	8,967		(1,139,873)	(1,540,735)		(1,540,735)	480,008				370,427		
Interest Rate Swap /169503 /Pay USD[Quarterly] SOFR [1.14158%]/ Receive USDQuarterly FIXED 2.4175%	Portfolio Hedge	Exhibit 5 ...	Interest ...	MORGAN STANLEY CAPITAL SERVICES / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	10/25/2017	06/23/2030	.....	66,000,000	2.4175% [SOFR]	17,735		(1,090,773)	(5,182,132)		(5,182,132)	(1,011,340)				807,658		
Interest Rate Swap /145478 /Pay USD[Annual] SOFR [2.52437%]/ 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	.....	286,000,000	1.481% [SOFR]	0		(5,678,746)	(35,737,430)		(35,737,430)	(4,936,643)				3,374,921		
Interest Rate Swap /162729 /Pay USD[Annual] FIXED [3.28%]/ Receive USDAnnual SOFR 2.91373%	Portfolio Hedge	Exhibit 5 ...	Interest ...	THE TORONTO-DOMINION BANK / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/21/2022	12/23/2042	.....	240,000,000	SOFR [3.28%]	0		2,563,511	19,652,586		19,652,586	13,161,577				5,160,000		
Interest Rate Swap /162730 /Pay USD[Annual] FIXED [3.36%]/ Receive USDAnnual SOFR 2.91373%	Portfolio Hedge	Exhibit 5 ...	Interest ...	THE TORONTO-DOMINION BANK / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/21/2022	12/23/2032	.....	280,000,000	SOFR [3.36%]	0		2,877,519	11,622,482		11,622,482	9,742,657				4,081,666		
Interest Rate Swap /162731 /Pay USD[Annual] SOFR [2.91373%]/ Receive USDAnnual FIXED 4.2535%	Portfolio Hedge	Exhibit 5 ...	Interest ...	CITIBANK N.A. / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/21/2022	12/23/2024	.....	855,000,000	4.2535% [SOFR]	0		(4,924,556)	(4,568,422)		(4,568,422)	(283,017)				2,992,500		
Interest Rate Swap /162732 /Pay USD[Annual] FIXED [3.354%]/ Receive USDAnnual SOFR 2.91373%	Portfolio Hedge	Exhibit 5 ...	Interest ...	CITIBANK N.A. / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/21/2022	12/23/2032	.....	195,000,000	SOFR [3.354%]	0		2,009,901	8,177,575		8,177,575	6,778,750				2,842,589		

