

VALUATION OF THE MILITARY RETIREMENT SYSTEM

SEPTEMBER 30, 2012

DoD Office of the Actuary April 2014

ACTUARIAL CERTIFICATION

This report on the Military Retirement System as of September 30, 2012, has been prepared in accordance with generally accepted actuarial principles, standards, and practices. In preparing the report, we have relied upon information maintained by the Department of Defense regarding plan provisions, finances, and participants. The purpose of the actuarial valuation documented in this report is to develop actuarial liability and funding amounts to support the Secretary of Defense and the DoD Board of Actuaries (Board) in meeting the requirements of Chapter 74, Title 10, United States Code. Use of these results for other purposes may not be appropriate. Any rates or parameters included in this report should not be used for other purposes without complete comprehension of the underlying derivation. Please contact the DoD Office of the Actuary for further information.

We have performed the valuation using methods and assumptions approved by the Board. In general, the decrement rates used in the valuation are based on Military Retirement System experience. The annual economic assumptions include a 3% rate of inflation, a 3.5% across-the-board salary increase, and a 5.5% interest rate.

The actuarial methods and assumptions used in the preparation of this report are reasonable, and the valuation results present a fair picture of the financial condition of the Military Retirement System for purposes of meeting the requirements of Chapter 74, Title 10, United States Code. Future report results may differ significantly from those presented and documented in this report.

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Meets the qualification standards of the American Academy of Actuaries, and continuing professional development requirements of the Society of Actuaries, to render the actuarial opinion referenced above.

USE OF THIS REPORT

- <u>Intended Audience</u>: Those seeking actuarial information about the Military Retirement System (MRS) or financial information about the Military Retirement Fund (MRF).
- **Report Limitations**: Stated in "Actuarial Certification" section of this report (page 2).
- For a high-level summary and "bottom line" results, refer to the "General Information and Key Result" section (page 4).
- For those new to the MRS, the main text and associated tables/figures can be found in the central section of this report ("Valuation of the MRS").
- For those familiar with the MRS, the appendices and supplementary information provide additional technical and background information to DoD Office of the Actuary's work.
- In various places throughout this report, figures may not add exactly due to rounding.
- Many references to "active duty" personnel throughout the report also include full-time support reservists. Similarly, many references to "reservists" or "selected reservists" exclude full-time support reservists.
- DoD Office of the Actuary contact information is located in the "Actuarial Certification" section of this report (page 2).

ABBREVIATIONS AND TERMS

AEAN Aggregate Entry-Age Normal cost funding method

Board DoD Board of Actuaries
COLA Cost-of-Living Adjustment
CPI Consumer Price Index

CSB/Redux Career Status Bonus Retirement System combined with the Redux System

DIC Dependency and Indemnity Compensation

DoD U.S. Department of Defense

FY Fiscal Year

GORGO Actuarial Projection Model used by DoD OACT

MRF Military Retirement Fund
MRS Military Retirement System
NCP Normal Cost Percentage

P.L. Public Law

RSFPP Retired Serviceman's Family Protection Plan

OACT DoD Office of the Actuary SBP Survivor Benefit Plan

Services Army, Navy, Air Force, Marines

UFL Unfunded LiabilityU.S.C. United States Code

VA U.S. Department of Veterans Affairs

GENERAL INFORMATION AND KEY RESULTS Military Retirement System – For Fiscal Year ending September 30, 2012

1. Name of Plan:

Military Retirement System

2. Name and Address of Plan Sponsor:

Department of Defense 1400 Defense Pentagon Washington, DC 20301-1400

3. Type of Plan:

Defined Benefit

4. Establishment of Funding Arrangement:

Public Law 98-94 (currently Chapter 74 of Title 10, U.S.C.)

5. Administrative Costs:

Not borne by the Plan

6. Funding Arrangement:

Trust Fund

7. Actuarial Cost Method:

Aggregate Entry-Age Normal

8. Oversight:

DoD Board of Actuaries. The Board approves methods and assumptions used in the valuation. The current members of the Board are:

James F. Verlautz, Chairman Marcia A. Dush Ronald Gebhardtsbauer

9. Plan Participant Information at End of Plan Year:

	<u>Members</u>	Annualized Pay
	(in 000s)	(\$ in billions)
Active Duty and Full-time Reservists:	1,464	\$57.45
Selected Drilling Reservists:	762	\$7.50
Non-Selected Reservists – w/ 20 years:	216	(N/A)
Nondisability Retirees:	1,848	\$47.92
Disability Retirees:	96	\$1.38
Surviving Families:	293	\$3.72

^{***} Only retirees and survivors are paid from the Military Retirement Fund. ***

GENERAL INFORMATION AND KEY RESULTS (Continued) Military Retirement System – For Fiscal Year ending September 30, 2012

10. Valuation Input Data:

Extracts from files maintained by the Defense Manpower Data Center, and files submitted by the Defense Finance and Accounting Service

11. Retirement Criteria:

- A. Nondisabled Retirement from Active Duty Immediate after 20 years of service
- B. Disabled Retirement Immediate, generally with no years of service requirement
- C. Nondisabled Retirement from Reserve Duty Deferred to age 60 (or earlier in some cases) after 20 years of service

12. Actuarial Assumptions:

A. Economic:

(Annual Rates)

- 1) Inflation 3.0%
- 2) Salary 3.5%
- 3) Interest 5.5%

B. Demographic:

- 1) Mortality and other assumptions: Based on Plan experience.
- 2) Mortality Improvement: Based on Plan experience (generally).

13. Accounting Results **During** Fiscal Year 2012:

(\$ in billions)

A. Benefits paid to participants: \$ 52.6
B. Contributions from Services: \$ 21.9
C. Contributions from Treasury: \$ 70.1
D. Investment Income: \$ 12.5

14. Actuarial Results at End of Fiscal Year 2012:

(\$ in billions)

A. Present Value of Future Benefits: \$1,607.9
B. Actuarial Accrued Liability: \$1,361.5
C. Actuarial Value of Assets: \$428.0
D. Unfunded Accrued Liability: \$933.5
E. Funded Ratio (C./B.): 31%

15. Normal Cost Percentages Applied to Fiscal Year 2014 Basic Pay:

	$\underline{\text{DoD}}$	<u>Treasury</u>	<u>Total</u>
Full-time:	32.4%	11.7%	44.1%
Part-time:	24.5%	2.9%	27.4%

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SUMMARY OF CHANGES FOR THE SEPTEMBER 30, 2012, VALUATION

Changes in Actuarial Assumptions

At its July 2012 meeting, the DoD Board of Actuaries approved the following changes for the September 30, 2012, valuation.

Economic Assumptions (Interest and Salary Increase)

The Board approved a new long-term interest rate assumption of 5.5% (vs. 5.75%), and a new long-term, across-the-board salary increase assumption of 3.5% (vs. 3.75%). The new interest assumption increases the full-time DoD NCP* by 2.4 percentage points, and increases the part-time DoD NCP by 2.2 percentage points. The new salary assumption decreases the full-time DoD NCP by 1.1 percentage points, and decreases the part-time DoD NCP by 1.3 percentage points. The new assumptions led to an actuarial loss of \$47.8 billion (or 3.5% of the accrued liability) to the Fund. For the September 30, 2012, valuation, long-term economic assumptions are shown in Appendix D.

Reserve Valuation

The Board approved a new model used to value retired and survivor pay for the reserves. It decreases the full-time DoD NCP by 1.2 percentage points, and decreases the part-time NCP by 1.0 percentage point. The change led to an actuarial loss of \$5.9 billion (or 0.4%) to the Fund. For the September 30, 2012, valuation, reserve valuation assumptions are described in Appendix H.

Temporary Disability Retiree List (TDRL) Valuation Rates

The Board approved an update to rates used to value retired pay for retirees on TDRL. The change has no effect on the full- and part-time DoD NCPs to the nearest 0.1 percentage point. The change led to an actuarial gain of \$0.4 billion (or 0.0%) to the Fund. For the September 30, 2012, valuation, TDRL rates are described in Appendix I.

Survivor Valuation Rates

The Board approved an update to rates used in the valuation of survivor pay. They increase both the full- and part-time time DoD NCPs by 0.1 percentage point. The new rates led to an actuarial loss of \$6.9 billion (or 0.5%) to the Fund. For the September 30, 2012, valuation, the rates are found in Appendices F, I, and J.

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^{*} DoD pays only a portion of the total NCP. The portion attributable to concurrent receipt benefits is paid by Treasury.

SUMMARY OF CHANGES FOR THE SEPTEMBER 30, 2012, VALUATION (Continued)

Normal Cost Weighting Factors

The Board approved an updated set of factors used to weight the NCPs associated with the different retirement benefit formulas. The change has no effect on the full-time DoD NCP to the nearest 0.1 percentage point, and increases the part-time DoD NCP by 0.1 percentage point. The new factors led to an actuarial gain of \$0.2 billion (or 0.0%) to the Fund. For the September 30, 2012, valuation, the weighting factors are described in Appendix E.

Changes in Benefits

Temporary Early Retirement Authority (TERA) Reinstitution

The FY 2012 National Defense Authorization Act (P.L. 112-181) reinstated TERA, from January 1, 2012 through December 31, 2018, which allows the Services to voluntarily retire active duty members with more than 15 years but less than 20 years of active service. Since it is not anticipated this authority will be used to a large extent, the Board approved recognizing the effect as actuarial experience with no modeling changes. It has no effect on the full- and part-time DoD NCPs. The Board will monitor TERA usage in the future. TERA is discussed further in Appendix A.

SUMMARY OF ANTICIPATED CHANGES FOR THE SEPTEMBER 30, 2013, VALUATION

Changes in Actuarial Assumptions

At its July 2013 meeting, the DoD Board of Actuaries approved the following changes for the September 30, 2013, valuation. Note that all changes in accrued liabilities are estimated on a 9/30/2012 valuation basis.

Reserve Model Refinements

The Board approved refinements to the reserve model, which more accurately project new retirees, and refines the calculation of reserve officer new entrant pay. The refinements lower the full-time DoD NCP by 0.1 percentage point, and lower the part-time DoD NCP by 2.0 percentage points. OACT estimates the refinements lead to an actuarial gain of \$13.7 billion (or 1.0% of the accrued liability) to the Fund. For the September 30, 2012, valuation, reserve assumptions are shown in Appendix H.

Disability Factors

The Board approved new assumptions for average benefit multipliers for new temporary and permanently disabled retirees. The new assumptions increase the full- and part-time DoD NCPs slightly, but do not exceed the standard rounding threshold (i.e., the 3rd decimal place). OACT estimates the new assumptions lead to an actuarial loss of \$0.2 billion (or 0.0%) to the Fund. For the September 30, 2012, valuation, disability factor assumptions are shown in Appendix F.

Cell-Rounding Elimination

The Board approved the elimination of cell-rounding in the projection, which ends the setting of population cells equal to zero if they fall beneath a certain threshold (e.g., 0.1). It increases the full- and part-time DoD NCPs slightly, but do not exceed the standard rounding threshold (i.e., the 3rd decimal place). OACT estimates the change leads to an actuarial gain of \$0.1 billion (or 0.0%) to the Fund.

SUMMARY OF ANTICIPATED CHANGES FOR THE SEPTEMBER 30, 2013, VALUATION (Continued)

Changes in Benefits

Bipartisan Budget Act of 2013(Ryan/Murray) with subsequent amendments

The Bipartisan Budget Act of 2013 (BBA 2013) lowers the COLA by one percent (e.g., 2% instead of 3%) for "working-age" (pre-age 62), non-disabled military retirees, with a restoral at age 62 and full COLAs thereafter. The changes apply only to those entering after December 31, 2013. The change has no effect on the full- and part-time DoD NCPs for FYs 2014 and 2015. The FY 2016 full-time NCP is estimated to decrease by 0.1 percentage point and the part-time NCP is unchanged. OACT estimates no gain or loss to the Fund as of September 30, 2013. BBA 2013 is discussed further in Appendix A.

U.S. Supreme Court Overturn of the Defense of Marriage Act (DOMA)

While not a change to Title 10 U.S. military benefits per se, the June 26, 2013 ruling has the effect of allowing legal spouses of same-sex marriages to be eligible to receive SBP benefits. OACT estimates the change leads to a small increase to the DoD NCP, but do not exceed the standard rounding threshold (i.e., the 3rd decimal place). DOMA overturn is discussed further in Appendix A.

VALUATION OF THE MILITARY RETIREMENT SYSTEM

Introduction

The Military Retirement System provides benefits for retirement from active duty and from the reserves, disability retirement benefits, optional survivor coverage, and a special compensation program for certain disabled retirees. A detailed description of benefits can be found in Appendix A, and a history of the system is in Appendix B.

Public Law (P.L.) 98-94 (currently Chapter 74 of Title 10, U.S.C.) established an aggregate entry-age normal cost funding method for the Military Retirement System starting October 1, 1984. Under this law, DoD pays the normal cost of the system and the Treasury Department makes payments from general revenues to amortize the unfunded liability, including any gains or losses that have arisen from assumption or benefit changes, or from actual experience differing from assumed experience. P.L. 108-136 modified this process such that DoD's normal cost contribution excludes the cost due to Concurrent Receipt benefits (refer to Appendix A for more information on Concurrent Receipt provisions). Treasury's total contribution includes an additional amount to fund the normal cost for Concurrent Receipt benefits.

P.L. 98-94 also established an independent three-member DoD Retirement Board of Actuaries who were appointed by the President. The Board is required to review valuations of the Military Retirement System; to determine the method of amortizing unfunded liabilities; to report annually to the Secretary of Defense; and to report to the President and the Congress on the status of the Military Retirement Fund at least every four years. The DoD Office of the Actuary provides all technical and administrative support to the Board. P.L. 110-181 eliminated the Retirement and Education Benefits Boards, and created a new single DoD Board of Actuaries appointed by the Secretary of Defense. Board duties with respect to the Retirement and Education Benefits Funds are similar, and the new law expands the Board's responsibilities to include oversight of any other Fund the Secretary of Defense deems necessary.

The terms of the Board members are fifteen years and a member can be removed only for misconduct or failure to perform the duties of the office. The current Board members are James F. Verlautz (Chairman), Marcia A. Dush, and Ronald Gebhardtsbauer. The DoD Chief Actuary is the Executive Secretary for the Board.

Military retired pay is based on "basic pay." This is the principal element of military compensation that all members receive; however, it is not analogous to private or public sector salaries for comparative purposes. Reasonable comparisons can be made to Regular Military Compensation (RMC). RMC is the sum of (1) basic pay, (2) the housing allowance, which varies by grade, location, and dependency status, (3) the subsistence allowance and, (4) the tax advantages accruing to allowances because they are not subject to federal income tax. Consequently, comparisons of military retired pay to other pension systems should recognize the relationship to RMC rather than to basic pay only. Appendix A contains a more complete description of this topic.

Valuation Data and Procedure

The valuation input data were extracted from files maintained by the Defense Manpower Data Center (DMDC). Data on individual retirees and survivors come from official files submitted by the Defense Finance and Accounting Service (DFAS). Reserve data are obtained from the Reserve Component Common Personnel Data System (RCCPDS), the official source for all reserve strengths and statistics. The DoD Office of the Actuary (OACT) reviews the data for reasonableness and consistency, but does not audit the data and relies on the file suppliers for its accuracy and comprehensiveness.

Where applicable, dollar amounts include the subsequent January 1st, pay raise. These totals are summarized in Table 1.

TABLE 1
INITIAL ACCOUNTING FIGURES AS OF SEPTEMBER 30

	<u>2012</u>	<u>2011</u>
Total Active Duty Personnel + Full-Time Reservists Total Annualized Basic Pay	1,464,110 \$57.45 billion	1,486,853 \$57.08 billion
Total Selected Drilling Reservists Total Annualized Basic Pay	762,375 \$7.50 billion	771,080 \$5.80 billion
Total Non-Selected Reservists (with 20 years) Total Annualized Basic Pay	215,508 (N/A)	218,090 (N/A)
Total Number of Nondisability Retirees Total Annualized Retired Pay	1,848,139 \$47.92 billion	1,838,042 \$45.89 billion
Total Number of Disability Retirees Total Annualized Retired Pay	96,068 \$1.38 billion	95,051 \$1.36 billion
Total Number of Surviving Families Total Annualized Survivor Annuities	293,124 \$3.72 billion	294,794 \$3.62 billion

<u>Note</u>: Some amounts do not reflect benefit increases described in Appendix A. Costs, liabilities, and outlays in this report, however, reflect these benefit increases unless otherwise stated. Only retirees and survivors are paid from the Military Retirement Fund.

Population and pay projections are generated by an actuarial projection model (GORGO¹). GORGO is a deterministic model; use of a deterministic model assumes the average outcome will occur annually over a period of time. When projecting a large population such as the military the law of large numbers manages certain risks.

For use in this model additional, slight adjustments to the pay projection are made outside of GORGO. Further, the data on active duty personnel and drilling reservists are grouped into cells by age and number of years of service. Each cell contains the number and the average basic pay for personnel with that particular combination of age and length of service. Data on the retired population and surviving families are grouped into cells by age, and each cell contains the number and total net annualized retired pay or survivor annuity.

Separate data arrays are maintained in GORGO for each of the population categories listed in Table 2. These data arrays are displayed in Appendix C.

In GORGO, these starting populations are projected year by year into the future. Each year personnel are moved from one population category to another (e.g., from active to retired, or dropped from the system altogether) by means of decrement rates such as withdrawal, nondisability retirement, temporary disability, permanent disability, transfer, death with and without survivors, etc. Basic pay scale increases are assumed to be 3.5 percent per year. Basic pay is also increased by individual promotion and longevity increases. Generally, retired pay and survivor annuities are increased by cost-of-living adjustments (COLAs) of 3 percent per year for retirees and survivors who receive a full COLA. At the end of each year, the number of people and the amounts paid in basic pay and benefits are saved, and the population is aged. After 100 years, when an immaterial number (less than 0.01 percent) of basic pay and benefit expenditures are projected, the present values of the series of future benefit payments and future basic pay outlays are determined, using the valuation interest rate of 5.5 percent per year. Because no new entrants come into the system, the projection is said to be "closed group."

There is also an option in GORGO for an "open group" projection in which new entrants are added each year to meet projected endstrengths. Detailed results of an open group projection of the Military Retirement System appear in Appendix K.

An open group projection also appears in Table 9. This projection, which shows the past and projected flow of plan assets, includes the total basic payroll over the next 25 years, the normal cost contributions, the payments to amortize the unfunded liability, investment income, fund disbursements, and the fund balance. All of these items are discussed in detail throughout the text of this report. An overview of the GORGO process is illustrated in Figure 1.

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¹ GORGO was named after a monster featured in a 1961 British science fiction movie based on a variation of *Godzilla*.

TABLE 2

GORGO POPULATION CATEGORIES

- 1. Active duty populations and basic pay
 - a. Officers
 - b. Enlistees
- 2. Selected reserve populations, basic pay, and benefit formula
 - a. Officers
 - b. Enlistees
- 3. Non-selected reserve (those who have completed 20 good years and have not reached paid retirement) populations, basic pay, and benefit formula
 - a. Officers
 - b. Enlistees
- 4. Retiree populations, retired pay, and benefit formula
 - a. Nondisabled officers
 - b. Nondisabled enlistees
 - c. Reserve officers
 - d. Reserve enlistees
 - e. Disabled officers (Permanent and Temporary)
 - f. Disabled enlistees (Permanent and Temporary)
- 5. Surviving families in a survivor benefit plan, total annuities, and benefit formula
 - a. Retired Serviceman's Family Protection Plan (RSFPP)
 - b. Survivor Benefit Plan (SBP)
 - c. Reserve Component Survivor Benefit Plan (RCSBP)
 - d. Death on active duty
 - e. Minimum income
- 6. Typical new-entrant cohort
 - a. Officers
 - b. Enlistees

FIGURE 1

GORGO PROCESS OVERVIEW

ECONOMIC ASSUMPTIONS

- Inflation
- Interest
- Basic Pay Scale Increases

POPULATION FILES

- Active Duty
- Selected Reserve
- Non-Selected Reserve
- Retirees
- Survivors

NON-ECONOMIC ASSUMPTIONS

- Retirement
- Mortality
- Withdrawal
- Etc.



GORGO



CLOSED GROUP PROJECTION

- Actuarial Liability

OPEN GROUP PROJECTION

- Long-Term Projections

NEW ENTRANT PROJECTION

- Normal Cost Percentage Economic assumptions, i.e., the annual rate of inflation, the annual basic pay scale increases, and the annual valuation interest rate, were decided upon by the DoD Board of Actuaries after extensive analysis of past trends, current environment, and future expectations. A discussion of these considerations is contained in Appendix D.

The decrement rates and other non-economic assumptions can be categorized as follows:

- 1. Active duty decrement rates
- 2. Retiree and survivor decrement rates
- 3. Drilling and non-drilling (with 20 good years) reserve decrement rates
- 4. Actuarial projection model parameters
- 5. Other rates (e.g., mortality improvement)

The decrement rates and GORGO parameters are generally based on military-specific experience. The rates and descriptions of how they were derived appear in Appendixes G through J. The actuarial projection model parameters, dealing with such matters as the survivor benefit elections, premium deductions, and member/beneficiary age differences, appear in Appendix F. In general, the valuation results are most sensitive to changes in the economic and retention assumptions, where retention refers to the active and reserve duty withdrawal/reentrant and separation rates.

Assets

The assets of the Military Retirement Fund (the Fund) are invested in special issue Treasury obligations bearing interest at rates determined by the Secretary of the Treasury taking into consideration current market yields for outstanding marketable U.S. obligations of comparable maturities. Each security issued to the Fund "mirrors" a security that has been issued to the public, i.e., it has the same maturity date and coupon rate. The special issue "mirrored" security may have been issued recently, or at any time in the past. Under current procedures adopted by Treasury, the investment manager (DFAS Trust Fund Accounting Division) is permitted to redeem long-term special issue securities at any time before maturity for their fair market value, which is based on the public issue bid price with the same maturity date and coupon rate. However, Treasury policy encourages a buy-and-hold approach giving consideration to the needs of the Fund in determining the maturities of securities purchased.

The investment manager must follow the asset investment strategy approved by the DFAS Investment Board at their semiannual meetings. The current investment strategy includes investing the assets so that the Fund generates sufficient cash to fund benefit payments and expenses as they come due. Many considerations are taken into account when making investment decisions, including balancing various risks, targeting an expected average maturity of future investments of 20 years (which is close to the duration of the liabilities) and current and expected economic conditions. A large majority of purchases are in Treasury Inflation-Protected Securities (TIPS). This strategy hedges almost all of the inflationary pressures while minimizing liquidity risks to the Fund. Timing issues and the inconsistency between the TIPS calculation of inflation (CPI-U) and the Fund's crediting of inflation (CPI-W) to retiree and survivor benefits leave some residual inflationary risks.

For purposes of determining the unfunded liability, the assets of the Fund are valued using the amortized cost method. Under this method, the yield to maturity of a security valued at any point in time is equal to the yield to maturity at the time of purchase. In the valuation of the Military Retirement System, the amortized cost value is referred to as the "actuarial value of assets." The actuarial value of assets is determined by amortizing premium and discount over the life of the securities. The total investment return includes: the interest coupons received; the change in the amortized cost value during the year; and the inflation compensation accrued from the holdings of TIPS. The actuarial value of assets used in the determination of the unfunded liability includes the "accrued interest," which is the amount of the next semiannual interest coupon payment that has accrued since the date of the last coupon payment. The amount of the "accrued interest" is determined by multiplying the coupon payment by the ratio of the time that has elapsed since the last coupon payment date to the total time between coupon payments. Table 3 presents a statement of the actuarial value of assets as of September 30, 2012; Table 4 presents a statement of changes in the actuarial value of assets. Other associated asset statements and disclosures are included in Appendix L; these should be used for descriptive purposes only.

In an open group projection of a retirement system where the total number of employees is held constant, the number of retirees and survivors on the rolls at year end, as well as the number withdrawing, retiring, dying, etc., each year, eventually levels out. When this occurs, the population is said to be "stationary." In this report's open group projection, DoD-projected endstrengths are used through the end of FY 2018 (as depicted in Table 9). Subsequently, the force size is held constant each year. However, the assumption of future mortality improvement results in a small increase in the retired population each year, so that the retired population is nearly, but not completely, stationary².

When a population becomes stationary, the fund disbursements increase each year at the same rate as total pay, which is 3.5 percent per year. If the method of funding the system is theoretically sound, the value of the assets in the Fund will also increase at this same rate, and thus will become a level percentage of pay. Otherwise, the fund would either increase indefinitely as a percent of pay, or decrease until it was zero. Practical considerations in this report's open group projection, including mortality improvement, cause the fund disbursements to grow at an ultimate rate slightly higher than 3.5 percent.

A portion of the investment income must be used to generate the 3.5 percent Fund increases and cannot be used to pay benefits. For example, in the year 2037 (on Table 9), the projected normal cost payment ('From DoD' plus 'From Treasury') is \$51.8 billion, the investment income is \$164.0 billion, and Fund disbursements are \$111.9 billion. The beginning-of-year fund balance is \$2,997.7 billion. The two sources of Fund income will ultimately cover benefit payments plus 3.5 percent of the beginning-of-the-year fund balance. That is, the difference of \$51.8 billion plus \$164.0 billion and \$111.9 billion plus \$104.9 billion (\$2,997.7 billion x .035)—where \$104.9 billion represents the amount that would be required for the Fund to grow by 3.5 percent during the year. The lack of equality in various years of the projection is due to (1) mortality improvement, which keeps the retired population from being stationary, and (2) the difference between the short-term economic assumptions and the ultimate economic assumptions (see Table 9 Footnote). Additionally, the projection uses unfunded liability amortization payments determined in the September 30, 2012, valuation.

² More precisely, the retired population would become nearly, but not completely stationary if the open group projection were extended many years beyond what's shown in this report.

TABLE 3

DEPARTMENT OF DEFENSE MILITARY RETIREMENT FUND STATEMENT OF ACTUARIAL VALUE OF ASSETS (\$ in millions)

For the Plan Year Ended September 30: 2012 2011 <u>Assets</u> 1) Investments, at book value: U.S. Government securities¹ \$424,194 \$372,066 2) Accounts receivable: a) Accrued interest² \$3,673 \$3,405 b) Due from military retirees or their survivors \$67 \$47 \$0 c) Intragovernmental \$186 3) Cash: \$23 \$370 Actuarial value of assets <u>\$427,957</u> \$376,074

Book value is determined by 1) amortizing premium and discount over the life of the securities using the effective interest method and 2) including additional inflation compensation from TIPS. Additional adjustment made as a result of FY 2011 National Defense Authorization Act (P.L. 111-383) regarding retired pay date as follows:

	<u>2012</u>	<u>2011</u>
Investments, at book value (actual)	\$424,194	\$368,212
October Expenditures paid in September	<u>\$0</u>	3,854
Investments, at book value (adjusted)	\$424,194	\$372,066

² Includes accrued interest receivable and interest purchased.

TABLE 4

DEPARTMENT OF DEFENSE MILITARY RETIREMENT FUND STATEMENT OF CHANGES IN ACTUARIAL VALUE OF ASSETS (\$ in millions)

F	for the Plan Year Ended 2012	1 September 30: <u>2011</u>
1) Actuarial value of assets at beginning of plan year:	\$376,074	\$321,749
2) Investment income:		
a) Interest/Inflation	\$16,102	\$20,179
b) Net appreciation (depreciation) in book value of investments ¹	\$(3,586)	\$(2,181)
3) Contributions:		
a) From Services	\$21,863	\$20,970
b) Appropriation to amortize the unfunded liability	\$64,751	\$61,404
c) Appropriation for Treasury Normal Cost Contribut	ion \$5,376	\$4,950
4) Total additions (2 + 3):	\$104,506	\$105,322
5) Change in Accounts Receivable	\$20	\$10
6) Benefits paid to participants:	<u>\$52,643</u>	\$51,007
Actuarial value of assets $(1 + 4 + 5 - 6)$:	<u>\$427,957</u>	<u>\$376,074</u>

Investments bought, sold and held during the plan year ended September 30 appreciated (depreciated) in value as follows:

	<u>2012</u>	<u>2011</u>
Amortized discount	\$45	\$62
Amortized premium	\$(3,631)	\$(2,243)
Gain (loss) on sale *	\$0	\$0
	\$(3,586)	\$(2,181)

^{*} Gain (loss) on sale is only shown for informational purposes and is not included in the net appreciation (depreciation).

Normal Cost

The aggregate entry-age normal cost percentage (NCP) is the level percentage of basic pay that must be contributed over the entire active career of a typical group of new entrants to pay for all the future retirement and survivor benefits of that group. It is determined by using the new-entrant cohort as the starting population in a GORGO projection. Their basic pay and benefits are projected over 100 years, and then discounted back to the present (i.e. valuation date). Mathematically, a NCP is calculated by dividing the present value of future benefits for the entire cohort by the present value of future basic pay, evaluated at the assumed interest rate.

As described in Appendix A, there are three distinct nondisability benefit formulas (relevant to three distinct populations) within the Military Retirement System. Retirement benefits are based on final basic pay (Final Pay) for military personnel who first became members of a uniformed service before September 8, 1980, and are based on the average of the highest 36 months (High-3) for those becoming members on or after this date. Additionally, active duty military personnel who first became members of a uniformed service on or after August 1, 1986, are High-3 unless they elect Career Status Bonus (CSB)/Redux, which provides them with a bonus in exchange for reduced (Redux) benefits.

P.L. 99-661, enacted in November 1986, mandated that two separate NCPs be used for the valuation of the Military Retirement System. One NCP is for active duty personnel and full-time reservists (full-time) and one is for part-time reservists (part-time). Full-time and part-time NCPs are calculated for each of the three separate benefit formulas. Only full-time personnel are under the CSB/Redux benefit formula, thus an analogous part-time NCP is not applicable ("N/A"). The FY 2013 NCPs are summarized below (with DoD NCPs in parentheses):

Benefit Formula	Full-Time	Part-Time
Final Pay	49.5% (36.7%)	29.0% (25.9%)
High-3	45.0% (33.4%)	27.4% (24.4%)
CSB/Redux ³	44.0% (32.3%)	N/A

P.L. 108-136 required the Treasury to pay the normal cost arising from increased benefits due to Concurrent Receipt into the Fund at the beginning of each year. The NCPs shown above include the respective Total (DoD plus Treasury) and DoD percentages. Table 7 depicts the DoD and Treasury NCPs separately. The NCPs are further disaggregated in Table 6.

Table 5 shows the expected percentage of the total basic payroll that will be paid during the fiscal year to all personnel who entered a uniformed service since the beginning of fiscal year t-k, where k can take any value from 0 to 39 (or greater). (Note that starting with the FY 2012 valuation, different percentages are used for active and reserve duty personnel.) For example, during FY 2013 (t =2013), 3 percent of the expected basic payroll will be paid to full-time personnel entering service in that fiscal year (k = 0), and 99 percent of the expected basic payroll will be paid to persons entering service since the beginning of FY 1981 (k = 32), while 66 percent will be paid to members entering since the beginning of FY 1998 (k = 15). The data and methodology used to derive this table are described in Appendix E.

³ This NCP represents a blend of NCPs for CSB/Redux and HI-3 benefit formulas based on the CSB/Redux Election Proportion (see Appendix F).

TABLE 5

PERCENTAGE OF TOTAL BASIC PAYROLL PAID DURING FISCAL YEAR 't' TO ALL PERSONNEL ENTERING SERVICE DURING OR AFTER SPECIFIC YEAR OF ENTRY

Year of Entry	Percentage	Percentage
4	(Full-time)	(Part-time)
t t-1 or later	3% 8	0% 6
t-2 or later	13	11
t-3 or later	18	16
t-4 or later	24	20
t-5 or later	28	24
t-6 or later	32	27
t-7 or later	37	31
t-8 or later	41	35
t-9 or later	45	38
t-10 or later	49	41
t-11 or later	53	44
t-12 or later	56	46
t-13 or later	59	49
t-14 or later	63	51
t-15 or later	66	53
t-16 or later	68	55
t-17 or later	71	58
t-18 or later	75	60
t-19 or later	78	64
t-20 or later	81	67
t-21 or later	84	70
t-22 or later	86	74
t-23 or later	89	77
t-24 or later	91	80
t-25 or later	93	83
t-26 or later	95	86
t-27 or later	96	89
t-28 or later	97	91
t-29 or later	98	93
t-30 or later	98	94
t-31 or later	99	95
t-32 or later	99	96
t-33 or later	99	97
t-34 or later	100	98
t-35 (or greater)	:::	

Notes:

- Based on basic payroll data for Fiscal Year 2010, as described in Appendix E.
- The part-time percentage is first equal to 100% at t-38 years or later.

Thus, 99 percent of the full-time basic payroll for FY 2013 is expected to be paid to personnel entering service since the beginning of FY 1981, while the remaining 1 percent of the expected basic payroll for FY 2013 will be for personnel whose retirement benefits are based on FINAL PAY 4 . Of the post-FY 1980 new entrants, 95 percent is expected to be attributable to the CSB/Redux members (entering on or after August 1, 1986) and the remaining 4 percent to the High-3 members. The 95 percent was derived by interpolating between the factors for FY 1986 (k = 27) and FY 1987 (k = 26) years of entry. The FY 2013 weighted aggregate full-time NCPs are obtained by weighting their respective NCPs for the CSB/Redux formula by 95 percent, the NCPs for the High-3 formula by 4 percent, and the NCPs for the Final Pay formula by 1 percent. A similar calculation can be done for the part-time NCPs based on the part-time NCP weighting factors. The resulting sum of the DoD and Treasury components of the weighted aggregate full-time NCP is 44.1 percent, and the weighted aggregate part-time NCP is 27.4 percent. Due to federal budget deadlines, the two NCPs used to determine the actual contributions to the Fund must be established in advance of implementation and may vary from those actually derived in a valuation.

Table 6 summarizes the components of the FY 2013 normal cost percentages.

TABLE 6

NORMAL COST AS A PERCENT OF BASIC PAY (NCPs) (DoD Normal Cost Percentage in Parentheses)				
FULL-TIME	FINAL PAY	HIGH-3	CSB/REDUX	FY 2013 Weighted
Nondisability benefits Disability benefits Survivor benefits Total	47.1 (35.0) 0.8 (0.5) 1.6 (1.2) 49.5 (36.7)	42.8 (31.9) 0.7 (0.4) 1.4 (1.1) 45.0 (33.4)	41.9 (30.8) 0.7 (0.4) <u>1.4 (1.1)</u> 44.0 (32.3)	42.0 (30.9) 0.7 (0.4) 1.4 (1.1) 44.1 (32.4)
PART-TIME				
Nondisability benefits Disability benefits	26.5 (23.8) 0.6 (0.4)	25.0 (22.5) 0.5 (0.3)	N/A N/A	25.1 (22.6) 0.5 (0.3)

- Note that columns may not add exactly due to rounding of the separate NCP components.

1.9 (1.7)

29.0 (25.9)

- Disability benefits from part-time personnel are modeled for the first time in this valuation.
- Only full-time personnel are under the CSB/Redux benefit formula, thus an analogous part-time NCP is not applicable ("N/A").

1.8 (1.6)

27.4 (24.4)

-- N/A --

-- N/A --

Survivor benefits

Total

1.8 (1.6)

27.4 (24.5)

⁴ Personnel hired before September 8, 1980, have their retirement benefits based on Final Pay, but for purposes of determining the weights in the weighted NCP, we use personnel hired before October 1, 1980.

As can be determined from this table, about 95 percent of the full-time normal cost stems from nondisability retirement. Based on current decrement rates, 19 percent of a typical group of new entrants attains 20 years of active duty service and becomes eligible for nondisability retirement from active duty. Specifically, 49 percent of new officers and 17 percent of new enlistees attain 20 years of active duty service. It should be noted that some military personnel who begin their careers on active duty move to the reserves and retire from there. This is modeled through the allocation of a portion of the reserve benefit, in present values terms, to the full-time normal cost (see Appendix F). Based on current reserve decrement rates, 14 percent of a typical group of members entering the reserves for the first time (including members with prior active or non-drilling reserve time) become eligible for a reserve nondisability retirement (49% for officers, and 13% for enlisted).

Table 10 lists the past and projected weighted aggregate full-time and part-time NCPs under current law in the normal cost columns. The columns are separated into the DoD and Treasury NCPs due to P.L. 108-136. In recent years both the full- and part-time sums of the DoD and Treasury component weighted aggregate percentages are (generally) at the level of the CSB/Redux normal cost percentages since virtually all non-retired personnel have entered the uniformed service on or after August 1, 1986. For example, in 2014, the full-time NCP is 44.1 percent (44.1 = 32.4 + 11.7) and the part-time NCP is 27.4 percent (27.4 = 24.5 + 2.9) [the above figures may not add due to rounding].

Amortization of Unfunded Liability

Under P.L. 98-94, normal cost contributions began to be made by DoD on behalf of all military personnel on October 1, 1984. Since normal cost contributions had not been made for service prior to this date, there was an initial unfunded accrued liability, or "initial unfunded liability," of \$528.7 billion as of September 30, 1984. If this amount had been deposited in the retirement fund on September 30, 1984, then it, together with the future normal cost payments to be made on behalf of all active duty personnel and drilling reservists over the balance of their active careers, plus investment earnings at the assumed rate, would have been sufficient to provide all expected retirement and survivor benefits for those in the system on that date.

Effect on the reserve duty is more pronounced relative to the above active duty figures due to the inherent nature of the reserve career.

As in past valuation reports, these percentages are stated from the perspective of a new entrant cohort still in active service at its first fiscal-year boundary (i.e., September 30). If losses prior to the first fiscal-year boundary are taken into account, the percentages would be reduced by approximately 15 percent (19 percent would become 16 percent). The stated percentages also reflect the effect of reentrants, i.e., members who appear in the active duty population one year without having been there the year before, who are not new entrants. Without the effect of reentrants, the proportion of a typical group of new entrants who attain 20 years of active duty service is reduced from 19 percent to 15 percent. The paygrade transfer rates have no effect.

The Board of Actuaries originally determined that the initial unfunded accrued liability of the system (\$528.7 billion) should be amortized with payments equal to 33 percent of the second preceding fiscal year's basic payroll. It was originally projected that this method would amortize the initial unfunded liability over 60 years. However, economic assumption changes extended the amortization period well beyond 60 years. As a result, the Board revised the amortization method of the original unfunded liability in such a way that the amortization would have been completed in 2043. In more recent years, it was determined that the Military Retirement Fund was projected to have a negative balance for several years before becoming positive again. The Board decided to shorten the amortization period to 50 years in 1996. The Board again shortened the amortization period in 2007 to 42 years in order for the payments to cover the interest on the unfunded liability each year. The initial unfunded liability is now expected to be fully amortized in calendar year 2025 (FY 2026).

Changes in the unfunded liability can also arise because of: 1) modifications to benefit provisions, 2) changes in actuarial assumptions, and 3) deviations in actual experience from expected experience (gains and losses). The Board approved a method to amortize these changes over 30 years by payments that increase in absolute value at the same rate as the annual long-term basic pay scale assumption (currently 3.5 percent). A detailed description of the methods and computations used to calculate the payment streams for changes in unfunded liability can be found in Appendix M.

Unfunded Accrued Liability as of September 30, 2012

Table 7 summarizes the calculation of the unfunded accrued liability as of September 30, 2012. The present value of future benefits is obtained by projecting future benefits for the total covered population (closed group with no new entrants) as of September 30, 2012, and discounting these benefits back to the present (i.e. valuation date) at the assumed interest rate. The GORGO actuarial model projects benefits for the current active and retired populations over the duration of their lifetimes. Due to recent law changes, additional adjustments to the pay projections are made outside of the GORGO model. The initial retirement benefits for military personnel are based on their total projected service at retirement, the applicable benefit formula, and assumed basic pay increases. Subsequent retirement benefits include assumed cost-of-living adjustments and the age 62 adjustment for those retiring under the CSB/Redux formula.

The present value of future normal cost contributions is obtained by (1) using GORGO to project future yearly full-time and part-time basic pay for the September 30, 2012, covered population, (2) multiplying the pay by the total projected (DoD and Treasury) full-time and part-time weighted aggregate entry-age NCPs, and (3) discounting the resulting normal costs back to September 30, 2012. For this closed group, the relative percentages of basic pay subject to the three separate benefit formulas will change over time as fewer members are covered under the High-3 and Final Pay formulas. The *weighted* full- and part-time NCPs that are multiplied against the future full- or part-time pay in each year reflect expected changing percentages of pay going to members covered by the multiple benefit formulas. This weighted procedure is roughly equivalent in the aggregate to projecting separately the pay of each of the six groups of active duty and selected reserve members and multiplying it by the individual group's NCP.

The sum of the DoD and Treasury components of the weighted aggregate entry-age normal cost percentages for FY 2013 are 44.1 percent full-time and 27.4 percent part-time. Federal budget deadlines require the establishment of normal cost percentages in advance of the valuation. Consequently, the percentages actually implemented in a fiscal year may vary from those derived in the valuation. These differences, which are small unless major actuarial assumptions or benefits are changed, are reflected in the unfunded liability by using the implemented normal cost in the first year of the projection.

Deducting the present value of future normal costs and the actuarial asset value of the Fund from the present value of future benefits leaves an unfunded liability of \$933.5 billion as of September 30, 2012. This was 6 percent more than the expected unfunded liability of \$880.4 billion. The expected unfunded liability is what the unfunded liability would have been if all actuarial assumptions had been realized and all benefit formulas had remained unchanged. The fact that the actual unfunded liability is more than expected means that there was a total FY 2012 loss of \$53.2 billion (\$933.5 billion minus \$880.4 billion). The components of this loss are outlined in Table 8. The total experience loss is divided into four segments: (1) the loss due to the difference between the actual interest rate (2.9%) earned by the Fund and the assumed interest rate (5.75%); (2) the gain due to the actual COLA (1.7%) increase being different from that assumed (3.0%); (3) the gain due to the actual salary (1.7%) increase being different from that assumed (3.75%); and (4) the loss due to the difference between the actual and assumed experience. See the Summary of Changes for the September 30, 2012, Valuation for a more detailed discussion of the actuarial assumptions outlined in Table 8.

These changes in unfunded liability were used to calculate the October 1, 2013, unfunded liability payment. The total payment was determined to be \$72.885 billion. This total payment includes (1) a payment of \$81.373 billion to amortize the original unfunded liability, plus (2) an amount of \$3.150 billion to amortize changes in actuarial assumptions, plus (3) an amount of \$8.211 billion to amortize benefit changes, less (4) an amount of \$19.849 billion to amortize total combined experience gains and losses through FY 2012. The detailed calculations of these payment components are located in Appendix M. Tables 11 and 12 show the projection of the unfunded liability payments and unfunded liability balances. Tables 9 and 10 display all projected transactions to the Fund.

Starting in FY 2005, the total payment to be made by Treasury includes the amount required by P.L. 108-136 to pay for the increased normal cost due to Concurrent Receipt benefits in addition to the unfunded liability amortization amount. The total Treasury payment on October 1, 2013, is \$79.222 billion (\$72.885 billion for the unfunded liability amortization + \$6.337 billion for Concurrent Receipt benefits). Detailed calculations of the total Treasury payment are also located in Appendix M.

Other measures of a retirement system's liabilities (required for private sector plans under Generally Accepted Accounting Principles [GAAP]) are the "Accumulated Plan Benefits" and the "Market Value of Assets." In prior years, both these items and explanatory notes were included in Appendix L. Currently, only the "Market Value of Assets" is shown for informational purposes as well as other financial statement disclosures and comparisons.

TABLE 7

MILITARY RETIREMENT SYSTEM ACTUARIAL STATUS INFORMATION (\$ in billions)

For the Plan Year Ended September 30:

		<u>2012</u>	<u>2011</u>
1.	Present value of future benefits		
	 a. Annuitants now on roll b. Nonretired reservists c. Active duty personnel¹ TOTAL 	\$854.6 \$187.5 \$ <u>565.8</u> \$1,607.9	\$807.3 \$174.2 \$ <u>530.9</u> \$1,512.4
2.	Present value of future normal cost contributions	\$246.4	\$239.1
3.	Actuarial accrued liability $(1 2.)$	\$1,361.5	\$1,273.3
4.	Actuarial value of assets ²	\$428.0	\$376.1
5.	Unfunded accrued liability $(3 4.)$	\$933.5	\$897.2
6.	Funded Ratio (4. / 3.)	31%	30%
7.	DoD normal cost percentage (NCP) ³ to be applied to basic pay in fiscal year a. Full-time b. Part-time	FY 2014 32.4% 24.5%	FY 2013 32.1% 24.4%
8.	Treasury normal cost percentage (NCP) ⁴ to be applied to basic pay in fiscal year	<u>FY 2014</u>	FY 2013
	a. Full-timeb. Part-time	11.7% 2.9%	11.2% 3.2%

Basic pay is only a portion of active duty military compensation. See The Military Retirement System: Benefits (Appendix A) for details.

¹ The future benefits of active duty personnel expected to retire as reservists are counted on line 1.b.

² The actuarial value of assets is determined using the amortized cost method from Table 4.

³ Due to the need to establish the NCPs in advance of implementation (federal budget deadlines), the percentages actually used in a fiscal year may vary from the ones derived in the valuation.

⁴ P.L. 108-136 requires the Department of Treasury to pay the normal cost resulting from the increase in benefits due to Concurrent Receipt.

TABLE 8

MILITARY RETIREMENT SYSTEM FY 2012 CHANGE IN UNFUNDED LIABILITY (\$ in billions)

		For the Plan Year Ended September 30, 2012
1.	Actual unfunded accrued liability (9/30/12	\$933.5
2.	Expected unfunded accrued liability (9/30/	\$880.4
3.	Total gain/(loss)	(\$53.2) 3.9%
	a. Total experience gain/(loss)	\$6.9 0.5%
	Interest assumption COLA assumption Salary assumption Non-economic assumptions	(\$12.1) 2.8% \$10.4 0.8% \$8.7 0.6% (\$0.1) 0.0%
	b. Total benefit change gain/(loss)	\$0.0 0.0%
	c. Total assumption change gain/(loss)	(\$60.1) 4.4%
	New Survivor Rates New Temporary Disability Rates/Fa New NCP Weighting Factors Reserve Model/Rates New Economic Assumptions	(\$6.9) 0.5% actors \$0.4 0.0% \$0.2 0.0% (\$5.9) 0.4% (\$47.8) 3.5%

In this table, negative values represent actuarial losses and positive values represent actuarial gains.

