

American Freedom Liberty 5

OVERVIEW

ISSUE AGES

0-89 (qualified); 0-89 (non-qualified); 0-75 (inherited IRA); 0-75 (inherited non-qualified)

Issue age is the owner's age at last birthday. For joint owners, the oldest age will be used as the issue age. If the owner is a non-natural person, the age of the eldest annuitant will be treated as the age of the owner for all purposes under this contract.

PURCHASE PAYMENTS

This product accepts a single purchase payment for non-qualified, traditional 403(b), Roth 403(b), traditional IRA, Roth IRA, SEP IRA, SIMPLE IRA, Inherited IRA, Inherited non-qualified, and 457 plan funds. Additional purchase payments are allowed during the first contract year. Terms begin only on the 6th and 20th of each month. Purchase payments received prior to the beginning of a term will be held in the purchase payment account until the beginning of the next term. Additional purchase payments have their own interest crediting terms.

Minimum: Initial purchase payment: \$25,000;
additional purchase payments: \$2,000

Maximum (without prior approval): \$2 million for ages 0-75,
\$1 million for ages 76+

Maximums apply to the total purchase payments made to all annuities from MassMutual Ascend with the same owners or the same annuitants.

INTEREST STRATEGIES

Upon issue, the owner selects from two types of interest strategies: a **declared rate strategy** and **indexed strategies**. At the end of each term, the owner has the opportunity to transfer funds among the available interest strategies. To transfer funds, the owner must submit changes at least one day before the new term begins. Unless the owner transfers funds at the end of a term, funds are automatically applied to the same strategy for the next term. Funds held in the S&P 500 5-year cap lock strategy are automatically applied to the S&P 500[®] 1-year strategy, unless the owner elects otherwise. Available strategies are subject to change at any time for new sales.

TERM

- A term is the period over which interest is calculated for an indexed strategy. Indexed strategies available on this product offer either one-year or five-year terms. Clients may reallocate funds among available strategies at the end of each one-year or five-year term.
- The S&P 500 5-Year Cap Lock Annual Point-To-Point strategy has a five-year term. The cap is locked in for the entire five-year term. This strategy may only be selected during the first contract year. At the end of the five-year term, funds held in the strategy are automatically applied to the S&P 500 1-year strategy, unless clients elect otherwise.

TERM (CONTINUED)

- The First Trust Barclays Edge Index 1-Year Point-To-Point with 5-Year Cap Lock strategy has five one-year terms. The cap is locked in for all five one-year terms. This strategy may only be selected during the first contract year. At the end of each one-year term, the ending value of this strategy may be applied to a new term of this strategy. No other amounts may be applied. At the end of each one-year term, clients may also reallocate funds held in this strategy among other available strategies. Funds held in the strategy at the end of the fifth one-year term are automatically applied to the First Trust Barclays Edge Index 1-year point-to-point with cap strategy unless you elect otherwise.
- All other strategies have one-year terms.
- Interest, if any, is credited on the last day of each term year on all indexed strategies.

INTEREST RATES

Purchase payment account interest rate: Interest is credited daily on amounts held in this account based on an applicable interest rate. This interest rate is guaranteed to be at least equal to the GMSV rate set out in the contract.

Declared interest rate: Interest is credited daily on amounts held under a declared rate strategy based on the applicable declared interest rate. The current declared interest rate will not change during the strategy's term and is guaranteed to never be below the guaranteed minimum declared rate set out in the contract.

Indexed interest rate: Indexed strategies linked to the S&P 500®(SPX), iShares U.S. Real Estate ETF (IYR) and the iShares MSCI EAFE ETF (EFA) provide returns based, in part, on the change in the price of the applicable Index or ETF. The price does not include dividends that might be paid on the underlying investments of the Index or ETF.

Indexed strategies linked to the First Trust Barclays Edge Index (FTEDGE7) provide returns based, in part, on the change in the price of the Index. The price change includes dividends that might be paid on components of the Index.

Indexed strategies include:

- S&P 500® 1-year point-to-point with cap
- S&P 500® 5-year cap lock annual point-to-point
- iShares U.S. Real Estate 1-year point-to-point with cap
- iShares MSCI EAFE 1-year point-to-point with cap
- First Trust Barclays Edge Index 1-year point-to-point with cap
- First Trust Barclays Edge Index 1-year point-to-point with 5-year cap lock

Point-to-point indexed strategy: The indexed interest rate for a term year is determined by comparing the index value on the last day of that term year to the value on the first day of that term year. The indexed interest rate for that term year equals the index change, up to the cap. The indexed interest rate will never be less than 0%.

Available strategies may vary by state and by distribution.