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
Interest Rate Swap /162733 /Pay USD[Annual] FIXED [3.276%]/ Receive USDAnnual SOFR 2.91373%	Portfolio Hedge	Exhibit 5 ...	Interest ...	THE TORONTO-DOMINION BANK / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/21/2022	12/23/2042	.....	240,000,000	SOFR [3.276%]	0 .....	.....	2,568,365	19,777,889	.....	19,777,889	13,154,033	.....	.....	.....	5,160,000	.....	.....
Interest Rate Swap /162735 /Pay USD[Annual] FIXED [3.3545%]/ Receive USDAnnual SOFR 2.91373%	Portfolio Hedge	Exhibit 5 ...	Interest ...	THE TORONTO-DOMINION BANK / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/21/2022	12/23/2032	.....	400,000,000	SOFR [3.3545%]	0 .....	.....	4,121,864	16,760,266	.....	16,760,266	13,906,207	.....	.....	.....	5,830,952	.....	.....
Interest Rate Swap /162736 /Pay USD[Annual] FIXED [3.354%]/ Receive USDAnnual SOFR 2.91373%	Portfolio Hedge	Exhibit 5 ...	Interest ...	JPMORGAN CHASE BANK, N.A. / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/21/2022	12/23/2032	.....	190,000,000	SOFR [3.354%]	0 .....	.....	1,958,365	7,967,894	.....	7,967,894	6,604,936	.....	.....	.....	2,769,702	.....	.....
Interest Rate Swap /179971 /Pay USD[Annual] FIXED [3.468%]/ Receive USDAnnual SOFR 2.94166%	Portfolio Hedge .....	.....	Interest ...	CITIBANK N.A. / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/20/2023	12/22/2035	.....	410,000,000	SOFR [3.468%]	0 .....	.....	3,997,507	17,194,748	.....	17,194,748	17,294,297	.....	.....	.....	6,951,888	.....	.....
Interest Rate Swap /179972 /Pay USD[Annual] SOFR [2.94166%]/ Receive USDAnnual FIXED 3.8165%	Portfolio Hedge .....	.....	Interest ...	CITIBANK N.A. / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/20/2023	12/22/2026	.....	1,400,000,000	3.8165% [SOFR]	0 .....	.....	(11,183,417)	(20,303,734)	.....	(20,303,734)	(23,372,145)	.....	.....	.....	11,045,814	.....	.....
Interest Rate Swap /179973 /Pay USD[Annual] SOFR [2.94166%]/ Receive USDAnnual FIXED 3.5615%	Portfolio Hedge .....	.....	Interest ...	MUFG SECURITIES EMEA PLC / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/20/2023	12/22/2028	.....	1,090,000,000	3.5615% [SOFR]	0 .....	.....	(10,112,281)	(23,925,492)	.....	(23,925,492)	(26,296,283)	.....	.....	.....	11,561,196	.....	.....
Interest Rate Swap /179974 /Pay USD[Annual] FIXED [3.482%]/ Receive USDAnnual SOFR 2.94166%	Portfolio Hedge .....	.....	Interest ...	MUFG SECURITIES EMEA PLC / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/20/2023	12/22/2038	.....	425,000,000	SOFR [3.482%]	0 .....	.....	4,113,676	20,683,108	.....	20,683,108	20,624,864	.....	.....	.....	8,088,968	.....	.....
Interest Rate Swap /179975 /Pay USD[Annual] FIXED [3.4655%]/ Receive USDAnnual SOFR 2.94166%	Portfolio Hedge .....	.....	Interest ...	JPMORGAN CHASE BANK, N.A. / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/20/2023	12/22/2035	.....	100,000,000	SOFR [3.4655%]	0 .....	.....	976,265	4,216,716	.....	4,216,716	4,216,621	.....	.....	.....	1,695,582	.....	.....
Interest Rate Swap /179976 /Pay USD[Annual] SOFR [2.94166%]/ Receive USDAnnual FIXED 3.5585%	Portfolio Hedge .....	.....	Interest ...	JPMORGAN CHASE BANK, N.A. / MORGAN STANLEY/CLEARED THROUGH CME 9R7GPTS07KV3UQJZ0078	12/20/2023	12/22/2028	.....	210,000,000	3.5585% [SOFR]	0 .....	.....	(1,951,423)	(4,634,917)	.....	(4,634,917)	(5,063,201)	.....	.....	.....	2,227,386	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
1119999999. Subtotal - Swaps - Hedging Other - Interest Rate										93,250	0	(15,485,281)	6,489,124	XXX	6,489,124	42,068,946	0	0	0	77,824,763	XXX	XXX
Currency Swap /154919 /Pay EUR[Semi-Annual] FIXED [3.33%]/ Receive USDSemi-Annual FIXED 5.214%	ASSET HEDGE	Schedule D ..	Currency.....	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCJFXTO9	.08/04/2022	.08/20/2027	 22,972,500	5.214% [3.33%]	 0	.....	.....193,778	 (971,009)	.....	..... (971,009)	729,981	.....	.....	.....	.....203,537	.....	.....
Currency Swap /156715 /Pay GBP[Semi-Annual] FIXED [6.66%]/ Receive USDSemi-Annual FIXED 6.78%	ASSET HEDGE	Schedule D ..	Currency.....	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCJFXTO9	.09/09/2022	.09/20/2032	 19,669,000	6.78% [6.66%]	 0	.....	.....(49,367)	(2,345,008)	.....	..... (2,345,008)	634,557	.....	.....	.....	.....282,132	.....	.....
Currency Swap /158392 /Pay EUR[Semi-Annual] FIXED [6.04%]/ Receive USDSemi-Annual FIXED 7.672%	ASSET HEDGE	Schedule D ..	Currency.....	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	.10/13/2022	.10/30/2027	 21,802,500	7.672% [6.04%]	 0	.....	.....101,594	(2,593,856)	.....	..... (2,593,856)	946,103	.....	.....	.....	.....199,228	.....	.....
Currency Swap /158652 /Pay EUR[Quarterly] FIXED [6.408%]/ Receive USDQuarterly FIXED 7.798%	ASSET HEDGE	Schedule D ..	Currency.....	CITIBANK N.A.	E570DZWZ7FF32TWIEFA76	.10/20/2022	.10/19/2027	4,895,000	7.7987% [6.408%]	 0	.....	.....15,771	(764,700)	.....	..... (764,700)	298,843	.....	.....	.....	.....44,528	.....	.....
Currency Swap /158899 /Pay GBP[Semi-Annual] FIXED [6.22%]/ Receive USDSemi-Annual FIXED 6.2485%	ASSET HEDGE	Schedule D ..	Currency.....	ROYAL BANK OF CANADA	ES71P3U3RH1GC71XBU11	.10/25/2022	.01/31/2030	 27,528,000	6.2485% [6.22%]	 0	.....	.....(84,237)	(3,383,587)	.....	..... (3,383,587)	765,970	.....	.....	.....	.....325,425	.....	.....
Currency Swap /159983 /Pay GBP[Semi-Annual] FIXED [9.2279%]/ Receive USDSemi-Annual FIXED 9.495%	ASSET HEDGE	Schedule D ..	Currency.....	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCJFXTO9	.10/26/2022	.05/02/2025	 5,785,000	9.495% [9.2279%]	 0	.....	.....(20,465)	(559,072)	.....	..... (559,072)	65,385	.....	.....	.....	.....26,510	.....	.....
Currency Swap /159089 /Pay GBP[Semi-Annual] FIXED [6.07%]/ Receive USDSemi-Annual FIXED 6.282%	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGOFU57RNE97	.10/27/2022	.11/09/2037	 18,528,000	6.282% [6.07%]	 0	.....	.....(32,326)	(2,037,655)	.....	..... (2,037,655)	761,135	.....	.....	.....	.....338,612	.....	.....
Currency Swap /159812 /Pay EUR[Quarterly] FIXED [5.01%]/ Receive USDQuarterly FIXED 6.691%	ASSET HEDGE	Schedule D ..	Currency.....	WELLS FARGO BANK, N.A.	KB1H1DSPRFMYMCJFXTO9	.11/07/2022	.01/31/2030	 20,000,000	6.691% [5.01%]	 0	.....	.....124,148	(1,668,886)	.....	..... (1,668,886)	816,422	.....	.....	.....	.....236,432	.....	.....
Currency Swap /161475 /Pay EUR[Semi-Annual] FIXED [5.08%]/ Receive USDSemi-Annual FIXED 6.418%	ASSET HEDGE	Schedule D ..	Currency.....	MORGAN STANLEY CAPITAL SERVICES ..	I7331LVCZKQKX5T7VX54	.12/02/2022	.06/27/2030	 18,445,000	6.418% [5.08%]	 0	.....	.....111,354	(611,880)	.....	..... (611,880)	771,280	.....	.....	.....	.....225,904	.....	.....
Currency Swap /162602 /Pay EUR[Semi-Annual] FIXED [5.478%]/ Receive USDSemi-Annual FIXED 6.6425%	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A.	7H6GLXDRUGOFU57RNE97	.12/21/2022	.01/04/2032	 21,180,000	6.6425% [5.478%]	 0	.....	.....104,496	(1,027,117)	.....	..... (1,027,117)	895,168	.....	.....	.....	.....290,406	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
Currency Swap /166905 /Pay GBP[Semi-Annual] FIXED [6.2%]/ Receive USDSemi-Annual FIXED 6.13%	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGQFU57RNE97	.03/28/2023	.08/23/2029	.....	..... 17,262,000	.. 6.13% [6.2%]	 0	.....	..... (19,982)	 (691,593)	.....	..... (691,593)	 365,393	.....	.....	.....	..... 195,869	.....	.....
Currency Swap /166906 /Pay GBP[Semi-Annual] FIXED [6.26%]/ Receive USDSemi-Annual FIXED 6.2675%	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGQFU57RNE97	.03/28/2023	.08/23/2031	.....	..... 11,097,000	 6.2675% [6.26%]	 0	.....	..... (8,632)	 (470,965)	.....	..... (470,965)	 279,315	.....	.....	.....	..... 148,468	.....	.....
Currency Swap /166959 /Pay GBP[Semi-Annual] FIXED [6.11%]/ Receive USDSemi-Annual FIXED 6.055%	ASSET HEDGE	Schedule D ..	Currency.....	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.03/30/2023	.06/29/2030	.....	..... 24,760,000	6.055% [6.11%]	 0	.....	..... (23,215)	 (945,306)	.....	..... (945,306)	 564,222	.....	.....	.....	..... 303,499	.....	.....
Currency Swap /167021 /Pay EUR[Semi-Annual] FIXED [6.01%]/ Receive USDSemi-Annual FIXED 6.839%	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGQFU57RNE97	.03/31/2023	.06/30/2028	.....	..... 27,175,000	6.839% [5.62%]	 0	.....	..... 116,885	 (286,658)	.....	..... (286,658)	 1,053,568	.....	.....	.....	..... 272,089	.....	.....
Currency Swap /167275 /Pay EUR[Semi-Annual] FIXED [4.57%]/ Receive USDSemi-Annual FIXED 5.219%	ASSET HEDGE	Schedule D ..	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.04/05/2023	.06/19/2029	.....	..... 24,046,000	5.219% [4.57%]	 0	.....	..... 84,013	 (484,495)	.....	..... (484,495)	 902,975	.....	.....	.....	..... 268,304	.....	.....
Currency Swap /167714 /Pay EUR[Semi-Annual] FIXED [4.7%]/ Receive USDSemi-Annual FIXED 5.471%	ASSET HEDGE	Schedule D ..	Currency.....	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.04/18/2023	.06/07/2029	.....	..... 21,880,000	5.471% [4.7%]	 0	.....	..... 90,379	 (322,677)	.....	..... (322,677)	 824,456	.....	.....	.....	..... 243,154	.....	.....
Currency Swap /167928 /Pay GBP[Semi-Annual] FIXED [7.16%]/ Receive USDSemi-Annual FIXED 6.791%	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGQFU57RNE97	.04/20/2023	.05/12/2030	.....	..... 18,690,000	6.791% [7.16%]	 0	.....	..... (44,686)	 (881,972)	.....	..... (881,972)	 458,242	.....	.....	.....	..... 226,604	.....	.....
Currency Swap /170669 /Pay GBP[Annual] FIXED [6.24%]/ Receive USDAnnual FIXED 5.9265%	ASSET HEDGE	Schedule D ..	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. 17331LVCZKQKX577XV54	.04/27/2023	.05/16/2033	.....	..... 25,563,500	 5.9265% [6.24%]	 0	.....	..... (49,430)	 (1,438,220)	.....	..... (1,438,220)	 762,328	.....	.....	.....	..... 380,888	.....	.....
Currency Swap /171291 /Pay EUR[Semi-Annual] FIXED [4.27%]/ Receive USDSemi-Annual FIXED 5.08%	ASSET HEDGE	Schedule D ..	Currency.....	BNP PARIBAS LONDON ROMUJWSFPUBMIPR08K5P83	.05/11/2023	.06/20/2030	.....	..... 18,018,000	5.08% [4.27%]	 0	.....	..... 76,816	 (343,488)	.....	..... (343,488)	 668,026	.....	.....	.....	..... 220,306	.....	.....
Currency Swap /171895 /Pay DKK[Semi-Annual] FIXED [5.26%]/ Receive USDSemi-Annual FIXED 6.34%	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGQFU57RNE97	.05/25/2023	.06/30/2030	.....	..... 24,446,362	6.34% [5.26%]	 0	.....	..... 126,719	 (919,508)	.....	..... (919,508)	 874,427	.....	.....	.....	..... 299,655	.....	.....
Currency Swap /171910 /Pay CAD[Semi-Annual] FIXED [5.96%]/ Receive USDSemi-Annual FIXED 6.152%	ASSET HEDGE	Schedule D ..	Currency.....	JPMORGAN CHASE BANK, N.A. 7H6GLXDRUGQFU57RNE97	.05/26/2023	.06/30/2033	.....	..... 14,684,288	6.152% [5.96%]	 0	.....	..... 13,000	 (403,747)	.....	..... (403,747)	 545,199	.....	.....	.....	..... 220,387	.....	.....