Percentages shown are ratios of absolute values of each gain or loss component to the accrued liability (Table 7, line 3), except the percentage given for the experience gain/(loss) due to the interest assumption: it is the ratio of the gain or loss to the actuarial value of assets (Table 7, line 4).

TABLE 9

MILITARY RETIREMENT SYSTEM

PAST AND PROJECTED FLOW OF PLAN ASSETS¹
(In Billions of Dollars and as a Proportion of Payroll)

				Contributio	ons Received								
Fiscal Year	Basic Payroll ²		o, for Normal		easury, for	Amorti	easury, for ization of d Liability 4	Investme	ent Income	Fund Disb	oursements 5		ance, End of ear 6
1985	\$33.5	\$17.0	(50.7%)			\$9.5	(28.4%)	\$1.1	(3.3%)	\$15.8	(47.2%)	\$11.8	(35.2%)
1986	35.4	17.4	(49.2)			10.5	(29.7)	2.5	(7.1)	17.6	(49.7)	24.6	(69.5)
1987	36.4	18.3	(50.3)			10.5	(28.8)	3.6	(9.9)	18.1	(49.7)	38.9	(106.9)
1988	37.3	18.4	(49.3)			10.3	(27.6)	5.0	(13.4)	17.5	(46.9)	53.4	(143.2)
1989	38.6	18.5	(47.9)			9.8	(25.4)	6.1	(15.8)	20.2	(52.3)	67.6	(175.1)
1990	39.8	16.3	(41.0)			10.6	(26.6)	7.3	(18.3)	21.5	(54.0)	80.4	(202.0)
1991	42.3	17.2	(40.7)			10.8	(25.5)	8.5	(20.1)	23.1	(54.6)	93.7	(221.5)
1992	41.1	16.3	(39.7)			11.2	(27.3)	9.4	(22.9)	24.5	(59.6)	106.1	(258.2)
1993	38.9	13.2	(33.9)			12.3	(31.6)	10.0	(25.7)	25.7	(66.1)	115.9	(297.9)
1994	38.3	12.8	(33.4)			11.9	(31.1)	10.3	(26.9)	26.7	(69.7)	124.2	(324.3)
1995	37.1	12.2	(32.9)			11.5	(31.0)	10.9	(29.4)	27.8	(74.9)	131.0	(353.1)
1996	36.7	11.2	(30.5)			10.7	(29.2)	11.3	(30.8)	28.8	(78.5)	135.3	(368.7)
1997	36.8	11.1	(30.2)			15.2	(41.3)	11.9	(32.3)	30.2	(82.1)	143.3	(389.4)
1998	37.1	10.4	(28.0)			15.1	(40.7)	12.2	(32.9)	31.1	(83.8)	149.9	(404.0)
1999	37.6	10.4	(27.7)			15.3	(40.7)	12.4	(33.0)	31.9	(84.8)	156.0	(414.9)
2000	39.0	11.4	(29.2)			15.3	(39.2)	12.7	(32.6)	32.8	(84.1)	162.7	(417.2)
2001	40.9	11.4	(27.9)			16.1	(39.4)	13.2	(32.3)	34.1	(83.4)	169.2	(413.7)
2002	44.7	12.9	(28.9)			17.0	(38.0)	12.4	(27.7)	35.1	(78.5)	176.5	(394.9)
2003	52.0	13.7	(26.3)			17.9	(34.4)	10.0	(19.2)	35.6	(68.5)	182.6	(351.2)
2004	53.6	14.1	(26.3)			18.2	(34.0)	10.1	(18.8)	37.0	(69.0)	188.0	(350.7)
2005	56.3	15.0	(26.6)	\$1.5	(2.7%)	21.4	(38.0)	10.9	(19.4)	39.0	(69.3)	197.9	(351.5)
2006	54.0	13.9	(25.7)	2.3	(4.3)	23.2	(43.0)	12.3	(22.8)	41.1	(76.1)	208.4	(385.9)
2007	56.4	14.5	(25.7)	2.5	(4.4)	26.0	(46.1)	10.3	(18.3)	43.5	(77.1)	218.2	(386.9)
2008	59.2	16.1	(27.2)	2.8	(4.7)	46.2	(78.0)	15.6	(26.4)	45.8	(77.4)	253.1	(427.5)
2009	63.0	17.5	(27.8)	3.7	(5.9)	51.1	(81.1)	2.9	(4.6)	50.0	(79.4)	278.4	(441.9)
2010	64.4	20.4	(31.7)	4.5	(7.0)	58.6	(91.0)	10.4	(16.1)	50.6	(78.6)	321.7	(499.5)
2011	66.9	21.0	(31.4)	5.0	(7.5)	61.4	(91.8)	18.0	(26.9)	51.0	(76.2)	376.1	(562.2)
2012	66.8	21.9	(32.8)	5.4	(8.1)	64.8	(97.0)	12.5	(18.7)	52.6	(78.7)	428.0	(640.7)
						↑ A C T	U A L ↑						
						PROJE	E C T E D \	•					
2013	\$64.9	\$20.2	(31.2%)	\$6.7	(10.3%)	\$67.7	(104.4%)	\$26.7	(41.1%)	\$54.2	(83.5%)	\$495.1	(763.2%)
2014	65.0	20.5	(31.5)	6.9	(10.7)	72.9	(112.1)	30.7	(47.2)	55.3	(85.1)	570.8	(877.8)
2015	65.0	20.4	(31.4)	6.9	(10.7)	75.4	(116.1)	34.9	(53.8)	56.7	(87.3)	651.7	(1,003.4)
2016	65.2	20.5	(31.4)	7.0	(10.7)	78.1	(119.8)	39.5	(60.6)	58.3	(89.5)	738.4	(1,132.8)
2017	65.7	20.6	(31.4)	7.0	(10.7)	80.8	(122.9)	44.4	(67.5)	60.0	(91.2)	831.2	(1,264.5)
2018	67.3	21.1	(31.3)	7.2	(10.7)	83.6	(124.3)	49.6	(73.7)	61.4	(91.2)	931.3	(1,384.1)
2019	69.1	21.6	(31.3)	7.3	(10.6)	86.6	(125.4)	55.2	(80.0)	63.0	(91.3)	1,039.1	(1,504.7)
2020	70.9	22.2	(31.3)	7.5	(10.6)	89.6	(126.5)	61.3	(86.5)	64.7	(91.4)	1,155.0	(1,630.1)
2021	72.7	22.8	(31.3)	7.7	(10.6)	92.7	(127.5)	67.8	(93.3)	66.5	(91.5)	1,279.6	(1,759.6)
2022	74.6	23.4	(31.3)	7.9	(10.6)	96.0	(128.6)	74.8	(100.3)	68.8	(92.2)	1,412.9	(1,893.2)
2023	77.1	24.1	(31.3)	8.2	(10.6)	99.3	(128.9)	82.3	(106.8)	71.3	(92.4)	1,555.6	(2,017.8)
2024	79.6	24.9	(31.3)	8.4	(10.6)	102.8	(129.1)	90.3	(113.4)	74.1	(93.0)	1,708.0	(2,145.2)
2025	82.2	25.7	(31.3)	8.7	(10.6)	106.4	(129.4)	98.9	(120.2)	76.9	(93.5)	1,870.9	(2,274.7)
2026	85.0	26.6	(31.3)	9.0	(10.6)	110.1	(129.6)	108.0	(127.1)	79.5	(93.6)	2,045.1	(2,406.0)
2027	87.8	27.5	(31.3)	9.3	(10.6)	-13.3	(-15.1)	110.8	(126.1)	82.2	(93.6)	2,097.1	(2,387.5)
2028	90.8	28.4	(31.3)	9.6	(10.6)	14.9	(16.4)	115.1	(126.8)	85.0	(93.7)	2,180.0	(2,401.3)
2029	93.8	29.3	(31.3)	9.9	(10.6)	19.0	(20.3)	119.9	(127.7)	87.9	(93.6)	2,270.3	(2,419.1)
2030	97.1	30.3	(31.2)	10.3	(10.6)	19.7	(20.3)	124.9	(128.6)	90.7	(93.5)	2,364.7	(2,436.2)
2031	100.5	31.4	(31.2)	10.6	(10.6)	20.4	(20.3)	130.1	(129.5)	93.6	(93.2)	2,463.6	(2,452.5)
2032	104.0	32.5	(31.2)	11.0	(10.6)	21.1	(20.3)	135.5	(130.3)	96.5	(92.8)	2,567.1	(2,468.3)
2033	107.6	33.6	(31.2)	11.4	(10.6)	21.8	(20.3)	141.2	(131.2)	99.7	(92.6)	2,675.5	(2,485.6)
2034	111.4	34.8	(31.2)	11.8	(10.6)	22.6	(20.3)	147.2	(132.1)	102.8	(92.3)	2,789.0	(2,503.3)
2035	115.4	36.1	(31.2)	12.2	(10.6)	7.6	(6.6)	152.6	(132.2)	105.8	(91.6)	2,891.6	(2,505.0)
2036	119.6	37.4	(31.2)	12.6	(10.6)	6.7	(5.6)	158.1	(132.2)	108.8	(91.0)	2,997.7	(2,505.9)
2037	124.0	38.7	(31.2)	13.1	(10.6)	6.9	(5.6)	164.0	(132.3)	111.9	(90.3)	3,108.4	(2,507.6)

TABLE 9 FOOTNOTES

NOTE REGARDING OPEN GROUP PROJECTIONS: The 25-year open group projection in this report is based on benefit provisions, data, methods and assumptions described herein. The values are displayed in future-year dollars. They are intended to provide the user with a general directional magnitude; uncertainty increases with the length of the projection period. Actual results are heavily dependent on the underlying assumptions being realized. Benefit changes, economic conditions, and other factors are not perfectly predictable.

In addition, the fundamental purpose of the OACT's valuation is to produce actuarial liability and normal cost amounts, both of which are done on a closed group basis. In performing the valuation calculations, some assumptions represent long-run average expectations. This is appropriate for such liability and normal cost determinations. The open group projection uses many of the same long-run average assumptions as are used in the actuarial liability and normal cost calculations, but incorporates some adjustments for short-term expectations (e.g., the use of Office of Management and Budget [OMB] short-term economic assumptions for basic pay and COLA increases).

The projection in this publication is intentionally limited to 25 years. Additional projection years, as well as projections assuming different economic assumptions, may be requested.

- P.L. 98-94 established the Military Retirement Fund. Under the law, DoD is responsible for the normal cost payment and Treasury is responsible for the payments on the unfunded liability. P.L. 108-136 assigned Treasury the responsibility of funding the normal cost resulting from increased benefits due to Concurrent Receipt, starting in FY 2005. There are no employee contributions to the Fund.
- DoD-projected endstrengths are used through the end of FY 2018 and constant force strengths thereafter. Basic pay is only a portion of military compensation. See The Military Retirement System: Benefits in Appendix A for details. The drop in Basic Payroll from FY 2012 to FY 2013 reflects the expectation of decreased reserve (part-time) mobilizations as well as the inherent challenges of the reserve projection (discussed further in Appendix H).
- Due to federal budget deadlines, normal cost percentages are established in advance of implementation. The percentage actually used and displayed here may vary from the one derived in the valuation as of the end of the previous year. Starting in FY 1987, NCPs have been developed separately for the full-time and part-time basic payrolls. Beginning in FY 2008, the part-time NCP has been charged against mobilized reserve pay. However, this report includes mobilized reserve pay as part of the full-time payroll from FY 2008 through FY 2010.

TABLE 9 FOOTNOTES (Continued)

- Reflects amortization payments for FY 2014 and thereafter determined in the September 30, 2012, valuation. The FY 2027 payment depicts a negative value, implying the Fund will have to pay Treasury this amount. There is no mechanism that would allow for this to occur under current law. The Board is aware of this situation and will monitor.
- Disbursements are on a cash basis. Beginning in December 1984, entitlements obligated for a month have been paid at the beginning of the following month. Prior to this date, entitlements were paid at the end of the month of obligation. Consequently, FY 1985 disbursements include only 11 months of payments. The FY 2011 National Defense Authorization Act allowed for retired pay to be paid on the previous business day if the first of the month falls on a weekend or holiday. This is not accounted for in the projected Fund Disbursements or Balances in order to give the projection a smooth trajectory.
- This fund balance (on a book value basis) reflects cash disbursements during the year. On September 30, 2012, assets in the Fund totaled \$428.0 billion.

OTHER NOTES: Mortality rates that are applied in the valuation to active duty members, nondisabled retirees, and survivors, are subject to improvement over time. See Appendix J for details. People and pay underlying the projection can be found in Appendix K. The table does not reflect future gains or losses due to experience being different than assumed. Consequently, only payments on the total unfunded liability as of September 30, 2012, are reflected.

ANNUAL ECONOMIC ASSUMPTIONS USED IN PROJECTIONS OF PLAN ASSETS

Fiscal Year	Full COLA	Basic Pay	<u>Interest</u>
2013	1.7%	1.7%	5.5%
2014	1.1	1.0	5.5
2015	2.1	1.0	5.5
2016	2.2	1.0	5.5
2017	2.2	1.5	5.5
2018-21	2.2	2.8	5.5
2022	3.0	2.8	5.5
2023+	3.0	3.5	5.5

Full COLA is equal to full cost-of-living increases to retiree and survivor annuities. Basic Pay is the rate at which the entire military pay table increases (hence excludes longevity or promotion-and-merit increases). They are applied on an across-the-board basis and typically occur each January 1st. Interest assumptions pertain to annual, aggregate Fund yield on all cash flows. The above COLA and Basic Pay assumptions are from the OMB; the interest (fund yield) is the Board of Actuaries long-term interest assumption. Long-term annual economic assumptions (used throughout the projection in the normal cost and unfunded liability calculations) are 3.0% COLA, 3.5% basic pay, and 5.5% interest.

TABLE 10

MILITARY RETIREMENT SYSTEM

PAST AND PROJECTED PAYROLL AND NORMAL COST PAYMENTS

(In Billions of Dollars and as a Proportion of Payroll)

Fiscal		Payroll			DoD Normal	Cost Paymen	ts	Т	reasury Norma	l Cost Payme	nts	Normal Co	st Payments
Year	Full-Time	Part-Time	Total	Full	-Time	Part	-Time	Full	-Time	Part	-Time	T	otal
1985	\$30.6	\$2.9	\$33.5	\$15.5	(50.7%)	\$1.5	(50.7%)	\$0.0		\$0.0		\$17.0	(50.7%)
1986	32.3	3.1	35.4	16.4	(50.7)	1.6	(50.7)	0.0		0.0		17.9	(50.7)
1987	33.4	3.0	36.4	17.4	(52.2)	0.8	(26.4)	0.0		0.0		18.2	(50.1)
1988	34.0	3.3	37.3	17.4	(51.2)	0.9	(26.1)	0.0		0.0		18.3	(49.0)
1989	35.0	3.6	38.6	17.6	(50.2)	0.9	(25.7)	0.0		0.0		18.5	(47.9)
1990	36.0	3.7	39.7	15.8	(43.9)	0.5	(13.4)	0.0		0.0		16.3	(41.1)
1991	38.6	3.7	42.3	16.7	(43.2)	0.5	(13.3)	0.0		0.0		17.2	(40.6)
1992	36.9	4.1	41.0	15.8	(42.7)	0.5	(13.3)	0.0		0.0		16.3	(39.8)
1993	35.1	3.8	38.9	12.8	(36.4)	0.4	(10.6)	0.0		0.0		13.2	(33.9)
1994	34.5	3.8	38.3	12.4	(36.0)	0.4	(10.6)	0.0		0.0		12.8	(33.5)
1995	33.4	3.8	37.2	11.9	(35.5)	0.4	(10.5)	0.0		0.0		12.3	(32.9)
1996 1997	33.1	3.7 3.7	36.8	10.9	(32.9)	0.4	(9.6)	0.0 0.0		0.0		11.2 11.2	(30.6)
1997	33.2 33.4	3.7	36.9 37.1	10.8 10.2	(32.6) (30.5)	0.4 0.3	(9.6) (8.8)	0.0		0.0 0.0		10.5	(30.3) (28.3)
1999	33.7	3.9	37.6	10.2	(30.2)	0.3	(8.7)	0.0		0.0		10.5	(28.0)
2000	35.1	4.0	39.1	11.2	(31.8)	0.4	(9.8)	0.0		0.0		11.6	(29.5)
2001	36.7	4.2	40.9	10.9	(29.6)	0.6	(14.1)	0.0		0.0		11.5	(28.0)
2002	40.8	3.9	44.7	12.4	(30.3)	0.6	(14.4)	0.0		0.0		12.9	(28.9)
2003	47.8	4.2	52.0	13.1	(27.4)	0.6	(14.6)	0.0		0.0		13.7	(26.4)
2004	49.4	4.2	53.6	13.4	(27.1)	0.7	(16.0)	0.0		0.0		14.1	(26.2)
2005	52.0	4.3	56.3	14.3	(27.5)	0.7	(16.7)	\$1.7	(3.3%)	\$0.0	(0.8%)	16.8	(29.8)
2006	49.7	4.3	54.0	13.2	(26.5)	0.7	(16.7)	2.4	(4.9)	0.1	(1.4)	16.4	(30.3)
2007	51.2	5.2	56.4	13.6	(26.5)	0.9	(17.5)	2.5	(4.9)	0.1	(1.5)	17.1	(30.3)
2008	53.5	5.7	59.2	15.5	(29.0)	1.1	(19.1)	2.7	(5.0)	0.1	(1.5)	19.4	(32.7)
2009	57.1	5.9	63.0	16.8	(29.4)	1.2	(21.1)	4.0	(7.0)	0.1	(2.3)	22.2	(35.2)
2010	58.3	6.1	64.4	18.9	(32.4)	1.5	(24.5)	4.7	(8.0)	0.2	(2.8)	25.2	(39.2)
2011	56.6	10.3	66.9	18.5	(32.7)	2.5	(24.4)	4.6	(8.2)	0.3	(3.2)	26.0	(38.9)
2012	56.8	10.0	66.8	19.5	(34.3)	2.4	(24.3)	5.0	(8.8)	0.4	(3.6)	27.3	(40.8)
						ACI	TUAL T						
					,	PROJ	ECTED	<u> </u>					
2013	\$57.3	\$7.5	\$64.9	\$18.4	(32.1%)	\$1.8	(24.4%)	\$6.4	(11.2%)	\$0.2	(3.2%)	\$26.9	(41.5%)
2014	57.4	7.6	65.0	18.6	(32.4)	1.9	(24.5)	6.7	(11.7)	0.2	(2.9)	27.4	(42.1)
2015 2016	57.3 57.4	7.7 7.8	65.0 65.2	18.5 18.5	(32.3) (32.3)	1.9 1.9	(24.5) (24.5)	6.7 6.7	(11.7) (11.7)	0.2 0.2	(2.9) (2.9)	27.3 27.4	(42.1) (42.1)
2017	57.4	8.0	65.7	18.7	(32.3)	2.0	(24.5)	6.8	(11.7)	0.2	(2.9)	27.4	(42.1)
2018	59.0	8.3	67.3	19.1	(32.3)	2.0	(24.5)	6.9	(11.7)	0.2	(2.9)	28.3	(42.0)
2019	60.5	8.6	69.1	19.5	(32.3)	2.1	(24.4)	7.1	(11.7)	0.2	(2.9)	29.0	(42.0)
2020	62.0	8.8	70.9	20.0	(32.3)	2.2	(24.4)	7.3	(11.7)	0.3	(2.9)	29.7	(42.0)
2021	63.6	9.1	72.7	20.5	(32.3)	2.2	(24.4)	7.5	(11.7)	0.3	(2.9)	30.5	(41.9)
2022	65.2	9.4	74.6	21.1	(32.3)	2.3	(24.4)	7.7	(11.7)	0.3	(2.9)	31.3	(41.9)
2023	67.3	9.8	77.1	21.7	(32.3)	2.4	(24.4)	7.9	(11.7)	0.3	(2.9)	32.3	(41.9)
2024	69.4	10.2	79.6	22.4	(32.3)	2.5	(24.4)	8.1	(11.7)	0.3	(2.9)	33.4	(41.9)
2025	71.7	10.6	82.2	23.1	(32.3)	2.6	(24.4)	8.4	(11.7)	0.3	(2.9)	34.4	(41.9)
2026	74.0	11.0	85.0	23.9	(32.3)	2.7	(24.4)	8.7	(11.7)	0.3	(2.9)	35.6	(41.9)
2027	76.4	11.5	87.8	24.7	(32.3)	2.8	(24.4)	9.0	(11.7)	0.3	(2.9)	36.8	(41.9)
2028	78.9	11.9	90.8	25.5	(32.3)	2.9	(24.4)	9.3	(11.7)	0.3	(2.9)	38.0	(41.8)
2029	81.4	12.4	93.8	26.3	(32.3)	3.0	(24.4)	9.6	(11.7)	0.4	(2.9)	39.3	(41.8)
2030	84.2	12.9	97.1 100.5	27.2	(32.3)	3.2	(24.4)	9.9	(11.7)	0.4	(2.9)	40.6	(41.8)
2031 2032	87.1 90.1	13.4 13.9	100.5 104.0	28.1 29.1	(32.3) (32.3)	3.3 3.4	(24.4) (24.4)	10.2 10.6	(11.7) (11.7)	0.4 0.4	(2.9) (2.9)	42.0 43.5	(41.8) (41.8)
2022	93.2	14.4	107.6	20.1	(22.2)	2.5	(24.4)	10.9		0.4		45.0	(41.9)
2033 2034	93.2 96.5	14.4 15.0	107.6	30.1 31.1	(32.3) (32.3)	3.5 3.7	(24.4) (24.4)	11.3	(11.7) (11.7)	0.4 0.4	(2.9) (2.9)	45.0 46.6	(41.8) (41.8)
2034	99.9	15.5	115.4	32.3	(32.3)	3.8	(24.4)	11.7	(11.7)	0.4	(2.9)	48.2	(41.8)
2036	103.5	16.1	119.6	33.4	(32.3)	3.9	(24.4)	12.2	(11.7)	0.5	(2.9)	50.0	(41.8)
2037	107.3	16.7	124.0	34.6	(32.3)	4.1	(24.4)	12.6	(11.7)	0.5	(2.9)	51.8	(41.8)

TABLE 11

MILITARY RETIREMENT SYSTEM

PAST AND PROJECTED UNFUNDED LIABILITY PAYMENTS ON OCTOBER 1

(\$ in billions)

Calendar Year	Original UFL	Assumption Changes	Benefit Changes	Actuarial Experience	Total
1984	\$9.500	\$0.000	\$0.000	\$0.000	\$9.500
1985	10.500	0.000	0.000	0.000	10.500
1986	11.042	0.000	0.000	-0.518	10.524
1987	11.679	0.000	-0.113	-1.281	10.285
1988	12.003	0.135	-0.112	-2.244	9.782
1989	16.300	-2.116	-0.132	-3.456	10.596
1990	17.237	-2.237	-0.140	-4.078	10.782
1991	18.228	-2.366	-0.148	-4.508	11.206
1992	22.621	-4.625	-0.171	-5.552	12.273
1993	23.865	-4.880	-0.180	-6.897	11.908
1994	25.177	-5.148	-0.189	-8.370	11.470
1995	27.746	-6.619	-0.079	-10.349	10.699
1996	33.456	-6.917	-0.042	-11.346	15.151
1997	36.227	-8.529	0.048	-12.627	15.119
1998	37.676	-8.870	0.050	-13.606	15.250
1999	39.183	-9.201	0.052	-14.732	15.302
2000	42.098	-9.984	0.335	-16.360	16.089
2001	43.571	-9.862	0.472	-17.134	17.047
2002	45.096	-10.059	0.661	-17.770	17.928
2003	46.674	-10.741	0.977	-18.721	18.189
2004	46.857	-10.959	4.627	-19.167	21.358
2005	48.614	-11.337	6.081	-20.178	23.180
2006	50.437	-11.238	6.313	-19.464	26.048
2007	66.711	-7.642	6.430	-19.312	46.187
2007	69.213	-5.076	7.026	-20.038	51.125
2009	70.379	-1.241	7.100	-17.619	58.619
2010	73.018	-1.012	7.367	-17.969	61.404
2011	75.757	0.171	7.643	-18.820	64.751
2012	78.598	0.386	7.930	-19.181	67.733
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2012	001.272	62.150	60.211	610.040	672.005
2013	\$81.373	\$3.150	\$8.211	-\$19.849	\$72.885
2014	84.221	3.260	8.498	-20.544	75.435
2014 2015	84.221 87.169	3.260 3.374	8.498 8.796	-20.544 -21.263	75.435 78.076
2014 2015 2016	84.221 87.169 90.220	3.260 3.374 3.492	8.498 8.796 9.104	-20.544 -21.263 -22.007	75.435 78.076 80.809
2014 2015	84.221 87.169	3.260 3.374	8.498 8.796	-20.544 -21.263	75.435 78.076
2014 2015 2016 2017	84.221 87.169 90.220	3.260 3.374 3.492	8.498 8.796 9.104	-20.544 -21.263 -22.007	75.435 78.076 80.809
2014 2015 2016	84.221 87.169 90.220 93.378	3.260 3.374 3.492 3.614	8.498 8.796 9.104 9.422	-20.544 -21.263 -22.007 -22.777	75.435 78.076 80.809 83.637
2014 2015 2016 2017 2018 2019	84.221 87.169 90.220 93.378 96.646 100.029	3.260 3.374 3.492 3.614 3.741 3.872	8.498 8.796 9.104 9.422 9.752 10.093	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400	75.435 78.076 80.809 83.637 86.564 89.594
2014 2015 2016 2017 2018 2019 2020	84.221 87.169 90.220 93.378 96.646 100.029 103.530	3.260 3.374 3.492 3.614 3.741 3.872 4.007	8.498 8.796 9.104 9.422 9.752 10.093 10.447	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254	75.435 78.076 80.809 83.637 86.564
2014 2015 2016 2017 2018 2019 2020 2021	84.221 87.169 90.220 93.378 96.646 100.029	3.260 3.374 3.492 3.614 3.741 3.872	8.498 8.796 9.104 9.422 9.752 10.093	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400	75.435 78.076 80.809 83.637 86.564 89.594 92.730
2014 2015 2016 2017 2018 2019 2020	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336
2014 2015 2016 2017 2018 2019 2020 2021	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291 13.756	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525 0.000	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000 0.000 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291 13.756 14.237	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525 0.000 0.000	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864 19.033 19.699
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098 5.277 5.462 5.653	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291 13.756 14.237 14.736	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525 0.000 0.000 0.000	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864 19.033 19.699 20.389
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000 0.000 0.000 0.000 0.000 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098 5.277 5.462 5.653 5.851	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291 13.756 14.237 14.736 15.252	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525 0.000 0.000 0.000 0.000 0.000	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864 19.033 19.699 20.389 21.103
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098 5.277 5.462 5.653 5.851 6.055	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291 13.756 14.237 14.736 15.252 15.785	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525 0.000 0.000 0.000 0.000 0.000 0.000 0.000	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864 19.033 19.699 20.389 21.103 21.840
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098 5.277 5.462 5.653 5.851 6.055	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291 13.756 14.237 14.736 15.252 15.785 16.338	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525 0.000 0.000 0.000 0.000 0.000 0.000 0.000	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864 19.033 19.699 20.389 21.103 21.840 22.605
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098 5.277 5.462 5.653 5.851 6.055 6.267 6.487	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291 13.756 14.237 14.736 15.252 15.785 16.338 1.082	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864 19.033 19.699 20.389 21.103 21.840 22.605 7.569
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098 5.277 5.462 5.653 5.851 6.055 6.267 6.487 6.714	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291 13.756 14.237 14.736 15.252 15.785 16.338 1.082 0.000	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864 19.033 19.699 20.389 21.103 21.840 22.605 7.569 6.714
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098 5.277 5.462 5.653 5.851 6.055	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291 13.756 14.237 14.736 15.252 15.785 16.338 1.082 0.000 0.000	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864 19.033 19.699 20.389 21.103 21.840 22.605 7.569 6.714 6.949
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098 5.277 5.462 5.653 5.851 6.055 6.267 6.487 6.714	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291 13.756 14.237 14.736 15.252 15.785 16.338 1.082 0.000	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864 19.033 19.699 20.389 21.103 21.840 22.605 7.569 6.714
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2034 2029 2030 2031 2032	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098 5.277 5.462 5.653 5.851 6.055	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291 13.756 14.237 14.736 15.252 15.785 16.338 1.082 0.000 0.000	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864 19.033 19.699 20.389 21.103 21.840 22.605 7.569 6.714 6.949
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2034 2035 2036 2037	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098 5.277 5.462 5.653 5.851 6.055 6.267 6.487 6.714 6.949 7.192	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291 13.756 14.237 14.736 15.252 15.785 16.338 1.082 0.000 0.000 0.000	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525 0.000	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864 19.033 19.699 20.389 21.103 21.840 22.605 7.569 6.714 6.949 7.192
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2031 2032 2034 2037 2033 2034 2037	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098 5.277 5.462 5.653 5.851 6.055 6.267 6.487 6.714 6.949 7.192 7.443 7.704	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291 13.756 14.237 14.736 15.252 15.785 16.338 1.082 0.000 0.000 0.000	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525 0.000	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864 19.033 19.699 20.389 21.103 21.840 22.605 7.569 6.714 6.949 7.192 7.443
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2034 2035 2036 2037 2038 2036 2037	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098 5.277 5.462 5.653 5.851 6.055 6.267 6.487 6.714 6.949 7.192 7.443 7.704 7.973	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291 13.756 14.237 14.736 15.252 15.785 16.338 1.082 0.000 0.000 0.000 0.000 0.000 0.000 0.000	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525 0.000	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864 19.033 19.699 20.389 21.103 21.840 22.605 7.569 6.714 6.949 7.192 7.443 7.704 7.973
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098 5.277 5.462 5.653 5.851 6.055 6.267 6.487 6.714 6.949 7.192 7.443 7.704 7.973 8.253	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291 13.756 14.237 14.736 15.252 15.785 16.338 1.082 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525 -0.000	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864 19.033 19.699 20.389 21.103 21.840 22.605 7.569 6.714 6.949 7.192 7.443 7.704 7.973 8.253
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2034 2035 2036 2037 2038 2036 2037	84.221 87.169 90.220 93.378 96.646 100.029 103.530 107.153 110.904 114.785 118.803 122.962 0.000	3.260 3.374 3.492 3.614 3.741 3.872 4.007 4.148 4.293 4.443 4.598 4.759 4.926 5.098 5.277 5.462 5.653 5.851 6.055 6.267 6.487 6.714 6.949 7.192 7.443 7.704 7.973	8.498 8.796 9.104 9.422 9.752 10.093 10.447 10.812 11.191 11.582 11.988 12.407 12.841 13.291 13.756 14.237 14.736 15.252 15.785 16.338 1.082 0.000 0.000 0.000 0.000 0.000 0.000 0.000	-20.544 -21.263 -22.007 -22.777 -23.575 -24.400 -25.254 -26.137 -27.052 -27.999 -28.979 -29.994 -31.043 -3.525 0.000	75.435 78.076 80.809 83.637 86.564 89.594 92.730 95.976 99.336 102.811 106.410 110.134 -13.276 14.864 19.033 19.699 20.389 21.103 21.840 22.605 7.569 6.714 6.949 7.192 7.443 7.704 7.973

TABLE 12

MILITARY RETIREMENT SYSTEM

PAST AND PROJECTED UNFUNDED LIABILITY BALANCE ON SEPTEMBER 30 (Before Payment)

(\$ in billions)

W	Original	Assumption	Benefit	Actuarial	m . •
Year	UFL	Changes	Changes	Experience	Total
1984	\$528.700	\$0.000	\$0.000	\$0.000	\$528.700
1985	553.500	0.000	0.000	-13.800	539.700
1986	578.800	0.000	-3.000	-34.200	541.600
1987	605.200	3.600	-2.998	-59.500	546.302
1988	632.700	-50.062	-3.076	-81.180	498.382
1989	664.173	-53.711	-3.172	-94.562	512.728
1990	693.224	-55.207	-3.253	-102.283	532.481
1991	723.306	-97.578	-3.331	-111.879	510.518
1992 1993	757.959 790.488	-102.353 -105.057	-3.421 -3.494	-139.327 -167.942	512.858 513.995
	024.120	120 (01	0.070	201.052	401.400
1994	824.120	-130.691	-0.968	-201.052	491.409
1995	852.872	-134.017	-0.832	-217.255	500.768
1996	880.822	-159.859	0.897	-231.424	490.436
1997	902.444	-162.883	1.000	-244.673	495.888
1998	922.521	-164.057	1.014	-259.976	499.503
1999	942.360	-169.827	6.583	-277.940	501.176
2000	959.626	-164.942	9.414	-284.168	519.931
2001	974.873	-162.970	13.075	-285.393	539.585
2002	989.509	-170.593	19.216	-293.105	545.027
	1,003.439	-172.248	94.231	-293.105 -297.115	628.308
2003	1,003.439	-1/2.248	74.231	-497.113	028.308
2004	1,016.562	-171.288	125.272	-304.415	666.132
2005	1,030.312	-165.769	128.261	-290.020	702.784
2006	1,043.054	-126.439	131.332	-282.660	765.287
2007	1,052.174	-89.221	140.140	-279.068	824.025
2008	1,044.591	-27.990	142.047	-254.441	904.207
2009	1,031.462	-19.974	142.785	-245.726	908.548
2010	1,016.346	2.415	143.487	-258.786	903.461
2011	997.569	8.208	143.947	-252.478	897.246
2012	974.816	68.621	144.141	-254.041	933.537
2012	<i>y</i> /1.010			201.011	,,,,,,,
		↑ A C T	<u> </u>		
		↓ PROJE			
2013 2014	\$945.510 911.665	\$71.988 72.624	\$143.703 142.944	-\$247.778 -240.465	\$913.423 886.767
	872.953	73.179	141.840	-232.016	855.956
2015					
2016	829.002	73.644	140.362	-222.345	820.663
2017	779.415	74.010	138.477	-211.356	780.546
2018	723.769	74.268	136.153	-198.951	735.239
2019	661.615	74.406	133.353	-185.022	735.239 684.352
					735.239
2019	661.615	74.406	133.353	-185.022	735.239 684.352
2019 2020	661.615 592.473	74.406 74.414	133.353 130.039	-185.022 -169.456	735.239 684.352 627.470
2019 2020 2021 2022	661.615 592.473 515.835 431.160	74.406 74.414 74.279 73.988	133.353 130.039 126.170 121.703	-185.022 -169.456 -152.133	735.239 684.352 627.470 564.151 493.924
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2019 2020 2021 2022 2023 2024	661.615 592.473 515.835 431.160 337.870 235.354	74.406 74.414 74.279 73.988 73.528 72.885	133.353 130.039 126.170 121.703 116.590 110.783	-185.022 -169.456 -152.133 -132.926 -111.697 -88.302	735.239 684.352 627.470 564.151 493.924 416.291 330.721
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2019 2020 2021 2022 2023 2024	661.615 592.473 515.835 431.160 337.870 235.354	74.406 74.414 74.279 73.988 73.528 72.885	133.353 130.039 126.170 121.703 116.590 110.783	-185.022 -169.456 -152.133 -132.926 -111.697 -88.302	735.239 684.352 627.470 564.151 493.924 416.291 330.721
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The Military Retirement Fund Transaction Process

The description of deficit, debt, and funding impact contained in this section are applicable under the current practices of the federal government regarding budget accounting and tax policy. These practices do not provide for increases in taxes to fund the Military Retirement System beyond what is required to pay benefits to retirees and survivors each year, but do result in increases in the national debt.

A trust fund was created inside the Unified Budget of the federal government for the monies of the Military Retirement System. This fund has three sources of income: (1) normal cost payments made by DoD, (2) unfunded liability and Concurrent Receipt normal cost payments made by Treasury, and (3) interest earnings on investments in government securities made by Treasury and the payment of the par values of these securities at maturity. All three of these items are intragovernmental transfers consisting of debits from one government account and credits to another.

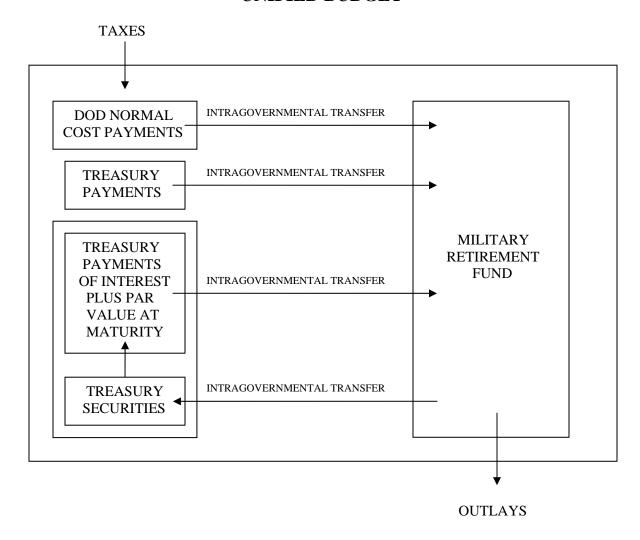
The Fund has two types of payouts: (1) payments to retirees and survivors of retirees and (2) purchases of U.S. Treasury securities. The purchase of a Treasury security is also an intragovernmental transfer, while a payment to a retiree or a survivor is not.

Figure 2 on the following page depicts this process. The only transactions in a particular year that directly affect the deficit of the Unified Budget are those that pass in or out of the government, such as tax collections ("in") and retiree or survivor payments ("out"). The intragovernmental transfers are debits and credits within the federal budget, with no direct effect on the deficit. The following examples illustrate the process:

- If DoD debits \$25 billion in normal cost payments and the Fund credits the \$25 billion, the net direct federal budget deficit effect is zero.
- If the Fund purchases \$60 billion in securities (debit) and the Treasury sells \$60 billion in securities (credit), the net direct federal budget deficit effect is zero.
- If the Treasury pays \$20 billion interest (debit) and the Fund earns \$20 billion interest (credit), the net direct federal budget deficit effect is zero.
- Disregarding all other government programs, if the government collects \$45 billion in tax revenues (credit) and pays \$50 billion to retirees (debit), the net direct federal budget deficit effect is \$5 billion.

FIGURE 2

MILITARY RETIREMENT SYSTEM UNIFIED BUDGET



All of the intragovernmental transfers in Figure 2 will always generate both a credit and an associated equal debit within the Unified Budget. Consequently, under current federal budget accounting practices, contributions to the Fund beyond what are required to pay benefits to retirees and survivors that year have no impact on the total federal deficit. Just as in the pay-as-you-go method, the only transactions that directly affect the deficit in the retirement system accounting process are payments to retirees and survivors (i.e. outlays).

On the other hand, the purchase of securities by the Fund does increase the national debt, specifically the portion of the debt held by the government. The portion held by the public will not change. However, the total debt will increase and this requires an increase in the statutory borrowing authority (debt ceiling).

Suppose that in the year 2012 the amount needed to pay retirees was \$50 billion and the Military Retirement Fund had grown to \$425 billion. The following transactions would take place:

- Fund cashes in \$50 billion in securities (credit).
- Treasury pays \$50 billion to Fund (debit).
- Net federal surplus zero.

Since no budget surplus can be derived from using fund money, the government still has a need for \$50 billion to pay retirees—the same need it would have under the pay-as-you-go system. Accordingly, the Fund cannot transfer liabilities from one tax year to another.

However, funding does have an effect on the DoD budget. With the normal cost payments (except for Concurrent Receipt) in the DoD budget, policymakers now consider the impact on future retirement costs when they make manpower decisions, and this could have a significant impact on future federal budgets. For example, if a decision were made today to double the size of the active duty and reserve forces, the DoD budget would automatically have an immediate increase in retirement obligations. Under the pay-as-you-go method, the retirement expenses would not necessarily be considered in the initial decision since they would not show up for 20 years.

In their prior quadrennial reports to the President and Congress, the DoD Board has noted that the establishment of the Fund does not represent actual advance funding. Real advance funding could be achieved by investing the assets outside the Unified Budget, for example, in stocks or corporate bonds, or in bonds of state and local municipalities or quasifederal government agencies (like Fannie Mae or Freddie Mac). Instead, the accrual accounting procedure now in place is essentially an internal cost accounting system. While the nation has not really set aside money to pay the benefits of those who have served in uniform, the Fund can be viewed as earmarking future tax receipts for the benefit of military retirees. As such, the existence of the Fund promotes a measure of "psychological security" for military members.

Two common *misconceptions* about the Fund are:

- 1) The Fund represents government tax receipts that have been accumulated in the past. Actually, the Fund represents future tax receipts that will be allocated to pay principal and interest on government bonds being held by the Fund.
- 2) The actuarial soundness of the Fund can be measured by prospective short-term (or medium-term) cash flows. Rather, the entire present value of the liabilities must be compared to the sum of the Fund and prospective contributions. A year-by-year projection of cash flow is also needed to measure the Fund's ability to pay benefits every year. Comparing the past and projected dollars as a proportion of payroll (as shown in Table 9) is another good measure of sustainability.

The current financing procedure, although carried out by allocating no more tax dollars than needed to pay benefits to military retirees as they come due, has nonetheless contributed to a more accurate allocation of resources within the defense budget and to formal quantification of the government's obligation to pay retirement benefits to military members and eligible survivors. This type of required quantification and allocation represents strong fiscal responsibility.

Additionally, the costs of the current retirement system are actuarially based and reasonable given the plan provisions; thus, the system is considered sustainable. However, all elements of compensation should be considered and compared when examining sustainability of the respective defense and federal budgets.

The fact that costs are fully recognized in advance provides greater benefit security over the long term. Also, when there is a Fund, the system is not as dependent on obtaining the necessary appropriation from Congress each year in order to pay benefits for that year. This can provide additional benefit security in the short run.

APPENDIX A

THE MILITARY RETIREMENT SYSTEM: BENEFITS

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THE MILITARY RETIREMENT SYSTEM: BENEFITS

As of September 30, 2012

Summary

The Military Retirement System applies to members of the Army, Navy, Marine Corps, and Air Force. However, most of the provisions also apply to retirement systems for members of the Coast Guard (administered by the Department of Homeland Security), officers of the Public Health Service (administered by the Department of Health and Human Services), and officers of the National Oceanic and Atmospheric Administration (administered by the Department of Commerce). Only those members in plans administered by the Department of Defense (DoD) are included in this report.

The system is a funded, noncontributory defined benefit plan that includes nondisability retired pay, disability retired pay, retired pay for reserve service, survivor annuity programs, and special compensation programs for certain disabled retirees. The Service Secretaries may approve immediate nondisability retired pay at any age with credit of at least 20 years of active duty service. Reserve retirees generally must be at least 60 years old and have at least 20 qualifying years of service before retired pay commences, with certain exceptions. Public Law (P.L.) 110-181 allows a 90-day reduction in the reserve retirement age from age 60 for every 3 months served within a contingency operation, for service after enactment (not below age 50). There is no vesting of benefits before retirement.

There are distinct nondisability benefit formulas related to three populations within the Military Retirement System. A summary is displayed in Tables B-1 and B-2 (see Appendix B).

- 1) *Final Pay*: Military personnel who first became members of a uniformed service <u>before September 8, 1980</u>, have retired pay equal to final basic pay times a multiplier. The multiplier is equal to 2.5 percent times years of service.
- 2) *High-3* (*HI-3*): If the retiree first became a member of a uniformed service on or after September 8, 1980, the average of the highest 36 months of basic pay is used instead of final basic pay.
- 3) Career Status Bonus (CSB)/Redux: Members who first became a member of a uniformed service on or after August 1, 1986, may choose between a High-3 and CSB/Redux retirement. Those who elect CSB/Redux receive the Career Status Bonus outlined below, also have retired pay computed on a base of the average of their highest 36 months of basic pay, but are subject to a multiplier penalty if they retire with less than 30 years of service; however, at age 62, their retired pay is recomputed without the penalty. Members make their election during the fifteenth year of service and may receive the Career Status Bonus of \$30,000 in either a lump-sum or installments. Those who elect CSB/Redux generally must remain continuously on active duty until they complete 20 years of active duty service or forfeit a portion of the \$30,000 (exceptions include death and disability retirement).

Retired pay and survivor annuity benefits are automatically adjusted annually to protect the purchasing power of initial retired pay. The benefits associated with members first entering the armed services before August 1, 1986, or those entering on or after that date who do not take the CSB, have their benefits adjusted annually by the percentage increase in the average Consumer Price Index (CPI). For member entering on or after January 1, 2014, the benefit adjustment provisions are different. Refer to the section "Cost-of-Living Increases" in this appendix for more information on the CPI. Receiving a benefit adjustment based on the percentage increase in the CPI is commonly referred to as full CPI protection. Benefits associated with members entering on or after August 1, 1986, who elect the \$30,000 CSB bonus payment are annually increased by the percentage change in the CPI minus 1 percent (except when the change in the CPI is less than or equal to 1 percent), but at the military member's age 62, or when the member would have been age 62 for a survivor annuity, the benefits are restored to the amount that would have been payable had full CPI protection been in effect. This restoral is in combination with that described in the previous description. However, after this restoral, partial indexing (CPI minus 1 percent) continues for future retired pay and survivor annuity payments.

The FY 2011 National Defense Authorization Act (NDAA) (P.L. 111-383) required "amounts of retired pay and retainer pay due a retired member of the uniformed services shall be paid on the first day of each month beginning after the month in which the right to such pay accrues." This means that when the first day of the month falls on a non-business day (weekend/holiday), the pay must be paid the preceding business day. This legislation did not apply to survivor annuitant pay and Combat-Related Special Compensation. This results in retirees receiving 13 payments in some fiscal years and 11 payments in others, with 12 payments occurring in a typical fiscal year. Note that annual fiscal year amounts shown throughout this report represent 12 monthly payments without regard to the 2011 NDAA. Comments regarding this law are also noted in the Table 9 footnotes in the main text.