BAILOUT FEATURE

American Freedom Liberty 5 features a bailout on the 1-year indexed strategies. This feature allows the client to withdraw money without penalty from an indexed strategy if the cap for the indexed strategy ever falls below its bailout rate. The bailout rate will always be below the initial cap. If the bailout feature is triggered, we will send a letter and give the client 30 days to withdraw money from that strategy with no early withdrawal charge or MVA.

ACCOUNT VALUE

The account value equals the sum of the following values:

Purchase payment account value: The purchase payment account value equals the purchase payments received, less amounts applied to an interest strategy, less withdrawals and applicable early withdrawal charges, plus or minus applicable MVAs, plus interest credited, less any rider charges, and less any applicable premium tax or other applicable tax.

Declared rate strategy value: A declared rate strategy value equals the amount applied to the declared rate strategy, less withdrawals and applicable early withdrawal charges, plus or minus applicable MVAs, plus interest credited at the declared interest rate, and less any rider charges.

Interest strategy value: An interest strategy value equals the amount applied to that strategy, less withdrawals and applicable early withdrawal charges, plus or minus applicable MVAs, plus indexed interest credited, and less any rider charges.

SURRENDER VALUE

The surrender value equals the greater of the account value adjusted for any MVA and less any early withdrawal charges and rider charges or the guaranteed minimum surrender value.

GUARANTEED MINIMUM SURRENDER VALUE (GMSV)

The GMSV equals 100% of purchase payments, plus interest credited daily at the GMSV rate, less prior withdrawals (other than rider charges), early withdrawal charges and market value adjustments, minus the account value multiplied by the applicable early withdrawal charge rate. The GMSV will not be less than the minimum values required by the applicable state.

FEES

There are no up-front sales charges or fees.

EARLY WITHDRAWAL CHARGES

An early withdrawal charge is applied to surrenders and withdrawals for the first five contract years.

CONTRACT YEAR	1	2	3	4	5	6+
EARLY WITHDRAWAL CHARGE	9%	8%	7%	6%	5%	0%

MARKET VALUE ADJUSTMENT (MVA)

During the first five contract years, a market value adjustment (or MVA) will apply if the contract is surrendered or a withdrawal above the free withdrawal allowance is taken.

An MVA is an adjustment to the contract values based on how market interest rates have changed since the contract was purchased. If interest rates have gone up, the adjustment will be negative and may decrease contract values. If interest rates have gone down, the adjustment may be positive and may increase contract values. The amount subject to the adjustment is the portion of the account value withdrawn after the 10% free withdrawal allowance. This amount is then multiplied by the MVA factor.

A positive MVA will never be more than the early withdrawal charge that would apply to the withdrawal or surrender. A negative MVA, together with the early withdrawal charge, will never reduce the account value by more than an amount equal to two times that charge.

FREE WITHDRAWAL ALLOWANCE

During the first contract year, 10% of the purchase payments may be withdrawn without an early withdrawal charge or MVA. After the first contract year, 10% of the account value on the most recent contract anniversary may be withdrawn without an early withdrawal charge or MVA. The sum of all previous withdrawals during the same contract year will be subtracted to determine the amount available. This free withdrawal allowance is not cumulative, and unused amounts do not carry over to the next contract year.

WITHDRAWALS

Withdrawals are allowed any time prior to the annuity payout initiation date. All withdrawals are subject to IRS regulations, early withdrawal charges and MVAs. Withdrawals will be taken first from amounts applied to the purchase payment account, then from the interest strategy with the shortest term. If there are multiple interest strategies that meet that criterion, withdrawals will be taken proportionally from all interest strategies with the shortest term. Amounts withdrawn from an interest strategy prior to the end of a term year will not be credited with interest.

Minimum withdrawal: \$500;

Minimum account value following withdrawal: \$5,000.

EXTENDED CARE WAIVER RIDER

To help ease the strain of certain unforeseen events, an extended care waiver is available for no additional charge. If the owner is confined to a nursing home or other long-term care facility after the completion of the first contract year for at least 90 consecutive days, early withdrawal charges and MVAs may be waived on withdrawals up to a full surrender.

Not available in Massachusetts. In California, the Extended Care Waiver Rider has been replaced with the Waiver of Early Withdrawal Charges for Facility Care or Home Care or Community-Based Services Rider, which provides for a waiver of early withdrawal charges under an expanded variety of circumstances.

TERMINAL ILLNESS WAIVER RIDER

Provided that the diagnosis is rendered more than one year after the contract effective date, up to 100% of the account value can be withdrawn without deduction of an early withdrawal charge or MVA if the owner or joint owner is diagnosed by a physician as having a terminal illness with a life expectancy of 12 months or less.