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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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 Quarter-end (b)
Currency Swap /176821 /Pay EUR[Annual] FIXED [5.194%]/ Receive USDAnnual FIXED 6.8% Currency Swap /177781 /Pay GBP[Quarterly] SONIA [6.3705%]/ Receive USDQuarterly SOFR 6.66593% Currency Swap /180765 /Pay EUR[Quarterly] FIXED [5.629%]/ Receive USDQuarterly FIXED 7.3215% Currency Swap /181109 /Pay CAD[Semi-Annual] FIXED [5.583%]/ Receive USDSemi-Annual FIXED 5.8805% Currency Swap /182949 /Pay EUR[Semi-Annual] FIXED [4.07%]/ Receive USDSemi-Annual FIXED 5.815% Currency Swap /182950 /Pay EUR[Semi-Annual] FIXED [4.79%]/ Receive USDSemi-Annual FIXED 6.5675% Currency Swap /183595 /Pay EUR[Semi-Annual] FIXED [4.88%]/ Receive USDSemi-Annual FIXED 6.8425% Currency Swap /184052 /Pay EUR[Semi-Annual] FIXED [4.67%]/ Receive USDSemi-Annual FIXED 6.709% Currency Swap /184056 /Pay EUR[Semi-Annual] FIXED [5.12%]/ Receive USDSemi-Annual FIXED 7.12% Currency Swap /184476 /Pay GBP[Semi-Annual] FIXED [5.51%]/ Receive USDSemi-Annual FIXED 5.9145% Currency Swap /185019 /Pay DKK[Semi-Annual] FIXED [4.27%]/ Receive USDSemi-Annual FIXED 6.1525%	ASSET HEDGE	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES 17331LVCZKQKXST7XV54	.09/21/2023	.09/28/2030		10,650,000	6.8% [5.194%]	0		82,792	(100,593)		(100,593)	424,624				133,231		
	ASSET HEDGE	Schedule D	Currency	JPMORGAN CHASE BANK, N.A.	.10/16/2023	.07/13/2027		24,400,000	6.66593% [6.3705%]	0		4,173	(884,077)		(884,077)	267,554				212,714		
	ASSET HEDGE	Schedule D	Currency	CITIBANK N.A.	.01/19/2024	.10/19/2027		14,520,000	7.3215% [5.629%]	0			22,233		22,233	22,233				132,084		
	ASSET HEDGE	Schedule D	Currency	CITIBANK N.A.	.01/31/2024	.07/31/2033		15,375,762	5.8805% [5.583%]	0		25,783	91,855		91,855	91,855				231,787		
	ASSET HEDGE	Schedule D	Currency	CREDIT AGRICOLE	.03/27/2024	.07/18/2031		21,642,000	5.815% [4.07%]	0			286,394		286,394	286,394				287,521		
	ASSET HEDGE	Schedule D	Currency	CREDIT AGRICOLE	.03/27/2024	.04/17/2031		27,050,000	6.5675% [4.79%]	0		100,142	591,624		591,624	591,624				352,689		
	ASSET HEDGE	Schedule D	Currency	CREDIT AGRICOLE	.04/10/2024	.05/07/2034		26,875,000	6.8425% [4.88%]	0		78,350	507,872		507,872	507,872				421,946		
	ASSET HEDGE	Schedule D	Currency	JPMORGAN CHASE BANK, N.A.	.04/26/2024	.07/15/2031		21,440,000	6.709% [4.67%]	0			366,264		366,264	366,264				284,636		
	ASSET HEDGE	Schedule D	Currency	JPMORGAN CHASE BANK, N.A.	.04/26/2024	.05/08/2031		37,450,000	7.12% [5.12%]	0		107,831	828,537		828,537	828,537				490,438		
	ASSET HEDGE	Schedule D	Currency	CREDIT AGRICOLE	.05/10/2024	.05/15/2029		37,590,000	5.9145% [5.51%]	0		12,868	(95,169)		(95,169)	(95,169)				415,195		
	ASSET HEDGE	Schedule D	Currency	CREDIT AGRICOLE	.05/23/2024	.06/11/2029		24,345,930	6.1525% [4.27%]	0		26,132	369,072		369,072	369,072				270,831		

STATEMENT AS OF JUNE 30, 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 Current Statement Date

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 Quarter-end (b)
Currency Swap /185230 /Pay EUR[Semi-Annual] FIXED [5.05%]/ Receive USDSemi-Annual FIXED 6.782%	ASSET HEDGE	Schedule D ..	Currency.....	CREDIT AGRICOLE ... 1VUV7VQFKUQGSJ21A208	.05/30/2024	.07/02/2029	.....	..... 19,512,000	6.782% [5.05%]	.....	..... 0	.....	.....125,264	.....	.....125,264	125,264	.....	.....	.....	.....218,369	.....	.....
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	.....	..... 21,702,000	5.6875% [4.04%]	.....	..... 0	.....	.....125,851	.....	.....125,851	125,851	.....	.....	.....	.....252,154	.....	.....
Currency Swap /185683 /Pay EUR[Semi-Annual] FIXED [5.82%]/ Receive USDSemi-Annual FIXED 7.4075%	ASSET HEDGE	Schedule D ..	Currency.....	CREDIT AGRICOLE ... 1VUV7VQFKUQGSJ21A208	.06/13/2024	.07/15/2034	.....	..... 21,540,000	7.4075% [5.82%]	.....	..... 0	4,864	51,752	.....	.....51,752	51,752	.....	.....	.....	.....341,428	.....	.....
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. KB1H1DSPRFMYMCJFXT09	.06/26/2024	.06/30/2031	.....	..... 24,541,000	6.139% [4.57%]	.....	..... 0	.....	.....(13,513)	.....	.....(13,513)	(13,513)	.....	.....	.....	.....324,879	.....	.....
1139999999. Subtotal - Swaps - Hedging Other - Foreign Exchange										0	0	1,269,545	(20,878,032)	XXX	(20,878,032)	17,933,207	0	0	0	9,321,839	XXX	XXX
1169999999. Subtotal - Swaps - Hedging Other										93,250	0	(14,215,735)	(14,388,908)	XXX	(14,388,908)	60,002,153	0	0	0	87,146,602	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	(15,485,281)	6,489,124	XXX	6,489,124	42,068,946	0	0	0	77,824,763	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	1,269,545	(20,878,032)	XXX	(20,878,032)	17,933,207	0	0	0	9,321,839	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	(14,215,735)	(14,388,908)	XXX	(14,388,908)	60,002,153	0	0	0	87,146,602	XXX	XXX
REC 25630044.84 USD PAY [23032031.67] EUR /166475	Asset Hedge	Schedule BA ..	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJFXT09	.03/21/2023	.03/27/2026	.....	..... 25,630,045	1.11280000	 0	.....	.....	.....209,832	.....	.....209,832	862,214	.....	.....	.....	.....169,527	.....	.....
REC 14914652.07 USD PAY [13823000.00] EUR /183035	Asset Hedge	Schedule D ..	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ... 21G119DL770XOHC3ZE78	.04/02/2024	.07/03/2024	.....	..... 14,914,652	1.07897360	 0	.....	.....	.....110,138	.....	.....110,138	110,138	.....	.....	.....	.....7,457	.....	.....
REC 5009674.42 USD PAY [4643000.00] EUR /183040	Asset Hedge	Schedule BA ..	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ... 21G119DL770XOHC3ZE78	.04/02/2024	.07/03/2024	.....	.....5,009,674	1.07897360	 0	.....	.....	.....36,994	.....	.....36,994	36,994	.....	.....	.....	.....2,505	.....	.....
REC 3933000.00 GBP PAY [4941116.79] USD /183056	Asset Hedge	Schedule D ..	Currency.....	MORGAN STANLEY CAPITAL SERVICES ... 17331LVCZKQKX57XV54	.04/02/2024	.07/03/2024	.....	.....4,941,117	1.25632260	 0	.....	.....	.....30,890	.....	.....30,890	30,890	.....	.....	.....	.....2,471	.....	.....
REC 25902710.23 USD PAY [23930000.00] EUR /183152	Asset Hedge	Schedule D ..	Currency.....	BANK OF AMERICA, N.A. B4TYDEB6GKMZ0031MB27	.04/03/2024	.07/05/2024	.....	..... 25,902,710	1.08243670	 0	.....	.....	.....239,025	.....	.....239,025	239,025	.....	.....	.....	.....18,316	.....	.....
REC 6698982.41 USD PAY [6150000.00] EUR /183235	Asset Hedge	Schedule D ..	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCJFXT09	.04/04/2024	.07/08/2024	.....	.....6,699,892	1.08941340	 0	.....	.....	.....110,048	.....	.....110,048	110,048	.....	.....	.....	.....5,802	.....	.....
REC 677000.00 EUR PAY [732471.76] USD /183560	Asset Hedge	Schedule BA ..	Currency.....	BNP PARIBAS LONDON ROMJWSPFUMBP08K5P83	.04/10/2024	.07/11/2024	.....	.....732,472	1.08193761	 0	.....	.....	.....(6,685)	.....	.....(6,685)	(6,685)	.....	.....	.....	.....732	.....	.....
REC 10668784.00 USD PAY [10000000.00] EUR /183628	Asset Hedge	Schedule D ..	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE ... 21G119DL770XOHC3ZE78	.04/15/2024	.07/08/2024	.....	.....10,668,784	1.06687840	 0	.....	.....	.....(43,602)	.....	.....(43,602)	(43,602)	.....	.....	.....	.....9,239	.....	.....