Nondisability Retirement From Active Service

The current system allows voluntary retirement upon completion of at least 20 years of service at any age, subject to Service Secretary approval. The military retiree receives immediate retired pay calculated as (base pay) times (a multiplier). Base pay is equal to terminal basic pay if the retiree first became a member of a uniformed service before September 8, 1980. It is equal to the average of the highest 36 months of basic pay for all other members. The multiplier is equal to (2.5 percent) times (years of service, rounded down to the nearest month). Members first entering a uniformed service on or after August 1, 1986, who elect CSB/Redux and who retire with less than 30 years of service receive a temporary penalty until age 62. The penalty reduces the multiplier by one percentage point for each full year of service under 30. For example, the multiplier for a 20-year retiree would be 40 percent (50 percent minus 10 percent, where 50 percent equals 20 years times 2.5 percent). At age 62, the retired pay is recomputed with the penalty removed.

As of September 2012, 1.47 million nondisability retirees from active duty and full-time reserves were receiving an annualized retired pay entitlement totaling \$42.44 billion. Included in this number are a reported 34,800 nondisabled retirees who elected CSB/Redux.

Disability Retirement

A military member in an active component or on active duty for more than 30 days who is found unfit for duty is entitled to disability retired pay if the disability:

- (1) is incurred while entitled to basic pay;
- (2) is neither the result of the member's intentional misconduct nor willful neglect;
- (3) was not incurred during a period of unauthorized absence; and
- (4) either:
 - (a) the member has at least 20 years of service; or
 - (b) the disability is rated at least 30 percent under the Department of Veterans Affairs Schedule of Rating Disabilities (VASRD) and one of the following conditions is met:
 - (i) the disability was not noted at the time of the member's entrance on active duty (unless clear and unmistakable evidence demonstrates that the disability existed before the member's entrance on active duty and was not aggravated by active military service);
 - (ii) the disability is the proximate result of performing active duty;
 - (iii) the disability incurred in the line of duty in time of war or national emergency; or
 - (iv) the disability was incurred in the line of duty after September 14, 1978.

Under certain conditions generally similar to the above, members on active duty for 30 days or less or on inactive-duty training are also entitled to disability retired pay for disabilities incurred or aggravated in the line of duty.

In disability retirement, the member may elect to receive retired pay equal to either:

- (1) the accrued nondisability retirement benefit regardless of eligibility to retire; or
- (2) base pay multiplied by the rated percent of disability.

Except for members with more than 30 years of service, the benefit cannot be more than 75 percent of base pay. Only the excess of (1) over (2) is subject to federal income taxes if the member had service on or before September 24, 1975. If not a member of a uniformed service on September 24, 1975, disability retired pay is tax-exempt only for those disabilities that are combat or hazardous duty related. Base pay is equal to final basic pay if the retiree first became a member of a uniformed service before September 8, 1980; otherwise, base pay is equal to the average of the highest 36 months of basic pay.

Members whose disabilities may not be permanent are placed on a temporary-disability retired list and receive disability retirement pay just as if they were permanently disabled. However, they must be physically examined every 18 months for any change in disability. A final determination must be made within five years. The temporary disability pay is calculated like the permanent disability retired pay, except that it can be no less than 50 percent of base pay.

Members who elected the CSB/Redux retirement option, but who retire for disability, are not subject to the reduced CSB/Redux retired pay multiplier and are awarded retired pay based on the disability retired rules outlined above. However, such members continue to be subject to the reduced CPI (with age 62 restoral) as Career Status Bonus recipients.

Recent Congressional action has been directed to the care of disabled retirees and veterans. P.L. 110-181 established the Physical Disability Board of Review (PDBR). The PDBR has the authority to reexamine the files of veterans medically separated with ratings under 30 percent between September 11, 2001, and December 31, 2009, and potentially offer disability retirements. The PDBR is expected to review files for approximately 77,000 veterans.

As of September 2012, 96,000 disability retirees were receiving an annualized retired pay entitlement totaling \$1.38 billion. Included in this number are a reported 925 disability retirees who elected CSB/Redux.

Reserve Retirement

Members of the reserves may retire after 20 qualifying years of creditable service. However, reserve retired pay is not payable until age 60 unless the member performs certain types of active duty or active service subsequent to the enactment of NDAA 2008 (P.L. 110-181). In these cases, retirement age is reduced below 60 by three months for every 90 days of service. However, the age cannot be reduced below 50, and eligibility for subsidized retiree health benefits remains at age 60 even if the eligibility age for retired pay is reduced.

Retired pay is computed as base pay times 2.5 percent times years of service. If the reservist was first a member of a uniformed service before September 8, 1980, base pay is defined as the active duty basic pay in effect for the retiree's grade and years of service at the time that retired pay begins. If the reservist first became a member of the armed services on or after September 8, 1980, base pay is the average basic pay for the member's grade in the highest 36 months computed as if he/she was on active duty for the entire period preceding age 60. The years of service are determined by using a point system, where 360 points convert to a year of service. Typically, one point is awarded for one day of active duty service (e.g. active duty training) or one inactive duty training (IDT) drill attendance. Reservists often perform two IDT periods in one day thereby receiving two retirement points per day. In addition, 15 points are awarded for completion of one year's membership in a reserve component. A creditable year of service is one in which the member earned at least 50 points. A member generally cannot retire with less than 20 creditable years, although points earned in non-creditable years are used in the retirement calculation. Beginning with years of service that include October 30, 2007, IDT points are limited in any year to no more than 130. Lesser limitations have applied in the past.

As of September 2012, 367,000 reserve retirees were receiving an annualized retired pay entitlement totaling \$5.47 billion.

Survivor Benefits

Legislation originating in 1953 provided optional survivor benefits. It was later referred to as the Retired Servicemen's Family Protection Plan (RSFPP). The plan proved to be expensive to the participants and inadequate since the survivor annuities were never adjusted for inflation and could not be more than 50 percent of retired pay. RSFPP was designed to be self-supporting

in the sense that the present value of the reductions to retired pay equaled the present value of the survivor annuities.

On September 21, 1972, RSFPP was replaced by the Survivor Benefit Plan (SBP) for new retirees. RSFPP still covers those servicemen retired before 1972 who did not convert to the new plan or who retained RSFPP in conjunction with SBP. RSFPP continues to pay survivor annuities.

Retired pay is reduced, before taxes, for the member's cost of SBP. Total SBP costs are shared by the government and the retiree, so the reductions in retired pay are only a portion of the total cost of the SBP program.

The SBP survivor annuity is 55 percent of the member's base amount. The base amount is elected by the member, but cannot be less than \$300 or more than the member's full gross monthly retired pay, with one exception. If the member elects CSB/Redux and is subject to a penalty for service under 30 years in the calculation of retired pay, the maximum base amount is equal to the full retired pay without the penalty. However, the annuity for a survivor of a CSB/Redux retiree is subject to the reduced CPI.

When the plan started in 1972, benefits for those 62 and older were reduced by the amount of Social Security for which the survivor would be eligible based on the member's military pay. In 1985, that reduction formula was changed so all annuitants 62 and over received a reduced flat rate of 35 percent of the member's base. Beginning October 1, 2005, the age 62 reduced rate was phased out in 5 percent increments. On April 1, 2008, the survivor benefit reduction at age 62 was fully eliminated and the rate of 55 percent of the member's elected base became standard for all survivors, regardless of age.

During FY 1987, SBP's treatment of survivor remarriages changed. Prior to the change, a surviving spouse remarrying before age 60 had the survivor annuity suspended. The change lowered the age to 55. If the remarriage ends in divorce or death, the annuity is reinstated.

An active or reserve member who died in the line of duty on or after September 10, 2001, is generally assumed to have retired with full disability on the day they died and to have elected full SBP coverage for spouses, former spouses, and/or children. Insurable interest elections may be applicable in some cases. These benefits have been improved and expanded over the history of the program.

The surviving spouse (or dependent children, if there is no surviving spouse or if the spouse subsequently dies) of a reservist who dies in the line of duty while performing IDT service is entitled to an SBP annuity based on the reservist's years of service.

SBP annuities generally are reduced by any VA survivor benefits (Dependency and Indemnity Compensation (DIC)), and all premiums relating to the reductions are returned to the survivor. The FY 2008 NDAA enacted, and the Family Smoking Prevention and Tobacco Control Act of 2009 (P.L. 111-31) revised, a temporary Special Survivor Indemnity Allowance (SSIA) that pays a monthly amount (\$50 in FY 2009 grading up to \$310 in FY 2017) to survivors with a DIC offset. The authority for the allowance ends in 2017.

The relationship between SBP and DIC has been the subject of litigation in the U.S. Court of Appeals. As a result of the "Sharp Case" ruling, the SBP benefit of survivors with entitlement to both DIC and SBP who remarry after age 57 is not reduced by DIC benefits received.

As with retired pay, SBP annuities and premiums are annually increased with cost-of-living adjustments (COLAs). These COLAs are either full or partial CPI increases, depending on the benefit formula covering the member. If a member who elected the CSB/Redux retirement option dies before age 62, the survivor is subject to partial COLAs and his/her annuity is increased on what would have been the member's 62nd birthday to the amount that would have been payable had full COLAs been in effect. Partial COLAs continue annually thereafter.

For reserve retirees, the retired pay reductions applicable under SBP apply for survivor coverage after a reservist turns 60 (or earlier if they have certain active service) and begins to receive retired pay. Reserve Component Survivor Benefit Program (RCSBP) provides annuities to survivors of reservists who die before age 60 (or earlier if they have certain active service), provided they attained 20 years of qualified service and elected to participate in the program (or were within their 90-day election window after receiving their "20-year letter"). However, if the death occurs either on active or inactive duty as described above, the survivor receives an annuity under SBP. The added cost of RCSBP coverage is borne completely by reservists through deductions from future retired pay.

Beginning October 1, 2008, a paid-up provision eliminated the reduction in retired pay for premiums for SBP and RSFPP coverage for participants age 70 or older whose retired pay has been reduced for at least 360 months.

On June 26, 2013, the U.S. Supreme Court ruled to overturn the Defense of Marriage Act (DOMA). While not a change to Title 10 U.S. military benefits per se, the ruling has the effect of allowing legal spouses of same-sex marriages to be eligible to receive SBP benefits.

As of September 2012, 293,000 survivors of military members were receiving an annualized annuity entitlement totaling \$3.72 billion.

Temporary Early Retirement Authority (TERA)

The FY 1993 NDAA (P.L. 102-484) granted temporary authority for the military services to offer early retirements to members with more than 15 but less than 20 years of service. The retired pay was calculated in the usual way except that there was a reduction of 1 percent for every year below 20 years of service. Part or all of this reduction can be restored at age 62 if the retired member works in a qualified public service job during the period from the date of retirement to the date on which the retiree would have completed 20 years of service. Unlike members who leave military service before 20 years with voluntary separation incentives or special separation benefits, these early retirees are generally treated like regular military retirees for the purposes of other retirement benefits. This authority originally expired on September 1, 2002.

The FY 2012 NDAA (P.L. 112-81) reinstated TERA, from January 2012 through December 2018, but without the qualified public service provision.

As of September 2012, 58,000 TERA retirees were receiving an annualized retired pay entitlement totaling \$950 million.

Cost-of-Living Increases

All nondisability retirement, disability retirement, and most survivor annuities are adjusted annually for inflation. Cost-of-living adjustments (COLAs) are automatically scheduled to occur every 12 months, on December 1st, to be reflected in checks issued at the beginning of January.

The "full" COLA effective December 1 is computed by calculating the percentage increase in the average CPI of the third quarter of the prior calendar year to the third quarter of the current calendar year. The increase is based on the Urban Wage Earner and Clerical Worker Consumer Price Index (CPI-W) and is rounded to the nearest tenth of one percent. Recent retirees/annuitants receive a prorated COLA depending on their date of retirement/eligibility.

The benefits of retirees (and most survivors) are increased annually with the full COLA, except for those first entering a uniformed service on or after August 1, 1986, who elect CSB/Redux. Their benefits are increased annually with a partial COLA equal to the full COLA minus 1 percent (except if the full COLA is less than or equal to 1 percent). A one-time restoral is given to a partial COLA recipient on the first day of the month after the retiree's 62nd birthday. At this time, retired pay (or the survivor benefit if the retiree is deceased) is increased to the amount that would have been payable had full COLAs been in effect. Annual partial COLAs continue after this restoral.

The Bipartisan Budget Act of 2013 (Public Law 113-67) lowers the COLA by one percent (e.g., 2% instead of 3%) for working-age (pre-age 62), non-disabled military retirees entering on or after January 1, 2014. Full COLAs are restored at age 62 prospectively. Subsequent legislation exempted disabled retirees and their survivors, as well as survivors of members who die on active duty from the COLA reduction. Members who enter on or after January 1, 2014 who elect CSB/Redux are subject to the COLA provisions described in the previous paragraph.

Relationship with Veterans Administration Benefits

The Department of Veterans Affairs (VA) provides compensation for Service-connected and certain non-Service-connected disabilities. These VA benefits can be in place of or in combination with DoD retired pay, but through December 31, 2003, were not fully additive. Since VA benefits are exempt from federal income taxes, it is often to the advantage of a member to elect them. Through 2003, retired pay earned from DoD for military service was offset by any payment received from VA for a VA-rated disability. Beginning with the FY 2004 NDAA (P.L. 108-136), a series of legislation has been enacted that increasingly reduces or

eliminates the offset to military retired pay due to receipt of VA disability compensation. Members with a combined VA disability rating of 50% or greater who have at least 20 years of service will have their offset eliminated under the Concurrent Retirement and Disability Pay (CRDP) program. The CRDP program has a ten-year phase-in schedule that began in 2004; however, the offset is already fully eliminated for members whose disabilities are rated total or make the individual unemployable. Members whose disability meets certain combat-related criteria can elect to receive payments against the offset under the Combat Related Special Compensation (CRSC) program. Under CRSC, members are not subject to a phase-in schedule, are not required to have at least 20 years of service (per P.L. 110-181), and are not required to have at least a 50% VA disability rating. Although CRSC amounts are calculated based on retired pay lost due to offset and are paid from the Military Retirement Fund, CRSC is not technically considered retired pay. CRSC payments are tax exempt. A member may not participate in both the CRDP and CRSC programs simultaneously, but may change from one to the other during an annual "open season."

VA benefits also offset (or reduce) survivor pay through the Dependency and Indemnity Compensation (DIC) program. DIC benefits are payable to survivors of veterans who die from Service-connected causes. Although SBP annuities are generally reduced by the amount of any DIC benefit, all SBP premiums relating to the reduction in benefits are returned to the survivor. The FY 2008 NDAA enacted, and the Family Smoking Prevention and Tobacco Control Act of 2009 (P.L. 111-31) revised, a temporary Special Survivor Indemnity Allowance (SSIA) that pays a monthly amount (\$50 in FY 2009 grading up to \$310 in FY 2017) to survivors with a DIC offset; the authority for the allowance ends in 2017. As a result of the "Sharp Case" ruling, the SBP benefit of widows with entitlement to both DIC and SBP who remarry after age 57 is not reduced by DIC benefits received.

As of September 2012, there were 356,000 CRDP members and 78,000 CRSC members. These members were paid an additional monthly amount of \$511 million and \$79 million, respectively. As of September 2012, there were 59,000 survivors receiving annualized SSIA benefits of \$57 million.

Interrelationship with Other Federal Service

For military retirement purposes, no credit is given for other federal service, except where cross-service transferability is allowed. Military service is generally creditable toward the federal civilian retirement systems if military retired pay is waived. However, a deposit (equal to a percentage of post-1956 basic pay) must be made to the Civil Service Retirement and Disability Fund in order to receive credit. Military service is not generally creditable under both systems (but is for reservists and certain disability retirees). Military retirees may qualify separately for Civil Service retirement and receive concurrent pay from both systems.

Relationship of Retired Pay to Military Compensation

Basic pay is the only element of military compensation upon which non-disability retired pay is based and entitlement is determined. Basic pay is the principal element of military compensation that all members receive, but it is not representative of salary levels in the public and private sectors for comparative purposes. Reasonable comparisons can be made to regular military compensation (RMC). RMC is the sum of (1) basic pay, (2) the housing allowance, which varies by grade, location, and dependency status, (3) the subsistence allowance and, (4) the tax advantages accruing to allowances because they are not subject to federal income tax. Basic pay represents approximately 69 percent of RMC for all retirement eligible members. For the 20-year retiree, basic pay is approximately 67 percent of RMC. Consequently, a member retired with 20-years of service and entitled to 50 percent of basic pay, only receives 34 percent of RMC. For a 30-year retiree, basic pay is approximately 72 percent of RMC and such member would be entitled to 75 percent of basic pay or 54 percent of RMC. P.L. 109-364 allows certain members, retired since January 1, 2007, with greater than 30 years of service to retire with entitlements exceeding 75 percent of basic pay. These relationships should be considered when military retired pay is compared to compensation under other retirement systems.

Social Security Benefits

Many military members and their families receive monthly benefits indexed to the CPI from Social Security. As full participants in the Social Security system, military personnel are in general entitled to the same benefits and are subject to the same eligibility criteria and rules as other employees. Details concerning the benefits are covered in other publications.

Beginning in 1946, Congress enacted a series of amendments to the Social Security Act that extended some benefits to military personnel and their survivors. These "gratuitous" benefits were reimbursed out of the general fund of the U.S. Treasury. The Servicemen's and Veterans' Survivor Benefits Act brought members of the military into the contributory Social Security system effective January 1, 1957.

For the Old Age, Survivors, and Disability Insurance (OASDI) program, military members must contribute the employee portion of the OASDI payroll tax, with the federal government contributing the matching employer contribution. Only the basic pay of a military member constitutes wages for Social Security purposes. One feature of OASDI unique to military personnel grants a noncontributory wage credit of (i) \$300 for each quarter between 1956 and 1978 in which such personnel received military wages and (ii) up to \$1,200 per year after 1977 (\$100 of credit for each \$300 of wages up to a maximum credit of \$1,200). The purpose of this credit is to take into account elements of compensation such as quarters and subsistence not included in wages for Social Security benefit calculation purposes. Under the 1983 Social Security amendments, the cost of the additional benefits resulting from the noncontributory wage credits for past service was met by a lump sum payment from general revenues, while the cost for future service will be met by payment of combined employeremployee tax on such credits as the service occurs. Payments for these wage credits ended in 2002.

Members of the military are also required to pay the Hospital Insurance (HI) payroll tax, with the federal government contributing the matching employer contribution. Medicare eligibility occurs at age 65, or earlier if the employee is disabled.

Performance Measures

During FY 2012, the Fund made monthly disbursements to approximately 2.2 million retirees and survivors.

There are many ways to measure the funding progress and performance of a pension plan. Table A-1 depicts a few common measures, specifically 1) Percent Funded, 2) Asset-to-Annuitant Liability Ratio, and 3) Effective Fund Yield. The table footnotes show the associated derivation of each performance measure.

TABLE A-1 MILITARY RETIREMENT FUND PERFORMANCE MEASURES (\$ in billions)

End of Fiscal Year	Accrued Liability (1)	Assets (2)	Annuitant Liability On Roll (3)	Unfunded Accrued Liability (4)	Percent Funded (5)	Asset-to-Annuitant Liability Ratio (6)	Fund Effective Yield (7)
1984	\$528.7	\$0.0	\$310.0	\$528.7	0.0%		
1985	551.5	11.8	322.7	539.7	2.1	3.7%	14.3%
1986	566.2	24.6	321.4	541.6	4.3	7.7	11.8
1987	585.2	38.9	326.3	546.3	6.6	11.9	11.0
1988	551.8	53.4	329.4	498.4	9.7	16.2	10.5
1989	580.3	67.6	345.8	512.7	11.6	19.5	10.1
1990	612.9	80.4	367.5	532.5	13.1	21.9	9.9
1991	604.2	93.7	372.9	510.5	15.5	25.1	9.8
1992	619.0	106.1	392.7	512.9	17.1	27.0	9.5
1993	629.9	115.9	409.3	514.0	18.4	28.3	9.1
1994	615.6	124.2	409.9	491.4	20.2	30.3	8.7
1995	631.8	131.0	431.3	500.8	20.7	30.4	8.6
1996	625.8	135.3	432.2	490.5	21.6	31.3	8.6
1997	639.2	143.3	444.9	495.9	22.4	32.2	8.5
1998	649.4	149.9	452.9	499.5	23.1	33.1	8.4
1999	657.2	156.0	442.7	501.2	23.7	35.2	8.1
2000	682.6	162.7	459.8	519.9	23.8	35.4	8.0
2001	708.8	169.2	487.3	539.6	23.9	34.7	8.0
2002	721.6	176.5	467.2	545.1	24.5	37.8	7.2
2003	810.9	182.6	519.8	628.3	22.5	35.1	5.5
2004	854.1	188.0	556.3	666.1	22.0	33.8	5.4
2005	900.6	197.9	592.2	702.7	22.0	33.4	5.5
2006	973.7	208.4	636.3	765.3	21.4	32.8	5.9
2007	1,042.3	218.2	677.3	824.1	20.9	32.2	4.7
2008	1,157.3	253.1	750.6	904.2	21.9	33.7	6.2
2009	1,186.9	278.4	751.8	908.5	23.5	37.0	1.0
2010	1,225.2	321.7	768.0	903.5	26.3	41.9	3.2
2011	1,273.3	376.1	807.3	897.2	29.5	46.6	4.9
2012	1,361.5	428.0	854.6	933.5	31.4	50.1	2.9

- NOTES:

 (1) From Table 7, Item 3 in main text.
 (2) From Table 7, Item 4 in main text.
 (3) From Table 7, Item 1.a in main text.
 (4) = (1) (2)
 (5) = $(2) / (1) \times 100$ (6) = $(2) / (3) \times 100$ (7) Discussed in Appendix D.

APPENDIX B

THE MILITARY RETIREMENT SYSTEM: HISTORY

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THE MILITARY RETIREMENT SYSTEM: HISTORY¹

The history of the Uniformed Services Military Retirement System in the United States extends back to the early days of the country. The history detailed in this appendix provides the user with a useful, yet robust, context when evaluating the status of the current system. The extensive legislative history has been an interplay of the separate retired pay plan motivations. When available, the Public Law (P.L.) reference is provided. Over the course of its history, the Military Retirement System has been scrutinized by numerous committees, commissions, and groups. Since the end of World War II, a number of military compensation studies have been conducted under the general sponsorship of the Department of Defense, the President, and Congress, including: Hook, Strauss, Cordiner, Gorham/Randall, Quadrennial Review of Military Compensation, Gates, Military Compensation and Retirement Modernization Commission, etc. These studies continue to the present day. Much discussion typically occurs as a result of the study findings. It should be noted that while there may be superficial resemblance between the Military Retirement System and other retirement systems, there exist substantial differences, including that of the federal civil servants. Primarily, retired members are subject to active duty recall.

History of Retired Pay – Active Duty and Disability

The legislative history of the nondisability (regular service) and disability retired pay have been a collaborative effort of lawmakers. The two programs are highly correlated given the possible end states of a regular service career. Before discussing the regular service retired pay history, below are the motivations driving the two distinct retirement types:

1) The principal motivations guiding the <u>nondisability</u> retired pay evolution of the Military Retirement System have been to ensure that (1) continued service in the armed forces is competitive with the alternatives; (2) promotion opportunities are kept open for young and able members; (3) some measure of economic security is made available to members after retirement from a military career; (4) a pool of experienced personnel is available for recall in times of war or national emergency. Much of the history to be discussed focuses on officers. The legislative history for enlisted personnel is much shorter. The objectives can be achieved for the enlisted force by an administrative policy of "judicious non-acceptance of reenlistments."

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Much of the information in this appendix can be found in *Military Compensation Background Papers*, Seventh Edition (November 2011), Department of Defense – Under Secretary of Defense for Personnel and Readiness. For a more in-depth discussion of the early history of military pensions, refer to *History of Military Pension Legislation in the United States*, William H. Glasson, New York, N.Y. 1900, Digitized by Google.

2) The guiding motivation behind <u>disability</u> retired pay is to authorize continuing payments to members separated from active service due to physical disability causes in service for their country. Members should not be left to cope with the effects of these disabilities on their own. A measure of economic security will be provided for duties exposing members to wartime hazards and career military service. Early reports showed rationale for separation other than physical disability as well: "An officer may possess a strong mind and a robust frame, yet, if his moral perception of right or wrong be so blunted and debased as to render him unreliable, he could hardly be ranked as the capable officer."

Provisions for the maintenance of disabled military members date to colonial days. Not surprisingly, the English pension law is a precursor to the American colonial pension legislation. The pilgrims at Plymouth provided in 1636 that any man sent forth as a soldier and returned maimed should be maintained by the colony during his life. In order to obtain enlistments in military expeditions against the Indians the colonies promised to care for those who were disabled and had no means of earning a livelihood as well as providing aid for the indigent families of those fallen in conflict. Some of these precedents were continued in the first national pension law of August 26, 1776, which promised half pay for life, or during disability, to the disabled. After the Revolutionary War, a full disability pension for a noncommissioned officer or private soldier was fixed at five dollars per month, with commissioned officers being paid at one-half of their monthly pay. Initially, the States administered disability pensions. However, in 1790, the Secretary of War became the principal pension administrator. In 1805, disability pensions were extended to those who received wounds in military service who subsequently became disabled.

Pensions based on service by itself were more controversial. Payments of half pay for life had been promised in 1780 by Congress for officers who served to the end of the War. However, the resulting claims were initially settled for less than full value and with a considerable amount of controversy. With the number of veterans declining and the treasury increasing, Congress became more generous. In 1818, an act was passed providing relief to Revolutionary War veterans in need. By 1832, it became full pay for life, regardless of need. In 1836, widows were included. This same pattern was followed for Service pensions for subsequent wars, with each war treated separately.

In 1849, the Bureau of Pensions was transferred to the newly established Department of the Interior, where it was to remain until the Veterans Administration (VA) was created in 1930. In 1855, authorization was given for involuntary separation with partial pay of Navy officers adjudged incapable, but not necessarily disabled. The outbreak of the Civil War brought further changes when it became necessary to retire older officers no longer fit for field duty. The vehicle was the act of August 3, 1861, the first major nondisability retirement act, which provided for the voluntary retirement of regular officers of all branches of Service after 40 years of duty, at the discretion of the President. Subsequent acts in 1861 and 1862 provided for involuntary retirements for age or years of service.

The 1861 act also established a military disability retirement system that covered the regular officers of all branches of Service. Army and Marine Corps officers were to be paid an amount equal to their "pay proper" plus four rations. Navy officers were paid slightly more. The act of March 2, 1867, authorized disability retirement for enlisted personnel of the Navy and Marine Corps.

Congress established two enduring retirement principles while reducing forces to a peacetime basis in 1870. The first permitted voluntary retirement of officers after 30 years of service upon approval by the President, and the second eliminated the ration commutation by fixing retired pay at 75 percent of the officer's pay. The 75 percent applied to Army and Marine Corps officers, both disabled and nondisabled, and was extended to the Navy in 1873.

In 1885, the first nondisability retirement law for Army and Marine Corps enlistees was enacted. Paralleling the officer retirement laws, it provided for voluntary retirement at 30 years of service with 75 percent of pay of the grade in which retired, plus an allowance in lieu of fuel, quarters, and food. The law was extended to the Navy in 1899.

By the middle of World War I, the limit on the number of officers who could be placed on the retired list was causing stagnating promotion in the Navy. To alleviate the problem, Congress established selection boards for promotion to Rear Admiral, Captain, and Commanders on the basis of age-in-grade in 1916 (P.L. 64-241). Service-in-grade replaced age-in-grade in 1926 (P.L. 69-413). Those officers not selected for promotion were retired at 2 ½ percent of pay per year of service, not to exceed 75 percent of pay. This was the first recognition of length of service as well as grade in the computation of retired pay.

The act of 1916 (P.L. 64-241) also created the Fleet Naval Reserve, to provide a pool of experienced personnel who could be recalled to active duty in an emergency. While technically different than retirement, the practical effect was that it was possible for enlistees of the Navy and Marine Corps to "retire" with as little as 16 years of service (raised to 20 in 1925) and become entitled to "retainer pay."

By 1938 (P.L. 75-706), the Navy was again experiencing stagnating promotion caused by the large influx of officers throughout World War I. Almost all of these officers were in the same age and years of service groups. To remedy the situation, Congress extended the selection board process to all grades above Lieutenant (junior grade); set limits on years of service for Lieutenant Commanders through Captains; and provided for voluntary retirement at 20 years of service at the discretion of the President.

Following World War II, allegations of unfairness, inequity, and inefficiency in the existing disability retirement system became extensive. A new system for disability retirement was created by the Career Compensation Act of 1949 (P.L. 81-351). Under this system, all disabilities had to be rated under the standard schedule of rating disabilities in use by the VA, and the resultant ratings became a factor in disability retired pay entitlement and taxability. The new system covered officer and enlisted personnel of both the regular and reserve components, and it authorized temporary as well as permanent disability retirements. The disability

retirement system remains basically unchanged from the way it was enacted in 1949. Much legislation has been passed recently, as well as additional process improvements, in an attempt to modernize the disability system.

Meanwhile, the Officer Personnel Act of 1947 (P.L. 80-381) brought the Army and Air Force under a selection process similar to the Navy system. It also provided that those officers who failed promotion and were not eligible to retire would receive severance pay of two months per year of service, but not exceeding two years' pay.

Standardized nondisability retirement laws for all Services were brought about by the Army and Air Force Vitalization and Retirement Equalization Act of 1948 (P.L. 80-810). The act established 20 years as the minimum requirement for voluntary retirement, thereby placing the Army and Air Force on a par with the Navy. It also provided for the removal of substandard officers with severance pay equal to one month's pay per year of service, but not exceeding one year's pay. This law resulted, for the first time in history, in uniform voluntary retirement authority among the officers of all branches of service.

P.L. 96-513 changed the retired pay formula for persons who first became a service member after September 7, 1980. For this group, the 2½ percent times years of service is multiplied by the average of the highest 36 months of pay, rather than by final pay. This is sometimes referred to as the High-3 (HI-3) formula, where the highest 36 months of pay generally occurs within the highest 3 years of average annual pay. This first major change to retired pay computation since 1948 was endorsed in findings by various committees and commissions.

P.L. 99-348, enacted July 1, 1986, made extensive changes in retired pay formula for persons entering service after July 31, 1986. These persons are credited with 2 percent for each of the first twenty years of service, 3½ percent for each of the next 10 years, and 2½ percent thereafter. At the member's age 62, the annuity is recomputed to equal the annuity that would have been in effect if a level 2½ percent had been used for each year of service. In addition, the cost-of-living adjustment for this group no longer keeps up with inflation, as described later. This is referred to as the Redux benefit formula.

P.L. 106-65, enacted October 1, 1999, enhanced benefits for military members previously covered by the Redux benefit formula (those who entered service on or after August 1, 1986) by converting these members to the HI-3 formula. At the 15 year-of-service mark, these (full-time) members now have the choice of: (1) remaining in HI-3, or (2) electing the Career Status Bonus, which is not paid out of the Military Retirement Fund, and converting to the Redux benefit formula. Those who elect the bonus must commit to remaining continuously in service until completing 20 years or forfeit a portion of the \$30,000. Part-time reservists previously covered by Redux do not have the option of electing the bonus, and so remain under the HI-3 benefit formula. This is referred to as the Career Status Bonus (CSB)/Redux benefit formula. The three different retirement systems currently in effect for members of the uniformed services are summarized in Table B-1.

P.L. 108-136, enacted November 23, 2003, provides a phase-out of the offset to military retired pay due to receipt of VA disability compensation for members whose combined disability rating is 50% or greater, effective January 1, 2004. Members retired under disability provisions must have at least 20 years of service. P.L. 108-136 also expands eligibility under the Combat Related Special Compensation program to include qualified retirees at any combined percentage rating for certain combat-related disabilities compensated by the VA. Through 2003, retired pay earned from DoD for military service was offset by any payment received from Veterans Affairs for a VA-rated disability. These VA benefits were in place of or in combination with DoD retired pay but were not fully additive. Thus the law is commonly referred to as Concurrent Receipt.

Subsequent to P.L. 108-136, a series of legislation has been enacted that increasingly reduces or eliminates the offset to military retired pay due to receipt of VA disability compensation. This is described further in Appendix A.

P.L. 109-364, enacted October 17, 2006, eliminated the 75 percent multiplier cap for retirements exceeding 30 years of service for members retiring on nondisability after January 1, 2007. A member can now retire with a retired pay multiplier greater than 100 percent if their years of service exceed 40 years. The various percentage multipliers by year of service and benefit system are shown in Table B-2.

History of Retired Pay – Reserve Duty

The motivation behind the reserve duty retirement (non-regular service) is to establish a nondisability retirement system to authorize retired pay for service in the reserve components. This provides an incentive for qualified personnel to retain membership and continue training in these components, providing a pool of skilled, trained, and readily available manpower to assist active duty forces in times of national emergency.

Title III of the Army and Air Force Vitalization and Retirement Equalization Act of 1948 (P.L. 80-810) created a nondisability retirement program for reserve personnel. The above motivation was explained as part of the House Report accompanying the legislation. The reserve retirement system remained basically unchanged from the original 1948 legislation until 1993. Those modifications made over that time were more corrective than substantive.

The National Defense Authorization Act for Fiscal Year 1993 (P.L. 102-484) adopted two provisions intended to induce Selected Reserves members to apply for transfer to the retired reserve through temporary special retirement mechanisms. Subsequent legislation authorizes further downsizing of the military during the mid-1990's, which was extended until October 1, 2001.

P.L. 107-314 permanently reduced the required reserve service eligibility years for retired pay from eight years to six years. This law also authorized a 10 percent increase in reserve retired pay, not to exceed 75 percent, for enlisted members credited with extraordinary heroism in the line of duty, analogous to members on active duty.

P.L. 110-181, enacted January 28, 2008, reduces the retirement age for a reserve retirement below age 60 by three months for every 90 days of certain active service with a limit of 10 years. Eligibility for subsidized retiree health benefits remains at age 60 even if the eligibility age for retired pay is reduced.

Adjustments - Cost-of-Living

Cost-of-living adjustments provide a mechanism for adjusting retired pay entitlements to compensate for the effects of inflation. The ideal system is one that protects the initial value of pay to insure that members who retire from the military do not have the purchasing power of their pay eroded by inflation.

Prior to 1958, retired pay was generally increased in direct proportion to changes in active duty pay. The practice was discontinued with the act of May 1958 (P.L. 85-422), when it was realized that a single 6 percent cost-of-living increase would cost only \$35 million, as opposed to \$65 million for linking the retired pay to active duty pay. The 6 percent approximated the increase in the cost of living since 1955 when retired pay was last increased. In 1963, a permanent system of increasing retired pay (P.L. 88-132) based on a formula geared to increases in the cost-of-living was adopted. In 1965, the adjustment mechanism was modified slightly (P.L. 89-132). This system granted cost-of-living increases whenever the Consumer Price Index (CPI) went up at least 3 percent and remained up for three months. The benefit increase was equal to the percentage rise in the CPI. In 1969 (P.L. 91-179), an additional 1 percent was added to compensate for the fact that five months elapsed between the time that the index increased 3 percent and the time that benefits increased.

Effective March 1977, cost-of-living adjustments (COLAs) were scheduled to occur every six months, on March 1 and September 1. This would be reflected in checks issued those months and the additional 1 percent was eliminated (P.L. 94-440). The cost-of-living increase, effective March 1, was computed by calculating the percentage increase (adjusted to the nearest tenth of a percent) in the CPI from the previous June to the previous December. Similarly, the cost-of-living increase effective September 1 was obtained by calculating the percentage increase in the June CPI over the CPI from the previous December.

In August 1981 (P.L. 97-35), once-a-year cost-of-living increases were implemented by eliminating the September increase. Full annual cost-of-living increases were given in March of each year based on the percentage increase in the CPI between the two previous Decembers.

In August 1982, P.L. 97-253 created a temporary deviation to the calculation and timing of the cost-of-living increase. Consequently, in FY 1983, the increase was delayed until April

and the full increase of 3.9 percent was given only to survivors, disabled persons and nondisabled persons over age 61. Nondisabled retirees under age 62 received 3.3 percent instead of 3.9 percent.

P.L. 98-270, enacted in April 1984, eliminated the FY 1984 increase and modified the permanent law. Under the modified system, the COLA equals the percentage increase in the average of the CPIs for July, August, and September over the averaged indexes for the same three months of the prior year. These increases become effective for entitlements earned in December. P.L. 98-369 directed that entitlements for a particular month should be paid at the beginning of the subsequent month rather than at the end of the month of entitlement and became effective with the December 1984 adjustment. P.L. 111-383 required amounts of retired and retainer pay (excluding survivor annuitant pay and Combat Related Special Compensation) due a retired member of the uniformed services shall be paid on the first day of each month beginning after the month in which the right to such pay accrues; unless the first falls on a non-business day, then the payment is made on the preceding business day.

P.L. 99-348, enacted July 1, 1986, changed the cost-of-living increase for members entering the service after July 31, 1986. Their retiree and survivor benefits are increased annually by the full cost-of-living adjustment minus 1 percent (except if the full adjustment is less than or equal to 1 percent). A one-time catch-up is given on the first day of the month after the <u>retiree's</u> 62nd birthday. At this time, the retiree benefit (or survivor benefit if the retiree is deceased) is increased to the amount that would have been payable had full adjustments been made. Annual partial increases continue after this catch-up. For persons entering the service prior to August 1, 1986, full COLAs are still applied to the retiree and survivor benefits. P.L. 106-65 called for full COLAs to be applied to the retiree and survivor benefits of post-July 31, 1986, entrants who decline the CSB/Redux and retire under the HI-3 benefit formula. Retired pay cost-of-living increases from 1958 to the present time are shown in Table B-3. Additional discussion regarding cost-of-living increases can be found in Appendix D.

P.L. 113-67 (commonly refered to as the 'Bipartisan Budget Act of 2013'), enacted December 26, 2013, reduces the annual COLA by one percent (e.g., 2% instead of 3%) for "working-age" (i.e., members younger than age 62), non-disabled military retirees, with restoral at age 62 and full COLA thereafter. The changes apply only to those entering military service on or after January 1, 2014 (although those entering on or after that date who elect CSB/Redux are covered by the COLA provisions for CSB/Redux electors described in the previous paragraph). Subsequent legislation exempts medically disabled retirees and their survivors, as well as survivors of members who die on active duty, from the COLA reduction enacted in P.L. 113-67.

Adjustments – Basic Pay

Basic pay scale increases are analogous to retired pay cost-of-living increases for the current active duty and drilling reserve population. These increases are typically credited and paid at the beginning of the calendar year. The annual basic pay scale increases are designed to establish a crude comparability with the private sector and American economy in general.

The Act of 1790 provided funds for "militia employed in the service of the United States" payable to "the troops of the United States." Although the components of the pay system, basic pay plus allowances, have changed throughout its history, the system itself has been remarkably enduring. However, the proliferation of special allowances has caused confusion and complexity surrounding compensation.

The Career Compensation Act of 1949 (P.L. 81-351) revamped the military compensation structure to provide pay that was equitable to personnel yet responsive to the needs of the United States in attracting and retaining the necessary personnel following World War II. The Uniformed Services Pay Act of 1958 (P.L. 85-422) was the beginning of regular basic pay adjustments intended to make personnel pay more competitive.

In the Act of 1967 (P.L. 90-207) Congress adopted new basic pay rate adjustment mechanisms. The adjustments were to be a "comparable increase" to the general schedule compensation for federal classified employees (Civil Service employees). This legislation resulted in a more systematic procedure for increasing basic pay rates as opposed to the prior methods which were solely dependent on Congressional discretion. The military-civilian pay adjustment remains loosely linked through present day.

The Department of Defense Authorization Act of 1981 (P.L. 96-342) granted personnel substantial basic pay adjustments with the intent of further convergence between military and civilian wages. The legislation also allowed the President greater flexibility in adjusting military compensation by allocating greater increases to "career" members. In the years that followed, Congress expressed dissatisfaction with the pay adjustment mechanisms shown in the military-civilian link. The Senate proposed linking military pay to the Employment Cost Index (ECI) as a method to correct the military-civilian pay inequity. This discussion continued for some years.

Beginning in 2000 (P.L. 106-65), legislative change responded to the military-civilian pay inequity by tying basic pay increases to the ECI plus an additional 0.5 percent for the five years that follow (through FY 2006). After FY 2006, the increases are tied directly to ECI; however, covenants are embedded within the law which gives the President the authority to propose an alternate adjustment. Subsequent legislation used targeted basic pay scale increases to be granted for specific pay grades and ranks in order to meet the necessary retention and recruitment needs. Basic pay scale increases from 1958 to the present time are shown in Table B-4. Additional discussion regarding basic pay scale increases can be found in Appendix D.

Funding of Retirement Benefits

Prior to 1935, the Navy had a pension fund which provided payments to persons retired for disability whenever there was a sufficient amount in the fund. The income to the fund consisted of the government's share of the proceeds from the sale of enemy or pirate ships captured by the Navy, and from interest received on fund investments. This fund was abolished in 1935, and the Military Retirement System moved to an unfunded or "pay-as-you-go" basis. P.L. 98-94 (currently Chapter 74 of Title 10, U.S.C.), signed in September 1983, established a

Military Retirement Fund starting October 1, 1984. Under this accrual accounting system, funds are allocated for the individual services via the Department of Defense annually by Congress. These funds are transferred to the Military Retirement Fund in an amount sufficient, along with the Treasury contributions resulting from P.L. 108-136, to cover the expected retirement costs associated with the current active duty force. This system helps to apprise all stakeholders of the total costs of manpower decisions made each year, although the split funding caused by P.L. 108-136 decreases the transparency of the information.

As explained by Congress (House Report No. 98-107 – Committee on Armed Services – p. 225), the reasons for adoption of the Department of Defense Military Retirement Fund were as follows:

"Most retirement plans in the private sector are funded, either partially or fully, and the trend--as a result of the Employee Retirement and Income Security Act (ERISA)--is toward full funding. Security of a retirement plan, *i.e.*, the probability that promised benefits will be paid, is generally related to the method of funding. Full funding provides greater security than partial funding.

Of course, the security of payments from the Federal government is not generally related to the method of funding. From the Federal government's perspective, the issue of funding is primarily a matter of timing. Should funds be raised by taxing and borrowing when the obligation becomes due, or should funds be set aside through taxing and borrowing when the obligation is incurred?"

This funding law stated that DoD will make normal cost payments into the Fund and the Treasury Department will make payments from general revenues to amortize the unfunded liability. P.L. 99-661, enacted in November 1986, mandated that two separate normal cost percentages (NCPs) be used to compute the normal cost payment of the Military Retirement System. One NCP is for active-duty personnel and full-time reservists and the second NCP is for drilling reservists (part-time). These normal cost payments are designed to be sufficient to pay for the future retirement benefits for a cohort of new entrants. The unfunded liability exists primarily because such payments were not made in the past, although deviations of actual compared to expected experience increase or decrease the unfunded liability over time.

P.L. 108-136, enacted November 2003, required the Department of Treasury to pay the normal cost arising from the increased benefits due to Concurrent Receipt at the beginning of each fiscal year. Beginning with FY 2005, Treasury includes the annual normal cost payment along with the unfunded liability payment in the October 1st contribution.

The original funding law also established an independent three-member DoD Retirement Board of Actuaries, appointed by the President (changed to the Secretary of Defense as part of the 2008 National Defense Authorization Act (P.L. 110-181)). House Report No. 98-107 – Committee on Armed Services – p. 227, states:

"Care must be exercised to minimize the ability to manipulate the interest rate. The committee recommends that an independent Board of Actuaries be established and that they, alone, be charged with the responsibility for determining the interest rate and other actuarial assumptions in accordance with generally accepted actuarial principles and practices."

The Board is required to approve methods and assumptions for determining the normal cost and unfunded liability; to review valuations of the Military Retirement System; to determine the method of amortizing unfunded liabilities; to annually report to the Secretary of Defense; and to report to the President and Congress on the status of the Fund not less than every four years. P.L. 110-181 renamed the Board the "DoD Board of Actuaries," and added oversight of other funds deemed to be necessary by the Secretary of Defense.

TABLE B-1

MILITARY RETIREMENT SYSTEM PROPERTIES

(FOR NONDISABILITY RETIREMENT FROM ACTIVE DUTY)

Benefit System	Final Pay	High-3 (HI-3)	Career Status Bonus (CSB)/Redux	
Applies to Members Who:	First became member of a uniformed service <u>before</u> <u>September 8, 1980</u>	First became member of a uniformed service on or after September 8, 1980 and prior to August 1, 1986, and members joining after July 31, 1986 who elect not to accept the Career Status Bonus (CSB) at the 15-year anniversary	First became member of a uniformed service on or after August 1, 1986 and elect to accept the Career Status Bonus (CSB) with additional 5-year service obligation	
Retired Pay Computation Basis Final basic pay rate		Highest 36 months of basic pay rate	Highest 36 months of basic pay rate	
Multiplier	2.5% per year of service	2.5% per year of service	2.5% per year of service less 1% for each year of service less than 30 (restored at age 62)	
Cost-of-Living Adjustment Mechanism	Full CPI-W	Full CPI-W	Full CPI-W minus 1% (one-time catch-up at age 62)	
Additional Benefit			\$30,000 Career Status Bonus (CSB) payable at 15-year anniversary upon assumption of 5-year obligation to remain on continuous active duty	

Note: P.L. 113-67 (commonly referred to as the 'Bipartisan Budget Act of 2013'), enacted December 26, 2013, reduces the annual COLA by one percent (e.g., 2% instead of 3%) for "working-age" (i.e., members younger than age 62), non-disabled military retirees, with restoral at age 62 and full COLA thereafter. The changes apply only to those entering military service on or after January 1, 2014, although those entering on or after that date who elect the CSB are covered by CSB/Redux COLA provisions.