This waiver may be used only once. Not available in Massachusetts.

EASY SYSTEMATIC PAYMENT (ESP) PROGRAM (NON-CONTRACTUAL)

The fixed dollar and RMD options are available. Refer to the Terms and Conditions section of the applicable ESP program election agreement form for eligibility requirements. ESP payments reduce the amount available under the free withdrawal allowance. Indexed interest is credited only at the end of a term year. Amounts withdrawn under the ESP program before the end of a term year will not earn any indexed interest.

PAYOUT OPTIONS

The following options are available following the first contract year: fixed period payout, life payout or life payout with payments for at least a fixed period and joint and one-half survivor payout.

DEATH BENEFIT

The death benefit amount is based on the greater of the account value or the GMSV. A death benefit is payable if the owner dies before annuitization or surrender. A spouse who is the surviving joint owner or sole surviving beneficiary may become the successor owner.

The “S&P 500® Index” is a product of S&P Dow Jones Indices LLC or its affiliates (“SPDJI”) and has been licensed for use by MassMutual Ascend Life Insurance Company. S&P®, S&P 500®, US 500, The 500, iBoxx®, iTraxx® and CDX® are trademarks of S&P Global, Inc. or its affiliates (“S&P”); Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC (“Dow Jones”); MassMutual Ascend Life Insurance Company’s products are not sponsored, endorsed, sold or promoted by SPDJI, Dow Jones, S&P, their respective affiliates, and none of such parties make any representation regarding the advisability of investing in such product(s) nor do they have any liability for any errors, omissions, or interruptions of the S&P 500® Index.

The iShares MSCI EAFE ETF and the iShares U.S. Real Estate ETF are distributed by BlackRock Investments, LLC. iShares®, BLACKROCK®, and the corresponding logos are registered and unregistered trademarks of BlackRock, Inc. and its affiliates (“BlackRock”), and these trademarks have been licensed for certain purposes by MassMutual Ascend Life Insurance Company. MassMutual Ascend Life Insurance Company annuity products are not sponsored, endorsed, sold or promoted by BlackRock, and purchasers of an annuity from MassMutual Ascend Life Insurance Company do not acquire any interest in the iShares MSCI EAFE ETF or the iShares U.S. Real Estate ETF nor enter into any relationship of any kind with BlackRock. BlackRock makes no representation or warranty, express or implied, to the owners of any MassMutual Ascend Life Insurance Company annuity product or any member of the public regarding the advisability of purchasing an annuity, nor does it have any liability for any errors, omissions, interruptions or use of the iShares MSCI EAFE ETF or the iShares U.S. Real Estate ETF or any data related thereto.

The First Trust Barclays Edge Index (“FTIS Index”) is a product of FT Indexing Solutions LLC (“FTIS”) and is administered and calculated by Bloomberg Index Service Limited and its affiliates (collectively, “BISL”). FIRST TRUST® and First Trust Barclays Edge Index are trademarks of First Trust Portfolios L.P. (collectively, with FTIS and their respective affiliates, “First Trust”). The foregoing index and trademarks have been licensed for use for certain purposes by Barclays, Bloomberg, and MassMutual Ascend Life Insurance Company (collectively, the “Licensees”) in connection with the FTIS Index and certain products utilizing the FTIS Index (collectively, the “Products”).

The Capital Strength Index (“Nasdaq Index”) is a product of Nasdaq, Inc. (collectively, with its affiliates, “Nasdaq”). NASDAQ®, CAPITAL STRENGTH INDEX™, NQCAPST™, and NQCAPSTT™ are trademarks of Nasdaq. The foregoing index and trademarks have been licensed for use for certain purposes by FTIS and Licensees in connection with the FTIS Index and the Products.

The Value Line Dividend Index (“Value Line Index”) is a product of Value Line, Inc. (“Value Line”). VALUE LINE® and VALUE LINE DIVIDEND INDEX™ are trademarks or registered trademarks of Value Line. The foregoing index and trademarks have been licensed for use for certain purposes by FTIS and Licensees in connection with the FTIS Index and the Products. The FTIS Index is not sponsored, endorsed, recommended, sold or promoted by Value Line and Value Line makes no representation regarding the advisability of investing in any product utilizing the FTIS Index.

BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. Bloomberg Finance L.P., BISL, and their affiliates (“Bloomberg”) are not affiliated with First Trust or Barclays. Bloomberg’s relationship to First Trust and Barclays is only (1) in the licensing of the FIRST TRUST®, BARCLAYS®, and FIRST TRUST BARCLAYS EDGE INDEX™ trademarks and (2) to act as the administrator and calculation agent of the FTIS Index, which is the property of FTIS. Bloomberg does not guarantee the timeliness, accurateness, or completeness of the FTIS Index or any data or information relating thereto and shall have no liability in connection with the FTIS Index or any data or information relating thereto.