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE DB - PART A - SECTION 1

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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 Quarter-end (b)
REC 806000.00 EUR PAY [859675.41] USD /183654	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ..	04/16/2024	07/05/2024		859,675	1.06659480		0		3,964		3,964	3,964				.608		
REC 5712480.60 USD PAY [5346000.00] EUR /183706	Asset Hedge	Schedule BA	Currency	BANK OF AMERICA, N.A.	04/17/2024	07/11/2024		5,712,481	1.06855230		0		(22,307)		(22,307)	(22,307)				5,712		
REC 132267.32 USD PAY [181000.00] CAD /183941	Asset Hedge	Schedule BA	Currency	MORGAN STANLEY CAPITAL SERVICES ..	04/24/2024	07/25/2024		132,267	.73075867		0		(76)		(76)	(76)				.187		
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		4,971,948	1.07431900		0		2,688		2,688	2,688				7,458		
REC 15606095.84 USD PAY [12403000.00] GBP /184208	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ..	05/03/2024	08/05/2024		15,606,096	1.25825170		0		(76,301)		(76,301)	(76,301)				24,675		
REC 297380.21 USD PAY [405000.00] CAD /184529	Asset Hedge	Schedule BA	Currency	CITIBANK N.A.	05/14/2024	08/14/2024		297,380	.73427212		0		1,103		1,103	1,103				.536		
REC 5106742.36 USD PAY [4701844.00] EUR /184541	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ..	05/14/2024	08/14/2024		5,106,742	1.08611480		0		58,675		58,675	58,675				9,206		
REC 3018717.13 USD PAY [2388000.00] GBP /184608	Asset Hedge	Schedule BA	Currency	ROYAL BANK OF CANADA	05/15/2024	08/15/2024		3,018,717	1.26411940		0		(94)		(94)	(94)				5,442		
REC 126562.29 USD PAY [100000.00] GBP /184671	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ..	05/16/2024	08/05/2024		126,562	1.26562290		0		.118		.118	.118				.200		
REC 2969893.80 USD PAY [4440000.00] AUD /184730	Asset Hedge	Schedule D	Currency	THE TORONTO-DOMINION BANK	05/20/2024	08/20/2024		2,969,894	.66889500		0		5,083		5,083	5,083				5,556		
REC 10797736.95 USD PAY [9900000.00] EUR /184747	Asset Hedge	Schedule D	Currency	BNP PARIBAS LONDON	05/20/2024	08/14/2024		10,797,737	1.09068050		0		166,182		166,182	166,182				19,466		
REC 30687277.73 USD PAY [326717000.04] SEK /184834	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ..	05/21/2024	07/05/2024		30,687,278	.09392617		0		(139,873)		(139,873)	(139,873)				21,699		
REC 10438804.69 USD PAY [9597000.00] EUR /184937	Asset Hedge	Schedule D	Currency	MORGAN STANLEY CAPITAL SERVICES ..	05/22/2024	08/22/2024		10,438,805	1.08771540		0		.130,942		.130,942	.130,942				20,215		
REC 913680.94 USD PAY [840000.00] EUR /184946	Asset Hedge	Schedule BA	Currency	MORGAN STANLEY CAPITAL SERVICES ..	05/22/2024	08/22/2024		.913,681	1.08771540		0		.11,461		.11,461	.11,461				1,769		
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		142,762	1.27465768		0		(1,144)		(1,144)	(1,144)				.226		
REC 2613803.76 USD PAY [2400000.00] EUR /185143	Asset Hedge	Schedule D	Currency	CITIBANK N.A.	05/24/2024	08/14/2024		2,613,804	1.08908490		0		.36,136		.36,136	.36,136				4,712		
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		3,400,379	1.07880050		0		.12,596		.12,596	.12,596				7,603		
REC 1034673.32 USD PAY [10903999.97] SEK /185476	Asset Hedge	Schedule D	Currency	CITIBANK N.A.	06/10/2024	07/05/2024		1,034,673	.09488934		0		.4,887		.4,887	.4,887				.732		
REC 805000.00 EUR PAY [865342.16] USD /185505	Asset Hedge	Schedule D	Currency	BNP PARIBAS LONDON	06/10/2024	07/05/2024		865,342	1.07495920		0		(2,583)		(2,583)	(2,583)				.612		

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE DB - PART A - SECTION 1

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REC 530697.11 USD PAY [413000.00] GBP /185530	Asset Hedge	Schedule D ..	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE .. 21G119DL770XOHC3ZE78	.06/12/2024	.09/12/2024		530,697	1.28498090		0		8,256		8,256	8,256				1,216		
REC 4268574.04 USD PAY [3929000.00] EUR /185534	Asset Hedge	Schedule BA ..	Currency.....	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.06/12/2024	.09/12/2024	.....	4,268,574	1.08642760	.....	.....0	.....	42,721	.....	42,721	42,721	.....	.....	.....	9,781	.....	.....
REC 2439696.54 USD PAY [2247000.00] EUR /185566	Asset Hedge	Schedule D ..	Currency.....	ROYAL BANK OF CANADA ES71P3U8RH1GCT1XBUI1	.06/12/2024	.07/31/2024	.....	2,439,687	1.08575280	.....	.....0	.....	29,534	.....	29,534	29,534	.....	.....	.....	3,660	.....	.....
REC 1869356.50 USD PAY [1455000.00] GBP /185630	Asset Hedge	Schedule D ..	Currency.....	ROYAL BANK OF CANADA ES71P3U8RH1GCT1XBUI1	.06/12/2024	.08/08/2024	.....	1,869,357	1.28478110	.....	.....0	.....	29,936	.....	29,936	29,936	.....	.....	.....	3,100	.....	.....
REC 27086728.62 USD PAY [25232000.00] EUR /185687	Asset Hedge	Schedule D ..	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE .. 21G119DL770XOHC3ZE78	.06/14/2024	.09/16/2024	.....	27,086,729	1.07350700	.....	.....0	.....	(33,391)	.....	(33,391)	(33,391)	.....	.....	.....	63,524	.....	.....
REC 4721039.71 USD PAY [7135000.00] AUD /185709	Asset Hedge	Schedule D ..	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE .. 21G119DL770XOHC3ZE78	.06/14/2024	.09/16/2024	.....	4,721,040	66167340	.....	.....0	.....	(47,546)	.....	(47,546)	(47,546)	.....	.....	.....	11,072	.....	.....
REC 4504731.46 USD PAY [4201000.00] EUR /185717	Asset Hedge	Schedule BA ..	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE .. 21G119DL770XOHC3ZE78	.06/14/2024	.09/16/2024	.....	4,504,731	1.07229980	.....	.....0	.....	(10,571)	.....	(10,571)	(10,571)	.....	.....	.....	10,565	.....	.....
REC 1469408.42 USD PAY [1160000.00] GBP /185719	Asset Hedge	Schedule D ..	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. 17331LVCZKQKX5T7XV54	.06/14/2024	.08/05/2024	.....	1,469,408	1.26673140	.....	.....0	.....	2,645	.....	2,645	2,645	.....	.....	.....	2,323	.....	.....
REC 4912911.28 USD PAY [4591000.00] EUR /185722	Asset Hedge	Schedule D ..	Currency.....	CANADIAN IMPERIAL BANK OF COMMERCE .. 21G119DL770XOHC3ZE78	.06/14/2024	.08/14/2024	.....	4,912,911	1.07011790	.....	.....0	.....	(13,747)	.....	(13,747)	(13,747)	.....	.....	.....	8,857	.....	.....
REC 4994108.81 USD PAY [3939000.00] GBP /185810	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. 17331LVCZKQKX5T7XV54	.06/17/2024	.09/17/2024	.....	4,994,109	1.26786210	.....	.....0	.....	11,495	.....	11,495	11,495	.....	.....	.....	11,712	.....	.....
REC 6227465.94 USD PAY [10188000.00] NZD /185816	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.06/17/2024	.09/17/2024	.....	6,227,466	61125500	.....	.....0	.....	19,219	.....	19,219	19,219	.....	.....	.....	14,605	.....	.....
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	.....	928,501	1.27017910	.....	.....0	.....	3,808	.....	3,808	3,808	.....	.....	.....	2,226	.....	.....
REC 43053028.44 USD PAY [39907000.00] EUR /185932	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.06/18/2024	.09/19/2024	.....	43,053,028	1.07883400	.....	.....0	.....	119,756	.....	119,756	119,756	.....	.....	.....	103,238	.....	.....
REC 538860.01 USD PAY [809000.00] AUD /185958	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO-DOMINION BANK PT30B789TSUIDF371261	.06/18/2024	.08/20/2024	.....	538,860	66608159	.....	.....0	.....	(1,332)	.....	(1,332)	(1,332)	.....	.....	.....	1,008	.....	.....
REC 1899000.00 NZD PAY [1163139.40] USD /186019	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. 17331LVCZKQKX5T7XV54	.06/20/2024	.09/17/2024	.....	1,163,139	61250100	.....	.....0	.....	(5,733)	.....	(5,733)	(5,733)	.....	.....	.....	2,728	.....	.....
REC 1955527.34 USD PAY [2924000.00] AUD /186036	Asset Hedge	Schedule BA, D	Currency.....	CITIBANK N.A. E570DZIWZ7FF32TWEFA76	.06/20/2024	.09/16/2024	.....	1,955,527	66878500	.....	.....0	.....	(1,090)	.....	(1,090)	(1,090)	.....	.....	.....	4,586	.....	.....
REC 237720.96 USD PAY [356000.00] AUD /186047	Asset Hedge	Schedule BA, D	Currency.....	THE TORONTO-DOMINION BANK PT30B789TSUIDF371261	.06/20/2024	.08/02/2024	.....	237,721	66775551	.....	.....0	.....	113	.....	113	113	.....	.....	.....	357	.....	.....
REC 5362575.50 USD PAY [5000000.00] EUR /186058	Asset Hedge	Schedule BA, D	Currency.....	WELLS FARGO BANK, N.A. KB1H1DSPRFMYMCUFXT09	.06/20/2024	.07/08/2024	.....	5,362,576	1.07251510	.....	.....0	.....	5,103	.....	5,103	5,103	.....	.....	.....	4,644	.....	.....
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	.....	1,160,411	61074240	.....	.....0	.....	(1,885)	.....	(1,885)	(1,885)	.....	.....	.....	580	.....	.....