TABLE B-2

MILITARY RETIREMENT SYSTEM MULTIPLIERS
(FOR NONDISABILITY RETIREMENT FROM ACTIVE DUTY)

Years of	Final Pay/HI-3	CSB/Redux	Multiplier
Service	Multiplier	Before Age 62	After Age 62
20	50.0 %	40.0 %	50.0 %
21	52.5	43.5	52.5
22	55.0	47.0	55.0
23	57.5	50.5	57.5
24	60.0	54.0	60.0
25	62.5	57.5	62.5
26	65.0	61.0	65.0
27	67.5	64.5	67.5
28	70.0	68.0	70.0
29	72.5	71.5	72.5
30	75.0	75.0	75.0
31	77.5	77.5	77.5
32	80.0	80.0	80.0
33	82.5	82.5	82.5
34	85.0	85.0	85.0
35	87.5	87.5	87.5
36	90.0	90.0	90.0
37	92.5	92.5	92.5
38	95.0	95.0	95.0
39	97.5	97.5	97.5
40	100.0	100.0	100.0
41	102.5	102.5	102.5
42	105.0	105.0	105.0
:	:	:	:

TABLE B-3

MILITARY RETIRED PAY COST-OF-LIVING INCREASES (JUNE 1958 TO PRESENT)

Date of Increas	<u>se</u>	Percentage Increase	Cumulative % From <u>Date of Increase</u>
6/1/58		6.0 %	760.8 %
10/1/63		5.0	712.1
9/1/65		4.4	673.4
12/1/66		3.7	640.9
4/1/68		3.9	614.4
2/1/69		4.0	587.6
11/1/69		5.3	561.2
8/1/70		5.6	527.9
6/1/71		4.5	494.6
7/1/72	one percent over	4.8	469.0
7/1/73	inflation was	6.1	442.9
1/1/74	added during	5.5	411.7
7/1/74	these years	6.3	385.0
1/1/75		7.3	356.3
8/1/75		5.1	325.2
3/1/76		5.4	304.6
3/1/77		4.8	283.9
9/1/77		4.3	266.3
3/1/78	4	2.4	251.2
9/1/78 3/1/79	twice-a-year	4.9	243.0
9/1/79	increases	3.9 6.9	226.9 214.7
3/1/80		6.0	194.4
9/1/80		7.7	177.7
3/1/81	once-a-year	4.4	157.8
3/1/82	increases	8.7	147.0
4/1/83	(Dec to Dec)	3.9 (1)	127.2
12/1/84	(Bee to Bee)	3.5 (2)	118.7
12/1/85		0.0 (3)	111.3
12/1/86	once-a-year	1.3	111.3
12/1/87	increases (3rd	4.2	108.6
12/1/88	qtr to 3rd qtr)	4.0	100.2
12/1/89	1 1,	4.7	92.5
12/1/90		5.4	83.8
12/1/91		3.7	74.4
12/1/92		3.0	68.2
3/1/94		2.6 (4)	63.3
3/1/95		2.8 (5)	59.1
3/1/96		2.6 (6)	54.8
12/1/96		2.9	50.9
12/1/97		2.1	46.6
12/1/98		1.3	43.6
12/1/99		2.4	41.8
12/1/00		3.5	38.5
12/1/01		2.6	33.8
12/1/02		1.4	30.4
12/1/03		2.1	28.6
12/1/04		2.7	25.9
12/1/05		4.1	22.6
12/1/06		3.3	17.8
12/1/07		2.3	14.0
12/1/08		5.8	11.5
12/1/09		0.0	5.4
12/1/10		0.0	5.4
12/1/11		3.6	5.4
12/1/12		1.7	1.7

⁽¹⁾ Nondisabled retirees under age 62 received 3.3%.

⁽²⁾ Starting December 1984, entitlements earned in a particular month are paid at the beginning of the next month.

⁽³⁾ A cost-of-living adjustment of 3.1%, scheduled for 12/1/85, was suspended as a consequence of P.L. 99-177.

⁽⁴⁾ Disabled retirees and survivors received 2.6% on 12/1/93.

⁽⁵⁾ Disabled retirees and survivors received 2.8% on 12/1/94.

⁽⁶⁾ Disabled retirees and survivors received 2.6% on 12/1/95.

TABLE B-4

MILITARY BASIC PAY SCALE INCREASES
(JUNE 1958 TO PRESENT)

	•	•
		Cumulative % From
Date of Increase	Percentage Increase	Date of Increase
6/1/58	8.3 %	1,280.1 %
10/1/63	14.2	1,174.3
9/1/64	2.3	1,015.9
9/1/65	10.4	990.8
7/1/66	3.2	888.0
10/1/67	5.6	857.4
7/1/68	6.9	806.6
7/1/69	12.6	748.1
1/1/70	8.1	653.2
1/1/71	7.9	596.8
11/14/71	11.6	545.7
1/1/72	7.2	478.6
10/1/72	6.7	439.8
10/1/73	6.2	405.9
10/1/74	5.5	376.3
10/1/75	5.0	351.5
10/1/76	3.6	330.0
10/1/77	6.2	315.1
10/1/78	5.5	290.8
10/1/79	7.0	270.5
10/1/80	11.7	246.2
10/1/81	14.3 (1)	210.0
10/1/82	4.0 (2)	171.2
1/1/84 1/1/85	4.0 (2) 4.0	160.7 150.7
10/1/85	3.0	130.7
1/1/87	3.0	141.1
1/1/88	2.0	127.2
1/1/89	4.1	122.8
1/1/90	3.6	114.0
1/1/91	4.1	106.6
1/1/92	4.2	98.4
1/1/93	3.7	90.4
1/1/94	2.2	83.6
1/1/95	2.6	79.7
1/1/96	2.4	75.1
1/1/97	3.0	71.0
1/1/98	2.8	66.0
1/1/99	3.6	61.5
1/1/00	4.8 (3)	55.9
1/1/01	3.7 (3)	48.8
1/1/02	4.6 (3)	43.5
1/1/03	4.1 (3)	37.2
1/1/04	3.7 (3)	31.8
1/1/05	3.5	27.1
1/1/06	3.1	22.8
1/1/07	2.2 (3)	19.1
1/1/08	3.5	16.5
1/1/09	3.9	12.6
1/1/10	3.4	8.3
1/1/11 1/1/12	1.4 1.6	4.8 3.3
1/1/12	1.7	5.5 1.7
1/1/13	1./	1./

⁽¹⁾ Basic pay increases for enlisted personnel ranged from 10% for E-1; 10.7% for E-2, E-3; 13% for E-4; 16.5% for E-5, E-6; and 17% for E-7, E-8, E-9. For officers, the increase was 14.3%.

⁽²⁾ Except for E-1 with less than 4 months service.

 $^{(3) \} The \ increases \ do \ not \ include \ additional \ targeted \ pay \ increases.$

APPENDIX C

VALUATION POPULATION DATA

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POPULATION DATA NOTES

The following are relevant notes to the population data displayed in this appendix:

- These populations represent the appropriate beginning counts ("inputs") to "Closed Group" and "Open Group" projections.
- Valuation input data were extracted from files maintained by the Defense Manpower Data Center. Data on individual retirees and survivors came from official files submitted by the Defense Finance and Accounting Service. Reserve data were obtained from the Reserve Component Common Personnel Data System, the official source for all reserve strengths and statistics.
- These data were not further adjusted to match the official totals supplied by the DoD Comptroller.
- The DoD Office of the Actuary reviews the data for reasonableness and consistency, but does not audit the data and relies on the file suppliers for its accuracy and comprehensiveness.
- Table-specific notes are shown at the bottom.

DoD Officers Average Monthly Active Duty Basic Pay by Active Years of Service and Age for FY 2012 Valuation

	Avg	0 0 0 0 2,876	2,819 2,853 2,896 3,175 3,712	4,211 4,562 4,751 4,902 5,017	5,166 5,352 5,571 5,799 5,99	6,136 6,313 6,514 6,739 6,943	7,098 7,267 7,429 7,654 7,910	8,187 8,388 8,554 8,739 8,840	8,993 9,160 9,189 9,333 9,646	9,434 9,608 9,590 9,611 9,028	6,035
	30+	00000	00000	00000	00000	00000	00000	0 7,280 8,190 8,540 8,650	8,945 10,445 10,831 11,708 11,849	11,890 12,106 12,065 12,084 9,661	10,668
	29	00000	00000	00000	00000	00000	00000	8,583 7,876 7,987 7,895 8,307	10,193 10,833 10,408 9,957 10,441	10,380 10,190 10,420 9,576 10,401	9,602
	28	00000	00000	00000	00000	00000	0 0 0 0 8,585	7,662 7,840 7,842 8,360 9,985	10,371 10,124 9,934 10,398 10,429	10,145 9,896 10,025 10,136 10,082	9,379
	27	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 6,956 7,412	7,546 7,745 7,999 9,903 10,047	9,897 9,664 9,768 9,984 10,032	9,792 9,639 9,385 10,132 9,856	9,170
	36	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 7,110 7,257 7,300	7,457 7,996 9,754 10,010 9,838	9,537 9,806 9,779 9,679 9,778	9,455 10,008 10,103 9,927 9,698	9,127
	25	00000	00000	00000	00000	00000	0 7,276 7,121 7,194 7,337	7,475 9,343 9,590 9,537 9,297	9,420 9,445 9,539 9,017 9,460	9,506 9,334 9,582 9,287 9,946	8,783
	24	00000	00000	00000	00000	00000	7,276 6,968 6,995 7,175 7,525	9,191 9,419 9,442 9,217 9,307	9,362 9,091 8,674 9,227 8,818	9,553 9,555 9,219 10,072 9,659	8,657
	23	00000	00000	00000	00000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,890 6,866 6,998 7,245 8,908	9,126 9,173 8,968 8,963 9,059	9,199 8,969 9,055 8,838 8,959	9,275 9,528 9,146 9,519 8,853	8,442
	83	00000	00000	00000	00000	0 0 5,657 6,787	6,789 6,907 7,209 8,656 8,897	8,768 8,651 8,795 8,854 9,006	8,601 8,987 8,773 9,172 8,905	9,199 9,582 8,811 9,361 9,231	8,243
	21	00000	00000	00000	00000	0 0 6,545 6,703	6,685 6,938 8,011 8,355 8,420	8,399 8,462 8,642 8,475 8,747	8,599 8,573 8,851 8,628 8,824	8,599 9,168 8,791 8,814 8,643	7,953
	20	00000	00000	00000	00000	0 6,964 6,436 6,469 6,581	6,795 7,847 8,084 8,017 8,036	8,317 8,375 8,178 8,450 8,723	8,477 8,698 8,761 8,342 8,644	8,539 8,534 9,233 8,803 8,940	7,747
	119	00000	00000	00000	00000	0 6,189 6,228 6,327 6,629	7,596 7,791 7,751 7,871	7,939 8,053 8,034 8,251 8,356	8,371 8,402 8,139 8,195 8,712	8,692 8,541 8,441 8,736 9,168	7,529
	18	00000	00000	00000	0 0 0 6,306	5,998 6,056 6,169 6,422 7,566	7,766 7,710 7,591 7,673	7,984 8,007 7,921 8,166 8,071	8,230 8,266 8,145 8,271 8,122	8,806 8,146 8,969 8,371 8,089	7,435
	17	00000	00000	00000	0 0 5,305 5,719	5,766 5,864 6,133 7,362 7,514	7,468 7,353 7,482 7,559 7,480	7,562 7,811 7,803 7,904 7,904	7,888 8,133 7,905 8,022 8,104	8,158 8,129 8,165 9,171 9,333	7,185
	16	00000	00000	00000	0 4,547 5,524 5,582	5,638 5,953 7,094 7,312 7,232	7,116 7,229 7,270 7,313 7,559	7,657 7,860 7,883 7,874	7,800 8,023 8,181 7,841 8,151	7,817 8,008 7,818 8,486 7,024	6,946
	15	00000	00000	00000	0 5,927 5,302 5,366 5,509	5,779 6,756 6,957 6,948 6,893	6,935 7,084 7,064 7,190 7,199	7,327 7,587 7,376 7,782 7,783	7,713 7,706 7,785 7,936 8,153	8,012 7,870 7,910 8,140 7,802	6,674
	14	00000	00000	00000	4,942 5,194 5,299 5,341 5,662	6,877 6,876 6,825 6,801 6,889	6,976 6,864 7,058 7,262 7,248	7,455 7,411 7,445 7,302 7,487	8,193 8,035 7,183 7,853 7,642	8,424 8,080 8,757 9,385 8,776	009'9
•	13	00000	00000	0 0 0 4,605	4,905 4,985 5,135 5,446 6,474	6,680 6,642 6,648 6,735 6,786	6,787 6,822 6,882 6,984 7,126	7,377 7,284 7,373 7,471 7,493	7,463 7,530 7,435 7,422 7,511	8,268 8,223 7,303 7,342 7,880	6,433
	12	00000	00000	0 0 4,782 4,852	4,891 5,043 5,417 6,480 6,595	6,589 6,503 6,663 6,699 6,612	6,676 6,786 6,822 7,067	7,068 7,144 7,555 7,134 7,134	7,434 7,397 7,934 7,149 7,589	7,431 8,997 7,772 9,010 7,709	6,391
	Ξ	00000	00000	0 4,379 4,492 4,594	4,752 5,111 6,168 6,350 6,312	6,292 6,307 6,410 6,451 6,492	6,558 6,600 6,766 6,842 6,922	6,970 7,488 7,319 7,175 7,271	7,097 7,888 7,831 7,257 8,478	9,478 8,273 7,710 7,513 7,343	6,190
	10	00000	00000	0 5,078 4,440 4,531 4,721	5,036 6,056 6,144 6,123 6,068	6,094 6,193 6,272 6,260 6,320	6,380 6,554 6,571 6,627 6,957	7,038 7,286 6,783 7,014 7,357	7,558 8,003 7,240 7,782 6,438	8,237 7,748 7,602 7,342 7,714	690'9
	6	00000	00000	0 4,263 4,302 4,515 4,766	5,550 5,620 5,634 5,686 5,761	5,862 5,876 5,938 6,096 6,098	6,173 6,366 6,668 6,652 6,852	7,038 7,124 7,019 6,831 7,379	7,388 7,524 7,091 7,505 7,325	6,630 6,481 6,920 7,185 7,608	5,708
	∞	00000	0 0 0 4,190	4,167 4,207 4,406 4,773 5,495	5,575 5,572 5,551 5,694 5,748	5,777 5,833 5,845 5,938 6,077	6,103 6,209 6,307 6,894	6,755 6,627 7,070 6,928 6,920	7,211 6,481 7,098 7,391 6,599	7,639 7,096 6,723 8,425 8,685	5,633
	7	00000	0 0 4,294 3,920	3,904 4,156 4,496 5,296 5,338	5,338 5,325 5,466 5,574 5,587	5,562 5,591 5,736 5,831 5,901	6,034 6,302 6,161 6,398 6,338	6,583 6,512 6,894 7,022 7,150	6,581 7,721 7,252 6,204 7,317	7,755 7,116 10,282 0 8,179	5,436
	9	00000	0 0 3,931 3,854	4,109 4,747 5,299 5,322 5,292	5,263 5,379 5,472 5,473 5,526	5,562 5,613 5,699 5,784 5,780	6,133 6,074 6,072 6,294 6,532	6,405 6,382 6,354 5,857 6,661	6,284 5,910 6,575 6,883 7,539	0 8,915 5,859 0 7,857	5,383
	5	00000	0 3,326 3,722 3,639 4,040	4,493 5,057 5,091 5,085 5,085	5,075 5,124 5,158 5,220 5,315	5,275 5,443 5,478 5,602 5,697	5,584 5,804 5,717 5,961 5,917	6,179 6,033 6,544 5,986 6,579	6,483 6,967 6,535 6,250 6,980	6,168 8,019 8,178 7,866 6,758	5,138
	4	00000	3,562 3,472 3,647 3,715 4,284	4,995 5,010 4,972 4,929 4,977	5,041 5,041 5,159 5,144 5,258	5,269 5,418 5,317 5,568 5,568	5,610 5,802 5,878 5,639 5,806	5,708 6,277 6,154 6,109 5,883	6,299 6,419 6,424 6,158 7,417	7,096 7,028 0 6,354 4,619	5,040
	ю	00000	0 3,531 3,649 3,880 4,321	4,360 4,445 4,449 4,502 4,566	4,608 4,619 4,745 4,862 4,931	4,990 5,030 5,076 5,033 5,181	5,024 5,127 5,298 5,196 5,109	5,558 5,400 5,042 5,974 5,770	5,903 7,071 6,615 4,861 5,738	6,388 5,544 6,964 7,079 6,114	4,478
	2	00000	3,028 3,142 3,263 3,714 3,779	3,910 3,875 4,038 4,138 4,127	4,213 4,279 4,477 4,577 4,631	4,635 4,520 4,611 4,777 5,051	5,041 5,134 4,802 5,280 5,379	5,502 5,659 6,002 4,851 6,099	6,150 6,201 7,121 9,249 5,696	5,033 6,503 0 0 7,528	3,961
	-	00000	2,781 2,896 2,890 3,003 3,238	3,226 3,378 3,555 3,600 3,586	3,756 3,793 4,201 3,944 4,059	3,928 4,182 4,475 4,011 4,362	4,473 4,365 4,763 4,935 4,811	5,966 5,394 5,580 5,916 5,373	6,718 8,016 6,066 5,941 8,436	6,025 0 6,823 6,022 6,158	3,251
	0	0 0 0 0 2,876	2,792 2,848 2,881 2,922 2,973	3,257 3,446 3,503 3,524 3,693	3,672 3,907 3,797 3,845 3,949	3,640 3,770 3,785 3,851 4,122	4,061 3,738 4,345 4,737 5,315	5,857 4,008 5,025 7,281 6,503	7,104 7,339 7,223 7,684 8,590	8,216 8,571 5,056 4,099 7,529	3,088

Nαes: Basic pay figures reflect the January, 2013, increase of 1.7 Age is age nearest birthday as of the end of the fiscal year.

DoD Enlisted Average Monthly Active Duty Basic Pay by Active Years of Service and Age for FY 2012 Valuation

	Avg	0 1,559 1,604 1,662 1,754	1,868 1,992 2,092 2,183 2,281	2,387 2,507 2,630 2,755 2,880	3,007 3,134 3,254 3,360 3,460	3,576 3,685 3,794 3,889 3,983	4,082 4,179 4,282 4,397 4,512	4,627 4,755 4,915 4,969 4,969	4,970 4,918 4,955 5,028 5,083	5,031 5,198 5,185 5,109 5,201	2,687
	30+	00000	00000	00000	00000	0 0 0 0	0 0 0 0 0	0 6,661 6,703 6,608	6,649 6,242 6,303 6,249 6,097	6,305 6,916 6,913 5,636 4,070	6,492
	29	00000	00000	00000	00000	00000	00000	0 6,459 6,555 6,510 6,536	6,455 6,486 6,383 6,593 6,278	6,679 6,161 6,143 6,052 6,216	9,500
	28	00000	00000	00000	00000	00000	00000	6,361 6,340 6,386 6,385 6,298	6,248 6,238 6,441 6,318 6,269	6,203 6,211 6,829 6,629 6,222	6,343
	27	00000	00000	00000	00000	00000	0 0 6,423 6,253	6,289 6,238 6,229 6,229	6,147 6,161 6,369 6,203 6,078	6,140 5,970 6,423 5,650 6,345	6,251
	36	00000	00000	00000	00000	00000	0 0 6,047 6,181	6,145 6,104 6,094 6,123 6,112	6,079 5,991 6,151 5,755 5,934	5,833 6,049 5,484 6,527 6,249	6,114
	25	0 0 0 0 0	00000	00000	0 0 0 0 0	00000	0 4,573 5,482 5,505 5,505	5,561 5,496 5,608 5,555 5,558	5,523 5,591 5,502 5,426 5,367	5,296 5,259 5,559 5,413 4,413	5,516
	24	00000	00000	00000	00000	00000	6,069 5,325 5,381 5,398 5,375	5,376 5,386 5,332 5,412 5,425	5,366 5,238 5,431 5,362 5,157	5,746 4,680 5,415 5,644 5,369	5,373
	23	00000	00000	00000	00000	0 0 0 0 5,130	4,942 4,911 4,959 4,951 4,913	4,928 5,009 5,032 4,976 5,068	5,094 5,164 5,015 5,034 5,180	5,321 5,405 5,248 5,224 0	4,954
	23	00000	00000	00000	00000	0 0 4,988 4,823	4,808 4,799 4,826 4,809 4,855	4,878 4,918 4,928 4,909 4,951	4,900 4,915 4,871 5,391 4,836	4,836 5,001 4,972 4,949 5,454	4,833
	21	00000	00000	00000	00000	0 4,328 4,543 4,544	4,527 4,555 4,602 4,560 4,664	4,713 4,638 4,746 4,738 4,750	5,114 4,756 4,961 4,893 4,663	4,880 4,924 5,131 4,621 4,839	4,587
	20	00000	00000	00000	00000	0 4,289 4,442 4,425 4,435	4,407 4,434 4,464 4,484 4,518	4,624 4,627 4,629 4,721 4,794	4,916 4,739 4,728 4,868 4,881	4,606 4,761 5,307 4,267 4,947	4,466
	61	00000	00000	00000	00000	4,281 4,205 4,173 4,147 4,154	4,152 4,180 4,182 4,223 4,285	4,361 4,315 4,452 4,450 4,572	4,518 4,231 4,655 4,237 4,751	4,870 5,163 5,261 5,015 4,735	4,200
	18	00000	00000	00000	0 0 0 0 4,087	4,136 4,093 4,095 4,088 4,080	4,106 4,139 4,167 4,245 4,291	4,243 4,329 4,385 4,472 4,533	4,505 4,588 4,461 4,844 4,439	4,751 4,970 4,607 4,899 4,825	4,142
	17	00000	00000	00000	0 0 3,600 3,965	3,967 3,950 3,932 3,958 3,972	4,002 4,050 4,054 4,131 4,101	4,201 4,324 4,373 4,303 4,524	4,434 4,449 4,679 5,193 4,793	4,688 4,725 4,968 4,563 4,413	4,007
rvice	16	00000	00000	00000	0 3,928 3,925 3,906	3,901 3,908 3,908 3,908 3,908	3,948 4,011 4,019 4,140 4,176	4,213 4,163 4,246 4,232 4,335	4,320 4,376 4,624 4,906 4,780	4,947 5,086 4,761 4,109 0	3,947
ears of Active Service	15	00000	00000	00000	0 3,810 3,788 3,768 3,777	3,774 3,785 3,790 3,822 3,855	3,870 3,921 3,953 4,003 4,132	4,092 4,149 4,334 4,343 4,272	4,393 4,944 4,646 4,521 4,746	4,323 5,011 4,050 4,971 5,415	3,827
ears of /	14	00000	00000	00000	3,740 3,720 3,702 3,691 3,686	3,709 3,719 3,736 3,763 3,781	3,816 3,836 3,826 3,929 4,123	4,137 4,140 4,158 4,131 4,259	4,702 4,654 4,508 4,826 4,771	4,328 4,530 5,131 4,724 5,110	3,747
*	13	00000	00000	0 0 2,403 3,539	3,542 3,531 3,533 3,546 3,545	3,558 3,585 3,614 3,636 3,688	3,695 3,793 3,849 3,946 3,975	4,007 3,890 4,115 4,190 4,678	4,581 4,379 4,336 4,063 4,439	4,661 0 5,316 5,258 5,057	3,590
	12	00000	00000	0 0 3,439 3,457	3,449 3,453 3,459 3,477 3,490	3,498 3,534 3,569 3,569 3,597	3,652 3,706 3,848 3,849 3,913	3,941 3,866 4,452 4,341 4,500	4,517 4,367 4,212 4,233 5,393	4,175 5,662 4,574 4,949 0	3,508
	Ξ	00000	00000	0 3,556 3,274 3,246 3,236	3,249 3,268 3,289 3,303 3,330	3,375 3,379 3,415 3,454 3,488	3,574 3,686 3,632 3,712 3,779	3,786 4,064 4,401 4,520 4,403	4,311 4,120 4,487 4,004 4,978	4,912 5,100 5,131 5,299 5,064	3,316
	10	00000	00000	0 3,117 3,187 3,176 3,176	3,205 3,228 3,233 3,268 3,266	3,294 3,336 3,342 3,400 3,399	3,530 3,562 3,605 3,730 3,663	3,808 4,057 4,149 4,266 4,283	4,249 4,350 4,367 4,772 5,145	5,218 4,183 5,045 3,689 7,676	3,250
	6	00000	00000	3,006 3,000 3,000 3,007 3,039	3,055 3,078 3,113 3,135 3,154	3,148 3,201 3,278 3,273 3,316	3,383 3,341 3,439 3,501 3,605	3,926 3,832 3,955 4,071 4,135	4,106 4,314 4,990 4,544 4,468	5,259 3,822 0 4,196	3,075
	∞	00000	0 0 3,129 2,896	2,935 2,938 2,948 2,968 2,993	3,004 3,039 3,068 3,088 3,085	3,126 3,115 3,164 3,213 3,224	3,345 3,309 3,358 3,560 3,798	3,586 3,638 3,825 3,913 3,520	4,434 4,619 3,938 4,653 4,757	3,465 4,759 3,777 5,033	3,004
	7	00000	0 2,403 2,700 2,688	2,697 2,711 2,735 2,760 2,804	2,834 2,862 2,858 2,901 2,930	2,953 2,988 3,021 3,007 3,122	3,079 3,162 3,439 3,439 3,650	3,568 3,595 3,549 3,592 3,796	4,370 4,527 4,277 4,509 4,918	4,568 4,586 0 4,949 0	2,774
	9	00000	0 2,586 2,635 2,638	2,649 2,662 2,685 2,702 2,734	2,766 2,776 2,812 2,825 2,825 2,825	2,838 2,897 2,923 2,945 2,946	3,037 3,045 3,197 3,282 3,265	3,363 3,307 3,649 4,056 4,410	4,799 3,836 5,536 4,599 4,755	5,004 0 5,839 4,215 5,057	2,698
	ĸ	00000	0 2,360 2,419 2,430 2,442	2,453 2,474 2,499 2,524 2,553	2,575 2,604 2,606 2,602 2,625	2,688 2,686 2,755 2,666 2,773	2,875 2,864 2,806 2,866 2,957	2,939 2,769 3,255 4,280 3,502	4,490 5,434 3,991 0 4,640	0 4,690 4,489 0	2,486
	4	00000	2,325 2,331 2,337 2,359 2,371	2,382 2,404 2,428 2,442 2,468	2,492 2,496 2,514 2,537 2,512	2,566 2,579 2,551 2,543 2,653	2,662 2,694 2,652 2,830 2,620	2,680 3,147 3,634 4,523 3,551	4,872 3,915 4,143 5,630 3,077	0 5,662 5,483 4,949 0	2,387
	ю	0 0 0 2,109	2,157 2,165 2,179 2,192 2,207	2,219 2,231 2,243 2,260 2,281	2,291 2,323 2,328 2,350 2,340	2,362 2,380 2,344 2,326 2,460	2,469 2,445 2,561 2,481 2,529	2,441 3,428 3,609 4,494 5,471	0 3,471 5,496 3,559 4,176	0 4,919 3,652 0 5,057	2,204
	2	0 0 1,967 1,972	1,988 2,008 2,020 2,032 2,046	2,060 2,074 2,081 2,094 2,109	2,133 2,155 2,157 2,167 2,167 2,155	2,176 2,177 2,193 2,142 2,246	2,267 2,302 2,259 2,265 2,266	3,530 3,430 3,776 3,932 4,158	4,504 3,986 0 0	0 4,935 4,899 0	2,031
	-	0 1,700 1,768 1,783	1,798 1,806 1,815 1,828 1,845	1,849 1,863 1,878 1,897 1,933	1,920 1,948 1,978 1,963 1,963	1,936 2,012 1,985 2,022 2,130	1,996 2,162 1,988 2,125 3,196	2,927 3,197 4,016 3,240 4,214	4,247 5,584 4,621 4,058 4,898	4,943 0 0 0 0	1,815
	0	0 1,559 1,604 1,634 1,670	1,684 1,701 1,725 1,746 1,765	1,774 1,787 1,787 1,807 1,827	1,858 1,851 1,831 1,873 1,859	1,891 2,060 2,058 2,163 2,273	2,325 2,397 2,915 3,034 3,119	3,816 4,624 0 5,164 4,163	3,325 4,418 0 4,861	4,594 2,725 0 0 3,651	1,687
	Age	16 17 18 20	8 # 8 13 15	3 2 3 3 2 3 8	* * * * * *	8 12 88 88 94	4 6 6 4 8	8 4 4 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	2 2 2 2 2 2	57 57 58 59 60+	Avg

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DoD Average Monthly Active Duty Basic Pay by Active Years of Service and Age for FY 2012 Valuation 11,700 11,700 11,708 11 0 | 1.559 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.604 | 1.

DoD Officers Active Duty Personnel by Years of Service and Age for FY 2012 Valuation

	Total	0 0 0 -	36 2,112 6,418 8,591 9,527	10,509 11,055 11,269 10,930 10,903	10,393 10,413 10,643 9,807 9,688	9,431 9,478 9,454 9,458 9,417	9,810 9,971 8,902 7,632 6,647	5,848 5,196 4,655 3,771 3,012	2,395 1,866 1,382 1,133 837	723 527 398 332 586	255,156	
	30+	00000	00000	00000	00000	00000	00000	0 1 56 128 114	139 199 225 232 210	130 105 85 71 72	1,821	
	29	0 0 0 0 0	00000	0 0 0 0 0	00000	00000	00000	1 65 158 107 72	226 209 125 55 46	43 20 32 32	1,213	
	28	00000	00000	00000	00000	00000	0 0 0 0 -	85 199 150 99 242	278 133 86 71 51	30 19 14 29	1,527	
	27	0 0 0 0 0	0 0 0 0 0	00000	0 0 0 0 0	00000	0 0 4 661	238 188 112 329 397	197 125 102 83 47	34 30 17 29	2,093	
	26	0 0 0 0 0	00000	0 0 0 0 0	00000	00000	0 0 171 251	196 138 446 510 257	164 711 88 89 84	3 1 2 2 3	2,579	
	25	00000	00000	00000	00000	00000	0 2 227 350 255	175 499 659 358 210	157 119 69 55 43	22 22 10 16	3,272	
	24	0 0 0 0 0	00000	0 0 0 0 0	00000	00000	265 444 311 223	604 763 561 305 203	130 78 55 35 27	20 13 13 26	4,116	
	23			00000			302 552 386 265 702	990 663 344 268 166	109 83 65 49 24	33 34 19 16	5,090	
	23	00000	00000	00000	00000	0 0 2 281	544 416 325 804 970	629 355 277 213 134	78 58 49 40 42	33 19 11 24	5,326	
	21	00000	00000	00000	00000	0 0 235 513	440 428 917 1,161 844	473 309 254 199 129	118 78 44 36 24	37 20 18 12 27	6,316	
	20	00000	00000	00000	00000	0 2 267 638 508	459 1,210 1,543 990 516	416 338 211 158 116	85 70 60 46 29	36 28 19 18	7,791	
	19	00000	00000	00000	00000	293 638 610 509	1,350 1,995 1,316 750 560	387 285 199 170 150	91 100 56 48 34	31 24 21 13 36	999'6	111
	18	00000	00000	00000	0000 %	252 618 543 465 1,316	1,853 1,293 797 534 370	284 220 168 136 122	91 67 50 47 35	29 13 13 18 18	9,350	YAS:
	17	00000	00000	00000	0 0 3 3 299	574 522 448 1,282 1,722	1,171 753 569 403 291	223 174 149 122 91	87 72 44 40 30	30 13 13 11 12 11 11 11 11 11 11 11 11 11 11 11	9,147	Average YAS:
Service	16	00000	00000	00000	0 0 1 338 648	586 474 1,207 1,685 1,106	791 598 458 319 246	178 134 130 91	73 44 43 36 19	22 10 5 7	9,358	
Active Se	15			00000		455 1,307 1,742 1,123 727	597 483 313 251 198	127 131 108 93 65	40 48 21 26 19	16 17 10	9,553	
ears of	41			00000		1,221 1,723 1,162 694 558	456 327 271 212 184	122 112 91 77	58 34 23 28 14	16 11 7 5 10	9,469	
7	13	00000	00000	0 0 0 0 \$	325 564 494 348 1,204	1,730 1,169 651 555 466	308 288 204 1152	91 103 85 68 68	46 41 24 31 15	9 4 5 17	9,202	
	12	00000	00000	0 0 0 2 266	513 397 417 1,224 1,889	1,162 633 572 445 336	257 244 178 155 129	84 81 48 47	39 30 16 15	15 8 9 2 9	9,359	35.7
	Ξ	00000	00000	0 0 3 185 427	326 328 1,262 1,940 1,185	680 548 520 358 268	215 172 157 160 119	91 79 46 51	37 19 24 11	9 3 1 8	9,313	Average Age:
	10	00000	00000	0 2 151 302 299	278 1,410 2,128 1,251 762	596 528 381 335 230	221 178 152 120 118	106 49 49 49	28 118 12 115 10	r + r E	9,893	Averag
	6		00000		1,410 2,374 1,434 757 662	539 414 299 242 177	164 158 138 125 71	87 58 68 47 34	28 24 12 10	10 2 2 6 6	10,191	
	∞	00000	0 0 0 0 -	56 147 171 203 1,517	2,580 1,372 841 629 560	375 278 241 190 173	116 130 124 79 68	51 53 40 35 31	15 21 9 9	01 4 8 8	10,163	
	7	00000	0 0 2 2 25	67 86 153 1,606 3,028	1,462 722 721 546 406	302 246 183 138	137 109 67 77 50	43 33 31 28	11 19 5 13 3	5 6 0 11	10,505	
	9	00000	0 0 0 15 45	66 118 1,886 3,385 1,563	740 662 598 407 306	261 144 140 111 85	96 57 49		20 13 19 9	0 4 8 0 7	11,091	
	5	00000	0 1 1 8 8 8 8 8	2,073 3,740 1,685 789	656 663 429 317 208	178 142 110 99 84	73 73 52 42 49	37 32 24 17	15 12 14 8	w 4 4 4 4	11,852	ear.
	4	00000	1 4 4 28 28 120	2,090 3,867 1,769 861 705	692 450 325 246 163	143 127 79 62 62	58 73 56 39 46	29 31 13 14 20	7 4 4 4 5 5	r c o c c	12,239	the fiscal y
	ю	00000	0 32 105 2,195	4,276 2,146 1,087 798 809	520 422 318 212 162	124 107 93 62 63	76 48 53 30 40	20 20 17 15	10 7 7 2 2 4 4 4 4 4	4 6 0 - 8	13,912	the end of
	2	00000	1 13 98 2,110 3,979	2,164 1,081 851 801 582	398 303 251 192 148	124 85 84 59 45	73 46 34 33 23	15 16 12 10	8 2 8 8 =	7 4 0 0 7	13,663	hday as of
	-	00000	4 43 2,133 4,268 2,290	1,033 792 798 523 380	285 206 185 120 98				m vs m vs m	5 3 5 0 6	13,647	nearest birt
	0	0 0 0 0 -	30 2,048 4,133 2,045 829	644 669 457 341 232	205 151 130 80 82	58 25 25 33	36 18 16 13	9 15 5 4	F & & & & C	9 2 4	12,439	Age is age nearest birthday as of the end of the fiscal year.
	Age	16 17 18 19	2 2 2 2 2 2	88878	* * * * * *	8 8 8 8 9	4 6 4 4 8	84 4 4 8 8 9 S	8 42 83 82	58 57 50 50 4	Total	Notes: A

DoD Enlisted Active Duty Personnel by Years of Service and Age for FY 2012 Valuation

Total	0 17 10,976 42,225 67,149	81,717 90,045 87,016 78,987 73,210	68,723 63,772 56,922 51,283 46,993	41,926 37,910 34,745 31,475 28,873	26,826 25,384 24,645 22,228 19,881	17,940 16,257 12,934 10,209 8,056	6,668 5,666 4,707 3,673 2,743	2,044 1,549 1,144 724 541	382 325 191 143 130	1,208,954
30+	00000	00000	00000	00000	00000	00000	0 63 105 85	58 48 40 27 19	12 12 8 8 8	490
29	00000	00000	00000	00000	00000	00000	0 125 283 192 134	87 63 38 35 27	01 0 4 8 8	1,014
58	00000	00000	00000	00000	00000	00000	138 350 288 176 138	8 4 2 4 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	14 20 3 6	1,376
27	00000	00000	00000	00000	00000	0 0 4 205	393 329 195 143 113	88882	12 9 2 7 7	1,611
26	00000	00000	00000	00000	00000	0 0 274 456	370 264 191 138 91	69 24 18	9 4 6 7	1,993
25	00000	00000	00000	00000	00000	0 1 452 844 607	413 309 186 161	104 56 33 31	19 20 17 5 9	3,383
24	00000	00000	0 0 0 0 0	00000	0 0 0 0 0	1 540 1,027 745 436	288 223 181 173	77 56 39 26 29	13 5 10 10	3,997
23	00000	00000	00000	00000	0 0 0 0 %	872 1,838 1,456 853 558	409 354 255 204 135	8 8 8 8 8	0 4 r 8 0	7,259
22	00000	00000	0 0 0 0 0	00000	0 0 0 5 946	2,107 1,792 1,041 673 512	385 269 231 157 136	78 65 56 31 35	18 10 10 12	8,585
21	00000	00000	00000	00000	0 0 2 972 2,242	1,949 1,371 897 604 477	376 307 216 182 124	99 60 74 33	38 15 5 7	10,089
20	00000	00000	00000	00000	0 4 1,356 3,088 2,764	1,917 1,370 942 752 499	366 255 240 197 140	98 70 72 42 40	29 16 7 9	14,279
19	00000	00000	00000	00000	1 1,819 4,578 4,523 2,994	2,138 1,561 1,095 822 892	475 426 359 265 201	164 146 114 78 40	32 32 25 16 6	22,506
18	00000	00000	00000	0 0 0 0 4	1,761 4,506 4,083 2,669 1,939	1,414 1,184 860 623 461	409 312 294 226 202	176 135 122 48 16	25 17 11 9	21,533
17	00000	00000	00000	0 0 0 1,810	4,410 4,012 2,862 1,915 1,500	1,177 934 667 488 392	326 285 272 200 167	133 133 30 39	11 14 15 17 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	21,874
16	00000	00000	00000	0 0 2,130 5,079	4,530 2,991 2,177 1,558 1,222	980 838 598 497 381	321 284 221 181 142	142 62 51 37 28	12 12 5 0	24,499
15	00000	00000	0 0 0 0 0	2,514 5,613 4,797	3,241 2,167 1,654 1,255 1,000	757 675 520 367 321	274 199 196 182 161	75 70 45 47 26	17 16 9 9 3	26,228
4	00000	00000	0 0 0 0 0	15 2,839 6,368 4,933 3,289	2,237 1,614 1,225 977 724	616 572 404 343 303	261 237 183 166 106	88 33 33 88 18 33	16 10 5 5 9	27,696
13	00000	00000	0 0 0 1 42	3,145 6,894 5,228 3,344 2,305	1,746 1,278 1,043 769 633	554 467 365 307 263	219 188 173 115 86	45 49 18 14	5 0 = 4 %	29,355
12	00000	00000	0 0 36 3,732	7,427 5,428 3,643 2,510 1,753	1,368 1,024 813 613 499	490 385 353 273 261	209 197 113 90 55	81 28 28 15	16 2 0	31,502
=	00000	00000	0 1 28 3,849 8,023	5,901 3,923 2,803 2,057 1,489	1,199 937 779 555 520	395 327 234 233	192 151 110 67 74	41 45 22 16 15	4 11 3 3 10	34,375
10	00000	00000	0 20 3,807 8,531 6,386	4,373 3,153 2,436 1,889 1,375	1,029 862 629 548 412	368 371 336 284 212	147 133 103 79 55	49 38 20 11	16 6 2 2	37,723
6	00000	00000	20 3,940 9,285 7,398 5,295	3,803 2,812 2,150 1,651 1,294	915 709 580 472 388	328 336 279 249 156	121 87 88 66 73	43 33 13 6	4 % 0 9 0	42,616
œ	00000	0 0 0 0 78	4,296 10,644 9,029 6,111 4,465	3,317 2,565 1,906 1,462 1,074	871 641 470 407 359	342 311 298 157 121	94 12 13 14 15 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	36 11 11 9 9	5 13 6 0	49,325
7	00000	0 0 1 56 4,320	11,126 9,659 6,104 4,507 3,417	2,596 1,933 1,359 1,069 808	611 491 425 313 314	278 290 148 127	80 64 49 31	16 18 10 3	3 3 0 0 0	50,414
9	00000	0 0 5,129 12,738	11,311 8,134 5,750 4,333 3,325	2,398 1,784 1,339 1,024 779	585 445 387 303 266	292 197 163 141 115	129 61 56 31 25	16 5 8 4 4	5 3 5 0 2	61,343
ĸ	00000	0 81 5,739 13,991 11,867	8,672 6,312 4,846 3,690 2,728	2,046 1,431 1,142 817 614	526 386 387 301 333	235 214 163 142 140	112 91 32 15 8	10 8 4 0 8	0 9 7 0 0	680,75
4	00000	76 7,759 18,590 14,915 10,508	7,864 5,916 4,444 3,156 2,362	1,756 1,331 1,065 729 589	445 391 316 276 176	191 149 145 132 89	103 39 22 17 8	2 2 8 6 2 2 2 2 2 2 3 5 5 5 5 5 5 5 5 5 5 5 5 5	0 4 2 2 0	83,594
е	0 0 0 81	8,804 24,421 21,848 15,056 11,015	8,292 6,350 4,743 3,245 2,427	1,826 1,320 909 716 518	434 364 342 273 235	211 186 153 113 108	31 20 12 15 2	0 5 5 7 7	5 0 5 3 0	114,028
2	0 0 14 8,066	24,901 26,116 18,569 13,026 10,012	7,716 6,009 4,145 3,016 2,295	1,633 1,227 932 758 632	459 461 323 253 239	193 192 144 131 40	20 5 7 7 8	m m 0 0 0	0 5 3 0	131,563
-	0 0 6 8,894 28,496	28,155 18,303 12,584 9,240 7,255	5,450 3,940 2,685 2,025 1,510	1,002 738 535 442 339	360 239 175 150 130	112 96 88 25 12	6 0 0 N N	r - 2 s -	m 0 0 0 0	133,033 131,563 114,028
0	0 17 10,970 33,317 30,569	19,781 13,365 9,630 7,573 5,467	3,976 2,847 2,056 1,385 1,004	688 509 407 330 325	98 43 33 43	23 31 13 5	4 % 0 % 4	6 6 6 6 9	3 0 0 7 2	144,582
Age	17 18 19 20	22 23 24 24 25	25 27 30 30 30	31 32 33 34 35	36 37 38 40	1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	46 47 48 49 50	51 52 53 54 55	56 57 58 59 60+	Total

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All DoD Active Duty Personnel by Years of Service and Age for FY 2012 Valuation

	Total	0 17 10,976 42,225 67,150	81,753 92,157 93,434 87,578 82,737	79,232 74,827 68,191 62,213 57,896	52,319 48,323 45,388 41,282 38,561	36,257 34,862 34,099 31,686 29,298	27,750 26,228 21,836 17,841 14,703	12,516 10,862 9,362 7,444 5,755	4,439 3,415 2,526 1,857 1,378	1,105 852 589 475 716	1,464,110
	30+	00000	00000	00000	00000	00000	00000	0 1119 233 199	197 247 265 259 229	141 117 93 77	2,311
	29	00000	00000	00000	00000	00000	00000	1 190 441 299 206	313 272 163 90 73	53 24 23 35	2,227
	28	00000	00000	00000	00000	00000	0000-	223 549 438 275 380	358 197 128 94 78	54 50 22 20 36	2,903
	27	00000	00000	00000	00000	00000	0 0 8 8 344	631 517 307 472 510	265 184 137 108 59	36 36 19 36	3,704
	26	00000	00000	00000	00000	00000	0 0 2 445 707	566 402 637 648 348	233 170 113 80 55	47 24 23 38	4,572
	25	00000	00000	00000	00000	00000	0 3 679 1,194 862	588 808 845 519 309	261 175 102 86 60	43 43 43 43 43 43 43 43 43 43 43 43 43 4	6,655
	24	00000	00000	00000	00000	00000	2 805 1,471 1,056 659	892 986 742 478 304	207 134 94 61 56	56 118 23 36	8,113
	23	00000	00000	00000	00000	00004	1,174 2,390 1,842 1,118 1,260	1,399 1,017 599 472 301	205 1149 77 58	8 8 8 4 6	12,349
	22		00000				2,651 2,208 1,366 1,477 1,482	1,014 624 508 370 270	156 123 105 77	51 43 29 16 36	13,911
	21	00000	00000	00000	00000	0 0 1,207 2,755	2,389 1,799 1,814 1,765 1,321	849 616 470 381 253	217 138 118 73 57	75 35 23 14 34	16,405
	20	00000	00000	00000	00000	0 6 1,623 3,726 3,272	2,376 2,580 2,485 1,742 1,015	782 593 451 355 256	183 140 132 88 69	65 25 35 77	22,070
	19	00000	00000	00000	00000	2,112 5,216 5,133 3,503	3,488 3,556 2,411 1,572 1,156	862 711 558 435 351	255 246 170 126 74	63 46 42 42	32,172
	18	00000	00000	00000	0 0 0 7	2,013 5,124 4,626 3,134 3,255	3,267 2,477 1,657 1,157 831	693 532 462 362 324	267 202 172 95 51	56 40 30 22 27	30,883
	17	00000	00000	00000	0 0 4 2,109	4,984 4,534 3,310 3,197 3,222	2,348 1,687 1,236 891 683	549 459 421 322 258	220 205 117 70 69	41 28 28 16	31,021
Service	16	0000	00000	00000	0 0 2,468 5,727		1,771 1,436 1,056 816 627				33,857
Active Service	15		00000		26 2,893 6,319 5,330		1,354 1,158 833 618 519				35,781
Years of	4		00000				1,072 899 675 555 487				37,165
	13		00000		3,470 7,458 5,722 3,692 3,509	3,476 2,447 1,694 1,324 1,099	862 755 569 459 380	310 291 258 183 154	91 93 73 49	21 15 15 9	38,557
	12	00000	00000	0 0 38 3,998			747 629 531 428 390				40,861
	Ξ	00000	00000	0 1 31 4,034 8,450			610 528 484 394 352				43,688
	10		00000	22 3,958 8,833 6,685	4,651 4,563 4,564 3,140 2,137	1,625 1,390 1,010 883 642	589 549 404 330	253 197 174 128	77 56 47 35	23 13 10 9	47,616
	6	00000	00000	20 4,014 9,488 7,636 5,596	5,213 5,186 3,584 2,408 1,956	1,454 1,123 879 714 565	492 494 417 374 227	208 145 156 113 107	71 57 25 16 24	4 2 2 2 2	52,807
	œ	00000	0 0 1 29	4,352 10,791 9,200 6,314 5,982	5,897 3,937 2,747 2,091 1,634	1,246 919 711 597 532	458 441 422 236 189	145 144 101 99 65	51 27 32 18 17	15 17 18 18 8	59,488
	7	0000	0 0 1 58 4,345	9,745 6,257 6,113 6,445	4,058 2,655 2,080 1,615 1,214	913 737 608 451 431	415 399 215 204 149	123 108 97 80 59	27 37 21 23 6	10 9 2 2 11	60,919
	9	00000	0 0 55 5,144 12,783	11,377 8,252 7,636 7,718 4,888	3,138 2,446 1,937 1,431 1,085	846 589 527 414 351	382 272 235 205 159	1777 87 89 47 37	36 18 27 13	v 4 v w v	72,434
	S	00000	0 82 5,750 14,009 11,910	8,785 8,385 8,586 5,375 3,517	2,702 2,094 1,571 1,134 822	704 528 497 400 417	308 287 215 184 189	149 123 56 32 22	25 15 16 14 11	3 0 4 4	78,941
	4	00000	77 7,763 18,601 14,943 10,628	9,954 9,783 6,213 4,017 3,067	2,448 1,781 1,390 975 752	588 518 395 338 238	249 222 201 171 135	132 70 35 31 28	28 10 6 6	r 2 0 r c	95,833
	ю	0 0 0 81	8,804 24,424 21,880 15,161 13,210	12,568 8,496 5,830 4,043 3,236	2,346 1,742 1,227 928 680	558 471 435 335 298	287 234 206 143	51 40 30 14	10 12 7 6	4 9 8 T OI	127,940
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Enlisted Selected Reserve Personnel by PEBD Years of Service and Age for FY 2012 Valuation

10.07 10 2012 Valuation FY \mathbf{for} by PEBD Years of Service and Age DoD Selected Reserve Personnel

Average PEBD Years of Service:

53.1

Average Age:

Data taken from the actuarial valuation file created by the DoD Office of the Actuary. Age is age nearest birthday as of the end of the fiscal year.