The Products are not issued, sponsored, endorsed, sold, recommended, or promoted by First Trust, Bloomberg, Nasdaq, Value Line, or their respective affiliates (collectively, the “Companies”). The Companies do not make any representation regarding the advisability of investing in the Products or products based on the FTIS Index, Barclays Indices, Nasdaq Index, or Value Line Index, do not make any warranties or bear any liability with respect to such products, and do not make any warranties or bear any liability with respect to the Products, the FTIS Index, or another party’s index.

THE COMPANIES DO NOT GUARANTEE THE ADEQUACY, ACCURACY, TIMELINESS, COMPLETENESS, AND/OR UNINTERRUPTED CALCULATION OF THE PRODUCTS, FTIS INDEX, BARCLAYS INDICES, NASDAQ INDEX, VALUE LINE INDEX, OR ANY DATA INCLUDED THEREIN OR ANY COMMUNICATION WITH RESPECT THERETO, INCLUDING, ORAL, WRITTEN, OR ELECTRONIC COMMUNICATIONS. THE COMPANIES SHALL HAVE NO LIABILITY FOR ANY ERRORS, OMISSIONS, OR INTERRUPTIONS IN THE PRODUCTS, FTIS INDEX, BARCLAYS INDICES, NASDAQ INDEX, OR VALUE LINE INDEX. THE COMPANIES MAKE NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE RESULTS TO BE OBTAINED BY LICENSEES, OWNERS OF THE PRODUCTS OR OF PRODUCTS BASED ON THE FTIS INDEX, BARCLAYS INDICES, NASDAQ INDEX, OR VALUE LINE INDEX, OR BY ANY OTHER PERSON OR ENTITY FROM THE USE OF THE FTIS INDEX, BARCLAYS INDICES, NASDAQ INDEX, OR VALUE LINE INDEX, OR ANY DATA INCLUDED THEREIN.

Neither Barclays Bank PLC (“BB PLC”) nor any of its affiliates (collectively “Barclays”) is the issuer or producer of MassMutual Ascend’s products and Barclays has no responsibilities, obligations or duties to investors in MassMutual Ascend’s products. The Barclays US 2Y Treasury Futures Index, Barclays US 5Y Treasury Futures Index, Barclays US 10Y Treasury Note Index, and Barclays Switch USD Signal Index (collectively, the “Indices”), together with any Barclays indices that are components of the Indices, are trademarks owned by Barclays and, together with any component indices and index data, are licensed for use by FTIS in connection with the First Trust Barclays Edge Index.

Barclays’ only relationship with the MassMutual Ascend in respect of the Indices is the licensing of the Indices to FTIS, which are administered, compiled and published by BB PLC in its role as the index sponsor (the “Index Sponsor”) without regard to MassMutual Ascend’s products or investors in MassMutual Ascend’s products. Additionally, MassMutual Ascend as issuer or producer of MassMutual Ascend’s products may for itself execute transaction(s) with Barclays in or relating to the Indices in connection with MassMutual Ascend’s products. Investors acquire MassMutual Ascend’s products from MassMutual Ascend and investors neither acquire any interest in the Indices nor enter into any relationship of any kind whatsoever with Barclays upon making an investment in MassMutual Ascend’s products. MassMutual Ascend’s products are not sponsored, endorsed, sold or promoted by Barclays and Barclays makes no representation regarding the advisability of MassMutual Ascend’s products or use of the Indices or any data included therein. Barclays shall not be liable in any way to MassMutual Ascend, investors or to other third parties in respect of the use or accuracy of the Indices or any data included therein.

Product issued by MassMutual Ascend Life Insurance CompanySM (Cincinnati, Ohio), a wholly owned subsidiary of Massachusetts Mutual Life Insurance Company (MassMutual), under contract forms ICC20-P1144520NW and P1144520NW, and rider forms ICC20-R6032320NW and ICC20-R6032420NW (not available in Massachusetts). Form numbers, features and availability may vary by state.

All guarantees subject to the claims-paying ability of MassMutual Ascend Life Insurance Company.

This content does not apply in the state of New York.

For producer use only. Not for use in sales solicitation.

NOT A BANK OR CREDIT UNION DEPOSIT OR OBLIGATION • NOT FDIC OR NCUA-INSURED • NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY • MAY LOSE VALUE • NOT GUARANTEED BY ANY BANK OR CREDIT UNION

∴ MassMutual Ascend