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE DB - PART A - SECTION 1

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REC 1160000.00 GBP PAY [1468633.20] USD /186341	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. I7331LVCZKQKX5T7XV54	.06/27/2024	.08/05/2024		1,468,633	1.26606310		0		(1,874)		(1,874)	(1,874)				2,322		
REC 4727439.86 USD PAY [4402000.00] EUR /186349	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. I7331LVCZKQKX5T7XV54	.06/27/2024	.07/31/2024		4,727,440	1.07393000		0		4,828		4,828	4,828				7,091		
REC 4333000.00 EUR PAY [4646839.19] USD /186350	Asset Hedge	Schedule BA, D	Currency.....	MORGAN STANLEY CAPITAL SERVICES .. I7331LVCZKQKX5T7XV54	.06/27/2024	.07/01/2024		4,646,839	1.07243000		0		(4,797)		(4,797)	(4,797)				2,323		
1439999999. Subtotal - Forwards - Hedging Other										0	0	0	1,033,544	XXX	1,033,544	1,685,926	0	0	0	624,181	XXX	XXX
1479999999. Subtotal - Forwards										0	0	0	1,033,544	XXX	1,033,544	1,685,926	0	0	0	624,181	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										339,461,903	346,286,354	(221,052,425)	330,964,335	XXX	952,331,904	63,248,487	0	(240,440,604)	0	87,770,783	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										339,461,903	346,286,354	(221,052,425)	330,964,335	XXX	952,331,904	63,248,487	0	(240,440,604)	0	87,770,783	XXX	XXX

(a)	Code	Description of Hedged Risk(s)
(b)	Code	Financial or Economic Impact of the Hedge at the End of the Reporting Period

SCHEDULE DB - PART B - SECTION 1

Futures Contracts Open as of the Current Statement Date

1	2	3	4	5	6	7	8	9	10	11	12	13	14	Highly Effective Hedges			18	19	20	21	22
														15	16	17					
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	Cumulative Variation Margin	Deferred Variation Margin	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 Quarter-end (b)	Value of One (1) Point
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	109.9800	(106,794)	(106,794)				(106,794)	(106,794)	262,000		1,000
TYU4	262	26,200,000	Long /US 10Y NOTE FUTURE II /186338	LIABILITY HEDGE	Schedule BA, D	Interest	09/30/2024	CBOT	06/27/2024	109.9688	109.9800	3,381	3,381				3,381	3,381	524,000		1,000
TYU4	1,527	152,700,000	Long /US 10Y NOTE FUTURE II /186363	LIABILITY HEDGE	Schedule BA, D	Interest	09/30/2024	CBOT	06/27/2024	110.2500	109.9800	(409,763)	(409,763)				(409,763)	(409,763)	3,054,000		1,000
TUU4	126	25,200,000	Long /US 2YR NOTE FUTURE II /186362	LIABILITY HEDGE	Schedule BA, D	Interest	09/30/2024	CBOT	06/27/2024	102.1211	102.1100	(3,277)	(3,277)				(3,277)	(3,277)	138,600		2,000
FVU4	94	9,400,000	Long /US 5YR NOTE FUTURE II /186339	LIABILITY HEDGE	Schedule BA, D	Interest	09/30/2024	CBOT	06/27/2024	106.4844	106.5800	8,571	8,571				8,571	8,571	122,200		1,000
FVU4	1,375	137,500,000	Long /US 5YR NOTE FUTURE II /186364	LIABILITY HEDGE	Schedule BA, D	Interest	09/30/2024	CBOT	06/27/2024	106.6875	106.5800	(153,924)	(153,924)				(153,924)	(153,924)	1,787,500		1,000
1539999999. Subtotal - Long Futures - Hedging Other												(661,806)	(661,806)	0	0	0	(661,806)	(661,806)	5,888,300	XXX	XXX
1579999999. Subtotal - Long Futures												(661,806)	(661,806)	0	0	0	(661,806)	(661,806)	5,888,300	XXX	XXX
1649999999. Subtotal - Short Futures												0	0	0	0	0	0	0	0	XXX	XXX
1679999999. Subtotal - SSAP No. 108 Adjustments												0	0	0	0	0	0	0	0	XXX	XXX
1689999999. Subtotal - Hedging Effective Excluding Variable Annuity Guarantees Under SSAP No.108												0	0	0	0	0	0	0	0	XXX	XXX
1699999999. Subtotal - Hedging Effective Variable Annuity Guarantees Under SSAP No.108												0	0	0	0	0	0	0	0	XXX	XXX
1709999999. Subtotal - Hedging Other												(661,806)	(661,806)	0	0	0	(661,806)	(661,806)	5,888,300	XXX	XXX
1719999999. Subtotal - Replication												0	0	0	0	0	0	0	0	XXX	XXX
1729999999. Subtotal - Income Generation												0	0	0	0	0	0	0	0	XXX	XXX
1739999999. Subtotal - Other												0	0	0	0	0	0	0	0	XXX	XXX
1749999999. Subtotal - Adjustments for SSAP No. 108 Derivatives												0	0	0	0	0	0	0	0	XXX	XXX
1759999999 - Totals												(661,806)	(661,806)	0	0	0	(661,806)	(661,806)	5,888,300	XXX	XXX

Broker Name	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

SCHEDULE DB - PART D - SECTION 1

Counterparty Exposure for Derivative Instruments Open as of Current Statement Date

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		448,836,261	(285,319,799)	448,836,261	438,956,842	(673,758)	438,956,842	5,888,300	5,888,300
Bank of America, N.A.	Y.....	Y.....	160,980,000		15,327,908	(1,624,220)	0	47,123,199	(22,307)	0	31,486	
Barclays Bank PLC	Y.....	Y.....				(1,885)	0		(1,885)	0	580	
Barclays Bank PLC	Y.....	Y.....	73,020,000		34,440,821	(23,877,939)	0	36,458,381		0	2,226	
BNP Paribas London	Y.....	Y.....	143,060,000		54,765,110	(21,391,420)	0	92,104,229	(352,756)	0	241,116	
Canadian Imperial Bank of Commerce	Y.....	Y.....			155,388	(148,857)	6,531	155,388	(148,857)	6,531	114,435	114,435
Citibank N.A.	Y.....	Y.....	109,579,840		54,154,479	(2,033,773)	0	110,778,744	(2,033,773)	0	1,093,242	
Credit Agricole	Y.....	Y.....	2,380,000		1,931,978	(95,169)	0	1,931,978	(95,169)	0	2,307,979	1,764,788
Goldman Sachs International	Y.....	Y.....	55,440,000		3,191,752	(2,091,309)	0	6,618,944		0		
JPMorgan Chase Bank, N.A.	Y.....	Y.....	88,950,000		25,728,471	(8,135,689)	0	89,792,934	(7,603,292)	0	2,979,878	
Morgan Stanley & Co. International PLC	Y.....	Y.....	10,425,000		9,061,514	(6,472,073)	0	9,896,376		0		
Morgan Stanley Capital Services	Y.....	Y.....				(4,797)	0		(4,797)	0	2,323	
Morgan Stanley Capital Services	Y.....	Y.....			255,018	(2,374,550)	0	255,018	(2,374,550)	0	847,229	
Royal Bank of Canada	Y.....	Y.....	82,300,000		18,262,408	(17,643,098)	0	25,049,874	(5,977,537)	0	536,855	
The Toronto-Dominion Bank	Y.....	Y.....			5,196	(1,332)	3,863	5,196	(1,332)	3,863	6,921	6,921
The Toronto-Dominion Bank	Y.....	Y.....			125,851		125,851	125,851		125,851	252,154	252,154
UBS AG	Y.....	Y.....	11,380,000		8,631,388	(1,247,426)	0	11,438,996		58,996		
Wells Fargo Bank, N.A.	Y.....	Y.....	90,602,364		31,705,370	(14,904,745)	0	92,492,262	(6,043,128)	0	1,529,596	
0299999999. Total NAIC 1 Designation			828,117,204	0	257,742,652	(102,048,282)	136,246	524,227,371	(24,659,382)	195,242	9,946,020	2,138,298
Societe General	Y.....	Y.....	344,410,000		11,748,678	(7,146,104)	0	6,353,478	976,423	0		
0399999999. Total NAIC 2 Designation			344,410,000	0	11,748,678	(7,146,104)	0	6,353,478	976,423	0	0	0
0899999999. Aggregate Sum of Central Clearinghouses (Excluding Exchange Traded)					126,053,262	(119,564,138)	6,489,124	126,053,262	(119,564,138)	6,489,124	77,824,763	77,824,763
0999999999 - Gross Totals			1,172,527,204	0	844,380,852	(514,078,323)	455,461,631	1,095,590,953	(143,920,855)	445,641,209	93,659,083	85,851,361
1. Offset per SSAP No. 64												
2. Net after right of offset per SSAP No. 64					844,380,852	(514,078,323)						