	DoD (Officers Non-Selected Reserve	s. No	n-Sele	cted	Reser		Personnel	l With	50	Good	Years	by	PEBD	Years	\mathbf{o}	Service	and	Age f	for FY	2012	Valuation	ıtion	
									Com	Completed Pay Entry		ase Date	(PEBD)	Base Date (PEBD) Years Of	Service									
Age	<19	19	20	21	22	23	24	25	26	27	28	29 30		31 32	2 33	34	35	36	37	38	39	40	41 Total	[a]
ç	c	•	c	•	c	c	c	•	•	c	c					•	c	c	c	c	c	c	•	•
31	0	0	0	0	0	0	0	0	0	0	0	0		0	0 0	0	0	0	0	0	0	0	0	>
37	0	0	_	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	_
38	0	7	14	7	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	18
39	0	2	23	27	6	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	61
40	0	1	17	44	47	10	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 1.	19
41	0	2	14	33	73	112	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54
42	С	4	76	34	08	131	126	12	0	0	0	0	_	0	0	С	С	О	C	С	С	С	0	63
. 43	0	- 4	8.2	159	09	102	160								0	0	• С	0	0	0		. 0	0	55
4	0	0	32	142	22.1	86	114			22	0		0	. 0	0	0	0	0	0	0	0	0	0 1.0	54
45	0	0	13	69	209	282	114	172	260	203	41	0	0	0	0 0	0	0	0	0	0	0	0		1,363
46	0	0	20	36	106	328	342	183					0	0	0 0	0	0	0	0	0	0	0	0 1,695	95
47	0	33	10	29	47	151	348		180	184 2	243 24	14 25	2	0	0 0	0	0	0	0	0	0	0	0 1,882	82
48	0	-	5	28	45	105	183					299 28			0 0	0	0	0	0	0	0	0	0 2,390	90
49	0	0	9	23	48	73	131		572			74 324		324 3.	1 0	0	0	0	0	0	0	0	0 2,924	54
50	0	0	4	7	29	61	96	142		633 (4 249	9 30	0	0	0	0	0	0	0	0 3,005	05
51	0	0	7	14	26	45	62	106				729 30				11	0	0	0	0	0	0	0 3,361	61
52	0	0	3	œ	21	21	39	92								188	16	0	0	0	0	0	0 3,537	37
53	0	0	-	9	19	31	36	64	107		193 4					264	219	∞	0	0	0	0	0 3,693	93
54	0	0	5	∞	17	23	42	39		106 1				843 820	0 233	221	318	199	6	0	0	0	0 3,802	02
55	0	-	S	6	14	29	33	47						433 879		231	265	313	192	6	0	0	0 4,070	70
26	0	0	1	11	13	19	25	40	09	54		147 20				1,038	283	282	310	173	œ	0	0 4,328	28
57	0	0	2	∞	21	20	37	52	41	65	61 11	112 158		242 280	0 473	937	886	300	289	265	128	3	0 4,482	82
58	0	0	4	33	20	23	40	36	44	53						461	897	920	279	266	245	145	6 4,359	59
59	0	0	2	33	13	16	37	23	42	44		73 91		128 161		301	467	829	895	277	289	295 1	4,418	18
09	0	0	0	2	4	6	17	25	22	25				49 73	3 86	101	126	267	515	317	149		174 2,315	15
61	0	0	-	0	2	-	0	_	_	2	33	_	_	0	2 1	7	4	∞	14	16	13	9	9	90
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tal	0	20	348	902	1,146	1,691	2,003	2,603 3,	3,078 3,	3,161 3,4	3,450 3,924	24 4,132	2 4,264	3,971	1 3,805	3,762	3,586	3,159	2,507	1,336	852	713 5	0 514 54,731	31

uo		Total	0	20	114	361	920	1,773	2,650	3,432	4,510	5,366	6,218	6,994	8,423	9,447	10,081	10,594	10,679	10,329	10,039	10,500	10,621	10,406	896'6	10,229	5,945	231	175	752	160,777
Valuation		41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	519	768	75	70	473	1,922
		40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	610	1,523	1,270	45	12	39	3,524
7 2012		39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	704	1,240	1,280	642	17	13	20	3,954
for FY		38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	916	1,651	1,348	1,044	517	11	15	34	5,600
Age f		37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	1,089	1,925	1,551	1,249	1,044	487	12	=	31	7,448
and '		36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	91	1,286	1,986	1,675	1,299	1,029	913	410	10	13	30	8,742
Service		35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132	1,512	2,071	1,735	1,283	1,060	988	781	371	13	∞	31	9,883
of Ser		34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	122	1,393	1,927	1,484	1,171	606	784	878	582	288	9	9	22	9,372
Years	ice	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	147	1,695	2,209	1,642	1,123	856	764	662	267	497	231	15	9	20	10,536
	Of Serv	32	0	0	0	0	0	0	0	0	0	0	0	0	0	202	1,871	2,617	1,952	1,320	676	816	741	277	200	430	220	4	5	15	12,199
' PEBD)) Years	31	0	0	0	0	0	0	0	0	0	0	0	0	222	698'1	2,391				729		536	477	411	351	165	4	33	∞	11,618
Years by	Completed Pay Entry Base Date (PEBD) Years Of Service	30	0	0	0	0	0	0	0	0	0	0	0		1,732		1,683	1,287	964	746	297	438	450	344	317	325	132	5	4	∞	11,385 1
	Base Da	29	0	0	0	0	0	0	0	0	0	0	157		2,101			911	761	570	451	417	347	302	288	212	109	4	-	7	10,963
Good	ay Entry	28	0	0	0	0	0	0	0	0	0	209			1,576			708	562	468	331	330	247	254	226	174	68	0	33	7	10,507
th 20	pleted P	27	0	0	0	0	0	0	0	0	108	1,190			874 1			435	408	350	277	232	212	191	154	158	65	1	3	33	8,546 10
el With	Con	26	0	0	0	0	0	0	0	91	,133	1,609			718			383	324	266	221	177	186	164	140	126	09	4	-	ю	8,957 8
Personnel		25	0	0	0	0	0	0	49	957	1,479 1				511			285	268	224	187	158	142	115	96	86	52	2	-	-	7,887 8
		24	0	0	0	0	0	73	197	1,160		601 1,			311				167		115		87	77	99	79	29	-	0	0	6,272 7,
eserv		23	0	0	0	0	99			719 1,			280					124					63	89	59	34	21	2	0	0	5,028 6,
ted R		22	0	0	0	33	409			314			149					98					47	59	09	39	13	0	0	0	3,506 5,0
-Selec		21				157				144							54	43	58	37	26	34	37	30	26	15	4	0	0	0	1,928 3,
Non		20				153				40			20	29	17	18	17	15	12	=	∞	14	15	==	6	4	7	0	0	0	867 1,9
DoD Enlisted Non-Selected Reserve		19				18 1				7			7						_		2	2	1	-	2	_	0	0	0	0	133 8
D En		<19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Do		V																													
		Age	<37	37	38	39	40	41	42	43	4	45	46	47	48	49	20	51	52	53	54	55	99	57	58	59	09	19	62	63	Total

52.1

	All	All DoD Non-Selected Reserve	Non-	Select	ed R	eserve		Personnel	With	50	Good	Years	by	PEBD	Years	\mathbf{o}	Service	e and	Age	for	FY 20	2012 V	Valuation	nc	
									Co	npleted I	Completed Pay Entry Base Date (PEBD) Years Of Service	Base Da	te (PEBI) Years	Of Servic	e									
Age	<19	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41 T	Total
27	c	c	c	c	c	c	c	c	c	c	c	0	c	c	c	0	c	0	0	c	c	c	c	c	0
5 5	0 0	5 [> =	0		0		0 0	0	0	> <	> <	0 0	> <	> <		> <	> <	> <	> <	> <	> <	0 0		7
37	0 (<u>:</u> :	4 6	; ٥	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	17
38	0	14	103	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132
39	0	20	176	184	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		422
40	0	10	153	344	456	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1,	,039
41	0	11	109	335	730	749	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 2.	2,027
42	0	17	145	235	613	1,119	923	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 3,	3,113
43	0	11	122	303	374	821	1,320	1,125	Ξ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,187
4	0	33	72	255	448	009	1,019	1,704	1,333	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0 5,	5,564
45	0	4	53	154	388	611	715	1,292	1,869	1,393	250	0	0	0	0	0	0	0	0	0	0	0	0	0 6,	6,729
46	0	7	40	102	255	809	807	666	1,558	1,647	1,710	180	0	0	0	0	0	0	0	0	0	0	0	0 7,	7,913
47	0	6	39	84	180	395	721	995	1,104	1,300	2,154 1	1,722	173	0	0	0	0	0	0	0	0	0	0	0 8	8,876
48	0	5	22	91	154	290	464	666	1,232	1,054	1,800 2	2,400 2	2,020	252	0	0	0	0	0	0	0	0	0	0 10,	10,813
49	0	2	24	88	147	265	414	684	1,181	1,331	1,331	1,949 2	2,529 2	2,193	233	0	0	0	0	0	0	0	0	0 12,	12,371
50	0	ю	21	61	126	199	342	477	862	1,227	1,506 1	1,386 1	1,958 2		2,120	177	0	0	0	0	0	0	0	0 13,	13,086
51	0	ю	22	57	112	169	274	391	574	773	1,369 1	1,640 1	1,589	2,006 2,	2,924 1,	616,1	133	0	0	0	0	0	0	0 13,	13,955
52	0	-	15	99	94	139	206	360	482	019					2,218 2,	2,478	1,581	148	0	0	0	0	0	0 14,	14,216
53	0	33	12	43	94	117	159	288	373	505	1 199	1,011	1,539	1,722	1,594 1,	1,880	2,191 1	1,731	66	0	0	0	0	0 14,	14,022
54	0	2	13	34	79	114	157	226	288	383	501	704 1	1,026	1,572 1,	1,749 1,		1,705 2	2,389 1		58	0	0	0	0 13,	13,841
55	0	9	19	43	29	111	145	205	238	320	447	619		1,062	1,695 1,		1,402 2	2,000 2		1,281	73	0	0	0 14,	14,570
56	0	-	16	48	09	82	112	182	246	266	340	494	654		1,164 1,	1,648		1,566 1	1,957 2	2,235	680'1	46	0	0 14,	14,949
57	0	-	13	38	80	88	114	167	205	256	315	414	502	719		1,135						832	28		14,888
28	0	7	13	59	80	82	96	132	184	207	299	356	445	597	703	826	1,139 1								14,327
59	0	-	9	18	52	20	116	121	168	202	224	285	416	479		402		1,248 1			1,321	1,569	1,818		14,647
09	0	0	7	9	17	30	46	77	82	06	118	142	187	214		317	389	497	677 1	1,002				942 8,	8,260
19	0	0	1	0	2	3	-	ю	5	3	3	5	9	4	9	16	13	17	18	26	27	30	51	81	321
62	0	0	0	0	-	-	0	-	-	9	5	4	4	3	∞	6	7	=	15	14	20	21	19	83	233
63	0	0	0	-	-	0	-	-	3	4	10	10	∞	11	15	23	23	31	31	32	42	32		248	986
tal	0	153	1,215	2,634	4,652	6,719	8,275	10,490 1	12,035	11,707	13,957 14	14,887 15	15,517 15	15,882 16,	16,170 14,	14,341 13	13,134 13	13,469 11	11,901	9,955 (6,936	4,806	4,237 2,4	2,436 215,	215,508

All Officers

CSB	08 80 80	80	80	80	80	8 8	80	S S	S S	. S	2 S	08 80 80	80	89,156 80	\$16,631	\$34,033	\$28,733 \$28,446	\$34,479 \$28,567	\$36,002	\$35,168 \$0	\$13,937	0\$	\$33,900	\$0 \$38,124	\$10,872 \$0	& & &	\$20.592	S 5	3 8 8	S 8	3 3 .	& &
CSB Non-Dis	80 80 80	80	08 80	80	80	S S	\$0	S S	S S	80	0S 80 S	80 80 80	\$0	\$0	\$25,759	\$27,602	\$28,969	\$31,123	\$31,671	\$32,012	\$31,636	\$33,143	\$38,518	\$27,078 \$34,131	\$31,196	\$32,988	\$29,410	\$30,986	\$49,876 \$0	\$0	08 os	\$0 \$0
TERA Res Ret	8 8	80	08 80 80	08 9	0\$	0S S	80	S S	8 8	. 0\$	08 8	\$0 \$0 \$0	\$0	08 80 80 80	800	\$0	08 8	\$0 80 80	\$0	S S	\$0 80	0\$	80	80 80	\$0 80	\$33,290	\$17,363	\$17,451	\$16,797	\$15,681	\$12,202	\$16,566 \$14,046
etired Pay TERA Non-Dis	80 80 80	80	80	800	0\$ \$	0\$ S	98	3 3	0 S	80	2 S	80 80 80	80	08 80 80	\$0 \$0 \$0	\$0	08 80 80	\$15.645	\$15,144	\$15,769	\$22,193	\$23,706	\$25,303	\$25,883 \$26,705	\$27,585 \$28,262	\$29,493 \$30,105	\$31.172	\$31,286	\$33,131	\$34,324	\$36,391	\$36,224 \$37,639
Average Annual Net Retired Pay Reserve TERA Retired Total Non-Dis	800	80	8 8 80	8 8	\$1,203	\$9,948	\$10,012	\$12,670	\$11,313	\$13,169	\$12,077	\$13,053	\$17,046	\$15,601	\$23,128	\$31,108	\$35,778	\$38,012	\$40,037	\$41,004 \$42,061	\$42,997 \$44,990	\$46,325	\$48,000	\$47,863 \$47,840	\$47,596 \$47,166	\$47,361	\$45,705	\$39,357	\$37,277	\$37,534	\$37,723	\$38,264
Average A Reserve Retired	800	\$0	8 8 80	80	80	0\$ S	\$0	08 os	800	08	20 S	\$0 \$0 \$0	\$0	0 8 8	\$0 \$0 \$0	\$0	08 S	\$0 \$0 \$0	\$0	0 8 8 8	\$0	80	80	\$23,376 \$24,684	\$44,112 \$42,287	\$39,479 \$37,005	\$25,213	\$24,535	\$22,765 \$22,765 \$23,015	\$22,847	\$23,290	\$22,854 \$22,391
Temp Disabled	88	S 8	88	88	\$1,203	\$9,948	\$10,768	\$15,279	\$17,873	\$17,855	\$15,093	\$18,952	\$21,867	\$21,967	\$21,720	\$23,523	\$26,504	\$28,606	\$29,894	\$28,801	\$28,082	\$30,041	\$39,044	\$36,748 \$15,498	\$29,263 \$35,874	\$32,380	\$43,909	\$43,060	0\$ 0\$	80	8 8	80 80 80
Perm Disabled	80 80 80	80	80 80	800	0\$ \$	\$11 100	89,579	\$5,961	\$8,032	\$10,613	\$9,892	\$11,258	\$15,478	\$13,763	\$13,919	\$17,967	\$19,434	\$19,205	\$21,779	\$23,880	\$21,675	\$21,910	\$25,127	\$24,885 \$22,871	\$25,145 \$28,083	\$24,631	\$27,111	\$31,504	\$28,935 \$28,935 \$28,360	\$27,956	\$27,268	\$29,135 \$30,114
Non Disabled	80 80	80	8 S	8 8	80	80	80	S S	S S	. 80	0S S	% % %	\$0	\$32,007	\$32,867	\$34,662	\$36,388	\$39,459	\$40,890	\$41,781	\$43,740	\$47,143	\$48,657	\$48,541 \$48,545	\$48,236 \$47,661	\$48,040 \$48,149	\$46,070	\$47,864	\$47,213	\$48,142	\$48,470 \$48,649	\$48,629 \$48,323
CSB Dis	00	0 0	00	00	0	00	0	00	00	0 0	00	00	0 -	- 0	6 6	∞;	1 01	10 16	۲.	n 0	0 2	00		0 -	1 0	000	0 -	00	000	0 0	> 0	00
CSB Non-Dis	00	0	00	00	0	00	0	00	00	0 0	00	00	0	0 %	14 48 48		166 232	185	105	86 55	43 27	27	1 4	v 4	9 \$	0 m =	4 v		- 67 0	0 0	00	00
TERA Res Ret	0 0	0	00	0 0	0	00	0	00	00	0	0	0 0	0	00	0 0	0	00	00	0	00	0 0	0	0	0 0	0 0	-08			108			36
h TERA Non-Dis	0 0	0	00	0				00		0	00	00	0	00	00	- 0		0.0	2.0	n ∞	27	- (3 719 9 1,090		1,428			299		126	
Strength Total									09						225	•		2,502			6,609			8,848 9,459		10,478			20,535			16,618 16,388
Reserve Retired	00					_ 10															0 0					2 48 6 101 7350			0 8,056 0 8,923		0 6,789 0 6,748	6,349
Temp Disabled	00			0.0																	1 26											
Perm Disabled	0.0	0	00	0.0		0.0	1		9 4		0 0 0															3 285						8 441 9 462
Non Disabled	16 0 17	~												28 0	· ·			2,307			9 6,379 0 6,761			4 8,590 5 9,201		8 10,143 9 10,468			12,091			9 9,828
Age	- 11 - 11		72	616	1 61	2 12	1 20	2 2	30	m h	n kh	in in	Ж	n ñ	€ 4	4,	4 4	4 4	4,	4 4	4. 2	vi ù	o io	ĸί	in in	85 59	0 0	9 %	တ် တော	ॐ १	οŏ	70

All Officers

					Strenoth								Average Annual Net Retired Pay	nnal Net B	atired Day			
Age	Non Disabled	Perm Disabled	Temp Disabled	Reserve Retired	Total	TERA Non-Dis	TERA Res Ret	CSB Non-Dis	CSB Dis	Non Disabled	Perm Disabled	Temp Disabled	Reserve Retired	Total	TERA Non-Dis	TERA Res Ret	CSB Non-Dis	CSB Dis
71		338	0	5.098	13,903	40	30	0	0	\$48.003	\$30,109	9S	\$21,699	\$37,923	\$38,122	\$12,111	80	
72		352	0	4.549	13,439	15	33	0	0	\$48,004	\$32,718	98	\$21,760	\$38,720	\$35,628	\$14,541	80	
73	8,544	295	0	4,256	13,095	12	36	0	0	\$48,441	\$36,559	80	\$21,527	\$39,426	\$44,844	\$14,558	80	
74		274	0	4,244	12,626	6	40	0	0	\$48,378	\$36,671	0\$	\$20,703	\$38,822	\$46,458	\$14,326	80	
75		248	0	4,091	12,072	11	33	0	0	\$49,648	\$39,550	80	\$20,087	\$39,423	\$43,828	\$14,631	80	
92		245	0	3.849	11.440	6	16	0	0	\$49,947	\$38,466	80	\$20,022	\$39,633	\$36,624	\$13,597	80	
77		240	0	3,668	11,037	· •	16	0	0	\$50,474	\$38,470	98	\$19,669	\$39,976	\$39,173	\$13,489	80	-
78		239	0	3,728	11,393	9	16	0	0	\$51,879	\$38,978	0\$	\$19,472	\$41,004	\$40,446	\$11,718	80	,
79		206	0	3,398	10,608	5	10	0	0	\$52,395	\$41,902	80	\$19,902	\$41,783	\$50,345	\$12,307	80	0,
80	6,980	229	0	3,444	10,653	∞	9	0	0	\$53,189	\$43,389	80	\$19,467	\$42,076	\$43,535	\$17,208	80	•,
81		270	0	3,539	10,285	5	5	0	0	\$54,142	\$43,242	80	\$18,650	\$41,643	\$46,525	\$17,450	80	,
82		239	0	3,680	10,218	-	-	0	0	\$55,063	\$43,786	O\$	\$18,260	\$41,545	\$27,420	\$24,801	\$0	•
83		268	0	3,437	9,263	-	5	0	0	\$55,824	\$41,081	0\$	\$17,876	\$41,317	\$42,504	\$15,915	80	,
84		224	0	2,864	7,549	-	4	0	0	\$57,635	\$45,314	O\$	\$17,679	\$42,111	\$35,328	\$18,210	80	•,
85	3,103	163	0	1,982	5,248	-	-	0	0	\$59,045	\$45,736	80	\$18,305	\$43,245	\$25,728	\$18,828	80	,
98			С	1.803	4.354	-	С	0	С	\$60.817	\$47.414	9	\$18.130	\$42.657	\$52.537	0\$	0\$	-
87	2,535		0	2,011	4,699	0	0	0	0	\$62,169	\$46,252	8	\$17,238	\$42,422	80	80	80	
88			0	2,364	5.238	0	0	0	0	\$61,614	\$39,105	98	\$17,168	\$40,592	80	80	80	
88			0	2,312	5,198	0	0	0	0	\$60,832	\$37,340	8	\$16,490	\$39,708	80	80	80	
06		345	0	2,258	5,035	0	0	0	0	\$60,165	\$36,053	8	\$16,611	\$38,981	80	80	80	,
91			0	2,097	4.919	0	0	0	0	\$58,855	\$35,985	80	\$16,948	\$39.246	80	80	80	,
92			0	1.827	4.254	0	1	0	0	\$57,013	\$34,528	80	\$17,627	\$38,205	80	\$8,916	80	,
93	1,654	330	0	1,375	3,359	0	0	0	0	\$57,263	\$38,284	80	\$18,763	\$39,638	80	80	80	,
94			0	1,100	2,525	0	0	0	0	\$56,140	\$37,986	80	\$19,536	\$38,612	80	80	80	,
95			0	992	1,681	0	0	0	0	\$54,813	\$36,968	80	\$19,680	\$37,126	80	80	80	9,
96			0	494	1,067	0	0	0	0	\$56,159	\$42,691	80	\$20,620	\$38,518	80	80	80	•,
76			0	299	708	0	0	0	0	\$54,117	\$38,625	80	\$21,730	\$38,842	80	80	80	,
86			0	218	442	0	0	0	0	\$55,975	\$36,314	80	\$22,160	\$37,385	80	80	80	•,
66	101	30	0 0	110	241	0	0	0	0 0	\$50,951	\$36,984	0\$	\$22,908	\$36,413	80	80	80	,
100			0	99	CII	0	0	0	0	\$51,/14	\$39,309	8	205,228	\$32,607	90	90	90	
101	34	- (0	30	65	0	0	0	0	\$49,958	\$32,808	S 3	\$23,068	\$37,283	80	\$0	\$0	
102	18	ю (0	5.0	47	0	0	0	0	\$47,771	\$46,384	9 , 9	\$21,705	\$33,263	20	0\$	0\$,, ,
501	0 0	710		71	19	0			0 0	945,018	\$21,078	Q S	621,323	927,600	000	000	000	., •
5 2	4		0	r C	- 4	0 0	0	00	0	\$54.849	0S	3 9	80	\$54.849	98	98	08	, ,
901			• •			· ·	• •		• •	9	012 600	9	010 056	614 022	9	9	9	, ,
192		- 0			4 0					09	910,000	9 9	050,514	414,632	000	09	99	, •
801				-	-	0		0	0	9	9	3	850 058	880 053	9	9	9	, •
100	0	0	0 0	-	-	0	00	0	00	9	9	\$ 5	\$11,916	\$11.916	9	9	9	, ,
110						0	0 0	0	0 0	9	9	3 5	017,119	05	9	9	9	, •
011										2	9	2	2	3	9	9	2	,
Total	362,206	16.508	749	148,420	527.883	11.797	1.207	1.285	11	\$49,102	\$30,379	\$24.410	\$21.347	840,678	\$29.256	\$16.678	\$30,649	\$30.1
±09	245 315		19	148 256	404 979	3.731	1 206	13	-	\$50,440	\$34 544	\$41.756	821329	839 336	\$32,440	\$16,665	836 336	820.59
62+	224,488		7	140,569	375,852	2,092	982	4	0	\$50.678	\$34,915	\$45,555	\$21,097	\$39,162	\$33,578	\$16,238	\$43,226	
+59	190,475		С	119,647	319.823	952	626	0	0	\$51.230	\$35,502	0\$	\$20,693	\$39,329	\$35.660	\$15,179	OS	. 9
Notes:	Age is retiree	Notes: Age is retiree's current age nearest birthday at end of fiscal year.	nearest birthda	ay at end of fi.	scal year.													

Age is retiree's current age nearest birthday at end of fiscal year.

60-is total for ages 60 and over.

61-is total for ages 62 and over.

62-is total for ages 65 and over.

61-is total for ages 65 and over.

61-is total for ages 65 and over.

62-is total for ages 65 and over.

71-includes only retirees receiving payment from DoD.

72-includes only retirees receiving payment from DoD.

73-includes only retirees and payments are shown for informational purposes only.

73-includes only retires and CSB retirees and payments are shown for informational purposes only.

73-include the 12/1/12 cost of living increase of 1.7%.

All Enlisted

	CSB Dis	80 80	\$0\$	08 80	80	08 8	80 80	80	80\$	80 80 80	80	0\$ 80	\$0 \$20,308	\$16,074	\$12,542	\$14,378 \$15,130	\$16,562	\$18,272	\$17,517	\$20,271	\$19,119	\$19,111	\$16,604	\$19,320	\$14,082	\$20,292 \$19,706	\$19,248 \$0 \$0	0\$	0 S	80 80 80	800	0,5	80
	CSB Non-Dis	80	80	80 80 80	80	0s 80 8	08 80 80	80	80	08 80 80	80	\$29,040	\$8,351	\$11,623	\$12,372	\$16,771 \$16,825	\$17,085	\$17,687	\$17,853	\$17,760	\$17,461	\$17,734	\$17,589	\$17,061	\$16,073	\$16,446 \$16,449	\$15,612 \$15,118 \$14.814	\$17,025	80	80 80	\$0 \$0	0,5	\$0
	TERA Res Ret	\$0 \$0	\$0\$	0\$ 80	80	08 8	80 80	0\$	80	80 80	80	08 8	80 S	80	80	80 80	08	80	0 8 8	08.8	80	08 80 80	80 80 80	80	80	80	\$0 \$0 \$7,790	\$7,130	\$6,751	\$6,668 \$6,870	\$6,634	\$6,545	\$7,050
stired Day	TERA Non-Dis	80	80	80 80	80	0s 8	\$0 \$0 \$0	08	80	80 80 80	\$0	\$13,856	\$14,144	\$14,535	\$15,300	\$15,439 \$16,304	\$14,636	\$15,641	\$14,916 \$10,048	\$9,872	\$11,017	\$11,445	\$12,135	\$13,067	\$14,124	\$14,397	\$14,344 \$14,329 \$14,237	\$14,504	\$15,529	\$15,826 \$16,344	\$16,938	\$17,985	\$17,849
Average Annual Net Retired Pay	Total	\$3,252	\$0 \$0	\$6,458 \$7,866	\$7,600	\$7,182	\$6,978	\$6,077	\$5,867	\$5,993 \$6,155	\$6,754	\$6,407	\$7,291	\$7,430	\$11,828	\$16,491	\$18,691	\$19,409	\$20,311 \$21,114	\$21,515	\$21,824	\$21,830 \$21,800	\$21,731	\$21,225	\$20,854	\$20,770 \$20,744	\$20,756 \$20,749 \$19,620	\$17,992	\$17,754	\$17,578 \$17,634	\$17,722	\$18,230	\$18,815
Average A	Reserve Retired	\$0 \$0	80	80 80	80	08 8	\$0 80 80	0\$	80	80 80 80	\$0	08 80	\$0 80 80	0\$	80	80 80 80	80	80	20 S	08.8	808	0 8 8 8	\$11.194	\$0	\$6,310	\$0 \$22,741	\$22,202 \$19,315 \$11,328	\$10,944	\$10,700	\$10,504 \$10,573	\$10,218	\$10,247	\$10,070
	Temp Disabled	S S	8	\$7,300 \$8,175	\$8,893	\$7,402	\$7,881	\$6,724	\$7,015	\$7,547 \$7,347	\$8,103	\$8,672	\$9,087 \$9,109	\$8,745	\$10,136	\$10,624 \$10,504	\$11,614	\$11,942	\$14,507 \$13,982	\$14,407	\$15,559	\$15,260 \$14,314	\$17,849	\$16,948	\$18,760	\$22,313	\$18,305 \$23,606 \$15,821	\$16,791	\$16,232	\$34,764 \$0	\$0 80 80	S S	80
	Perm Disabled	\$3,252 \$0	\$0\$	\$5,615 \$7,453	\$5,394	\$6,723	\$5,786	\$5,339	\$4,909	\$4,757 \$5,295	\$5,806	\$6,008	\$5,848	\$6,416	\$6,636	\$7,275 \$7,991	\$9,015	\$10,008	\$9,686 \$10,814	\$10,543	\$10,592	\$11,362	\$11,096	\$10,682	\$11,328	\$11,515	\$11,571 \$12,044 \$12,274	\$12,053	\$10,110	\$9,366 \$9,358	\$9,878	\$12,834	\$14,650
	Non Disabled	80 80	\$0\$	80 80	\$0	\$27,804	\$0 80	0\$	80	\$41,928 \$0	\$45,528	\$55,876	\$14,144	\$14,537	\$19,983	\$19,698 \$19,719	\$19,823	\$20,138	\$20,957 \$21,640	\$22,046	\$22,295	\$22,240 \$22,218	\$22,120	\$21,607	\$21,216	\$21,135	\$21,168 \$21,173 \$21,433	\$21,541	\$22,210	\$22,549 \$22,912	\$23,162	\$23,210	\$22,959
		0 0	0	00	0 0	00	00	0 0	0	00	0	00	0 4	= 8	3 52	6 9 9	96 5	110	88 88	5 15	. 98	10	L 50	40	7	- 8	-00	00	00	0 0	00	00	0
	CSB Dis	0 0 0	0 0	0 0	0 0	0 0	0 0	00	000	0 0	0 0	1 0	3 4 0	5 11		813 49 1,868 66			4,954 98 3,528 80				508 7 335 5	252 4	141 1	107 1 71 3	86 33 0 0	7	0	0 0	0 0	0 0	0 0
		0 0 0	0 0 0	0 0 0 0	0 0 0	000	0 0 0	0 0	000	0 0 0	0 0 0	0 0 0	0 1 0	0 5 11									0 508 7 0 335 5	0 252 4	0 141 1		0 86 1 0 33 0 124 26 0		363 0 0	416 0 0 432 0 0	398 0 0 260 0 0	224 0 0	168 0 0
	CSB CSB Non-Dis Dis	0 0 0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0		000000000000000000000000000000000000000	000	0 0 0	0 0 0 0	0 0 0 0	23 0 0 0	60 0 1 0 67 0 3 4	0 0	0 164	7 0 813 1 0 1,868			0 4,954 0 3,528	0 2,296	0 1,267	0 907	2,893 0 508 7 3,960 0 335 5	00	00	0 0		336		o) →	325 398 0 0 190 260 0 0	10.10	. 6)
Strenoth	TERA TERA CSB CSB Non-Dis Res Ret Non-Dis Dis	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	92 0 0 0 0	251 0 0 0 0 0 465 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	659 0 0 0 0 0 0 0 0 951 0 0 0 0 0	1,259 0 0 0 0 0	1,618 0 0 0 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,466 0 0 0 0 0		1,238 60 0 1 0 1,163 67 0 3 4	51 0 5	25 0 164	7 0 813 1 0 1,868	10 0 3,239	5 0 5,753	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0 2,296	370 0 1,267	843 0 907 1,627 0 694	00	4,586 0	4,773 0	4,078 0 3,060 0	0 0 72	902 336	546	452 384	10.0	136	82
Strangth	TERA TERA CSB CSB Non-Dis Res Ret Non-Dis Dis	0 0	0	0 0	0 (0 659 0 0 0 0 0 951 0 0 0 0	- -				1,419	1,238	1,093 51 0 5	1,387 25 0 164	3,154 17 0 813 5,995 21 0 1,868	9,485 10 0 3,239 12,496 12 0 4,607	14,675 5 0 5,753	17,404 7 0 4,954 20,448 17 0 3,528	37 0 2,296 155 0 1,678	30,412 370 0 1,267	33,140 843 0 907 35,598 1,627 0 694	2,893 0 3.960 0	4,586 0	4,773 0	35,153 4,078 0 34,323 3,060 0	2,241 0 1,557 0 1,119 124	43,450 902 336	546	47,272 452 48,599 384	47,888 325 33,180 190	136	34,334 82
Ctranoth	Total Non-Dis Res Ret Non-Dis Dis	0 0 0 0 0 0 0 0 0	0	0 0	58 0	293 0	375 0 516 0	671 0 1,	736 0	718 0 671 0	588	512 0 1,419 433 0 1,291	398 0 1,238 344 0 1.163	298 0 1,093 51 0 5	208 0 1,387 25 0 164	189 0 3,154 17 0 813 165 0 5,995 21 0 1,868	193 0 9,485 10 0 3,239 237 0 12,496 12 0 4,602	170 0 14,675 5 0 5,753	163 0 17,404 7 0 4,954 109 0 20,448 17 0 3,528	121 0 23.869 37 0 2,296 118 0 26.799 155 0 1678	83 0 30,412 370 0 1,267	78 0 35,140 843 0 907 88 0 35,598 1,627 0 694	59 0 37,398 2,893 0 53 1 38,515 3,960 0	47 0 38,202 4,586 0	25 1 36,626 4,773 0	19 0 35,153 4,078 0 21 12 34,323 3,060 0	19 48 34,0/1 2,241 0 12 92 33,040 1,557 0 14 5,423 38,348 1,119 124	7 13,106 43,450 902 336	5 15,710 45,887 546	2 16,639 47,272 452 0 17,774 48,599 384	0 17,648 47,888 325 0 12,331 33,180 190	0 11,366 32,350 136	0 10,323 34,334 82
Granath	Reserve Total Non-Dis Res Ret Non-Dis Dis	0 0	0	0 0	58 0	293 0	00	671 0 1,	736 0	00	588	906 512 0 1,419 834 433 0 1,291	780 398 0 1,238 751 344 0 1,163	744 298 0 1,093 51 0 5	695 208 0 1,387 25 0 164	676 189 0 3,154 17 0 813 763 165 0 5,995 21 0 1,868	847 193 0 9,485 10 0 3,239 917 237 0 12,496 12 0 4,602	918 170 0 14,675 5 0 5,753	905 163 0 17,404 7 0 4,954 917 109 0 20,448 17 0 3,528	1,021 121 0 23,869 37 0 2,296 1,03 118 0 26,799 155 0 1,678	1,176 83 0 30,412 370 0 1,267	1,201 78 0 33,140 843 0 907 1,300 88 0 35,598 1,627 0 694	1,296 59 0 37,398 2,893 0 1,299 53 1 38,515 3,960 0	1,317 47 0 38,202 4,586 0	1,332 25 1 36,626 4,773 0	1,337 19 0 35,153 4,078 0 1,397 21 12 34,323 3,060 0	1,464 19 48 34,0/1 2,241 0 1,517 12 92 33,040 1,557 0 1,598 14 5,423 3,8348 1,119 124	1,610 7 13,106 43,450 902 336	2,291 5 15,710 45,887 546	2,624 2 16,639 47,272 452 2,743 0 17,774 48,599 384	2,414 0 17,648 47,888 325 1,533 0 12,331 33,180 190	1,327 0 11,366 32,350 136	1,108 0 10,323 34,334 82
- Stranoth	Temp Reserve TERA TERA CSB CSB Disabled Retired Total Non-Dis Res Ret Non-Dis Dis	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0	0 0	0 34 58 0	0 /3 156 0 1 171 293 0	375 0 516 0	0 588 671 0 1,	0 882 736 0	1 932 718 0 0 930 671 0	1 877 588 0	1 906 512 0 1,419 24 834 433 0 1,291	60 780 398 0 1,238 68 751 344 0 1,163	51 744 298 0 1,093 51 0 5	41 080 200 0 989 41 0 0 0 484 695 208 0 1,387 25 0 164	2,289 676 189 0 3,154 17 0 813 5,067 763 165 0 5,995 21 0 1,868	847 193 0 9,485 10 0 3,239 917 237 0 12,496 12 0 4,602	13,587 918 170 0 14,675 5 0 5,753	16,336 905 163 0 17,404 7 0 4,954 19,422 917 109 0 20,448 17 0 3,528	22,727 1,021 121 0 23,869 37 0 2,296 25,578 1.103 1.18 0 26,799 155 0 1678	29,153 1,176 83 0 30,412 370 0 1,267	34,210 1,300 88 0 35,598 1,627 0 694	36,043 1,296 59 0 37,398 2,893 0 37,162 1,299 53 1 38,515 3,960 0	36,838 1,317 47 0 38,202 4,586 0	35,268 1,332 25 1 36,626 4,773 0	33,797 1,337 19 0 35,153 4,078 0 32,893 1,397 21 12 34,323 3,060 0	19 48 34,0/1 2,241 0 12 92 33,040 1,557 0 14 5,423 38,348 1,119 124	28,727 1,610 7 13,106 43,450 902 336	27,881 2,291 5 15,710 45,887 546	28,007 2,624 2 16,639 47,272 452 28,082 2,743 0 17,774 48,599 384	2,414 0 17,648 47,888 325 1,533 0 12,331 33,180 190	19,657 1,327 0 11,366 32,350 136	22,903 1,108 0 10,323 34,334 82

7,416 \$0 \$0 \$0

DoD Retired Military Valuation Data as of Year-End FY 2012

All Enlisted

					Strongth								Αυστουσ Αι	Average Approal Not Betired Day	tired Day			
Age	Non Disabled	Perm Disabled	Temp Disabled	Reserve Retired	Total	TERA Non-Dis	TERA Res Ret	CSB Non-Dis	CSB Dis	Non Disabled	Perm Disabled	Temp Disabled	Reserve Retired	Total	TERA Non-Dis	TERA Res Ret	CSB Non-Dis	CSB Dis
17	21,352	796	0 0	8,184	30,503	54	143	0 0	0 0	\$22,832	\$14,774	\$0	\$9,597	\$19,025	\$18,966	\$6,268	80	80
73	20,268	730	0	6,882	27.814	70 %	103	00	00	\$22,584	\$16,924	08 80	\$9,452 \$9,371	\$19,231	\$21,407	\$5,907	0s 80	80
74	21,097	748	0	6,798	28,643	27	120	0	0	\$22,703	\$16,810	80	\$9,184	\$19,341	\$19,902	\$5,847	\$	\$0
C/ 2L	22,464	/36	0 0	269.9	29,892	13	541	0 0	0 0	\$22,921	\$16,835	0\$	59,052	\$19,666	\$17,384	\$5,224	0.5	08 9
77	21,829	676	00	5.958	27.868	<i>y</i> (f)	123		00	\$23,306	\$16,299	Q Q	\$9,228	\$20,088	\$21.858	\$5,239	08	Q S
78	19,458	701	0	5,157	25,316	0	69	0	0	\$23,465	\$17,132	80	\$9,478	\$20,440	80	\$5,655	80	80
62 08	17,716	703	0 0	4,271	22,690	- 0	63	00	00	\$23,752	\$16,513	S S	\$9,860	\$20,913	\$14,172	\$5,884	0\$ S	80
00 18	15 9/5	000		3.05/	20,17		CI 8	0 0	0 0	\$25,939	\$16,193	8 8	\$9,732	\$20,126	000	62,000	0 9	00
82	15,819	937	0	3,703	20,459	00	n	0 0	0	\$23,859	\$16,157	8 8	\$9,004	\$20,937	08	\$4,806	08	os So
83	13,769	910	0	2,888	17,567	0	0	0	0	\$23,724	\$16,364	80	\$9,632	\$21,026	\$0	80	80	80
8 8	10,585	685	00	2,231	13,501	00	0 -	00	00	\$23,808	\$16,990	3 , 8	\$9,756	\$21,140	0S S	0\$	0S S	08 8
82	8,25/	20/	0	966,1	10,323	0	-	0	0	\$25,515	1/6/14	2	39,937	\$21,032	90	82,600	06	06
86	5,811	317	00	1,276	404,7	00	00	00	00	\$23,038	\$18,578	S 5	\$10,017	\$20,603	S S	08 8	0,5	S S
. œ	3,984	238	0	9886	5,210	0	0	0	0	\$22,961	\$19,981	8 8	\$9,900	\$20,348	80	80	80	80
68	3,366	199	0	782	4,347	0	0	0	0	\$22,647	\$19,707	S	\$9,911	\$20,221	80	80	80	80
06	2,607		0	625	3,387	0	0	0	0	\$22,474	\$22,108	80	\$9,975	\$20,151	\$0	\$0	80	20
91	2,199	114	00	381	2,881	00	00	00	00	\$22,198	\$24,076	S, 5	\$10,131	\$19,894	0 8 8	0 9 9	0\$ S	8 8
93	1,246		0	279	1,590	0	0	0	0	\$22,678	\$26,098	8 8	\$10,946	\$20,759	80	80	80	80
94	750		0	175	970	0 0	0	0	0	\$22,503	\$28,101	O\$ 8	\$11,193	\$20,722	\$0	\$0	\$0	\$0
66		71	0	125	679	0	0	0	0	\$22,210	\$52,309	2	\$11,180	\$20,333	90	20	90	20
96	278	19	0 0	8 7	365	0 0	00	0 0	0 0	\$21,330	\$26,433	S S	\$10,850	\$19,643	\$0 \$0 \$0	80	08	08
86		7	0	39.5	153	0	0	0	00	\$22,826	\$16,557	88	\$11,411	\$19,630	0\$ 8.	0\$	80	0\$
96	45	0 -	00	21	99	00	00	00	00	\$19,096	\$24 948	8 8	\$11,650	\$16,727	08 9	0,5	08	800
8 2		- 0	0 0	- "	2. 12	0 0	0 0	0 0	0 0	8180818	08	§ 9	\$10.552	\$16.950	9 9	<u> </u>	9	9
102	9	0	0		7	0	0	0	0	\$16,104	80	9 S	\$7,500	\$14,875	80	80	80	80
103	4	0	0	_	S	0	0	0	0	\$18,639	80	80	\$8,424	\$16,596	80	80	80	80
¥ 75	ec -	- 0	00	00	4 -	00	00	00	00	\$20,000	\$768	3 , 5	S S	\$15,192	S S	0 S	3 , 3	S S
106	0	• С	0	о С	0	0	о С	0	· c	0\$	OS	8	O\$	80	e os	0\$	0\$	0\$
107	0	0	0	0	0	0	0	0	0	80	\$0	80	80	80	80	\$0	80	80
108	0	0	0	0	0	0	0	0	0	80	80	80	80	80	80	80	80	80
109	0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	08	0S S	S 8	08	08 8	08	0s s	08	05 20 20
011	0	0	0	0	0	0	0	0	0	04	0	8	04	0\$	04	90	90	04
Total	1,109,881	68,770	10,041	227,632	1,416,324	40,563	4,235	33,515	848	\$22,218	\$11,175	89,019	\$10,116	\$19,643	\$13,715	\$6,639	\$17,487	\$17,416
+09 +09	577,129	33,453	32	227,477	838,091	5,108	4,235	33	0 0	\$22,870	\$13,395	\$17,530	\$10,109	\$19,028	\$15,540	\$6,639	\$15,283	08 9
+70	317,089	30,243	1	162 204	610524	1,303	5,175	0	0	523,031	\$13,320	971,026	\$10,026	\$19,038	510,510	\$0,336	08	06
+60	455,092	73,439	0	102,394	619,524	666,1	7,0/4	0	0	423,187	\$14,493	06	618,66	0/6,910	066,114	30,430	90	06
Notes: 4	Age is retiree	Notes: Age is retiree's current age nearest birthday at end of fiscal year.	earest birthda	ıy at end of fis	cal year.													

Age is retiree's current age nearest birthday at end of fiscal year.

60-is total for ages 60 and over.

61-is total for ages 62 and over.

62-is total for ages 65 and over.

61-is total for ages 65 and over.

61-is total for ages 65 and over.

62-is total for ages 65 and over.

71-includes only retirees receiving payment from DoD.

72-includes only retirees receiving payment from DoD.

73-includes only retirees and payments are shown for informational purposes only.

73-includes only retires and CSB retirees and payments are shown for informational purposes only.

73-include the 12/1/12 cost of living increase of 1.7%.

All DoD

		0\$	80	80 80	80	20	80 80	08 08	80	80 80	20	0 8 8	08 80	74	603	808	900	19	897 157	688	19	909	40 5	36	03	282	848	20 80	269	20	20 20 20	0\$	20	\$0 \$0
	CSB Dis												\$00.008	\$16,074	\$12,209	\$14,508	\$17,906	\$19,779	\$19,897	\$22,389	\$19,119	\$18,618 \$15,606	\$16,604	\$22,236	\$12,392 \$26,103	\$15,582	\$19,248		\$20,592					
	CSB Non-Dis	08	80	80 80	0\$	08 8	80 80 80	80	80	80 80	80	\$0 \$29.040	\$8,351	\$11,623	\$12,372	\$16,923	\$17,363	\$18,187	\$18,330	\$18,368	\$18,079	\$18,363 \$18,076	\$18,374	\$18,190	\$16,388	\$17,230	\$16,007	\$16,582 \$16,761	\$25,081	\$42,168	\$49,876 \$0	80	\$0 \$0	\$0 \$0
	TERA Res Ret	0\$	80	80 80	80	08 80	\$0 \$0	0\$	80	80 80	\$0	S S	08	80	S S	\$0 80 80	80	80	0\$ 80	80	8.0	0 8 8	80	\$0 \$0	80 80 80	80	\$33,290	\$0 \$11,631	\$10,676	\$10,205	\$8,756 \$8,476	\$8,479	\$8,401	\$8,680
etired Pav	TERA Non-Dis	80	80	\$0 \$0	0\$	0s 8	\$0 80	80	80	\$0 \$0	\$0	\$13.856	\$14,144	\$14,535	\$15,089	\$15,439	\$14,636	\$15,439	\$14,916	\$10,143	\$11,182	\$11,778	\$12,526	\$14,121	\$15,279 \$16,463	\$17,587	\$20,240	\$21,298 \$21,825	\$21,776	\$22,091	\$22,716 \$23,226	\$23,821	\$24,947 \$24,505	\$25,323 \$26,370
Average Annual Net Betired Pav	Total	\$3,252	80	\$6,458	\$7,600	\$7,182	\$6,983	\$6,145	\$5,977	\$6,180	\$7,171	\$6,797	\$7,682	\$8,309	\$8,756	\$16,933	\$19,557	\$20,520	\$22,536 \$23,627	\$24,195	\$25,056	\$25,349 \$25,613	\$25,801	\$26,004	\$26,194 \$26,393	\$26,596	\$27,013	\$27,371 \$25,774	\$23,859	\$23,519	\$23,544 \$23,820	\$24,325	\$24,317 \$24,986	\$25,107 \$24,969
Average A	Reserve Retired	0\$	80	\$0 80	80	08 80	\$0 \$0	80	80	80 80	80	08 80 80 80	08	80	08 08 08	800	0,5	0\$ 80	80 80	80	80	80 80	\$0	80	\$15,993	\$44,112	\$30,840	\$28,573 \$15,897	\$15,068	\$14,779	\$14,504	\$14,652	\$15,157	\$14,842
	Temp Disabled	8, 9	S S	\$7,300 \$8,175	\$8,893	\$7,402	\$7,887 \$7,009	\$6,771	\$7,166	\$7,827 \$7,771	\$8,665	\$8,356 \$9,045	\$9,581	\$9,835	\$11,255	\$12,144	\$13,028	\$13,235	\$16,999	\$17,484	\$19,981	\$18,465	\$20,187	\$21,442	\$19,742	\$23,981	\$19,646	\$31,622	\$23,686	\$30,096	\$34,764 \$0	80	\$0 \$	80 80
	Perm Disabled	\$3,252	80	\$5,615 \$7,453	\$5,394	\$6,723 \$6,244	\$5,786 \$5,425	\$5,438	\$4,984	\$4,892	\$6,142	\$5,891	\$6,287	\$7,325	\$7,469 \$7,579	\$8,116	\$10,238	\$11,221	\$11,116 \$12,648	\$12,089	\$12,376	\$12,859 \$12,675	\$12,732	\$12,919	\$13,130 \$13,158	\$13,770	\$13,699	\$14,700	\$14,657	\$12,753	\$11,887	\$13,553	\$15,150	\$17,988
	Non Disabled	0\$	\$0	\$0 80	80	\$27,804	\$0 80	80	80\$	\$41,928 \$0	\$45,528	\$33,876	\$14,144	\$14,537	\$15,089	\$20,233	\$20,732	\$22,005	\$23,247 \$24,200	\$24,773	\$25,580	\$25,827 \$26,117	\$26,273	\$26,461	\$26,633 \$26,870	\$27,071	\$27,554	\$27,914 \$28,119	\$28,458	\$29,564	\$29,986 \$30,641	\$31,433	\$31,577	\$31,146
,		0 0	0	0 0	0	00	00	00	0	0 0	0	0 0	0 4		37	22	40	202	41 90	52	39. ‡	21 10	L 4	o vo	2 2	7 %	. —	0 0	- 0	0	0 0	0 0	0 0	00
	CSB Dis	00	0	00	00	0	0 0	00	0	00	0 (0 0	0 4	. 11	4 TE	25 88	104	120	114 90	52	39.	21 10	F 4	n v o	0 0	2 %	. —	00	- 0	0 0	0 0	00	0	0 0
	CSB CSB Non-Dis Dis	000	0 0	0 0	0 0	0 0	0 0	000	000	0 0	0 0	0 0	3 0 0	5 11		827 52 1.916 68			5,139 114 3,666 90				535 7	266 5	175 2 145 2	113 2	888	36 0 30 0	12 1	1 1 0	2 0 0	0 0	0 0	0 0
	CSB Non-Dis	0 0	0 0	0 0 0	0 0	000	0 0 0 0	0 0 0	0 0 0	0 0 0	000	0 0 0	0 1 0	0 5 11					_				0 535 7	0 266 5	0 175 2 0 145 2	0 113 2		0 36 0 204 30 0		495 1 0	524 2 0 523 0 0	310 0 0	266 0 0	230 0 0 211 0 0
		0 0 0 0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	60 0 1 0	51 0 5 11	0 6 5 0 169		0 3,327 1		, 0 5,139] , 0 3,666		3 0 1,322	0 950 0 721	00	00	00	00			477					190 230 0 0 144 211 0 0
Strenorh	TERA TERA CSB Non-Dis Res Ret Non-Dis	1 0 0 0		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	92 0 0 0 0	231 0 0 0 0 0 0 466 0 0 0 0 0	660 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,281 0 0 0 0 0	1,654 0 0 0 0	1,711 0 0 0 0 0 1,679 0 0 0 0 0	1,568 0 0 0 0 0		1,328 60 0 1 0 1,328 67 0 3 4		0 6 5 0 169	17 0 827 21 0 1.916	10 0 3,327	5 0 5,985	, 0 5,139] , 0 3,666	39 0 2,401	378 0 1,322	0 950 0 721	2,994 0	5,018 0	00	5,379 0		2,789 0 2,060 204	1,600 477	927		538	316 219	
Strength	TERA TERA CSB Non-Dis Res Ret Non-Dis	0 0 0 0 0	0	0 0	00	00	00	00		0 1,711 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	0 1,524 0 1.418	0 1,328	0 1,203	1,114 41 0 6 1,542 25 0 169	17 0 827 21 0 1.916	0 10,196 10 0 3,327 1	0 15,000 12 0 4,700 0 16,458 5 0 5,985	0 19,906 7 0 5,139 1 0 23,706 19 0 3,666	0 27,908 39 0 2,401	36,191 378 0 1,322	870 0 950 1,689 0 721	2,994 0	5,018 0	5,638 0 5,863 0	44,906 5,379 0 44,588 4,500 0	44,549 3,669 1	2,789 0 2,060 204	59,415 1,600 477	64,493 927	751 644	71,826 538	49,210 219	190 144
Strangth	TERA TERA CSB Total Non-Dis Res Ret Non-Dis	0 0 0 0 0 0	0	3 3 0 6 0 0 0 0 0 8 24 0 42 0 0 0 0	58 0	294 0	376 0 522 0	679 0 1	753 0	738 0 1 701 0 1	624 0	549 0 1,524 460 0 1.418	419 0 1,328 378 0 1,328	325 0 1,203	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	219 0 3,379 17 0 827 188 0 6,444 21 0 1,916	219 0 10,196 10 0 3,327 1	2/9 0 13,000 12 0 4,700 191 0 16,458 5 0 5,985	198 0 19,906 7 0 5,139 1 132 0 23,706 19 0 3,666	151 0 27,908 39 0 2,401	110 0 36,191 378 0 1,322	104 0 39,749 870 0 950 101 0 42,603 1,689 0 721	73 0 44,815 2,994 0	59 0 46,503 5,018 0	48 2 46,157 5,638 0 31 2 46,085 5,863 0	25 2 44,906 5,379 0 30 23 44.88 4.500 0	21 96 44,549 3,669 1	18 193 43,920 2,789 0 21 7,782 51,510 2,060 204	12 18,434 59,415 1,600 477 1 20,126 60,408 1,156 441	9 22,645 64,493 927	2 24,695 67,807 751 0 26,697 71,003 644	0 27,195 71,826 538	0 19,120 49,385 316 0 18,114 49,210 219	0 17,161 49,811 190 0 16,610 50,722 144
Strenoth	Reserve TeRA TERA CSB Retired Total Non-Dis Res Ret Non-Dis	0 0 0 0 0 0	0	0 0	58 0	294 0	00	679 0 1	753 0	00	624 0	549 0 1,524 460 0 1.418	0 1,328	325 0 1,203	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0 3,379 17 0 827 0 6,444 21 0 1,916	219 0 10,196 10 0 3,327 1	2/9 0 13,000 12 0 4,700 191 0 16,458 5 0 5,985	0 19,906 7 0 5,139 1 0 23,706 19 0 3,666	151 0 27,908 39 0 2,401	110 0 36,191 378 0 1,322	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	73 0 44,815 2,994 0	59 0 46,503 5,018 0	2 46,157 5,638 0 2 46,085 5,863 0	25 2 44,906 5,379 0 30 23 44.88 4.500 0	21 96 44,549 3,669 1	193 43,920 2,789 0 7,782 51,510 2,060 204	12 18,434 59,415 1,600 477 1 20,126 60,408 1,156 441	9 22,645 64,493 927	24,695 67,807 751 26,697 71,003 644	0 27,195 71,826 538	0 19,120 49,385 316 0 18,114 49,210 219	17,161 49,811 190 16,610 50,722 144
Stranoth	Temp Reserve TERA TERA CSB Disabled Retired Total Non-Dis Res Ret Non-Dis	0 0 0 0 0 0 0	0	0 0	58 0	294 0	376 0 522 0	679 0 1	753 0	738 0 1 701 0 1	624 0	9/4 549 0 1,524 934 460 0 1.418	419 0 1,328 378 0 1,328	827 325 0 1,203	777 296 0 1,114 41 0 6 802 228 0 1.542 25 0 169	774 219 0 3,379 17 0 827 876 188 0 6,444 21 0 1,916	981 219 0 10,196 10 0 3,327 1	1,076 2/9 0 13,000 12 0 4,700 1,084 191 0 16,458 5 0 5,985 1	1,065 198 0 19,906 7 0 5,139 1 1,096 132 0 23,706 19 0 3,666	1,184 151 0 27,508 39 0 2,401	1,390 110 0 36,191 378 0 1,322	1,405 104 0 39,749 870 0 950 1,531 101 0 42,603 1,689 0 721	73 0 44,815 2,994 0	1,549 59 0 46,503 5,018 0	1,474 48 2 46,157 5,638 0 1,583 31 2 46,085 5,863 0	1,602 25 2 44,906 5,379 0 1 1 648 30 23 44 588 4 500 0	21 96 44,549 3,669 1	1,822 18 193 43,920 2,789 0 1,900 21 7,782 51,510 2,060 204	12 18,434 59,415 1,600 477 1 20,126 60,408 1,156 441	2,667 9 22,645 64,493 927	3,012 2 24,695 67,807 751 3,262 0 26,697 71,003 644	3,030 0 27,195 71,826 538	1,993 0 19,120 49,983 310 1,806 0 18,114 49,210 219	0 17,161 49,811 190 0 16,610 50,722 144

,476 ,592 \$0 \$0

DoD Retired Military Valuation Data as of Year-End FY 2012

All DoD

	CSB Dis								\$18,4
	CSB Non-Dis	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	8 80 80 80 80 80 80	\$ 80 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0	888888888888888888888888888888888888888	\$17,973 \$21,233 \$43,226 \$0
	TERA Res Ret	\$7,282 \$8,470 \$8,147 \$7,967 \$6,968	\$6,300 \$6,938 \$6,796 \$6,764 \$9,070	0, 0, 0, 0, 0,	\$ 80 \$0 \$0 \$0 \$0 \$0	88,6		8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$8,866 \$8,861 \$8,561 \$8,110
tired Pay	TERA Non-Dis	\$27,117 \$24,420 \$30,196 \$26,541 \$29,504	\$28,541 \$34,450 \$40,446 \$44,316 \$43,535	\$46,525 \$27,420 \$42,504 \$35,328 \$25,728	\$52,537 \$0 \$0 \$0 \$0 \$0 \$0	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$0 \$0 \$0 \$0 \$0 \$0 \$0	888888888888	\$17,217 \$22,674 \$23,289 \$24,807
Average Annual Net Retired Pay	Total	\$24,942 \$25,491 \$25,642 \$25,301 \$25,349	\$25,647 \$25,804 \$26,822 \$27,561 \$27,943	\$27,788 \$27,782 \$28,031 \$28,660 \$28,518	\$28,769 \$29,881 \$30,497 \$30,833 \$31,408	\$32,098 \$32,456 \$33,573 \$33,647 \$32,560	\$33,707 \$33,805 \$32,819 \$32,180 \$30,124	\$32,318 \$30,880 \$25,514 \$22,557 \$46,610 \$14,832 \$0 \$50,98 \$11,916 \$0	\$25,354 \$25,644 \$25,732 \$26,165
Average Ar	Reserve Retired	\$14,242 \$14,281 \$14,016 \$13,611 \$13,239	\$13,318 \$13,207 \$13,671 \$14,309 \$14,231	\$13,876 \$13,869 \$14,112 \$14,210 \$14,619	\$14,768 \$14,639 \$15,026 \$14,827 \$15,172	\$15,495 \$16,411 \$17,444 \$18,391 \$18,487	\$19,438 \$20,151 \$20,529 \$21,103 \$21,503	\$21,930 \$21,179 \$21,256 \$21,789 \$0 \$13,056 \$6 \$50,988 \$11,916 \$0	\$14,549 \$14,536 \$14,478 \$14,466
	Temp Disabled	8 8 8 8 8 80 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8 8	8 8 8 8	8888888888	\$10,088 \$26,555 \$30,045 \$0
	Perm Disabled	\$18,746 \$21,448 \$22,202 \$22,135 \$22,560	\$22,960 \$22,587 \$22,687 \$22,267 \$22,041	\$21,676 \$21,772 \$21,987 \$23,970 \$24,726	\$28,129 \$28,257 \$29,253 \$30,446 \$31,730	\$33,209 \$32,230 \$36,278 \$36,307 \$36,421	\$39,957 \$36,675 \$33,548 \$36,984 \$38,511	\$32,808 \$46,384 \$21,678 \$768 \$0 \$16,608 \$0 \$0 \$0 \$0 \$0	\$14,892 \$18,767 \$19,149 \$20,645
	Non Disabled	\$29,979 \$30,128 \$30,269 \$29,831 \$29,765	\$30,014 \$30,183 \$31,313 \$31,867 \$32,464	\$32,757 \$32,746 \$32,955 \$33,837 \$33,075	\$34,061 \$36,618 \$38,401 \$39,201 \$40,665	\$41,505 \$42,143 \$42,404 \$43,236 \$42,114	\$43,368 \$42,818 \$43,659 \$41,133 \$39,475	\$38,902 \$39,855 \$39,855 \$32,516 \$32,516 \$46,610 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$28,833 \$31,093 \$31,400 \$31,745
	CSB Dis	00000	00000	00000	00000	00000	00000	000000000	925 1 0 0
	CSB Non-Dis	00000	00000	00000	00000	00000	00000	000000000	34,800 46 4
									ñ
	TERA Res Ret	173 135 139 160 178	126 139 85 73 21	∞ 0 v 4 0	0000	0-00	0000	000000000	5,442 5,441 4,760 3,300
İ	TERA TERA Non-Dis Res Ret	94 173 49 135 32 139 36 160 24 178		8 2 8 4 2	-0000	0 - 0 0 0	00000	0000000000	
İ			18 11 6 6 8	31,086 5 8 30,677 1 2 26,830 1 5 21,050 1 4 15,571 1 2	11,758 1 0 10,803 0 0 10,448 0 0 9,545 0 0	7,800 0 0 6,316 0 1 4,949 0 0 3,4495 0 0 0 2,3,10 0 0		000000000	5,442 5,441 4,760 3,300
	TERA Non-Dis	94 49 32 36 42	40,226 18 38,905 11 33,709 6 33,298 6 32,505 8					000000000	\$2,360 5,442 8,839 5,441 5,179 4,760 2,345 3,300
	Tera Total Non-Dis	44,406 94 41,930 49 40,909 32 41,269 36 41,964 24	40,226 18 38,905 11 36,709 6 33,298 6 32,505 8	7,493 7,383 6,325 5,095 3,541	3,079 3,141 3,352 3,094 2,883		562 1,432 353 945 257 595 131 307 75 146	33 86 0 27 54 0 13 24 0 0 5 0 1 1 2 0 0 0 0 1 1 1 0 0 0	1,944,207 52,360 5,442 1,243,070 8,839 5,441 1,132,145 5,179 4,760 939,347 2,345 3,300
	Reserve TERA Retired Total Non-Dis	44,406 94 41,930 49 40,909 32 41,269 36 41,964 24	10,135 40,226 18 9,626 38,905 11 8,885 36,709 6 7,669 33,298 6 7,452 32,505 8	0 7,493 0 7,383 0 6,325 0 5,095 0 3,541	3,079 3,141 3,352 3,094 2,883	0 2,665 0 2,208 0 1,654 0 1,275 0 891	0 562 1,432 0 353 945 0 257 595 0 131 307 0 75 146	1 0 33 86 0 2 0 27 54 0 1 0 13 24 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	376,052 1,944,207 52,360 5,442 375,733 1,245,070 8,839 5,441 349,517 1,132,145 5,179 4,760 282,041 939,347 2,345 3,300
	Temp Reserve TERA Disabled Retired Total Non-Dis	29,819 1,305 0 13,282 44,406 94 29,106 1,229 0 11,595 41,930 49 29,706 1,025 0 11,138 40,999 32 29,205 1,022 0 11,042 41,269 36 30,197 984 0 10,783 41,964 24	29,175 916 0 10,135 40,226 18 28,363 916 0 9,626 38,905 11 26,884 940 0 9,885 36,709 6 24,720 909 0 7,669 33,298 6 23,988 1,065 0 7,432 32,505 8	22,421 1,172 0 7,493 22,118 1,176 0 7,383 19,327 1,178 0 6,325 15,46 909 0 5,095 11,360 670 0 3,541	8,205 474 0 3,079 7,214 448 0 3,141 6,634 462 0 3,352 5,039 500 0 2,883	489 0 2.665 441 0 2.208 395 0 1.654 265 0 1.775 179 0 891	757 113 0 562 1,432 508 84 0 353 945 288 50 0 257 595 146 30 0 131 307 53 18 0 75 146	52 1 0 33 86 0 24 3 0 27 54 0 9 2 0 13 24 0 6 1 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,790 376,052 1,944,207 52,360 5,442 51 375,733 1,243,070 8,839 5,441 18 349,517 1,132,145 5,179 4,760 0 282,041 939,347 2,345 3,300

Notes:

Age is retiree's current age nearest birthday at end of fiscal year.

60+ is total for ages 60 and over.

62+ is total for ages 62 and over.

65+ is total for ages 65 and over.

Includes only retirees receiving payment from DoD.

Temporary Early Retirement Act CIFRA) retirees and payments are shown for informational purposes only.

Career Status Boung (CSB) retirees and payments are shown for informational purposes only.

Park and CSB numbers and apyments are included in the appropriate categories.

Pay amounts do not include the 12/1/12 cost of living increase of 1.7%.

	Total	\$13,394 \$7,556	\$7,811 \$8,111 \$7,053	\$7,321	\$7,075 \$7,226	\$7,469	\$7,816 \$6,756	\$7,619	\$7,434 \$7,505	\$7,544	\$8,576	\$8,620 \$9,323	\$11,685	\$10,559	\$9,319 \$10,064	\$10,520	89,864	\$9,009	\$9,953	\$6,985	\$8,157	\$8,633	\$8,076	\$8,789	\$8,419 \$9,223	\$10,253	\$10,203	\$11,110 \$11,228	\$10,189	\$10,536	\$10,834	\$10,991	\$10,904	\$10,443	\$10,973 \$10,869 \$10,889
Pay	RSFPP	80 80	S S S	80	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80 8	80	80 80 80	\$0	89,727 80	S S	0S S	\$0 \$4,836	80	08 S	\$0 \$8,928	800	888	\$1,812	\$1.596	\$3.534	80	\$11,016	\$2,678	\$0	\$1,745	\$3,307	\$1,308	\$2,308 \$2,753	\$2,725	\$2,301	\$3,807	\$3,337	\$2,194	\$2,558	\$4,745 \$4,357 \$3,288
Average Annual Net Survivor Pay	Death on Active Duty	\$7,298	\$7,923 \$8,055 \$7,053	\$7,373	\$7,167	\$7,456	\$7,871 \$6,737	\$7,320	\$7,343 \$7,292	\$7,475	\$8,576	\$8,084 \$9,387	\$10,991	\$9,542	\$9,232 \$9,040	\$6,887	\$7,347	\$5,999 \$6,770	\$6,672	\$5,726	\$7,024	\$6,579	\$6,492	\$7,482	\$7,450 \$8,284	\$8,701	\$9,373	\$10,035 \$12,054	\$9,477	\$12,018	\$13,151	\$13,566	\$13,249	\$13,111	\$16,783 \$14,280 \$15,397
age Annual D	Minimum Income	80	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	08	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80 8	80	0s os	80	0s 0s	08 9	S 8	80 80 80	80	08 S	08 08 08	08	0s S	0s 0s	0 S S	0 S	80	0S S	S S S	80	0s 0s	0S 0S	80	08 08 80	S S	80	0S S	0,5	80	08 S	% % % % % %
Aver	RCSBP	\$19,056	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$5,160	\$3,852	\$5,748	\$1,768	\$3,865	\$5,727	\$4,798	\$4,889	\$4,784 \$5,238	\$4,394	\$5,344	\$1,260 \$4,040	\$4,830	\$3,588	\$9,000	\$5,118	\$4,830	\$6,432	\$3,286	\$7,014	\$6,118	\$6,610 \$5,374	\$6,449	86,758	\$6,972 \$6,662	\$6,706	\$6,873	\$7,682	\$7,124	\$7,573	\$6,763	\$7,096 \$7,443 \$7,433
	SBP	\$24,451	\$3,085 \$11,753 \$0	\$4,325	\$5,720 \$7,612	\$7,739	\$7,509 \$7,062	\$9,979	\$8,292	\$8,066	\$9,392	\$9,653 \$10,362	\$12,466	\$11,684	\$9,684 \$11,150	\$12,193	\$12,797	\$12,298	\$12,661	\$9,397	\$10,297	\$12,988	\$11,348	\$10,863	\$10,823	\$13,357	\$12,196	\$13,318 \$12,830	\$11,714	\$11,909	\$12,020	\$12,415	\$12,059	\$11,861	\$12,395 \$12,315 \$12,315 \$12,292
	Total	16	86 198 257	279	396 473	491	469 472	479	403 428	416	397	323 179	149	83 83	38 45	31	389	54 54	52	76	109	97	150	150	216 187	243 265	274	287 394	422	564	610	931	991	1,219	1,492 1,777 1,965
	RSFPP Total	0 16 0	0 86 0 198 0 257	0 279 0 415	0 396 0 473	0 491	0 469 0 472	0 479	2 403 0 428	0 416	0 397	0 323 1 179	0 149	0 83	0 38 1 45	0 31	0 33	1 54	0 52	0 76	0 109	1 97	5 150	0 150	5 216 13 187	7 243 3 265	1 274	4 287 12 394	10 422			37 931			10 1,492 8 1,777 21 1,965
ngth		00	84 0 86 195 0 198 257 0 257	00	372 0 396 447 0 473	0	$\begin{array}{cccc} 429 & 0 & 469 \\ 423 & 0 & 472 \end{array}$	00	70	00	00	163 0 323 59 1 179	0 0	00	0 -1	00	00	D -T	0 -	0 -	• 0		ייי	10	5 13	7 8	1	12	10	15	16 23	37	10	17 1	
irei	RSFPP	00	000	00	00	0	00	00	70	00	00	0 -	0 0	00	0 -1	00	00	D -T	0 -	0 -	• 0		ייי	10	5 13	7 8	1	12	10	15	16 23	37	10	17 1	10 8 1 21
irei	Death on Active Duty RSFPP	00	000	1 0 274 0 0 0 401 0	1 0 372 0 1 0 447 0	2 0 455 0	2 0 429 0 2 0 423 0	7 0 409 0	14 0 339 2 14 0 324 0	16 0 279 0 20 0 264 0	27 0 248 0	16 0 163 0 24 0 59 1	6 0 46 0	22 0 23 0 10 0 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 12 0 3 0 12 1	2 0 7 0	0 0 11.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2 0 21 0 3 0 25 1	12 0 35 0 7 0 40 1	7 0 63 0	7 0 55 1	8 0 85	10 0 78 0	22 0 113 5 26 0 63 13	37 0 92 7 43 0 106 3	46 0 101 1	50 0 83 4 68 0 117 12	73 0 84 10 82 0 101 10	127 0 83 15	156 0 75 16 179 0 82 23	204 0 78 37	249 0 60 10	322 0 57 17 1 391 0 71 21 1	429 0 52 10 1 535 0 51 8 1 567 0 60 21 1
irei	Minimum Death on Income Active Duty RSFPP	00	000	1 0 274 0 0 0 401 0	00	2 0 455 0	38 2 0 429 0 427 2 0 423 0	63 7 0 409 0	14 0 339 2 14 0 324 0	16 0 279 0 20 0 264 0	122 27 0 248 0	16 0 163 0 24 0 59 1	97 6 0 46 0	22 0 23 0 10 0 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	25 1 0 12 0 29 3 0 12 1	22 2 0 7 0	18 4 0 11 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2 0 21 0 3 0 25 1	29 12 0 35 0 29 7 0 40 1	39 7 0 63 0	34 7 0 55 1	52 8 0 85 5	62 10 0 78 0	76 22 0 113 5 85 26 0 63 13	107 37 0 92 7 113 43 0 106 3	126 46 0 101 1	150 50 0 83 4 197 68 0 117 12	255 73 0 84 10 306 82 0 101 10	339 127 0 83 15	363 156 0 75 16 496 179 0 82 23	612 204 0 78 37	672 249 0 60 10	823 322 0 57 17 1 897 391 0 71 21 1	0 52 10 1 0 51 8 1 0 60 21 1

DoD Survivor Valuation Data as of Year-End FY 2012

al N	ım Death on se Active Duty RSFPP Total		\$13,794 \$3,586	\$12,607	\$0 \$10,342 \$4,512 \$11,134 \$0 \$11,153 \$2,063 \$11,189 \$0 \$9,633 \$1,738 \$11,260	\$12,875 \$2,256 \$9,937 \$2,266	\$8,219 \$8,406 \$2,097 \$11,297 \$8,219 \$9,715 \$1,567 \$11,517	\$9,729 \$1,849	\$13,213 \$2,362 \$10,812 \$2,260	\$6,506 \$11,102 \$2,017 \$12,088 \$7,505 \$12,033 \$2,227 \$12,154 \$6,895 \$13,317 \$2,249 \$12,500	\$11,376 \$1,990	\$12,789 \$2,507	\$12,419 \$2,214 \$17,187 \$2,486	\$11,060 \$2,415 \$13,751 \$2,677	\$2,914	\$16,635 \$3,224	\$9,585 \$2,982 \$14,532 \$3,398 \$16,982 \$3,248	\$7,747 \$9,012 \$3,667 \$15,497 \$5,432 \$15,207 \$3,311 \$15,289	\$2,771 \$3,071	\$11,820 \$3,716 \$15,456 \$2,450 \$19,560 \$2,984	\$3,543	\$0 \$0 \$2,332 \$13,721 \$9,379 \$0 \$4,281 \$12,392	\$0 \$1,497	\$0 \$0 \$1,836	\$8,219 \$0 \$0,396 \$0 \$0 \$14,808 \$8,210 \$0 \$7.308	0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0	\$12,480 \$2,809	\$7.641 \$12,358 \$2,806 \$12,978 \$37.643 \$12,195 \$2,803 \$13.064	
Average Anı	Minimum SBP RCSBP Income	\$12,073 \$7,257 \$12,397 \$7,011 \$12,656 \$7,170	\$7,193 \$7,193		\$13,022 \$7,362 \$13,071 \$7,418 \$13,107 \$7,378	\$7,477 \$7,267	\$13,003 \$7,401 \$8 \$13,272 \$7,379 \$8	\$7,438		\$7,558 \$7,722	57,797	\$8,163	\$8,030 \$8,177		\$8,813	\$9,064	\$19,246 \$9,300 \$6 \$19,492 \$9,590 \$8 \$20,044 \$9,977 \$8	\$9,897 \$10,347	\$10,536 \$10,476	\$20,014 \$10,600 \$8 \$19,585 \$10,713 \$19,361 \$10,726	\$11,435		\$10,764	\$8,852 \$8,712	\$10,572 \$0 \$8 \$17,430 \$9,564 \$4,300 \$8,760 \$8	88.166	\$8,223	\$15,550 \$8,246 \$7 \$15,654 \$8,294 \$7	
	Total	2,214 2,523 2,826 2,140	3,149 3,716	15 4,241 5 4,785 5 4,785		6,395 6,533		8,310	8,820 9,243	204 10,553 \$ \$ \$ 257 10,459 \$ \$	11,043	11,039	10,679 10,621	10,405 10,649	523 10,672 § 558 10,634 §	10,364	531 9,145 8,484 8,368 8,423 6,430 8	4,829 3,394		1,091 714 488		15 124 \$ 12 76 \$	3 42	0 12 2 8	0 0 0	8 416 203 124	269,332	8,101 264,595 8 8,064 254,904 8	
treı	Minimum Death on Income Active Duty RSFPP	0 47 0 46 0 52		0 0 45	0 0 0 41 41	0 0 52 0 44	1 45 1 52	3 46	3 4 67 67	3 2 8 3 4 6 4 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5	2 65	1 62	2 43 7 41	7 31 5 38	3 42	5 35	5 5 19 20 20 20 30 30 30 30 30 30 30 30 30 30 30 30 30	4 C C C C C C C C C C C C C C C C C C C	2 2 2	1 0 0 2 2	2 1 0 0	3 0	1 0	0 0	700	2 80 0	1,518	95 1,425 8	nday at end of fiscal ye
	Minimur SBP RCSBP Income	1,434 720 1,567 902 1,787 981			2,/10 1,329 3,185 1,555 3,756 1,740		4,807 1,984 5,380 2,151			7,593 2,713 7,581 2,702 7,457 2,667					6,781 3,260		5,639 2,954 5,090 2,754 3,775 2,208			598 395 402 262 274 170		56 53 35 26	14 24	2 3	1 2 1	101 333 84 006		176,643 78,331 170,550 74,903	Age is survivor's current age neare 60+ is total for ages 60 and over.
	Age	9 5 6 6	8.2	8 8 E	è 8 6	70	72 73	74	57 57 15	. 8 6	80 80	5 25 3	8 2	85 86	88	68	8 2 8	93 94	95 96	98 98 99	001	102 103	104	105 106	104 108 108) I	+09	62+ 65+	Notes: Age 60+

APPENDIX D

ECONOMIC ASSUMPTIONS

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ECONOMIC ASSUMPTIONS

In July, 2012, the DoD Board of Actuaries adopted the following economic assumptions for use in the valuation as of September 30, 2012: the rate of inflation (CPI) is assumed to be 3.00 percent per year; the investment return (interest rate) is 5.50 percent per year; and the basic pay scale increases are 3.50 percent per year. As noted in the "Valuation Data and Procedure" section in the main text, the valuation results are highly sensitive to changes in these three primary economic assumptions. As background for determining the economic assumptions, the Board receives presentations by economists and actuaries and is provided with extensive historical data on inflation, interest rates, and wage growth. The Board analyzes past trends, current environment, and future expectations. As part of their survey of the current environment, the Board also considers what other federal retirement systems are assuming as well as other government agencies and financial experts. Table D-1 shows the DoD Board of Actuaries' long-term economic assumptions by valuation year since the Fund's inception (1984).

The comparisons to Civil Service and Social Security in this appendix are not meant to imply an expectation that all three systems should use the same assumptions. They are different in terms of the trust funds themselves and the programs financed by the trust funds.

Inflation

The CPI-W, one of the consumer price indexes published by the Bureau of Labor Statistics (BLS), is emphasized as an inflation measure since it is used in calculating military retired pay cost-of-living increases. The CPI-W measures the average price change for Urban Wage Earners and Clerical Workers and covers approximately 29 percent of the U.S population. (The CPI-W is a subset of the broader CPI-U measure which computes the average price change for All Urban Consumers and covers approximately 88 percent of the U.S. population). The CPI-W is the common index used to make cost-of-living adjustments for labor contracts.

Table D-2 shows the average annual CPI-W changes over various periods of time since 1930. Different periods experienced different rates of change. The average annual CPI change during successive 30-year periods since World War II has risen from 3.79 percent for the period ending in 1975 to 5.20 percent for the period ending in 1995. This reflects the high inflation during the 1970s. The average annual CPI change during the current 32-year period ending in 2012 is 2.97 percent.

The DoD assumption for CPI is reasonably consistent with what is used in other parts of the government. In its 2012 report, the Civil Service Retirement System (CSRS) assumes a 3.00 percent CPI increase. The Trustees of the Social Security Administration (SSA) in their 2012 Annual Report made projections under three alternative sets of assumptions. Their intermediate assumption for CPI was 2.8 percent (other assumptions: low cost -1.8 percent; high cost -3.8 percent). The Board has noted that in certain respects, the effect of the CPI on the valuation is

relatively minor in a system where retirement benefits are fully indexed and expressed as a percentage of payroll.

Interest Rate

The Board analyzes Tables D-3 and D-4, as well as other material presented at the DoD Board of Actuaries annual meeting, when setting the interest assumption. The Board focuses on real interest rates. To simplify discussion, the real interest rate is defined as the difference between the nominal interest rate and the CPI. Other things being equal, a lower element of risk in an investment will give a lower real interest rate. Because the Military Retirement Fund must be invested in obligations of the U.S. Government, a highly secure investment, the real interest rates are expected to be relatively low. As noted in the "Assets" section in the main text, the Fund is currently heavily investing in Treasury Inflation-Protected Securities (TIPS). TIPS allow the investor/institution to lock in the real interest rate for the given period of time.

The Board examines past real interest rates that would have been earned by the types of public debt securities in which the Fund is invested. The Board recognizes the importance of selecting a real interest rate that would prevail on average over a long period of time and that would not unduly weight recent experience or expected results during the near-term future.

Table D-3 depicts the average real yield rates on new purchases of the Fund. Because the Fund was established in 1984, the DoD Office of the Actuary constructed a Composite Series to simulate what new purchases would have yielded in the past.

Table D-4 shows the average real Military Retirement Fund effective yield. The effective yield calculation uses a "dollar-weighted yield," which is computed by dividing the investment income by the average amount of principal invested throughout the year. Since the Fund's inception, the average annual real yield is 4.82 percent.

After analyzing past trends of government trust fund earnings, 2.50 percent was adopted as the assumed rate of real interest. Since 3.00 percent had been adopted as the inflation rate, the assumed nominal rate of interest is 5.50 percent (where 5.50 = 2.50 + 3.00). This is commonly known as the 'Building Block Method' in setting actuarial assumptions.

It is relevant to note the real interest rates being assumed by the other two major public benefit systems. The SSA Trustees used an intermediate ultimate real interest rate assumption of 2.9 percent in their 2012 report (other assumptions: low $\cos t - 3.4$ percent; high $\cos t - 2.4$ percent). The Board of Actuaries of the CSRS used a 2.25 percent real interest rate assumption in its 2012 valuation.

Wage Growth

For the salary increase assumption, recent historical data is used as well as forecasts for the population at large. The Career Compensation Act of 1949 revamped the military compensation structure to provide an equitable pay and allowance system. Associated with this change was a large basic pay increase designed to establish rough comparability with the private sector. Additionally, the Army and Air Force Vitalization and Retirement Equalization Act of 1948 established for the first time a uniform voluntary retirement system authority among all branches of Service. The reserve retirement program was also established at this time. These two Acts provided the start of the modern-day compensation structure designed to attract and retain the number of Service members needed. In the analysis of basic pay scale increases, the Board looks at all data from this point forward.

The Military Pay Comparability Act of 2003 ensures that military pay increases are comparable to private sector pay growth, as measured by the Employment Cost Index (ECI) – Wages and Salaries index on a 15-month lag. ('Wages and Salaries' account for about 70 percent of the broader 'Compensation' costs, with 'Benefits' making up the remaining 30 percent.) Covenants are embedded within the act which give the President the authority to propose an alternate basic pay adjustment. This Act specifically referenced fiscal years through 2006. However, Congress has continued to use the basic framework of the Act in the subsequent fiscal years.

Table D-5 displays real military basic pay increases over various periods of time during the post-World War II era. From the early 1950s to the early 1970s, the average annual real military pay increase was approximately 1.79 percent. From the early 1950s to the present, the increase has averaged approximately 0.95 percent a year. Since the Vietnam War (~1970), annual real pay increases have averaged only 0.55 percent. (There was negative real pay growth in the late 1970s and late 1980s as well as numerous years since 2005.)

In making its recommendation for the real rate of the annual basic pay scale increase, the Board assumes that future pay increases in the military would not deviate much from pay increases in the private sector. In this light, the Board adopted a real basic pay growth assumption of 0.50 percent, leading to a nominal growth of 3.50 percent (where 3.50 = 0.50 + 3.00 - CPI assumption). The Board of Actuaries of the CSRS assumed 0.25 percent real wage growth for its 2012 valuation. The Social Security Trustees' 2012 report had an intermediate ultimate assumption for real wage growth of 1.2 percent (other assumptions: low cost -1.8 percent; high cost -0.6 percent). (For the Military Retirement System and CSRS, wage increase relates to "across-the-board salary increase," whereas for Social Security, wage increase generally relates to "total wage increase.")

TABLE D-1 DOD BOARD OF ACTUARIES' LONG-TERM ECONOMIC ASSUMPTIONS

Fiscal Year	Inflation (1)	Interest (2)	Salary Growth (3)	Real Interest (4)	Real Salary (5)
1984	5.00%	6.60%	6.20%	1.60%	1.20%
1985	5.00	6.60	6.20	1.60	1.20
1986	5.00	6.60	6.20	1.60	1.20
1987	5.00	6.60	6.20	1.60	1.20
1988	5.00	7.00	5.75	2.00	0.75
1989	5.00	7.00	5.75	2.00	0.75
1990	5.00	7.00	5.75	2.00	0.75
1991	5.00	7.50	5.50	2.50	0.50
1992	5.00	7.50	5.50	2.50	0.50
1993	5.00	7.50	5.50	2.50	0.50
1994	4.00	6.75	4.50	2.75	0.50
1995	4.00	6.75	4.50	2.75	0.50
1996	3.50	6.50	4.00	3.00	0.50
1997	3.50	6.50	4.00	3.00	0.50
1998	3.50	6.50	4.00	3.00	0.50
1999	3.00	6.25	3.50	3.25	0.50
2000	3.00	6.25	3.50	3.25	0.50
2001	3.00	6.25	3.50	3.25	0.50
2002	3.00	6.25	3.50	3.25	0.50
2003	3.00	6.25	3.75	3.25	0.75
2004	3.00	6.25	3.75	3.25	0.75
2005	3.00	6.25	3.75	3.25	0.75
2006	3.00	6.00	3.75	3.00	0.75
2007	3.00	6.00	3.75	3.00	0.75
2008	3.00	5.75	3.75	2.75	0.75
2009	3.00	5.75	3.75	2.75	0.75
2010	3.00	5.75	3.75	2.75	0.75
2011	3.00	5.75	3.75	2.75	0.75
2012	3.00	5.50	3.50	2.50	0.50

- NOTES:

 (1) Board Assumption
 (2) Board Assumption
 (3) Board Assumption
 (4) = (2) (1)
 (5) = (3) (1)

TABLE D-2

AVERAGE CONSUMER PRICE INDEX (CPI-W) INCREASES

	1930	1930 1935 1940 1945	10 END 10 15		1950	1955	1960	1965	1970	1975	1980	1985	1990	1995 2	2000 2	2001 2	2002 20	2003 20	2004 20	2005 2	2006 20	2007	2008	2009	2010	2011
TO END OF:	řŧ:																									
1935	-3.04																									
1940	-1.34	0.38																								
1945	0.81	2.79 5.2	5																							
1950	2.22	4.03 5.91		6.57																						
1955	2.06	3.37 4.39		3.96 1.	.43																					
0961	2.07	3.12 3.82		3.35 1.	1.77	2.12																				
1965	1.96	2.82 3.32			1.63	1.73	1.33																			
0261	2.28	3.07 3.52		3.18 2.	2.35	2.65	2.92	4.54																		
1975	2.79	3.54 4.00		3.79 3.	3.24	3.70	4.23	5.71	06.90																	
0861	3.41	4.16 4.64		4.55 4.	4.22	4.79	5.46	88.9	8.07	9.24																
1985	3.45	4.12 4.55		4.46 4.	4.16	4.62	5.13	6.10	6.63	6.50	3.82															
0661	3.49	4.10 4.48		4.40 4.	4.13	4.52	4.93	99.9	5.95	5.63		3.91														
1995	3.45	4.01 4.34		4.25 4.	4.00	4.32	4.64	5.20	5.34	4.95			2.94													
2000	3.37	3.88 4.18		4.08 3.		4.11	4.36		4.85	4.44				2.44												
2001	3.36	3.86 4.16		4.06 3.		4.08	4.32	4.74	4.77	4.37					5.60											
2002	3.34	3.83 4.11				4.02	4.25		4.67	4.26						.40										
2003	3.32	3.80 4.08		3.98 3.		3.98	4.20	4.58	4.59	4.18							10									
2004	3.31	3.79 4.06			3.72	3.95	4.16		4.53	4.13								.70								
2005	3.32	3.79 4.06		3.96 3.		3.96	4.16	4.52	4.52	4.13									.10							
2006	3.32	3.78 4.05		3.95 3.		3.94	4.14	4.49	4.49	4.10										.30						
2007	3.31	3.76 4.02		3.92 3.	3.69	3.91	4.10	4.4	4.43	40.4	3.11	2.95	2.67	2.56 2	2.64 2	2.65 2	2.90 3.	3.10 3.	3.23 2.	2.80 2	30					
2008	3.34	3.79 4.05		3.95 3.	3.73	3.95	4.14	4.47	4.46	4.10												.80				
5009	3.30	3.74 3.99		3.89 3.	3.66	3.87	4.05	4.37	4.35	3.97											2.67 2.	2.86 0	00.0			
2010	3.25	3.69 3.93		3.83 3.	3.60	3.80	3.97	4.27	4.23	3.86													0.00	0.00		
2011	3.26	3.69 3.92		3.82 3.		3.80	3.96	4.25	4.22	3.85													1.19	1.78	3.60	
2012	3.24	3.66 3.89		3.79 3.	3.57	3.76	3.92	4.20	4.16	3.79													1.31	1.76	2.65	1.70

Source: Bureau of Labor Statistics

*** CPL-W SERIES: DECEMBER TO DECEMBER INCREASES FROM 1930 TO 1984;
ACTUAL COST-OF-LIVING ADJUSTMENTS GIVEN TO MILITARY RETIREES BEGINNING FISCAL YEAR 1985.
- MRF COLAS ARE CALCULATED AS THE INCREASE FROM 3RD QUARTER TO 3RD QUARTER.