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE DB - PART D - SECTION 2

Collateral for Derivative Instruments Open as of Current Statement Date

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	Cash.....	9R7GPTS07KV3UQJZ0078 ..	Cash Collateral	(87,143,692)	(87,143,692)	(87,143,692) .....	.....	I.....
Morgan Stanley & Co. LLC CME	Cash.....	9R7GPTS07KV3UQJZ0078 ..	Cash Collateral	(11,783,070)	(11,783,070)	(11,783,070) .....	.....	V.....
Morgan Stanley Capital Services	Cash.....	17331LVCZKQKX5T7XV54 ..	Cash Collateral	(1,780,000)	(1,780,000)	(1,780,000) .....	.....	V.....
Morgan Stanley & Co. LLC	Cash.....	9R7GPTS07KV3UQJZ0078 ..	Cash Collateral	(673,758)	(673,758)	(673,758) .....	.....	V.....
Morgan Stanley & Co. LLC	Corporate.....	20030N-DH-1	Comcast Corporation	(31,180,984)	(38,000,000)	(21,826,689)	04/01/2040 ..	I.....
Morgan Stanley & Co. LLC	Corporate.....	05723K-AF-7	BAKER HUGHES LLC/CO-OBL	(6,388,922)	(8,000,000)	(4,472,245)	12/15/2047 ..	I.....
Morgan Stanley & Co. LLC	Corporate.....	00287Y-BX-6	ABBVIE INC.	(11,060,273)	(12,000,000)	(7,742,191)	11/21/2029 ..	I.....
.....								
.....								
.....								
0199999999 - Total				(150,010,699)	(159,380,520)	(135,421,646)	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	Cash.....	B4TYDEB6GKMZ0031MB27 ..	Cash Collateral	160,980,000	160,980,000	XXX.....	.....	V.....
Barclays Bank Plc	Cash.....	G5GSEF7VJP5170UK5573 ..	Cash Collateral	73,020,000	73,020,000	XXX.....	.....	V.....
BNP Paribas	Cash.....	ROMUWSPUB8MPRO8K5P83 ..	Cash Collateral	143,060,000	143,060,000	XXX.....	.....	V.....
Citibank NA	Cash.....	E570DZWZ7FF32TWEFA76 ..	Cash Collateral	109,579,840	109,579,840	XXX.....	.....	V.....
Credit Agricole Corporate and Investment Bank	Cash.....	1VUV7VQFKUQGSJ21A208 ..	Cash Collateral	2,380,000	2,380,000	XXX.....	.....	V.....
Goldman Sachs International	Cash.....	W22LR0WP21HZNB6K528 ..	Cash Collateral	55,440,000	55,440,000	XXX.....	.....	V.....
JPMorgan Chase Bank, N.A.	Cash.....	7H6GLXDRUGGFU57RNE97 ..	Cash Collateral	88,950,000	88,950,000	XXX.....	.....	V.....
Morgan Stanley & Co International PLC	Cash.....	4POUHN3JPFGFNF3BB653 ..	Cash Collateral	10,425,000	10,425,000	XXX.....	.....	V.....
Morgan Stanley & Co. LLC	Cash.....	9R7GPTS07KV3UQJZ0078 ..	Cash Collateral	11,952	11,952	XXX.....	.....	V.....
Royal Bank of Canada	Cash.....	ES71P3U3RHI6C71XBU11 ..	Cash Collateral	82,300,000	82,300,000	XXX.....	.....	V.....
Societe Generale	Cash.....	O2RNE8IBXP4R0TD8PU41 ..	Cash Collateral	344,410,000	344,410,000	XXX.....	.....	V.....
UBS AG	Cash.....	BFMBT61CT2L1QCEMIK50 ..	Cash Collateral	11,380,000	11,380,000	XXX.....	.....	V.....
Wells Fargo Bank NA	Treasury.....	KB1H1DSPPFMYMCLUFT09 ..	US TREASURY N/B	92,451,392	104,833,000	XXX.....	09/30/2028 ..	V.....
0299999999 - Total				1,174,388,184	1,186,769,792	XXX	XXX	XXX

Schedule DB - Part E - Derivatives Hedging Variable Annuity Guarantees

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

Month End Depository Balances

1	2	3	4	5	Book Balance at End of Each Month During Current Quarter			9
					6	7	8	
					First Month	Second Month	Third Month	
Depository	Code	Rate of Interest	Amount of Interest Received During Current Quarter	Amount of Interest Accrued at Current Statement Date				*
Bank of New York Mellon New York, NY .....	.....	.....	.....	.....	..... 40,832,434	 98,914,225	 65,044,138	..XXX.
PNC Bank Pittsburgh, PA .....	.....	.....	.....	.....	..... ( 168,462,363)	 (202,084,078)	 (255,714,141)	..XXX.
Wells Fargo Bank / Norwest Bank Phoenix, AZ .....	.....	.....	.....	.....	..... 168,617	 184,456	 135,042	..XXX.
FHLB Cincinnati, OH .....	.....	.. 4.800	 155,956	.....	..... 22,503,987	 20,150,974	 35,070,503	..XXX.
State Street Global Services Kansas City, MO .....	.....	.....	.....	.....	..... 6,799,961	 8,234,278	 16,359,040	..XXX.
0199998. Deposits in ... depositories that do not exceed the allowable limit in any one depository (See instructions) - Open Depositories	XXX	XXX	.....	.....	.....	.....	.....	XXX
0199999. Totals - Open Depositories	XXX	XXX	155,956	0	(98,157,364)	(74,600,145)	(139,105,418)	XXX
0299998. Deposits in ... depositories that 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	0	0	XXX
0399999. Total Cash on Deposit	XXX	XXX	155,956	0	(98,157,364)	(74,600,145)	(139,105,418)	XXX
0499999. Cash in Company's Office	XXX	XXX	XXX	XXX	.....	.....	.....	XXX
.....								
.....								
.....								
.....								
.....								
.....								
.....								
.....								
0599999. Total - Cash	XXX	XXX	155,956	0	(98,157,364)	(74,600,145)	(139,105,418)	XXX

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE E - PART 2 - CASH EQUIVALENTS

Show Investments Owned End of Current Quarter

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
.....	AT&T INC COMMERCIAL PAPER .....	.....	06/26/2024	0.000	07/16/2024	9,977,274	0	7,552
.....	AGILENT TECHNOLOGIES INC COMMERCIAL PAPE .....	.....	06/07/2024	0.000	07/02/2024	15,997,561	0	51,046
.....	AMCOR FLEXIBLES NORTH AMERICA INC COMMER .....	.....	06/21/2024	0.000	07/10/2024	18,474,709	0	28,020
.....	AMCOR FLEXIBLES NORTH AMERICA INC COMMER .....	.....	06/25/2024	0.000	07/17/2024	4,488,990	0	4,115
.....	AMEREN CORPORATION COMMERCIAL PAPER .....	.....	06/28/2024	0.000	08/01/2024	42,796,347	0	0
.....	AMERICAN ELECTRIC POWER COMPANY INC COMM .....	.....	06/20/2024	0.000	07/09/2024	34,757,473	0	58,306
.....	AMERICAN HONDA FINANCE CORP COMMERCIAL P .....	.....	04/16/2024	0.000	07/10/2024	34,950,593	0	411,718
.....	AMERICAN HONDA FINANCE CORPORATION COMME .....	.....	06/20/2024	0.000	09/16/2024	15,809,430	0	24,417
.....	AVANGRID INC COMMERCIAL PAPER .....	.....	05/16/2024	0.000	07/15/2024	13,969,402	0	99,602
.....	AVANGRID INC COMMERCIAL PAPER .....	.....	05/22/2024	0.000	08/01/2024	24,879,997	0	153,150
.....	BAYER CORP COMMERCIAL PAPER .....	.....	06/12/2024	0.000	07/26/2024	4,980,847	0	14,458
.....	BROWN-FORMAN CORP COMMERCIAL PAPER .....	.....	06/03/2024	0.000	07/03/2024	1,999,392	0	8,475
.....	BROWN-FORMAN CORPORATION COMMERCIAL PAPE .....	.....	06/17/2024	0.000	07/18/2024	41,093,742	0	87,096
.....	CIGNA GROUP/THE COMMERCIAL PAPER .....	.....	05/22/2024	0.000	07/02/2024	19,996,948	0	121,315
.....	CRH AMERICA FINANCE INC COMMERCIAL PAPER .....	.....	06/12/2024	0.000	09/05/2024	9,898,135	0	28,941
.....	CENTERPOINT ENERGY INC COMMERCIAL PAPER .....	.....	06/28/2024	0.000	07/01/2024	25,000,000	0	11,208
.....	DOMINION ENERGY SOUTH CAROLINA INC COMME .....	.....	06/11/2024	0.000	07/16/2024	33,422,304	0	97,900
.....	DOMINION ENERGY INC COMMERCIAL PAPER .....	.....	06/13/2024	0.000	07/11/2024	34,846,534	0	95,828
.....	DOMINION ENERGY INC COMMERCIAL PAPER .....	.....	06/13/2024	0.000	07/23/2024	14,949,168	0	41,334
.....	DUKE ENERGY CORP COMMERCIAL PAPER .....	.....	06/26/2024	0.000	08/08/2024	16,901,769	0	12,841
.....	ERAC USA FINANCE LLC COMMERCIAL PAPER .....	.....	06/26/2024	0.000	07/17/2024	46,885,429	0	40,696
.....	ENBRIDGE US INC COMMERCIAL PAPER .....	.....	06/13/2024	0.000	07/11/2024	44,930,935	0	123,785
.....	EVERGY KANSAS CENTRAL INC COMMERCIAL PAP .....	.....	06/18/2024	0.000	07/10/2024	68,805,074	0	136,655
.....	EVERSOURCE ENERGY COMMERCIAL PAPER .....	.....	06/12/2024	0.000	07/03/2024	29,990,640	0	83,974
.....	EVERSOURCE ENERGY COMMERCIAL PAPER .....	.....	06/25/2024	0.000	07/11/2024	16,973,531	0	15,842
.....	EVERSOURCE ENERGY COMMERCIAL PAPER .....	.....	06/24/2024	0.000	07/15/2024	14,967,064	0	16,414
.....	EXELON CORPORATION COMMERCIAL PAPER .....	.....	06/17/2024	0.000	07/02/2024	44,993,110	0	96,235
.....	FISERV INC COMMERCIAL PAPER .....	.....	06/26/2024	0.000	08/22/2024	13,888,693	0	10,609
.....	FISERV INC COMMERCIAL PAPER .....	.....	06/24/2024	0.000	08/28/2024	33,698,400	0	36,039
.....	FORTIVE CORP COMMERCIAL PAPER .....	.....	06/18/2024	0.000	07/19/2024	9,972,546	0	19,735
.....	FORTIVE CORP COMMERCIAL PAPER .....	.....	06/25/2024	0.000	07/24/2024	22,225,554	0	20,373
.....	GLAXOSMITHKLINE LLC COMMERCIAL PAPER .....	.....	06/26/2024	0.000	07/01/2024	12,900,000	0	9,478
.....	HP INC COMMERCIAL PAPER .....	.....	06/18/2024	0.000	07/10/2024	29,959,044	0	58,961
.....	HUBBELL INCORPORATED COMMERCIAL PAPER .....	.....	06/20/2024	0.000	07/19/2024	9,972,454	0	16,759
.....	INTEL CORP COMMERCIAL PAPER .....	.....	05/09/2024	0.000	07/08/2024	14,983,827	0	121,327
.....	INTEL CORP COMMERCIAL PAPER .....	.....	05/15/2024	0.000	07/12/2024	31,796,080	0	232,584
.....	INTERCONTINENTAL EXCHANGE INC COMMERCIAL .....	.....	06/12/2024	0.000	07/10/2024	6,491,053	0	18,808
.....	INTERCONTINENTAL EXCHANGE INC COMMERCIAL .....	.....	06/13/2024	0.000	07/11/2024	9,984,708	0	27,408
.....	INTERCONTINENTAL EXCHANGE INC COMMERCIAL .....	.....	06/28/2024	0.000	07/12/2024	12,978,262	0	5,916
.....	INTERCONTINENTAL EXCHANGE INC COMMERCIAL .....	.....	06/20/2024	0.000	07/22/2024	8,971,024	0	15,104
.....	INTERCONTINENTAL EXCHANGE INC COMMERCIAL .....	.....	06/13/2024	0.000	07/29/2024	24,892,582	0	64,769
.....	KEURIG DR PEPPER INC COMMERCIAL PAPER .....	.....	05/29/2024	0.000	07/17/2024	22,943,493	0	115,673
.....	KEURIG DR PEPPER INC COMMERCIAL PAPER .....	.....	06/26/2024	0.000	08/08/2024	24,854,222	0	19,055
.....	KINDER MORGAN INC COMMERCIAL PAPER .....	.....	06/24/2024	0.000	07/01/2024	41,600,000	0	44,327
.....	L3HARRIS TECHNOLOGIES INC COMMERCIAL PAP .....	.....	06/06/2024	0.000	07/02/2024	7,998,757	0	30,940
.....	L3HARRIS TECHNOLOGIES INC COMMERCIAL PAP .....	.....	05/03/2024	0.000	07/25/2024	9,962,321	0	91,432
.....	L3HARRIS TECHNOLOGIES INC COMMERCIAL PAP .....	.....	05/24/2024	0.000	08/21/2024	4,860,896	0	28,733
.....	MARRIOTT INTERNATIONAL INC/MD COMMERCIAL .....	.....	05/28/2024	0.000	07/10/2024	20,531,431	0	104,077
.....	MARRIOTT INTERNATIONAL INC/MD COMMERCIAL .....	.....	06/10/2024	0.000	07/25/2024	9,963,020	0	30,609
.....	MARRIOTT INTERNATIONAL INC COMMERCIAL PA .....	.....	06/28/2024	0.000	08/14/2024	14,898,570	0	6,866
.....	MARSH & MCLENNAN COMPANIES INC COMMERCIA .....	.....	06/17/2024	0.000	07/01/2024	33,000,000	0	70,583

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE E - PART 2 - CASH EQUIVALENTS