AVERAGE REAL YIELD RATES ON NEW PURCHASES

FROM DE	FROM DECEMBER 31 OF: 1930 193	l OF: 1935	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007 2	2008	2009	2010	2011
TO DECEN	TO DECEMBER 31 OF	2.																								
1935	6.51																									
1940	4.31	2.17																								
1945	1.72	-0.59	-3.28																							
1950	0.15	-1.88	-3.85	-4.41																						
1955	0.32	-1.17	-2.25	-1.73	1.02																					
1960	0.52	-0.64	-1.33	-0.67	1.25	1.48																				
1965	0.82	-0.10	-0.55	0.15	1.71	5.06	2.64																			
1970	0.88	0.10	-0.24	0.38	1.62	1.82	1.99	1.34																		
1975	0.77	80.0	-0.22	0.30	1.27	1.34	1.29	0.62	-0.10																	
1980	0.64	0.01	-0.25	0.19	0.97	96.0	0.83	0.24	-0.30	-0.51																
1985	1.32	0.81	99.0	1.17	1.99	2.15	2.29	2.20	2.49	3.81	8.31															
1990	1.62	1.19	1.09	1.59	2.37	2.56	2.74	2.77	3.13	4.22	29.9	5.06														
1995	1.72	1.33	1.26	1.73	2.43	2.61	2.77	2.79	3.09	3.90	5.41	3.99	2.93													
2000	1.84	1.49	1.43	1.87	2.52	5.69	2.84	2.87	3.12	3.78	4.88	3.76	3.12	3.31												
2001	1.82	1.47	1.41	1.84	2.48	2.64	2.78	2.80	3.04	3.65	4.67	3.56	2.88	2.85	0.55											
2002	1.82	1.47	1.42	1.84	2.46	2.62	2.75	2.77	2.99	3.58	4.53	3.44	2.78	2.67	1.08	1.61										
2003	1.81	1.47	1.42	1.83	2.44	2.59	2.72	2.73	2.94	3.50	4.39	3.32	5.66	2.50	1.16	1.47	1.32									
2004	1.80	1.47	1.41	1.82	2.42	2.56	5.69	5.69	2.90	3.42	4.26	3.22	2.57	2.37	1.20	1.42	1.33	1.33								
2005	1.80	1.47	1.42	1.82	2.41	2.55	2.67	2.67	2.86	3.37	4.16	3.15	2.52	2.31	1.32	1.52	1.48	1.57	1.80							
2006	1.81	1.49	1.43	1.83	2.41	2.54	5.66	5.66	2.85	3.33	4.09	3.10	2.50	2.31	1.48	1.67	1.68	1.80	2.04	2.27						
2007	1.81	1.50	1.45	1.84	2.40	2.54	2.65	2.65	2.83	3.30	4.02	3.06	2.48	2.30	1.58	1.76	1.79	1.90	2.09		2.20					
2008	1.81	1.50	1.45	1.84	2.40	2.53	5.64	2.63	2.81	3.25	3.94	3.01	2.45	2.27	1.63	1.78	1.81	1.91	2.05		2.07	1.94				
2009	1.82	1.51	1.46	1.84	2.39	2.52	2.62	2.62	2.79	3.22	3.87	2.97	2.43	2.25	1.67	1.81	1.84	1.93	2.05		2.05		2.01			
2010	1.81	1.50	1.46	1.83	2.37	2.49	2.60	2.59	2.75	3.16	3.79	2.90	2.37	2.19	1.63	1.75	1.77	1.83	1.91		1.85			.26		
2011	1.78	1.48	1.43	1.79	2.32	2.44	2.53	2.52	2.66	3.05	3.64	2.76	2.23	2.01	1.42	1.51	1.50	1.52	1.55	1.50	1.35	1.14	0.87	0.31	-0.64	
2012	1.76	1.46	1.41	1.77	2.29	2.40	2.49	2.47	2.60	2.98	3.53	2.67	2.13	1.90	1.32	1.39	1.37	1.37	1.38		1.16				0.22	0.19

Source: Office of the Actuary, Office of Personnel Management; Office of the Actuary, Department of Defense

*** COMPOSITE SERIES: TREASURY LONG TERM SECURTIES WITH REMAINING MATURITIES OF 10 OR MORE YEARS FROM 1941; AVERAGE OF FREASURY LONG TERM AND TREASURY 3-5 YEARS REMAINING MATURITY FROM 1941 TO 1941; SPECAL TREASURY CERTIFICATES (CSRS) FROM 1962 TO 1984; MILTARY RETREAMENT SYSTEM HERIF PROSP TOWN INVENTMENT BEGINNING WITH 1985

^{- &}quot;Real" rates defined as the difference between the associated nominal rate and the CPt-W (Table D-2).
All figures are average annual percentages.
-Real yields for non-TIPS securities computed as the nominal yield at purchase offset by inflation in the year of purchase.
For TIPS securities, the real yield is known and constant throughout the fife of the security.

TABLE D-4

AVERAGE REAL MILITARY RETIREMENT FUND EFFECTIVE YIELD

	1984	1984 1985 1986 1987 1988	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	6661	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
END OF	TO END OF FISCAL YEAR:	EAR:																										
1985	14.27																											
1986	12.32	10.41																										
1987	10.35	8.45	6.52																									
1988	9.31	7.71	6.38	6.24																								
1989	8.47	7.06	5.97	5.70	5.15																							
1990	7.76	6.50	5.55	5.22	4.72	4.29																						
1661	7.49	6.40	5.62	5.39	5.11	5.09	5.90																					
1992	7.34	6.38	5.73	5.57	5.40	5.48	80.9	6.27																				
1993	7.22	6.37	5.81	5.69	5.58	5.69	6.16	6.29	6.32																			
1994	7.07	6.30	5.80	5.70	5.61	5.70	6.05	6.10	6.02	5.72																		
1995	96.9	6.26	5.81	5.72	5.64	5.73	6.02	6.05	5.97	5.80	5.87																	
1996	5.84	6.19	5.78	5.70	5.63	5.70	5.94	5.94	5.86	5.71	5.71	5.54																
1997	6.80	6.20	5.83	5.76	5.70	5.77	5.99	0.00	5.95	5.85	5.90	5.91	6.29															
1998	6.81	6.26	5.92	5.87	5.83	5.90	6.11	6.14	6.12	80.9	6.17	6.26	6.63	6.97														
1999	6.73	6.21	5.89	5.84	5.80	5.87	6.05	6.07	6.04	5.99	6.04	60.9	6.27	6.26	5.56													
2000	6.58	60.9	5.78	5.73	2.68	5.73	5.88	5.88	5.83	5.76	5.76	5.74	5.79	5.63	4.96	4.37												
2001	6.50	6.03	5.75	5.69	5.65	5.69	5.82	5.81	5.76	5.69	5.69	5.66	5.68	5.53	5.05	4.80	5.23											
2002	6.45	6.01	5.74	5.69	5.65	5.69	5.81	5.80	5.75	5.69	5.69	5.66	5.68	5.56	5.21	5.09	5.45	5.68										
2003	6.29	5.86	5.60	5.54	5.50	5.52	5.62	5.59	5.53	5.45	5.42	5.37	5.34	5.19	4.83	4.65	4.74	4.50	3.34									
2004	6.10	5.69	5.43	5.37	5.31	5.33	5.40	5.36	5.29	5.19	5.14	5.06	5.00	4.82	4.46	4.25	4.21	3.88	2.99	2.64								
2005	5.87	5.47	5.22	5.14	5.08	5.07	5.13	5.07	4.98	4.87	4.79	4.69	4.59	4.38	4.02	3.76	3.64	3.25	2.45	2.01	1.39							
2006	5.72	5.33	5.08	5.01	4.94	4.92	4.96	4.90	4.81	4.69	4.60	4.49	4.39	4.18	3.83	3.59	3.46	3.11	2.48	2.19	1.97	2.55						
2007	5.57	5.19	4.95	4.87	4.80	4.78	4.81	4.74	4.64	4.52	4.43	4.31	4.20	3.99	3.67	3.43	3.30	2.98	2.45	2.23	2.09	2.45						
2008	5.35	4.98	4.74	4.65	4.57	4.54	4.56	4.48	4.37	4.24	4.14	4.00	3.88	3.66	3.34	3.09	2.93	2.61	2.11	1.86	1.67	1.76		0.40				
2009	5.17	4.81	4.57	4.48	4.40	4.36	4.37	4.28	4.17	4.03	3.92	3.79	3.65	3.44	3.12	2.88	2.71	2.40	1.95	1.71	1.53	1.57		0.70	66.0			
2010	5.10	4.74	4.52	4.43	4.35	4.31	4.31	4.23	4.11	3.99	3.88	3.75	3.62	3.42	3.13	2.91	2.76	2.49	2.10	1.93	1.81	1.90	1.73	1.53	2.10	3.22		
2011	4.95	4.61	4.38	4.29	4.21	4.17	4.16	4.08	3.96	3.83	3.72	3.59	3.46	3.26	2.98	2.77	2.63	2.37	2.01	1.84	1.73	1.79		1.46		2.23	1.25	
2012	4.82	4.48	4.26	4.17	4.08	4.04	4.03	3.94	3.82	3.69	3.58	3.45	3.32	3.12	2.86	2.65	2.51	2.26	1.93	1.77	1.67	1.71		1.41		1.89	1.23	1.22

"Real" rates defined as the difference betwe
 All figures are average annual percentages.

TABLE D-5

AVERAGE REAL MILITARY PERSONNEL BASIC PAY INCREASES

	1930 193	2	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004 2	2005	2006 2	2007	2008 20	2009 20	2010 2011
TO DECEMBER 31 OF:	3ER 31 OF:																								
1935	N/A																								
1940	N/A	V/A																							
1945	N/A	N/A	N/A																						
1950	N/A	N/A	N/A	-2.21																					
1955	N/A	N/A	N/A	-0.48	1.28																				
1960	N/A	N/A	N/A	-0.49	0.39	-0.50																			
1965	N/A	N/A	N/A	0.58	1.52	1.65	3.84																		
1970	N/A	N/A	N/A	0.97	1.79	1.96	3.21	2.58																	
1975	N/A	N/A	N/A	1.31	2.03	2.22	3.14	2.80	3.02																
1980	N/A	N/A	N/A	0.79	1.30	1.31	1.76	1.08	0.34	-2.26															
1985	N/A	N/A	N/A	0.93	1.39	1.40	1.79	1.28	0.85	-0.21	1.89														
1990	N/A	N/A	N/A	0.77	1.14	1.12	1.40	0.92	0.51	-0.32	0.67	-0.53													
1995	N/A	N/A	N/A	0.70	1.03	66'0	1.21	0.78	0.42	-0.22	0.47	-0.23	80.0												
2000	N/A	N/A	N/A	0.73	1.03	1.01	1.20	0.82	0.54	0.05	0.63	0.22	0.59	1.11											
2001	N/A	N/A	N/A	0.76	1.05	1.03	1.21	98.0	0.58	0.12	69.0	0.32	0.72	1.25	1.95										
2002	N/A	N/A	N/A	0.79	1.08	1.06	1.25	0.90	0.64	0.21	0.78	0.46	0.88	1.45	2.31										
2003	N/A	N/A	N/A	08.0	1.09	1.07	1.26	0.92	29.0	0.26	0.82	0.52	0.93	1.47	5.06		1.57								
2004	N/A	N/A	N/A	08.0	1.09	1.07	1.25	0.92	89.0	0.28	0.81	0.53	0.92	1.39	1.74			0.78							
2005	N/A	N/A	N/A	0.77	1.05	1.02	1.20	0.87	0.63	0.24	0.74	0.46	0.79	1.15	1.19				96.0						
2006	N/A	N/A	N/A	0.74	1.01	86.0	1.15	0.82	0.58	0.19	0.67	0.39	89.0	0.95	0.81					1.07					
2007	N/A	A/Z	N/A	0.75	1.01	66.0	1.15	0.83	09.0	0.22	69.0	0.42	0.70	0.97	98.0						1.17				
2008	N/A	N/A	N/A	0.71	96.0	0.93	1.08	0.77	0.53	0.16	09.0	0.32	0.56	0.75	0.53						ľ	08.1			
2009	N/A	A/Z	N/A	0.75	1.00	86.0	1.13	0.83	0.61	0.26	0.70	0.45	0.71	0.94	0.84								40		
2010	N/A	N/A	N/A	0.76	1.01	66'0	1.14	0.84	0.63	0.29	0.72	0.49	0.75	0.97	06'0	0.78	0.55	0.40	0.34 (0.61	1.03 0	0.98 2	2.40 1.	40	
2011	N/A	N/A	N/A	0.72	96.0	0.93	1.08	0.78	0.56	0.23	0.63	0.39	0.62	0.79	0.64									0.28 -1	-1.93
2012	Y/N	A/A	A/A	0.71	0.95	0.92	1.05	0.76	0.55	0.22	0.61	0.38	0.59	0.74	0.58										00 0 00

APPENDIX E

NORMAL COST WEIGHTING FACTORS

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NORMAL COST WEIGHTING FACTORS

There are three different retirement benefit formulas that apply to three populations within the Military Retirement System¹. (See Appendix A for a discussion of *Final Pay*, *High-3*, and CSB/Redux benefit formulas.) A single normal cost percentage (NCP) for the entire population is obtained by weighting the NCP for each retirement group by its expected percentage of payroll in the relevant year.

In order to continue to budget for NCPs well in advance of the valuation date, the DoD Board of Actuaries decided to create a set of projected weighting factors. The relative stability of past experience indicates that this method gives reasonable results.

Current rates were created using 2010 data. Table E-1 displays the active duty and reserve basic payroll percentage distributions by completed years of service at the end of FY 2010.

¹ The Bipartisan Budget Act of 2013 (Public Law 113-67) creates a fourth tier for those who enter military service on or after January 1, 2014.

TABLE E-1

BASIC PAYROLL PERCENTAGE DISTRIBUTION
BY COMPLETED YEARS OF SERVICE

Completed	Percentage of Pay	roll on 9/30/2010:
Years of		
Service	Full-time	Part-time
0	3%	0%
1 or less	8%	6%
2 or less	13%	11%
3 or less	18%	16%
4 or less	24%	20%
5 or less	28%	24%
6 or less	32%	27%
7 or less	37%	31%
8 or less	41%	35%
9 or less	45%	38%
10 or less	49%	41%
11 or less	53%	44%
12 or less	56%	46%
13 or less	59%	49%
14 or less	63%	51%
15 or less	66%	53%
16 or less	68%	55%
17 or less	71%	58%
18 or less	75%	60%
19 or less	78%	64%
20 or less	81%	67%
21 or less	84%	70%
22 or less	86%	74%
23 or less	89%	77%
24 or less	91%	80%
25 or less	93%	83%
26 or less	95%	86%
27 or less	96%	89%
28 or less	97%	91%
29 or less	98%	93%
30 or less	98%	94%
31 or less	99%	95%
32 or less	99%	96%
33 or less	99%	97%
34 or less	100%	98%
35 or less	100%	98%
36 or less	100%	99%
37 or less	100%	99%
38 or less	100%	100%
39 and greater	:	:
TOTAL FORCE	100%	100%

Notes

- Previous reports used the same percentages for both active and reserve duty personnel.
- Additionally, a multi-year experience period was used in computing valuation results.

APPENDIX F

VALUATION PROGRAM PARAMETERS

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VALUATION PROGRAM PARAMETERS DESCRIPTION

GORGO is an actuarial projection model run in a spreadsheet environment with embedded Visual Basic programming. The purpose is to simulate future cash flows impacting the Military Retirement Fund. The model is used to compute the aggregate entry-age normal cost percentage, unfunded liability, and make long-term projections, as needed. In addition to being affected by the decrement rates, GORGO has a number of parameters which affect its results. These parameters are generally summaries of recent experience and/or future expectations. Examples include the rates of election of the Survivor Benefit Plan and member-spouse age differences.

Public Law (P.L.) 108-136 ("Concurrent Receipt") requires additional breakouts of some parameters in order to calculate the DoD and Treasury normal cost components. Subsequent legislation required further breakouts.

A description of major valuation program parameters is given in Table F-1. The table is organized by population group with the economic factors reproduced for user convenience. Numerical values are also shown for selected items. To keep this report manageable and prevent unintentional misuse, other parameters not described as well as numerical values not shown in the table may be requested if needed.

TABLE F-1

DESCRIPTION OF THE MAJOR VALUATION PROGRAM PARAMETERS

Economic Factors

<u>Item</u> <u>Description/Value</u>

1) Salary Increase A parameter for each of the next ten fiscal years

specifies the annual percentage increase in basic pay for the active duty and reserve duty members.

An 11th parameter specifies the percentage increase for subsequent years. The value for the

valuation is 3.5 percent.

2) CPI (Inflation) A parameter for each of the next nine fiscal years

specifies the annual inflation (Consumer Price Index - CPI) rate for that year. A tenth parameter specifies the inflation rate for all subsequent years.

The value for the valuation is 3.0 percent.

3) Interest Rate A parameter for each of the next nine fiscal years

specifies the annual interest rate for that year. A tenth parameter specifies the interest rate for all

subsequent years. The value for the

valuation is 5.5 percent.

Active Duty

<u>Item</u> <u>Description/Value</u>

1) Member Election of Spouse or This gives the Spouse/Child SBP Coverage officer/enlisted

This gives the percentage of members by age, officer/enlisted status, and Career Status Bonus (CSB) election status who have elected spouse or spouse/child coverage under the Survivor Benefit

Plan (SBP).

Item

Description/Value

2) Full Offsets

A member who is disabled may waive all or part of his or her retired pay to receive benefits from the Veterans Administration (VA). Furthermore, a member who decides to convert his or her military service to receive a federal civilian retirement also waives his or her right to a military pension. These amounts are not included when computing normal costs or unfunded liabilities. The percent of retired pay of new retirees that is fully offset is given by officer/enlisted status, CSB election status, and type of retirement (disability/nondisability). Disability status is given further by those with over and under 20 years of service.

3) Partial VA Offsets

It is possible to have part of DoD retired pay offset by VA compensation. The parameter is defined as the percent of retired pay out of the total paid new retirees. They are given by officer/enlisted status, CSB election status, and disability/nondisability status. Disability status is given further by those with over and under 20 years of service.

4) Disability Factor

When an active duty member is disabled and receives DoD disability retirement, retired pay is based on a minimum (30%), a maximum (given by the conditions discussed in Appendix A regarding Disability Retirement), and a disability rating. These are combined into a single officer/enlisted factor, expressed as a percentage of Final, or High-3, pay and given by length of service and temporary disability or permanent disability retirement.

Item

Description/Value

5) Percent Active Duty with Beneficiary

When a member dies from a Service-connected disability or on active duty, any surviving spouse is eligible for Dependency and Indemnity Compensation (DIC) from the Veterans Administration. In addition, if the member dies in the line of duty or after completing 20 years of service, the surviving spouse is eligible for an SBP annuity from DoD which would bring the total amount of the benefit up to 55 percent of the member's retired pay. The excess of the SBP annuity over DIC comes from the Military Retirement Fund. If no spouse is present, the benefit passes on to an eligible child. If both spouse and eligible child are present then, under certain tax provisions, it is advantageous for the spouse to pass the benefits to the child. Thus, it is necessary to estimate the percent of active duty members with beneficiaries. The percentages are given by officer/enlisted status, and further allocated by spouse/child.

- 6) Reduction Factors for SBP
- Premium amounts, as a percent of retired pay, by age, officer/enlisted status, and CSB election status.
- 7) Rounding Assumptions for Partially Completed Years of Service
- When retired pay is computed, years of service are rounded down to the nearest completed month. An assumption must be made for the computation. The value for the valuation is 0.017.

8) CSB/Redux election proportion

The proportion of members who elect CSB/Redux. For the unfunded liability and open group valuations, the proportion varies by entry year and officer/enlisted status. For the normal cost (new entrant) valuation, the proportion is 15 percent. This value is essentially a representative rate needed to approximate the floating proportions (of CSB/Redux electors) used in the unfunded liability and open group valuations.

Item Description/Value

9) Initial Annual Pay of 16-year-old Active Duty Officer This value is used to allocate a portion of part-time benefits to full-time in normal cost valuations, thus linking the radixes (i.e., notional starting populations) and pay of full- and part-time members. The value for the valuation is \$34,301.

10) Accumulated Value of Partial Pay in the First Year of Service First Year of Service This amount is used to properly align the decrement rates with the assumption, in a normal cost run, of a new entrant cohort starting with zero years of service.

Reserve Duty

<u>Item</u> <u>Description/Value</u>

1) Ratio of Net to Gross Retired Pay For Reserves

This is the ratio of reserve net retired pay to gross retired pay. This is given by officer/enlisted status, age, and years of active service.

2) Proportion of Points Based on Active Service

This amount is used to allocate the part of the reserve normal cost that should be paid for as a part of the active duty normal cost. The value for the valuation is 51%.

3) Initial Annual Pay of new Selected Reserve member

This array is used to set initial pay for a new Selected Reserve member in a normal cost run. The values for the valuation are updated with an across-the-board salary increase each year.

Item

Description/Value

4) Reserve Retirement Age FYs

An assumption is made to reflect the number of years, on average, reservists retire early due to performing certain active service, per P.L. 110-181. An average reduction of two years (age 58) is assumed. Fiscal years are needed to phase into this earlier retirement over time. The transition to an average retirement age of 59 is assumed to occur in 2024, and the transition to age 58 is assumed to occur in 2033. See also the 'Retiree Gain Statement' in Appendix K.

5) Ratio of Reserve to Active Payroll

For the purposes of the allocation referred to in item 2) above, this value represents the assumed ratio of reserve duty to active duty basic payroll. The value for the valuation is 10%.

Retiree

Item

Description/Value

1) Retired Pay Adjustment Factors

Retired pay of current retirees is adjusted for VA compensation, SBP offset changes, and other effects during the year. They are given by officer/enlisted status, CSB election status, disability/nondisability, and whether or not the member has elected SBP spouse or spouse/child coverage.

2) Retired Pay Adjustment to Members With SBP Spouse Coverage

These factors model data that show mortality is better (or less), and non-death loss from paid status is generally higher, for those retired members who elect SBP spouse coverage. Rather than develop additional sets of mortality and loss rates, the respective retiree death and loss rates (Appendix I) are adjusted with these factors. This impacts retirees with SBP spouse coverage. The factors are given by active/reserve, disability/nondisability status, and officer/enlisted status.

Survivor

<u>Item</u> <u>Description/Value</u>

1) Member-Survivor Age Difference When a member dies, a survivor is assumed to

be a certain number of years younger (or older) than the member. This is given by active/reserve, age, officer/enlisted status, type of retirement (i.e., nondisability, temporary disability, permanent disability), and type of survivor (i.e., spouse, child,

insurable interest).

2) Ratio of SBP Base Amount to Net Retired Pay

Under SBP the retiree may elect an amount less than his or her gross retired pay as a base in

computing the survivor annuity. Base amounts can also exceed net retired pay because of factors that reduce gross retired pay to net. This is expressed as a percentage of net retired pay and is given by age, officer/enlisted status, CSB election status, and type of retirement (disability/nondisability/reserve). Additional adjustments are made to the factors as

part of Concurrent Receipt.

3) Ratio of RSFPP Survivor Benefit For RSFPP (Retired Servicemen's Family

Protection Plan), this gives the ratio of the survivor

payment to the net amount of retired pay.

4) Reservists' Election of RCSBP Proportion of reservists who have elected the

Reserve Component Survivor Benefit Plan (RCSBP) by immediate and deferred annuity, age,

and officer/enlisted status.

5) Partial DIC Offsets The percent of survivor pay of new survivors whose

pay is partially offset by DIC. They are given by

the member's active/reserve status.

6) Full DIC Offsets The percent of survivor pay of new survivors whose

pay is fully offset by DIC. They are given by the

member's active/reserve status.

To Net Retired Pay

<u>Item</u> <u>Description/Value</u>

7) Rates for Electing SBP Options Given that a member elects SBP, there is still a

choice of options: spouse only, child only, spouse

and child, or insurable interest (some other

designated beneficiary in the absence of a spouse or

child). These are expressed as ratios to those electing spouse only or spouse/child coverage, and are given by age, officer/enlisted status, and type of

retirement (disability/nondisability/reserve).

8) Rates for Election of RSFPP Options Given that a member elected an RSFPP option,

there was a choice of options: spouse only, child only, or spouse and child. These are expressed as ratios to those electing spouse only or spouse/child coverage, and are given by age and officer/enlisted

status.

9) Survivor Pay Adjustment Factors Survivor pay of current survivors is adjusted for

changes in DIC and other effects during the

year.

10) DIC Base Amount Monthly amount by which DoD annuitant pay is

offset by DIC. Future values are indexed to CPI.

The first-year value for the valuation is \$1,216.

APPENDIX G

ACTIVE DUTY RATES

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ACTIVE DUTY RATE DESCRIPTION

The active duty rates consist principally of decrement rates related to the probabilities of a member leaving a category of military service for a specific cause. In addition, they include a new entrant distribution, a set of reentrant ratios, and ratios for promotion and merit pay increases. For the purposes of active duty rate development, full-time support reservists (excluding Army National Guard) are included in the underlying data.

The active duty decrement rates are used to project active duty deaths, temporary and permanent disability retirements, nondisability retirements, and withdrawals (i.e., other active duty losses). As noted in the "Valuation Data and Procedure" section in the main text, the valuation results are highly sensitive to the withdrawal rates. In addition, the active duty decrements include rates of transfer between officer and enlisted status. The death rates are given by age nearest birthday for officers and enlistees separately. The remaining decrement rates are given by completed years of active service for officers and enlistees separately. The formulas used to derive the active duty rates are given on the following page. The fiscal years on which various rates are based are given on the subsequent page. The experience period was selected such that the sum of the active force size changes for the included periods was near zero. Full-time reservist experience is included in the data used to develop the rates.

Generally, the decrement rates were graduated (smoothed) using Whittaker-Henderson graduations. The typical active duty career has inherent discontinuities at select points (reenlistment, promotions, retirements, etc). Rates were separated into ranges where assumptions of continuity were reasonable. When real discontinuities were present, the rates were not smoothed.

A reentrant is defined as someone who is on active duty at year end, who was not on active duty a year earlier, and who is not a new entrant. The reentrant ratios give the expected number of reentrants per year, per active member, in each cell. The cells are defined by length of active service and by officer/enlisted status.

The new entrant distribution gives the percentages of new entrants to the military by age and by officer/enlisted status. This distribution is only used in the normal cost (new entrant) valuation and the open-group projection.

The promotion and merit increase scales (PAMS) give the expected annual percentage increase in pay regardless of whether or not there are across-the-board increases in the active duty pay table. The PAMS do not include adjustments for inflation or productivity increases. They are defined by length of service, by entry age, and by officer/enlisted status. The PAMS were created by first arraying the average pay for each entry along a dimension of increasing years of service. The PAMS were then computed by dividing the average pay at the next year of service by the average pay at the current year of service.

ACTIVE DUTY RATE FORMULAS

ACTIVE DEATH (by age nearest birthday)

Deaths during year

[Number at beginning of year - $\frac{1}{2}$ (withdrawals + nondisability retirements during year)]

NONDISABILITY RETIREMENT (by completed years of service)

New retirees during year Number at beginning of year

TEMPORARY DISABILITY RETIREMENT (by completed years of service)

New temporary disabilities during year

[Number at beginning of year - $\frac{1}{2}$ (withdrawals + nondisability retirements during year)]

PERMANENT DISABILITY RETIREMENT (by completed years of service)

New permanent disabilities during year

[Number at beginning of year - $\frac{1}{2}$ (withdrawals + nondisability retirements during year)]

WITHDRAWAL (by completed years of service)

Withdrawals during year Number at beginning of year

REENTRANT RATIOS (by completed years of service)

Number reentering during year Number at beginning of year

PERCENTAGE DISTRIBUTION OF NEW ENTRANTS (by age nearest birthday)

New entrants during year
Total new entrants

PAYGRADE TRANSFER (by completed years of service)

Transfers to category during year

[Number at beginning of year - ½ (withdrawals + nondisability retirements during year)]

PROMOTION AND MERIT SCALES (by entry age and completed years of service)

Average basic pay at next year of service using current year pay table

Average basic pay at current year of service

SUMMARY OF YEARS ON WHICH ACTIVE DUTY RATES ARE BASED

By Fiscal Year

<u>RATE</u>	<u>1982-1989</u>	<u>1997-1999</u>	2000-2008	<u>2009</u>
Death			X	X
Nondisability Retirement	X	X	X	
Temporary Disability Retirement	X	X	X	
Permanent Disability Retirement	X	X	X	
Withdrawal (other losses)	X	X	X	
Reentrant Ratios	X	X	X	
New Entrant Distribution	X	X	X	
Paygrade Transfer	X	X	X	
Promotion and Merit Scales (PAMS)	X	X	X	

DEATH RATES FOR NONRETIRED MILITARY

(AGE NEAREST BIRTHDAY)

Age	Officer	Enlisted
16	0.00044	0.00072
17	0.00051	0.00083
18	0.00058	0.00095
19	0.00063	0.00102
20	0.00063	0.00103
21	0.00061	0.00100
22	0.00060	0.00095
23	0.00059	0.00089
24	0.00057	0.00083
25	0.00056	0.00077
26	0.00057	0.00074
27	0.00054	0.00070
28	0.00052	0.00067
29	0.00050	0.00063
30	0.00048	0.00060
31	0.00048	0.00057
32	0.00046	0.00056
33	0.00045	0.00053
34	0.00043	0.00051
35 36	0.00042	0.00049
36 37	0.00041 0.00041	0.00048 0.00048
38	0.00041	0.00048
39	0.00040	0.00048
40	0.00039	0.00048
41	0.00039	0.00049
42	0.00039	0.00050
43	0.00039	0.00051
44	0.00040	0.00053
45	0.00041	0.00056
46	0.00043	0.00060
47	0.00044	0.00064
48	0.00045	0.00070
49	0.00048	0.00075
50	0.00050	0.00082
51	0.00053	0.00089
52	0.00056	0.00098
53	0.00059	0.00108
54	0.00064	0.00118
55	0.00069	0.00131
56	0.00074	0.00146
57	0.00080	0.00159
58	0.00086	0.00175
59	0.00092	0.00188
60	0.00098	0.00202

Note: These death rates should not be compared to other published rates or used for other purposes without examining the exposure formula used in the derivation.

NONDISABILITY, TEMPORARY DISABILITY & PERMANENT DISABILITY RETIREMENT RATES

OFFICERS (BY COMPLETED YEARS OF SERVICE)

Years of Service	Non- disability	Temporary Disability ***	Permanent Disability ***
0	0.00000	0.00043	0.00007
1	0.00000	0.00085	0.00009
2	0.00000	0.00113	0.00017
3	0.00000	0.00124	0.00019
4	0.00000	0.00146	0.00020
5	0.00000	0.00126	0.00021
6	0.00000	0.00143	0.00033
7	0.00000	0.00153	0.00026
8	0.00000	0.00144	0.00034
9	0.00000	0.00144	0.00036
10	0.00000	0.00142	0.00033
11	0.00000	0.00133	0.00033
12	0.00000	0.00128	0.00032
13	0.00000	0.00112	0.00036
14	0.00000	0.00119	0.00037
15	0.00000	0.00104	0.00037
16	0.00000	0.00093	0.00044
17	0.00000	0.00082	0.00048
18	0.00000	0.00073	0.00059
19	0.24556	0.00192	0.00141
20	0.20352	0.00231	0.00198
21	0.16113	0.00169	0.00178
22	0.14428	0.00204	0.00150
23	0.14541	0.00222	0.00187
24	0.14305	0.00209	0.00176
25	0.18396	0.00214	0.00140
26	0.19135	0.00361	0.00210
27	0.22470	0.00322	0.00166
28	0.20692	0.00367	0.00262
29	0.49853	0.00505	0.00341
30	0.37879	0.00692	0.00435
31	0.28016	0.00534	0.00334
32	0.25438	0.00534	0.00334
33	0.26999	0.00534	0.00334
34	1.00000	0.00534	0.00334

^{***} The increase in disability rates shown between 18 and 19 years of service may be due to the removal of the 30% disability rating minimum for members with 20 years of service. The tax advantages accorded disability retired pay described in Appendix A may result in members choosing disability over nondisability retirements. Disabilities were increased by 35% to reflect recent trends.

NONDISABILITY, TEMPORARY DISABILITY & PERMANENT DISABILITY RETIREMENT RATES

ENLISTED (BY COMPLETED YEARS OF SERVICE)

Years of	Non-	Temporary	Permanent
Service	disability	Disability ***	Disability ***
0	0.00000	0.00170	0.00007
1	0.00000	0.00294	0.00025
2	0.00000	0.00376	0.00042
3	0.00000	0.00438	0.00058
4	0.00000	0.00420	0.00059
5	0.00000	0.00429	0.00063
6	0.00000	0.00421	0.00071
7	0.00000	0.00440	0.00073
8	0.00000	0.00443	0.00085
9	0.00000	0.00437	0.00090
10	0.00000	0.00423	0.00099
11	0.00000	0.00416	0.00109
12	0.00000	0.00396	0.00104
13	0.00000	0.00369	0.00108
14	0.00000	0.00346	0.00101
15	0.00000	0.00319	0.00126
16	0.00000	0.00299	0.00141
17	0.00000	0.00260	0.00160
18	0.00000	0.00198	0.00163
19	0.42256	0.00541	0.00551
20	0.30241	0.00521	0.00634
21	0.26793	0.00422	0.00482
22	0.23110	0.00433	0.00508
23	0.29343	0.00417	0.00419
24	0.18735	0.00362	0.00359
25	0.33712	0.00437	0.00322
26	0.24102	0.00511	0.00333
27	0.24118	0.00523	0.00343
28	0.19147	0.00545	0.00466
29	0.77601	0.00999	0.00586
30	0.64842	0.01644	0.00795
31	0.42640	0.01399	0.00340
32	0.50641	0.01399	0.00340
33	0.40749	0.01399	0.00340
34	1.00000	0.01399	0.00340

^{***} The increase in disability rates shown between 18 and 19 years of service may be due to the removal of the 30% disability rating minimum for members with 20 years of service. The tax advantages accorded disability retired pay described in Appendix A may result in members choosing disability over nondisability retirements. Disabilities were increased by 35% to reflect recent trends.

WITHDRAWAL, REENTRANT, AND NET LOSS RATES FOR ACTIVE DUTY PERSONNEL

OFFICERS (BY COMPLETED YEARS OF SERVICE)

Years of Service	Withdrawal	Reentrant ***	Net Loss
0	0.01815	0.11937	-0.10122
1	0.02192	0.03298	-0.01106
2	0.07042	0.02574	0.04468
3	0.12192	0.02898	0.09294
4	0.10839	0.01964	0.08875
5	0.09306	0.01703	0.07603
6	0.09686	0.01444	0.08242
7	0.08447	0.01400	0.07047
8	0.07687	0.01200	0.06487
9	0.06825	0.01155	0.05670
10	0.06616	0.00872	0.05744
11	0.05337	0.00798	0.04539
12	0.03556	0.00656	0.02900
13	0.02481	0.00557	0.01924
14	0.01650	0.00467	0.01183
15	0.01042	0.00368	0.00674
16	0.00761	0.00291	0.00470
17	0.00479	0.00252	0.00227
18	0.00236	0.00246	-0.00010
19	0.0000	0.00223	-0.00223
20	0.0000	0.00247	-0.00247
21	0.0000	0.00259	-0.00259
22	0.0000	0.00230	-0.00230
23	0.0000	0.00237	-0.00237
24	0.0000	0.00229	-0.00229
25	0.00000	0.00268	-0.00268
26	0.0000	0.00276	-0.00276
27	0.00000	0.00284	-0.00284
28	0.00000	0.00329	-0.00329
29	0.00000	0.00419	-0.00419
30	0.00000	0.00912	-0.00912
31	0.00000	0.00803	-0.00803
32	0.0000	0.01145	-0.01145
33	0.00000	0.01084	-0.01084
34	0.00000	0.00000	0.00000

^{***} The reentrant (and all other) rates are developed for valuation purposes to be consistent with the data sources used in the valuation. For example, high reentrant rates for members with zero completed years of service at the beginning of the year reflect members showing up on the valuation data files with one completed year of service at year end, who were not on the data files at the beginning of the year, and who were not new entrants. To the extent the valuation data files exclude these members from the zero-completed-years-of-service cell, use of this reentrant rate is appropriate for the valuation projection. However, this "valuation focus" of the rates should be considered if using them for other purposes, e.g., to estimate the probability a given individual will remain on active duty from zero to one or more completed years of service.

WITHDRAWAL, REENTRANT, AND NET LOSS RATES FOR ACTIVE DUTY PERSONNEL

ENLISTED (BY COMPLETED YEARS OF SERVICE)

Years of Service	Withdrawal	Reentrant ***	Net Loss
0	0.10458	0.03043	0.07415
1	0.10267	0.00769	0.09498
2	0.10207	0.00709	0.16957
3	0.35545	0.01394	0.32800
4	0.15999	0.01394	0.14605
5	0.15789	0.01394	0.14661
6	0.13789	0.00966	0.10577
7	0.12660	0.00900	0.10377
8	0.12000	0.00761	0.08799
9	0.09098	0.00682	0.08416
10	0.05673	0.00540	0.05133
10	0.04738	0.00340	0.03133
12	0.04738	0.00433	0.03381
13	0.03728	0.00347	0.03381
13	0.02207	0.00282	0.02232
15	0.02207	0.00223	0.01984
16	0.01296	0.00188	0.01108
17	0.00827	0.00134	0.00369
18	0.00514	0.00145	0.00369
19	0.00227	0.00139	-0.00126
20 21	0.00000	0.00157	-0.00157
21 22	0.00000	0.00148	-0.00148
	0.00000	0.00167	-0.00167
23	0.00000	0.00156	-0.00156
24	0.00000	0.00212	-0.00212
25	0.00000	0.00169	-0.00169
26	0.00000	0.00247	-0.00247
27	0.00000	0.00180	-0.00180
28	0.00000	0.00212	-0.00212
29	0.00000	0.00168	-0.00168
30	0.00000	0.01403	-0.01403
31	0.00000	0.03693	-0.03693
32	0.00000	0.04974	-0.04974
33	0.00000	0.09762	-0.09762
34	0.00000	0.00000	0.00000

^{***} The reentrant (and all other) rates are developed for valuation purposes to be consistent with the data sources used in the valuation. For example, high reentrant rates for members with zero completed years of service at the beginning of the year reflect members showing up on the valuation data files with one completed year of service at year end, who were not on the data files at the beginning of the year, and who were not new entrants. To the extent the valuation data files exclude these members from the zero-completed-years-of-service cell, use of this reentrant rate is appropriate for the valuation projection. However, this "valuation focus" of the rates should be considered if using them for other purposes, e.g., to estimate the probability a given individual will remain on active duty from zero to one or more completed years of service.

PERCENTAGE DISTRIBUTION OF NEW ENTRANTS

(AGE NEAREST BIRTHDAY)

Age	Officers	Enlisted	Total
16	0.00000	0.00000	0.00000
17	0.00000	0.00142	0.00142
18	0.00000	0.12146	0.12146
19	0.00001	0.25484	0.25485
20	0.00008	0.19288	0.19296
21	0.00045	0.11431	0.11476
22	0.01188	0.07357	0.08545
23	0.01920	0.05093	0.07013
24	0.01025	0.03619	0.04644
25	0.00470	0.02550	0.03020
26	0.00386	0.01783	0.02169
27	0.00327	0.01252	0.01579
28	0.00216	0.00929	0.01145
29	0.00163	0.00663	0.00826
30	0.00127	0.00475	0.00602
31	0.00097	0.00358	0.00455
32	0.00075	0.00285	0.00360
33	0.00058	0.00226	0.00284
34	0.00046	0.00187	0.00233
35	0.00038	0.00165	0.00203
36	0.00028	0.00063	0.00091
37	0.00020	0.00030	0.00050
38	0.00017	0.00024	0.00041
39	0.00015	0.00020	0.00035
40	0.00013	0.00018	0.00031
41	0.00010	0.00014	0.00024
42	0.00008	0.00014	0.00022
43	0.00007	0.00007	0.00014
44	0.00006	0.00004	0.00010
45	0.00005	0.00004	0.00009
46	0.00005	0.00003	0.00008
47	0.00004	0.00003	0.00007
48	0.00004	0.00003	0.00007
49	0.00003	0.00002	0.00005
50	0.00003	0.00002	0.00005
51	0.00002	0.00001	0.00003
52	0.00002	0.00001	0.00003
53	0.00002	0.00001	0.00003
54	0.00002	0.00001	0.00003
55	0.00002	0.00001	0.00003
56	0.00001	0.00000	0.00001
57	0.00001	0.00000	0.00001
58	0.00001	0.00000	0.00001
59	0.00001	0.00000	0.00001
60	0.00000	0.00000	
Total	0.06352	0.93648	1.00000

PAYGRADE TRANSFER RATES

STATUS (BY COMPLETED YEARS OF SERVICE)

Years of	Officer to	Enlisted to
Service	Enlisted	Officer
		0.0000
0	0.00042	0.00304
1	0.00010	0.00096
2	0.00006	0.00112
3	0.00013	0.00145
4	0.00013	0.00227
5	0.00008	0.00282
6	0.00014	0.00393
7	0.00014	0.00515
8	0.00013	0.00718
9	0.00013	0.00874
10	0.00012	0.00968
11	0.00039	0.00969
12	0.00058	0.00907
13	0.00047	0.00778
14	0.00077	0.00613
15	0.00094	0.00472
16	0.00112	0.00306
17	0.00055	0.00179
18	0.00014	0.00137
19	0.00017	0.00096
20	0.00010	0.00115
21	0.00005	0.00105
22	0.00006	0.00093
23	0.00002	0.00088
24	0.00000	0.00044
25	0.00000	0.00005
26	0.00000	0.00002
27	0.00000	0.00007
28	0.00000	0.00000
29	0.00000	0.00000
30	0.00000	0.00000
31	0.00000	0.00000
32	0.00000	0.00000
33	0.00000	0.00000
34	0.00000	0.00000

PROMOTION AND MERIT BASIC PAY INCREASE SCALES

OFFICERS (BY ENTRY AGE)

Years of						Entry Age					
Service	16	17	18	19	20	21	22	23	24	25	26
1	1.01406	1.01406	1.01406	1.01406	1.01406	1.01406	1.01406	1.03788	1.06850	1.06863	1.03084
2	1.26101	1.26101	1.26101	1.26101	1.26101	1.26101	1.26101	1.26733	1.24639	1.22059	1.12813
3	1.16436	1.16436	1.16436	1.16436	1.16436	1.16436	1.16436	1.15592	1.14107	1.13118	1.08444
4	1.12838	1.12838	1.12838	1.12838	1.12838	1.12838	1.12838	1.12854	1.10999	1.09523	1.06425
5	1.01427	1.01427	1.01427	1.01427	1.01427	1.01427	1.01427	1.02410	1.02904	1.03108	1.02871
9	1.03943	1.03943	1.03943	1.03943	1.03943	1.03943	1.03943	1.04289	1.03995	1.04497	1.05461
7	0.99489	0.99489	0.99489	0.99489	0.99489	0.99489	0.99489	1.01191	1.02020	1.02535	1.02334
&	1.03290	1.03290	1.03290	1.03290	1.03290	1.03290	1.03290	1.04169	1.03766	1.04233	1.04014
6	0.99442	0.99442	0.99442	0.99442	0.99442	0.99442	0.99442	1.01394	1.02086	1.02143	1.02062
10	1.03956	1.03956	1.03956	1.03956	1.03956	1.03956	1.03956	1.05820	1.05017	1.04618	1.03943
111	1.01571	1.01571	1.01571	1.01571	1.01571	1.01571	1.01571	1.04944	1.05558	1.04535	1.02645
12	1.05143	1.05143	1.05143	1.05143	1.05143	1.05143	1.05143	1.05911	1.04767	1.04470	1.03802
13	1.00603	1.00603	1.00603	1.00603	1.00603	1.00603	1.00603	1.01511	1.01989	1.02090	1.01887
14	1.03458	1.03458	1.03458	1.03458	1.03458	1.03458	1.03458	1.02798	1.02367	1.02606	1.02729
15	1.01346	1.01346	1.01346	1.01346	1.01346	1.01346	1.01346	1.01512	1.02064	1.02177	1.01984
16	1.03810	1.03810	1.03810	1.03810	1.03810	1.03810	1.03810	1.04225	1.03899	1.03557	1.03369
17	1.02706	1.02706	1.02706	1.02706	1.02706	1.02706	1.02706	1.03034	1.02876	1.02850	1.02258
18	1.03826	1.03826	1.03826	1.03826	1.03826	1.03826	1.03826	1.02671	1.02287	1.02382	1.02758
19	1.01543	1.01543	1.01543	1.01543	1.01543	1.01543	1.01543	1.01051	1.01301	1.01426	1.01488
20	1.03350	1.03350	1.03350	1.03350	1.03350	1.03350	1.03350	1.03628	1.03721	1.03951	1.04114
21	1.02310	1.02310	1.02310	1.02310	1.02310	1.02310	1.02310	1.03595	1.03778	1.03563	1.02747
22	1.04475	1.04475	1.04475	1.04475	1.04475	1.04475	1.04475	1.06061	1.05316	1.04753	1.03385
23	1.02847	1.02847	1.02847	1.02847	1.02847	1.02847	1.02847	1.03169	1.03022	1.03020	1.02115
24	1.03200	1.03200	1.03200	1.03200	1.03200	1.03200	1.03200	1.02880	1.02749	1.02601	1.01918
25	1.02086	1.02086	1.02086	1.02086	1.02086	1.02086	1.02086	1.02065	1.02561	1.02340	1.01420
26	1.03961	1.03961	1.03961	1.03961	1.03961	1.03961	1.03961	1.03981	1.03084	1.02729	1.02475
27	1.01440	1.01440	1.01440	1.01440	1.01440	1.01440	1.01440	1.01278	1.00986	1.01164	1.00971
28	1.01850	1.01850	1.01850	1.01850	1.01850	1.01850	1.01850	1.02795	1.02738	1.02510	1.01871
29	1.01886	1.01886	1.01886	1.01886	1.01886	1.01886	1.01886	1.02296	1.01666	1.01419	1.00772
30	1.04665	1.04665	1.04665	1.04665	1.04665	1.04665	1.04665	1.06930	1.05109	1.04079	1.02158
31	1.03553	1.03553	1.03553	1.03553	1.03553	1.03553	1.03553	1.07120	1.05099	1.05582	1.01283
32	1.02979	1.02979	1.02979	1.02979	1.02979	1.02979	1.02979	1.04555	1.04030	1.04734	1.02783
33	1.02118	1.02118	1.02118	1.02118	1.02118	1.02118	1.02118	1.02422	1.02166	1.03341	1.02317
34	0.98796	0.98796	0.98796	0.98796	0.98796	0.98796	96286.0	0.94853	0.99750	1.00271	1.03332

Note: The number that appears, for example, in the column marked '20' and the row marked '2' is the ratio of basic pay at two years of service to basic pay at one year of service for a member who entered at age 20.