Show Investments Owned End of Current Quarter

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
	MARSH & MCLENNAN COMPANIES INC COMMERCIAL PAPER		06/26/2024	0.000	07/08/2024	31,966,001	0	24,241
	MOHAWK INDUSTRIES INC COMMERCIAL PAPER		06/18/2024	0.000	07/09/2024	16,579,782	0	32,750
	MOHAWK INDUSTRIES INC COMMERCIAL PAPER		06/28/2024	0.000	07/12/2024	29,950,202	0	13,552
	MONDELEZ INTERNATIONAL INC COMMERCIAL PAPER		06/25/2024	0.000	07/22/2024	24,919,718	0	22,843
	MONDELEZ INTERNATIONAL INC COMMERCIAL PAPER		06/26/2024	0.000	07/24/2024	22,919,119	0	17,508
	MOAIC CO/THE COMMERCIAL PAPER		06/11/2024	0.000	07/11/2024	28,955,397	0	88,797
	MOAIC CO/THE COMMERCIAL PAPER		06/25/2024	0.000	07/25/2024	29,889,298	0	27,548
	NASDAQ INC COMMERCIAL PAPER		06/26/2024	0.000	07/24/2024	29,895,670	0	18,070
	NISOURCE INC COMMERCIAL PAPER		06/10/2024	0.000	07/10/2024	19,972,315	0	61,248
	OGE ENERGY CORPORATION COMMERCIAL PAPER		06/20/2024	0.000	07/03/2024	47,085,374	0	80,281
	O'REILLY AUTOMOTIVE INC COMMERCIAL PAPER		06/12/2024	0.000	07/01/2024	30,000,000	0	86,133
	O'REILLY AUTOMOTIVE INC COMMERCIAL PAPER		06/18/2024	0.000	07/16/2024	19,954,410	0	39,343
	ONEOK INC COMMERCIAL PAPER		06/21/2024	0.000	07/08/2024	23,554,836	0	35,856
	PPG INDUSTRIES INC COMMERCIAL PAPER		06/26/2024	0.000	07/18/2024	19,948,118	0	12,168
	PENSKE TRUCK LEASING CO LP COMMERCIAL PAPER		06/17/2024	0.000	07/17/2024	34,914,261	0	74,678
	PENSKE TRUCK LEASING CO LP COMMERCIAL PAPER		05/24/2024	0.000	07/19/2024	9,972,086	0	58,420
	PENSKE TRUCK LEASING CO LP COMMERCIAL PAPER		06/10/2024	0.000	08/09/2024	15,903,836	0	51,303
	PHILLIPS 66 COMMERCIAL PAPER		06/18/2024	0.000	07/03/2024	14,295,646	0	28,238
	PHILLIPS 66 COMMERCIAL PAPER		06/25/2024	0.000	07/08/2024	32,964,805	0	30,108
	PUBLIC SERVICE ENTERPRISE GROUP INCORPORATED		06/26/2024	0.000	07/10/2024	47,934,080	0	29,240
	RELX INC(PRE-REINCORPORATION) COMMERCIAL PAPER		06/24/2024	0.000	07/10/2024	9,986,361	0	10,583
	RELX INC(PRE-REINCORPORATION) COMMERCIAL PAPER		06/20/2024	0.000	07/18/2024	29,922,663	0	49,830
	RELX INC(PRE-REINCORPORATION) COMMERCIAL PAPER		06/25/2024	0.000	07/25/2024	4,981,650	0	4,567
	RYDER SYSTEM INC COMMERCIAL PAPER		05/31/2024	0.000	07/01/2024	18,000,000	0	86,180
	RYDER SYSTEM INC COMMERCIAL PAPER		06/05/2024	0.000	07/05/2024	9,993,809	0	40,059
	RYDER SYSTEM INC COMMERCIAL PAPER		06/13/2024	0.000	07/11/2024	29,954,040	0	82,374
	RYDER SYSTEM INC COMMERCIAL PAPER		06/14/2024	0.000	07/12/2024	22,960,875	0	60,205
	SHERWIN-WILLIAMS COMPANY (THE) COMMERCIAL PAPER		06/28/2024	0.000	07/22/2024	19,936,505	0	9,038
	SOUTHERN COMPANY GAS CAPITAL CORPORATION		06/28/2024	0.000	07/16/2024	9,977,198	0	4,548
	SPIRE INC COMMERCIAL PAPER		06/12/2024	0.000	07/03/2024	24,992,339	0	72,547
	SPIRE INC COMMERCIAL PAPER		06/24/2024	0.000	07/15/2024	18,460,244	0	19,814
	SPIRE INC COMMERCIAL PAPER		06/26/2024	0.000	07/17/2024	11,970,644	0	9,144
	SPIRE INC COMMERCIAL PAPER		06/24/2024	0.000	07/18/2024	28,924,459	0	41,342
	VII CREDIT INC COMMERCIAL PAPER		06/04/2024	0.000	07/10/2024	11,983,341	0	49,701
	VII CREDIT INC COMMERCIAL PAPER		06/03/2024	0.000	07/11/2024	14,976,859	0	64,417
	VII CREDIT INC COMMERCIAL PAPER		06/07/2024	0.000	07/19/2024	7,053,264	0	26,144
	VII CREDIT INC COMMERCIAL PAPER		06/26/2024	0.000	08/28/2024	13,547,320	0	11,390
	VULCAN MATERIALS COMPANY COMMERCIAL PAPER		06/18/2024	0.000	07/11/2024	64,900,316	0	129,134
	VULCAN MATERIALS COMPANY COMMERCIAL PAPER		06/25/2024	0.000	07/19/2024	13,462,773	0	12,363
	WRKCO INC COMMERCIAL PAPER		06/20/2024	0.000	07/17/2024	9,975,425	0	16,825
	WRKCO INC COMMERCIAL PAPER		06/20/2024	0.000	07/19/2024	14,958,530	0	25,230
	WRKCO INC COMMERCIAL PAPER		06/25/2024	0.000	07/23/2024	19,932,226	0	18,404
	WASTE MANAGEMENT INC COMMERCIAL PAPER		06/25/2024	0.000	07/05/2024	44,972,976	0	40,476
	XCEL ENERGY INC COMMERCIAL PAPER		05/29/2024	0.000	07/02/2024	39,993,836	0	196,236
	XCEL ENERGY INC COMMERCIAL PAPER		06/28/2024	0.000	07/12/2024	10,981,741	0	4,969
	ALIMENTATION COUCHE-TARD INC COMMERCIAL PAPER		06/11/2024	0.000	07/08/2024	32,964,529	0	112,379
	ALIMENTATION COUCHE-TARD INC COMMERCIAL PAPER		06/26/2024	0.000	07/10/2024	19,972,583	0	12,161
	ALIMENTATION COUCHE-TARD INC COMMERCIAL PAPER		06/20/2024	0.000	07/12/2024	24,957,915	0	41,943
	BELL TELEPHONE COMPANY OF CANADA OR BELL		06/17/2024	0.000	07/17/2024	19,951,006	0	42,673
	CANADIAN PACIFIC RAILWAY COMPANY COMMERCIAL PAPER		06/21/2024	0.000	07/03/2024	19,993,891	0	30,491
	CANADIAN PACIFIC RAILWAY COMPANY COMMERCIAL PAPER		06/25/2024	0.000	07/08/2024	26,971,151	0	24,679
	MAGNA INTERNATIONAL INC COMMERCIAL PAPER		05/14/2024	0.000	07/11/2024	27,956,512	0	206,878
	MAGNA INTERNATIONAL INC COMMERCIAL PAPER		05/21/2024	0.000	07/23/2024	19,931,735	0	125,985
	MAGNA INTERNATIONAL INC COMMERCIAL PAPER		06/04/2024	0.000	07/30/2024	7,964,279	0	32,972
	NUTRIEN LTD COMMERCIAL PAPER		06/20/2024	0.000	08/02/2024	9,950,672	0	16,844
	TRANSCANADA PIPELINES LTD COMMERCIAL PAPER		05/13/2024	0.000	07/01/2024	8,840,000	0	66,538

STATEMENT AS OF JUNE 30, 2024 OF THE MassMutual Ascend Life Insurance Company

SCHEDULE E - PART 2 - CASH EQUIVALENTS

Show Investments Owned End of Current Quarter

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
.....	TRANSCANADA PIPELINES LTD COMMERCIAL PAP .....	.....	.....06/11/2024	0.000	07/02/2024	13,098,007	0	39,731
.....	TRANSCANADA PIPELINES LTD COMMERCIAL PAP .....	.....	.....06/24/2024	0.000	07/24/2024	14,947,235	0	15,985
.....	TRANSCANADA PIPELINES LTD COMMERCIAL PAP .....	.....	.....05/21/2024	0.000	07/25/2024	9,962,838	0	61,327
.....	CIE GENERALE DES ETABLISSEMENTS MICHELIN .....	.....	.....05/02/2024	0.000	07/08/2024	24,973,033	0	213,658
.....	DNB BANK ASA COMMERCIAL PAPER .....	.....	.....06/28/2024	0.000	07/08/2024	44,953,780	0	19,780
.....	MACQUARIE BANK LTD COMMERCIAL PAPER .....	.....	.....06/28/2024	0.000	08/09/2024	29,826,047	0	13,297
.....	MUFG BANK LTD (NEW YORK BRANCH) COMMERCIAL PAPER .....	.....	.....06/28/2024	0.000	07/08/2024	44,954,042	0	19,667
.....	RECKITT BENCKISER TREASURY SERVICES PLC .....	.....	.....06/28/2024	0.000	07/05/2024	3,997,608	0	1,792
.....	RECKITT BENCKISER TREASURY SERVICES PLC .....	.....	.....06/18/2024	0.000	07/12/2024	14,974,880	0	29,580
.....	RECKITT BENCKISER TREASURY SERVICES PLC .....	.....	.....06/21/2024	0.000	07/31/2024	29,861,601	0	32,110
.....	TYCO ELECTRONICS GROUP SA COMMERCIAL PAP .....	.....	.....06/26/2024	0.000	07/01/2024	46,000,000	0	44,948
1019999999. Subtotal - Bonds - Industrial and Miscellaneous (Unaffiliated) - Issuer Obligations						2,655,441,027	0	6,194,351
1109999999. Total - Industrial and Miscellaneous (Unaffiliated) Bonds						2,655,441,027	0	6,194,351
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						2,655,441,027	0	6,194,351
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						2,655,441,027	0	6,194,351
09248U-71-8	BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA .....	.....	.....06/28/2024	0.000 .....	.....	.....116,000,000	0	0
825252-40-6	INVESCO ADVISERS TREASURY PORT INSTL CL .....	.....	.....06/28/2024	0.000 .....	.....	.....3,976,095	0	0
8209999999. Subtotal - Exempt Money Market Mutual Funds - as Identified by the SVO						119,976,095	0	0
8609999999 - Total Cash Equivalents						2,775,417,122	0	6,194,351