Appendix G

PROMOTION AND MERIT BASIC PAY INCREASE SCALES

ENLISTED (BY ENTRY AGE)

Years of						Entry Age					
Service	16	17	18	19	20	21	22	23	24	25	26
П	1.14463	1.14463	1.15192	1.13066	1.10499	1.09967	1.09485	1.08803	1.08174	1.07784	1.04388
2	1.11460	1.11460	1.11454	1.111191	1.11084	1.11190	1.11330	1.11410	1.11451	1.11391	1.10682
8	1.10585	1.10585	1.10336	1.10136	1.09840	1.09751	1.09578	1.09395	1.09251	1.09236	1.09052
4	1.09187	1.09187	1.08458	1.07787	1.07474	1.07408	1.07363	1.07388	1.07381	1.07393	1.07417
5	1.03813	1.03813	1.03342	1.03727	1.03777	1.03740	1.03826	1.03842	1.03976	1.04040	1.03887
9	1.08603	1.08603	1.08305	1.07612	1.07386	1.07369	1.07362	1.07384	1.07273	1.07226	1.06800
7	1.02569	1.02569	1.02685	1.03172	1.03395	1.03440	1.03456	1.03495	1.03490	1.03383	1.03581
∞	1.08945	1.08945	1.08981	1.08241	1.07796	1.07646	1.07554	1.07405	1.07357	1.07271	1.06366
6	1.02372	1.02372	1.02136	1.02525	1.02709	1.02798	1.02772	1.02775	1.02740	1.02875	1.03084
10	1.05618	1.05618	1.06018	1.05735	1.05554	1.05409	1.05344	1.05256	1.05125	1.05021	1.04647
11	1.02443	1.02443	1.01796	1.02035	1.02207	1.02316	1.02245	1.02319	1.02343	1.02383	1.02399
12	1.06395	1.06395	1.06126	1.05530	1.05231	1.04959	1.04767	1.04687	1.04545	1.04561	1.03990
13	1.02883	1.02883	1.02147	1.02384	1.02456	1.02460	1.02476	1.02412	1.02438	1.02418	1.02288
14	1.03612	1.03612	1.04314	1.04047	1.03940	1.03772	1.03657	1.03541	1.03583	1.03424	1.03081
15	1.01461	1.01461	1.02312	1.02476	1.02479	1.02538	1.02514	1.02551	1.02446	1.02450	1.02351
16	1.03567	1.03567	1.03907	1.03689	1.03592	1.03480	1.03388	1.03283	1.03144	1.03022	1.02680
17	1.01696	1.01696	1.02141	1.02410	1.02454	1.02478	1.02413	1.02380	1.02323	1.02202	1.01908
18	1.04477	1.04477	1.04392	1.04034	1.03856	1.03586	1.03521	1.03422	1.03362	1.03169	1.02626
19	1.01797	1.01797	1.01812	1.01892	1.01876	1.01881	1.01845	1.01842	1.01786	1.01906	1.01495
20	1.04784	1.04784	1.05683	1.05989	1.06321	1.06664	1.06815	1.06936	1.07225	1.07401	1.08248
21	1.04156	1.04156	1.03878	1.04043	1.03946	1.03837	1.03962	1.04139	1.03968	1.04195	1.04150
22	1.06034	1.06034	1.06287	1.05641	1.05425	1.05316	1.05374	1.05449	1.05673	1.05100	1.04776
23	1.02863	1.02863	1.02731	1.03243	1.03388	1.03447	1.03473	1.03259	1.03274	1.03491	1.02869
24	1.05285	1.05285	1.06189	1.05931	1.05994	1.06183	1.06077	1.06046	1.06050	1.06188	1.05705
25	1.02562	1.02562	1.02998	1.03604	1.03767	1.03327	1.03183	1.03066	1.03112	1.03306	1.03074
26	1.08867	1.08867	1.09105	1.08810	1.08584	1.08542	1.08566	1.08473	1.07945	1.07139	1.05590
27	1.02419	1.02419	1.02080	1.02143	1.02065	1.02253	1.02540	1.02172	1.02343	1.02752	1.02455
28	0.99741	0.99741	1.01810	1.01911	1.02082	1.02168	1.02324	1.02113	1.02044	1.02451	1.02800
29	1.00414	1.00414	1.00950	1.01334	1.01506	1.01463	1.01298	1.01340	1.01243	1.01383	1.01924
30	1.02632	1.02632	1.05110	1.04098	1.03000	1.03513	1.02915	1.02501	1.02043	1.01257	1.00996
31	1.00002	1.00002	0.99460	0.98261	0.98840	1.00386	1.00729	1.00439	0.99995	0.99713	1.01452
32	0.99875	0.99875	1.00633	1.00144	1.00387	09666.0	1.02260	0.99998	1.00059	0.98624	0.99341
33	0.99973	0.99973	1.00337	0.99297	1.00241	1.01097	1.01385	0.99310	0.99612	0.97424	0.98173
34	0.99950	0.99950	1.02324	1.02368	1.00965	1.00437	1.01341	0.98561	0.99206	0.95993	0.98570

Note: The number that appears, for example, in the column marked '20' and the row marked '2' is the ratio of basic pay at two years of service to basic pay at one year of service for a member who entered at age 20.

APPENDIX H

RESERVE DUTY RATES

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RESERVE DUTY RATES DESCRIPTION

Modeling reserves is similar in some respects to modeling active duty. There are, however, additional challenges due to the complexities of the reserve career (multiple breaks in service of varying durations, movement between active and reserve components, etc.); the structure of the reserve force; limitations of the reserve data; and evolving changes in how the reserves are used.

Reserves are modeled in two population categories in the portion of their career prior to receiving retired pay – Selected Reserves and non-Selected Reserves with 20 good years. The Selected Reserves include only part-time members (full-time Reservists are included in the active-duty (full-time) portion of OACT's valuation) and are the reservists for whom normal costs are paid. The non-Selected Reserves with 20 good years¹ are modeled because they have enough service to qualify for retirement.

The reserve rates consist primarily of decrement rates related to the probabilities of a member leaving a category of military service for a specific reason. In addition, they include a new entrant distribution; a set of reentrant ratios; ratios for promotion and merit pay increases; average points per year; transfer to 20-year non-Selected Reserve status; and blow-up² factors. The decrement rates are mainly given by age nearest birthday at entry and completed years of service since Pay Entry Base Date (PEBD), for officers and enlisted separately. "Entry Age" is constructed on an assumption of no breaks in service; e.g., an "entry age" of 57 could represent a member who started at a much earlier age with a long break in service. As noted in the "Valuation Data and Procedure" section in the main text, the valuation results are highly sensitive to the separation rates and reentrant ratios³. Below is a description of the rates used in the reserve valuation process.

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¹ This includes the category commonly referred to as the "grey area" as well as other non-Selected Reservists with 20 qualifying retirement years.

² These are used to adjust for persistent patterns of actual outcomes not conforming to expectations based on known data. For example, some new reserve retirees show up in the data each year who were not in the data as eligible-to-retire reservists the year before. The need for such "blow up" factors is one of many challenges in modeling reservists.

³ Another challenge in modeling reserves relates to the fact that many reservists start their career in the active duty component or have breaks in service throughout their career. Their movements back into the Selected Reserves (from the active duty component, from civilian status, etc.) are modeled as implicit flows via reentrant ratios. However, in some cases these ratios are unusually high, and population cells with small numbers of members initially are then augmented throughout the actuarial projection by large numbers of reentrants. This creates the potential for volatility of results, to the extent small population cell counts experience variations over time. Additionally, patterns of reservist population flows (between the Selected Reserves and the active duty component and between civilian status and the Selected Reserve) are changing, given external and internal factors such as changes in how reserves are used by the military.

The data for the rates was taken from the Reserve Component Common Personnel Data System (RCCPDS) files as of September 30 for the years 2005 through 2009. The experience period was selected such that the sum of the part-time Selected Reserve force size changes for the included period was near zero. The fiscal years on which the rates are based is given on a subsequent page. A qualitative description follows. The general formula derivation is similar to those of the Active Duty rates (Appendix G) and Retiree/Survivor rates (Appendix I). The reserve rate formulas are not shown, but may be requested from the Office of the Actuary.

The separation rates give the probability that a member in a given status at the beginning of the fiscal year leaves that status during the fiscal year. Separation rates from the Selected Reserve include standard losses, transfers to active duty, transfers to the full-time reserves, discharge, and death. They do not include transfers to non-Selected Reserves with 20 good years, or retirement. Separation rates from the non-Selected Reserve with 20 good years include transfer to Selected Reserve, death, discharge, and file corrections and timing delays. They do not include transfer to retirement status.

A reentrant is defined as someone who is in the Selected Reserves at year end, who was not in the same status a year earlier, and who is not a new entrant (as defined by having greater than zero completed years of PEBD service). It can include transfers from active duty; former Selected Reserve or active members returning after breaks in service; reserve members returning after being attached to a non-selected reserve component (Individual Ready Reserve or Inactive National Guard); and members transferring to the part-time Selected Reserves from the full-time reserves.

The new entrant distribution gives the percentages of new entrants (as defined by having zero completed years of PEBD service) to the part-time Selected Reserves by age and by officer/enlisted status. The distribution is only used in the normal cost (new entrant) valuation and the open group projection.

Due to Public Law (P.L.) 110-181 (see Appendix A), the set of separation rates shown apply only in the early years of the projection, and then phase in to an average age of 58 for reserve retirement. (See Item 4 in the Reserve Duty section in Appendix F for a description of the parameter used to model the phase-in.) As the transitions to earlier average retirement ages occur, the ages applicable to some of the rates change.

In most cases the separation and reentrant rates and ratios are not smoothed (graduated). However, cells with numerators of fewer than 10 cases were combined with other cells.

The promotion and merit increase scales (PAMS) give the expected annual percentage increase in pay independent of the across-the-board increases in the active duty pay scale. The PAMS do not include adjustments for inflation or productivity increases. The PAMS are defined by length of PEBD service, by age, and by officer/enlisted status. They were computed by dividing the average pay at age (x+1), years of service (y+1) by the average pay at age (x), years of service (y) one year earlier. An adjustment was made to compute the averages for the

numerator and denominator based on the same pay table, and cells based on few observations were combined with other cells.

SUMMARY OF YEARS ON WHICH RESERVE RATES ARE BASED

By Fiscal Year

RATE	<u>2005</u>	<u>2006</u>	2007	<u>2008</u>	<u>2009</u>
New Entrant Distribution (Officer/Enlisted)	X	x	X	X	X
Separation (Officer/Enlisted; Selected/Non-Selected)	X	X	X	X	X
Reentrant (Officer/Enlisted; Selected)	X	X	X	X	X
Paygrade Transfer (Officer/Enlisted; Selected)	X	X	X	X	X
Status Transfer (Officer/Enlisted; Selected-to- Non-Selected)	X	X	X	X	X
Retirement (Officer/Enlisted; Selected/Non-Selected)	X	X	х	X	X
Disability Retirement (Permanent/Temporary; Officer/Enlisted; Selected)	Х	X	X	X	X
Average Points Per Year (Officer/Enlisted; Selected/Non-Selected)	X	X	X	X	X
Career Points Adjustment (Officer/Enlisted; Selected)	X	X	X	X	X
Reentering Average Points (Officer/Enlisted; Selected)	X	X	X	X	X
Retirement Blow-up (Officer/Enlisted; Non-Selected)	X	X	X	X	X
Transfer Blow-up (Officer/Enlisted; Selected-to- Non-Selected)	Х	X	X	X	
Transfer Blow-up Adjustment (Officer/Enlisted; Selected-to- Non-Selected)	X	X	X	X	
Selected Reserve PAMS (Officer/Enlisted)	X	X	X	X	X
Non-Selected Reserve PAMS (Officer/Enlisted)	X	X	X	X	X

New Entrant Distribution

By Paygrade (Officer/Enlisted)

Entry						
Age	Officer	Enlisted	Total			
17	0.00000	0.02350	0.02350			
18	0.00000	0.19427	0.19427			
19	0.00001	0.20176	0.10427			
		0.14591				
20	0.00018		0.14609			
21	0.00028	0.10208	0.10236			
22	0.00072	0.07088	0.07160			
23	0.00149	0.05248	0.05397			
24	0.00107	0.03949	0.04056			
25	0.00074	0.03018	0.03092			
26	0.00069	0.02308	0.02377			
27	0.00071	0.01890	0.01961			
28	0.00063	0.01535	0.01598			
29	0.00061	0.01341	0.01402			
30	0.00070	0.01077	0.01147			
31	0.00076	0.00925	0.00989			
31	0.00004	0.00925	0.00969			
32	0.00052	0.00773	0.00825			
33	0.00055	0.00687	0.00742			
34	0.00054	0.00607	0.00661			
35	0.00067	0.00633	0.00700			
36	0.00048	0.00518	0.00566			
37	0.00054	0.00474	0.00528			
38	0.00000	0.00000	0.00000			
39	0.00000	0.00000	0.00000			
40	0.00000	0.00000	0.00000			
41	0.00000	0.00000	0.00000			
42	0.00000	0.00000	0.00000			
43	0.00000	0.00000	0.00000			
44	0.00000	0.00000	0.00000			
45	0.00000	0.00000	0.00000			
46	0.00000	0.00000	0.00000			
47	0.00000	0.00000	0.00000			
48	0.00000	0.00000	0.00000			
49	0.00000	0.00000	0.00000			
50	0.00000	0.00000	0.00000			
51	0.00000	0.00000	0.00000			
31	0.00000	0.00000	0.00000			
52	0.00000	0.00000	0.00000			
53	0.00000	0.00000	0.00000			
54	0.00000	0.00000	0.00000			
55	0.00000	0.00000	0.00000			
56	0.00000	0.00000	0.00000			
E 7	0.00000	0.00000	0.00000			
57 50	0.00000	0.00000	0.00000			
58	0.00000	0.00000	0.00000			
59	0.00000	0.00000	0.00000			
60	0.00000	0.00000	0.00000			
61	0.00000	0.00000	0.00000			
>62	0.00000	0.00000	0.00000			
Total	0.01177	0.98823	1.00000			

DESCRIPTION: New Entrant distribution for a normal cost valuation (as well as open group), where a new entrant is defined as: a part-time selected reserve on the file as of year-end, who was not in that status in the prior year, and has zero completed PEBD years of service.

> Arrayed by entry age and paygrade (officer/enlisted). Populates age scatter of new entrant cohort. Model assumes no new entrants older than age 37.

Officer Selected Reserve Separation Rates (Non-Retirement Causes)

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	1.000								
	1.000								
	0.333								
	0.100								
	0.182 0.182 0.182 0.182 1.000								
	0.048 0 0.048 0 0.048 0 0.048 1	1.000							
	0.053 0. 0.053 0. 0.053 0. 0.053 0.	1.000							
		-							
	06 0.095 06 0.095 06 0.095 06 0.095	06 0.095 06 1.000 00 1.000							
	9 0.106 9 0.106 9 0.106 9 0.106	9 0.106 9 0.106 9 0.106 9 1.000							
	4 0.099 4 0.099 4 0.099 4 0.099	4 0.099 4 0.099 4 0.099 4 1.000							
1	0.094	0.094	0001						
	0.058	0.058	1.000						
١	0.087 0.087 0.087 0.087 0.087	0.087 0.087 0.087 0.087 0.087	0.087 1.000						
	0.051 0.051 0.051 0.051	0.051 0.051 0.051 0.051	0.051 0.051 1.000						
١	0.080 0.080 0.080 0.080 0.080	0.080 0.080 0.080 0.080	0.080 0.080 0.080 1.000						
	0.118 0.118 0.118 0.118	0.118 0.118 0.118 0.118	0.118 0.118 0.118 0.118	1.000					
۱	0.10 401.0 401.0 401.0	0.104 0.104 0.104 0.104	0.104 0.104 0.104 0.104	1.000					
	0110 0110 0110 0110	0.110 0.110 0.110 0.110	0.110 0.110 0.110 0.110	0.110					
	0.089 0.089 0.089 0.089	0.089 0.089 0.089 0.089	0.089 0.089 0.089 0.089	0.089 0.089 0.089					
	0.099 0.099 0.099 0.099	0.099	0.099	0.099					
	0.098 0.098 0.098 0.098	0.098 0.098 0.098 0.098	0.098 0.098 0.098 0.098	0.098					
١	0.040 0.040 0.060 0.110 0.143	0.065 0	0.065	0.065	0.065				
l	0.036 0.036 0.069 0.135 0.083	0.063 0.063 0.063 0.063 0.063	0.063 0.063 0.063 0.063 0.063	0.063 0.063 0.063 0.063 0.063	0.063 0				
	0.064 0 0.064 0 0.065 0 0.094 0	0.062 0 0.086 0 0.081 0 0.134 0	0.060 0 0.117 0 0.067 0 0.042 0	0.042 0 0.042 0 0.042 0 0.042 0	0.042 0				
	0.039 0. 0.039 0. 0.065 0. 0.113 0.	0.119 0. 0.089 0. 0.091 0. 0.124 0.	0.091 0. 0.072 0. 0.044 0. 0.044 0.	0.0044	0.044 0.0044 0.0044				
	0.079 0.0 0.082 0.0 0.068 0.0 0.070 0.0	0.130 0. 0.053 0.0 0.157 0.0 0.152 0.	0.110 0.049 0.049 0.049 0.049 0.049	0.049 0.0 0.049 0.0 0.049 0.0 0.049 0.0	0.049 0.0 0.049 0.0 0.049 0.0 0.049 0.0				
						24			
	48 0.058 74 0.067 86 0.075 85 0.094 80 0.088	95 0.089 57 0.090 13 0.144 82 0.133	28 0.117 14 0.106 37 0.062 37 0.042 37 0.042	37 0.042 37 0.042 37 0.042 37 0.042	37 0.042 37 0.042 37 0.042 37 0.042	37 0.042			
	33 0.048 75 0.074 75 0.065 78 0.065	36 0.095 34 0.057 14 0.113 32 0.132 39 0.093	0.128 0.0114 0.037 0.037 0.037	52 0.037 51 0.037 54 0.037 55 0.037 51 0.037	24 0.037 24 0.037 24 0.037 24 0.037	24 0.037 24 0.037			
	0 0.063 0 0.075 9 0.075 6 0.078	0 0.086 7 0.064 4 0.144 3 0.099	1 0.101 8 0.059 8 0.069 8 0.061	0 0.052 7 0.051 7 0.044 7 0.065 5 0.031	9 0.024 8 0.024 8 0.024 8 0.024	8 0.024 8 0.024 8 0.024			
	3 0.050 8 0.059 9 0.065 7 0.076	2 0.090 11 0.077 5 0.134 6 0.114 7 0.083	8 0.101 8 0.094 3 0.078 6 0.036	5 0.040 5 0.037 0 0.047 1 0.045	0.039 0.0037 9.0.018 9.0.018	9 0.018 9 0.018 9 0.018			
	4 0.063 4 0.077 4 0.078 8 0.079 3 0.057	1 0.052 6 0.061 0 0.115 8 0.156 9 0.097	8 0.088 5 0.086 9 0.123 3 0.086 9 0.096	7 0.065 8 0.035 9 0.030 0 0.031 4 0.046	7 0.021 0 0.020 9 0.029 9 0.029	9 0.029 9 0.029 9 0.029 9 0.029	6		
	5 0.064 9 0.074 1 0.094 6 0.088 0 0.073	5 0.101 1 0.076 6 0.170 9 0.158 7 0.049	2 0.118 1 0.075 0 0.079 0 0.039	3 0.057 2 0.058 0 0.049 2 0.030 0 0.054	9 0.047 1 0.029 2 0.029 5 0.029	9 0.029	9 0.029		
	7 0.065 4 0.079 7 0.081 4 0.086 5 0.100	9 0.065 3 0.101 2 0.116 5 0.189 4 0.087	4 0.102 7 0.091 0 0.090 8 0.070 8 0.050	0.083 0.032 0.022 0.022 0.040	7 0.029 5 0.041 8 0.042 3 0.025	0.019 0.019 0.019 0.019	0.019		
	0.064 0.067 0.084 0.085	0.093 0.142 0.125 0.114	0.084 0.110 0.056 0.063	0.060	0.027 0.037 0.028 0.028	0.026 0.027 0.038 0.037	0.024		
	0.065	0.082 0.095 0.148 0.142	0.0872	0.058	0.061	0.021	0.019		
١	0.053 0.069 0.071 0.084		0.094 0.090 0.091 0.076 0.080	0.065 0.061 0.051 0.043	0.058 0.033 0.054 0.044		0.015 0.015 0.015 0.015		
١	0.039 0.039 0.071 0.052 0.058		0.100 0.092 0.099 0.079 0.087	0.059 0.056 0.065 0.062 0.049	0.045 0.038 0.038 0.041 0.037		0.040 0.016 0.016 0.016 0.016	0.016	
Ì	0.033 0.033 0.042 0.069 0.060	0.120 0.086 0.129 0.154 0.103	0.096 0.102 0.094 0.083 0.083	0.072 0.068 0.058 0.047 0.056	0.050 0.049 0.035 0.022 0.029		0.052 0.032 0.028 0.028 0.028	0.028	
ì	0.023 0.055 0.051 0.051	0.083 0.101 0.156 0.124 0.146	0.127 0.097 0.103 0.089 0.069	0.060 0.064 0.053 0.058	0.047 0.051 0.050 0.040 0.024	0.035 0.031 0.034 0.032	0.022 0.025 0.047 0.026 0.021	0.021	
١	0.028 0.039 0.056 0.070 0.061	0.127 0.124 0.138 0.169 0.153	0.135 0.113 0.094 0.096	0.085 0.076 0.065 0.068 0.046	0.045 0.039 0.040 0.040	0.032 0.034 0.038 0.025 0.032	0.035 0.035 0.051 0.032 0.031	0.021 0.021 0.021 0.021	
	0.035 0.057 0.059 0.073	0.116 0.168 0.175 0.168 0.167	0.134 0.131 0.097 0.089	0.078 0.065 0.068 0.062 0.058	0.056 0.045 0.036 0.036	0.031 0.030 0.040 0.030 0.023	0.030 0.041 0.022 0.050 0.057	0.033 0.011 0.011 0.011	
۱	0.038 0.038 0.069 0.052 0.085	0.094 0.146 0.172 0.168 0.149	0.136 0.124 0.112 0.100 0.094	0.082 0.074 0.068 0.063 0.063	0.055 0.045 0.042 0.041 0.031	0.026 0.026 0.035 0.025 0.030	0.036 0.033 0.034 0.027	0.030 0.016 0.013 0.024 0.024	0.024
١	0.044 0.068 0.060 0.056	0.073 0.074 0.116 0.112 0.112	0.116 0.117 0.106 0.102 0.084	0.075 0.083 0.068 0.088 0.075	0.073 0.069 0.055 0.054 0.037	0.047 0.033 0.038 0.032 0.034	0.024 0.013 0.031 0.021 0.032	0.047 0.033 0.028 0.014 0.014	0.014
	0.029 0.029 0.118 0.076	0.059 0.087 0.096 0.098	0.113 0.104 0.112 0.108 0.081	0.080 0.082 0.073 0.061 0.073	0.074 0.064 0.063 0.052 0.048	0.040 0.028 0.046 0.041 0.030	0.039 0.029 0.026 0.027 0.046	0.055 0.033 0.034 0.045 0.010	0.010
	0.054 0.054 0.054 0.051 0.085	0.069 0.062 0.060 0.090 0.085	0.097 0.086 0.102 0.083 0.083	0.088 0.076 0.070 0.062 0.077	0.092 0.083 0.053 0.061	0.060 0.053 0.051 0.041	0.027 0.038 0.032 0.031 0.017	0.030 0.052 0.049 0.066 0.013	0.013
	0.047 0.047 0.047 0.047	0.063 0.046 0.051 0.065 0.074	0.091 0.096 0.089 0.087 0.090	0.082	0.100 0.076 0.084 0.081	0.052 0.052 0.037 0.044	0.034 0.020 0.047 0.019	0.037 0.037 0.037 0.037	0.037
۱	0.054 0.054 0.054 0.054 0.054	0.054	0.090 0.092 0.081 0.059 0.105	0.090 0.085 0.060 0.060 0.075	0.110 0.062 0.078 0.081 0.081	0.0000	0.030	0.030	0.030
	00000	00000	00000	00000	00000	00000	00000	00000	0.000
1		5556	55556	20308	55556	55556	55566	55566	J 3
	Under 1 2 3 4	9 9 4 9 9	11 12 14 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	15 17 18 19	8 2 2 2 2 4	28 27 28 28	8 2 2 2 2	88888	4 4

DESCRIPTION

Selected Reserve Separation Rates
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Probability that a member exits the status (due to non-retirement causes) during the fiscal year. Values for certain coalls in above rate table may represent little to no exposure in the population, hence have minimal or no impact on results.
Blank cells should be considered a value of zero (0.000).

Enlisted Selected Reserve Separation Rates (Non-Retirement Causes)

By Entry Age

0.140 0.140 0.140 1.000 0.140 0.140 1.000 0.140 1.000 1.000

29	2222								
	0.140								
58	0.140 0.140 0.140 0.140	1.000							
27	0.140 0.140 0.140 0.140	1.000							
29	0.140 0.140 0.140 0.140	0.140							
55	0.140	0.140 0.140 0.140 1.000							
54	0.140 0.140 0.140 0.041 0.041	0.140 0.140 0.140 0.140 1.000							
53			8						
	0.140	0.000	000.1						
52	0.140 0.140 0.140 0.140	0.140 0.140 0.140 0.140 0.140	1.000						
51	0.140 0.140 0.140 0.140	0.140 0.140 0.140 0.140	0.140 0.140 1.000						
50	0.140 0.140 0.140 0.140	0.140 0.140 0.140 0.140	0.140 0.140 0.140 1.000						
49	0.140 0.140 0.140 0.140	0.140 0.140 0.140 0.140	0.140 0.140 0.140 1.000						
48	0.140 0.140 0.140 0.140	0.140 0.140 0.140 0.140 0.140	0.140 0.140 0.140 0.140 0.140	1.000					
47	0.140	0.140 0.140 0.140 0.140	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000					
46	0.140 0.140 0.140 0.140 0.140	0.140 0.140 0.140 0.140 0.140	0.140 0.140 0.140 0.140 0.140	0.140 0					
45									
44	9 0.159 9 0.159 9 0.159 9 0.159	8 0.159 8 0.159 8 0.159 8 0.159	8 0.159 8 0.159 8 0.159 8 0.159	8 0.159 8 0.159 8 0.159					
	0.159 0.159 0.159 0.159	0.159 0.159 0.159 0.159	0.159 0.159 0.159 0.159	0.159 0.159 0.159					
43	0.159 0.159 0.159 0.159	0.159 0.159 0.159 0.159	0.159 0.159 0.159 0.159	0.159 0.159 0.159 0.159					
42	0.137 0.137 0.137 0.137	0.137 0.137 0.137 0.137 0.137	0.137 0.137 0.137 0.137	0.137 0.137 0.137 0.137 0.137	0.137				
41	0.137 0.137 0.137 0.137	0.137 0.137 0.137 0.137	0.137 0.137 0.137 0.137	0.137 0.137 0.137 0.137	0.137				
40	0.174 0.147 0.103 0.139	0.148 0.165 0.155 0.156 0.154	0.107 0.138 0.115 0.063 0.087	0.075 0.079 0.062 0.045 0.045	0.045				
39	0.200 0.158 0.128 0.131	0.140 0.134 0.160 0.153 0.149	0.124 0.124 0.085 0.103 0.096	0.049 0.056 0.039 0.048	0.041 0.069 0.010 0.010				
38	0.191 0.162 0.144 0.152 0.117	0.160 0.144 0.162 0.146 0.137	0.124 0.104 0.089 0.065 0.088	0.075 0.059 0.067 0.047 0.090	0.026				
37	0.189 0.177 0.133 0.136 0.110	0.159 0 0.135 0 0.169 0 0.150 0	0.110 0.099 0.115 0.077 0.087	0.080 0 0.070 0 0.065 0 0.046 0	0.073 0 0.053 0 0.032 0 0.028 0	0.075			
38	0.190 0.190 0.130 0.130 0.117 0.130 0.118 0.118		0.103 0. 0.118 0.0 0.112 0. 0.103 0.0	0.075 0.0 0.085 0.0 0.061 0.0 0.046 0.0	0.062 0.074 0.0053 0.0055 0.00	0.040			
35		7 0.194 18 0.135 12 0.168 18 0.148 11 0.120							
	7 0.192 7 0.157 9 0.121 2 0.111	5 0.177 0 0.148 7 0.192 4 0.148 3 0.131	0.104 6 0.122 7 0.098 1 0.099 0 0.086	9 0.091 7 0.062 5 0.050 9 0.059 6 0.073	0 0.082 3 0.060 1 0.090 4 0.023	0.063			
34	0.197	0.205 0.150 0.187 0.164	0.120 0.126 0.097 0.090	0.089	0.090	0.026			
33	0.171 0.145 0.146 0.130	0.205 0.152 0.195 0.152 0.129	0.131 0.138 0.110 0.108 0.096	0.096 0.057 0.062 0.055 0.055	0.084 0.089 0.097 0.096	0.060 0.012 0.016 0.016 0.016			
32	0.203 0.162 0.138 0.126 0.122	0.212 0.153 0.198 0.153 0.162	0.135 0.127 0.129 0.099	0.075 0.064 0.066 0.066	0.095 0.104 0.091 0.085	0.092 0.059 0.025 0.030	0.083		
31	0.182 0.159 0.132 0.132	0.226 0.187 0.204 0.163 0.139	0.138 0.148 0.107 0.085	0.097 0.058 0.066 0.063 0.072	0.097 0.086 0.089 0.083	0.085 0.091 0.056 0.010 0.025	0.025		
30	0.189 0.155 0.137 0.128 0.140	0.217 0.171 0.250 0.173 0.158	0.152 0.133 0.115 0.121 0.088	0.082 0.078 0.071 0.069	0.095 0.093 0.087 0.075 0.085	0.077 0.094 0.082 0.062 0.020	0.011		
29	0.190 0.155 0.138 0.138	0.258 0.182 0.227 0.170 0.149	0.149 0.141 0.122 0.113 0.101	0.085 0.076 0.064 0.067 0.076	0.096 0.109 0.089 0.084 0.089	0.052 0.055 0.073 0.050 0.036	0.021 0.021 0.021 0.021		
28	0.170 0.165 0.142 0.139	0.262 0.203 0.249 0.187 0.167	0.137 0.133 0.123 0.132 0.105	0.092 0.087 0.054 0.086	0.096 0.096 0.096 0.096 0.096 0.096	0.084 0.069 0.073 0.041	0.020		
27	0.177 0 0.152 0 0.141 0 0.134 0	0.258 0 0.198 0 0.259 0 0.193 0	0.171 0 0.156 0 0.133 0 0.137 0	0.111 0 0.088 0 0.072 0 0.067 0	0.092 0 0.108 0 0.093 0 0.091 0	0.067 0 0.065 0 0.074 0 0.051 0	0.047 0.022 0.024 0.021 0.021	0.021	
26	0.175 0. 0.159 0. 0.145 0. 0.134 0.	0.285 0. 0.206 0. 0.254 0. 0.203 0.	0.165 0. 0.157 0. 0.128 0. 0.119 0.	0.096 0. 0.086 0. 0.073 0. 0.058 0.	0.096 0. 0.102 0. 0.091 0. 0.081 0.	0.077 0. 0.058 0. 0.065 0. 0.041 0.		0.019 0.019	
25									
24	1 0.164 8 0.151 7 0.148 9 0.134 9 0.142	5 0.294 9 0.217 9 0.281 8 0.205 6 0.175	9 0.166 9 0.156 3 0.140 2 0.140 3 0.115	6 0.093 8 0.078 9 0.072 2 0.055 1 0.078	6 0.099 6 0.103 7 0.089 8 0.080 5 0.061	5 0.064 3 0.055 7 0.051 9 0.055	7 0.046 7 0.041 7 0.046 5 0.027 7 0.018	6 0.010 8 0.010 8	
	0.171 0.148 0.137 0.129	0.295 0.219 0.289 0.218 0.218	0.159 0.133 0.132 0.132	0.096 0.078 0.069 0.072	0.096	0.075 0.053 0.047 0.047	0.047	0.0026	
23	0.163 0.135 0.135 0.142	0.310 0.226 0.292 0.224 0.180	0.176 0.162 0.148 0.143 0.116	0.100 0.083 0.076 0.062 0.084	0.101 0.087 0.091 0.084 0.078	0.0070 0.0061 0.0048 0.0044	0.031 0.040 0.039 0.041	0.029 0.017 0.023 0.023 0.023	
22	0.160 0.148 0.133 0.143	0.319 0.229 0.308 0.224 0.181	0.171 0.162 0.140 0.144 0.116	0.095 0.086 0.076 0.063 0.086	0.099 0.097 0.074 0.081	0.073 0.063 0.053 0.044 0.047	0.049 0.035 0.043 0.043	0.043 0.031 0.008 0.008 0.008	0.008
21	0.156 0.144 0.134 0.138	0.336 0.239 0.306 0.231 0.187	0.169 0.135 0.138 0.108	0.097 0.086 0.069 0.068 0.087	0.100 0.090 0.086 0.091 0.076	0.068 0.061 0.057 0.048 0.051	0.038 0.032 0.038 0.036 0.049	0.034 0.028 0.011 0.011	0.011
20	0.153 0.141 0.127 0.129 0.135	0.342 0.238 0.305 0.233 0.184	0.171 0.161 0.135 0.142 0.112	0.097 0.089 0.075 0.059 0.086	0.100 0.094 0.084 0.089 0.074	0.065 0.062 0.050 0.043 0.041	0.038 0.035 0.032 0.032	0.042 0.031 0.037 0.013 0.013	0.013
19	0.164 0.149 0.116 0.111	0.325 0.235 0.299 0.233 0.179	0.161 0.155 0.127 0.132 0.113	0.094 0.086 0.072 0.061 0.084	0.103 0.095 0.086 0.080 0.079	0.066 0.060 0.050 0.047 0.047	0.036 0.034 0.022 0.022	0.027 0.032 0.030 0.027 0.027	0.027
18	0.169 0.214 0.133 0.109 0.106	0.294 0.211 0.279 0.232 0.173	0.168 0.168 0.133 0.133 0.111	0.098 0.082 0.075 0.062 0.096	0.121	0.063	0.040 0.033 0.032 0.027	0.025 0.025 0.026 0.026	0.026
17	0.128 0 0.233 0 0.155 0 0.103 0	0.227 0.233 0.229 0.239 0.179	0.145 0 0.178 0 0.161 0 0.148 0	0.095 0.105 0.085 0.063 0.111	0.154 0.139 0.117 0.111 0.115	0.079 0.099 0.095 0.070 0.061	0.052 0 0.052 0 0.052 0 0.052 0	0.052 0 0.052 0 0.052 0 0.052 0	0.052 0
16	0.0000	00000	00000	00000	00000	00000	00000	00000	0.000
6	30000	22220	3000	22220	20000	5 5 5 5 6	22220	50000	0.0

Selected Reserve Separation Rates
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Probability that a member exits the status (due to non-retirement causes) during the fiscal year.
Values for certain coalis in above rate table may represent little to no exposure in the population, hence have minimal or no impact on results.
Blank cells should be considered a value of zero (0.000).

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Officer Selected Reserve Reentrant Rates

By Entry Age

Service	Under 1 0 2 2 3 3 3 4 4 0 0	00000 00000		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		88488	8 2 8 8 8	8888	0,0
9	0.000 0.042 0.000 0.042 0.000 0.042 0.000 0.042	0.000 0.042 0.000 0.042 0.000 0.042 0.000 0.042	0.000 0.042 0.000 0.042 0.000 0.042 0.000 0.042	0.000 0.042 0.000 0.042 0.000 0.042 0.000 0.042	0.000 0.042 0.000 0.042 0.000 0.042 0.000 0.042	0.000 0.042 0.000 0.030 0.000 0.030 0.000 0.030	0.000 0.030 0.000 0.030 0.000 0.030 0.000 0.030	0.000 0.030 0.000 0.030 0.000 0.030 0.000 0.030	0.000 0.030
1/ 18	42 0.353 42 0.353 42 0.353 42 0.281 42 0.128	42 0.050 42 0.038 42 0.043 42 0.041 42 0.055	42 0.059 42 0.054 42 0.050 42 0.052 42 0.046		42 0.035 42 0.035 42 0.039 42 0.049	42 0.048 30 0.039 30 0.043 30 0.043	30 0.031 30 0.020 30 0.032 30 0.019 30 0.033	30 0.013 30 0.013 30 0.013 30 0.013	30 0.013
18	3 0.659 3 0.659 3 0.561 1 0.231 8 0.105		9 0.066 4 0.072 0 0.069 2 0.059 6 0.056		5 0.032 5 0.039 9 0.036 0 0.038	8 0.039 9 0.035 3 0.043 3 0.035		3 0.030 3 0.021 3 0.029 3 0.033 3 0.013	3 0.013
8	0.336 0.336 0.126 0.050	0.044 0.071 0.065 0.075	0.066	0.070 0.051 0.038 0.038	0.038	0.040 0.028 0.040 0.035	0.029 0.026 0.027 0.031		8 0.008
7	0.313 0.294 0.119 0.063 0.048	0.069 0.089 0.130 0.103	0.075 0.097 0.097 0.074 0.063	0.049 0.054 0.048 0.048	0.045 0.035 0.029 0.037	0.027	0.018 0.022 0.021 0.023	0.028	0.008
77	0.580 0.278 0.146 0.330 0.422	0.269 0.270 0.219 0.205 0.171	0.151 0.119 0.069 0.069	0.041 0.033 0.038 0.031	0.033 0.036 0.032 0.037 0.031	0.026 0.026 0.032 0.020 0.023	0.030 0.027 0.026 0.015 0.017	0.018 0.009 0.009 0.009	0.009
3	0.329 0.183 0.220 0.569 0.605	0.342 0.288 0.222 0.189 0.224	0.162 0.113 0.084 0.068 0.052	0.037 0.033 0.034 0.035	0.032 0.033 0.026 0.033	0.031 0.026 0.026 0.021 0.019	0.024 0.021 0.022 0.014 0.021	0.021 0.011 0.008 0.008 0.008	
+7	0.351 0.123 0.190 0.391 0.394	0.216 0.223 0.215 0.187 0.173	0.147 0.099 0.079 0.073		0.036 0.024 0.028 0.026 0.037	0.032 0.024 0.025 0.025		0.017 0.017 0.017 0.017	
2	0.346 0.087 0.128 0.256 0.202	0.148 0.202 0.176 0.135	0.115 0.085 0.067 0.045	0.036 0.047 0.029 0.029 0.030	0.037 0.032 0.032 0.031	0.029 0.031 0.034 0.032	0.022 0.022 0.014 0.014	0.014	
02	0.368 0.055 0.105 0.126 0.202	0.137 0.197 0.178 0.161 0.148	0.097 0.093 0.065 0.060 0.071	0.039 0.040 0.034 0.037 0.037	0.030	0.029 0.039 0.026 0.021 0.025		0.015	
	0.265 0.057 0.096 0.178 0.184	0.133 0.139 0.126 0.126	0.085 0.095 0.058 0.082 0.050	0.043 0.029 0.037 0.022 0.036	0.024 0.029 0.030 0.028	0.020 0.034 0.029 0.032 0.032	0.024 0.016 0.016 0.016 0.016	0.016	
2	0.275 0. 0.105 0. 0.038 0. 0.135 0.	0.091 0.0150 0.0134 0.0097 0.0097 0.0091			0.026 0.0016 0.0035 0.0030 0.0030 0.0030		0.015 0.0015 0.0015 0.0015 0.0015 0.0015		
2		0.090 0. 0.101 0. 0.121 0. 0.106 0.				0.021 0. 0.022 0. 0.034 0. 0.019 0.			
200	0.264 0. 0.066 0. 0.066 0. 0.058 0.	0.063 0. 0.078 0. 0.110 0. 0.089 0.	0.090 0. 0.062 0. 0.052 0. 0.056 0.	0.057 0. 0.030 0. 0.039 0. 0.031 0.	0.027 0. 0.016 0. 0.016 0. 0.025 0.	0.025 0. 0.025 0. 0.025 0. 0.025 0.	0.024 0. 0.024 0.		
5	0.283 0. 0.069 0. 0.051 0. 0.089 0.	0.059 0) 0.083 0) 0.151 0, 0.065 0)	0.047 0. 0.063 0. 0.037 0. 0.023 0.	0.038 0) 0.032 0) 0.035 0) 0.022 0)	0.027 0.025 0.022 0.022 0.022 0.022	0.019 0.0019 0.0019 0.0019 0.0019 0.0019 0.0019 0.0019 0.0019 0.0019 0.0019 0.0019 0.0019 0.0019 0.0019 0.0019	0.019 0.0019		
7	0.192 0. 0.046 0. 0.069 0. 0.092 0.	0.053 0. 0.070 0. 0.127 0. 0.058 0.	0.042 0.080 0.0065 0.0045 0.0045 0.0000000000000000000000	0.028 0.020 0.020 0.020 0.020	0.020 0.020 0.020 0.020 0.020 0.020 0.020	0.020 0.020 0.020 0.020 0.020 0.020 0.020	0.020		
3	0.052 0.1 0.052 0.0 0.033 0.0 0.035 0.0	0.061 0.0 0.049 0.0 0.111 0.1 0.082 0.0	0.074 0.0 0.046 0.0 0.078 0.0 0.038 0.0	0.032 0.0 0.027 0.0 0.023 0.0 0.031 0.0	0.016 0.0 0.016 0.0 0.016 0.0 0.016 0.0	0.016 0.0 0.016 0.0 0.016 0.0 0.016 0.0			
5	0.150 0.2 0.059 0.0 0.048 0.0 0.054 0.0	0.067 0.0 0.074 0.0 0.130 0.0 0.072 0.0	0.039 0.0 0.078 0.0 0.067 0.0 0.071 0.0		0.024 0.0 0.024 0.0 0.018 0.0 0.018 0.0	0.018 0.0 0.018 0.0 0.018 0.0			
000	0.259 0.339 0.027 0.027 0.027 0.027 0.027 0.027	0.040 0.042 0.044 0.042 0.093 0.042 0.082 0.042 0.099 0.042	0.070 0.042 0.070 0.042 0.063 0.042 0.042 0.042 0.031 0.042	0.043 0.037 0.026 0.037 0.028 0.037 0.025 0.037	0.021 0.037 0.021 0.037 0.021 0.037 0.021 0.037	0.021 0.037 0.021 0.037 0.021			
8	139 0.174 127 0.040 127 0.040 127 0.040 136 0.040	42 0.040 42 0.040 42 0.040 42 0.040 42 0.040	42 0.040 42 0.040 42 0.040 42 0.040 42 0.040	87 0.040 87 0.040 87 0.040 87 0.040	87 0.040 87 0.040 87 0.040 87 0.040	87 0.040			
90	74 0.214 40 0.038 40 0.038 40 0.038 40 0.038	40 0.038 40 0.038 40 0.038 40 0.038	40 0.038 40 0.038 40 0.038 40 0.038	40 0.038 40 0.038 40 0.038 40 0.038	40 0.038 40 0.038 40 0.038 40 0.038	9			
8	14 0.234 38 0.032 38 0.032 38 0.032	38 0.032 38 0.032 38 0.032 38 0.032	38 0.032 38 0.032 38 0.032 38 0.032	38 0.032 38 0.032 38 0.032 38 0.032	38 0.032 38 0.032 38 0.032 38 0.032				
2	22 0.029 22 0.029 22 0.029 22 0.029	22 0.029 22 0.029 22 0.029 22 0.029	22 0.029 22 0.029 22 0.029 22 0.029	22 0.029 22 0.029 22 0.029 22 0.029	22 0.029 22 0.029 22 0.029				
	9 0.028 9 0.028 9 0.028 9 0.028	9 0.028 9 0.028 9 0.028 9 0.028	9 0.028 9 0.028 9 0.028 9 0.028	9 0.028 9 0.028 9 0.028 9 0.028	9 0.028 9 0.028				
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	0.028 0.028 0.028 0.028	8 0.028 8 0.028 8 0.028 8 0.028	3 0.028 3 0.028 3 0.028 3 0.028	8 0.028 8 0.028 8 0.028 9 0.028	m				
	0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028	0.028	0.028 0.028 0.028 0.028					
2	0.028 0.028 0.028 0.028	0.028	0.028	0.028					
2	0.297 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	0.028					
-	0.355 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	0.028					
2	0.211 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028						
2	0.213 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028						
8	0.028 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	0.028 0.028 0.028						
5	0.267 0 0.028 0 0.028 0 0.028 0	0.028 0 0.028 0 0.028 0 0.028 0	0.028 0						
ś	0.267 0.0 0.028 0.0 0.028 0.0 0.028 0.0	0.028 0.0 0.028 0.0 0.028 0.0 0.028 0.0	0.028						
3	0.267 0.2 0.028 0.0 0.028 0.0 0.028 0.0	0.028 0.0 0.028 0.0 0.028 0.0 0.028 0.0							
5	0.267 0.2 0.028 0.0 0.028 0.0 0.028 0.0	0.028 0.028 0.028 0.028 0.028 0.028							
8	0.267 0.267 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028	28 0.028 28 0.028 28							
8	67 0.267 28 0.028 28 0.028 28 0.028 28 0.028	28 0.028							
3	7 0.267 8 0.028 8 0.028 8 0.028 8 0.028	60							
8	7 0.267 3 0.028 3 0.028 3 0.028								
8	0.028								
5	0.0267								
70	0.267								
ч.									

DESCRIPTION: Selected Reserve Reentrant Rates -- Members have a prior entry date.

Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).

Increment rate that a member enters reserve status during the fiscal year.

For PEBD YOS greater than 15, if the reentrant rate > loss rate then set the reentrant rate equal to the loss rate.

Additional adjustments are made in an open group valuation in order to prevent the population from becoming "over-strengthed" relative to DoD-Comptroller projected endstrengths.

Values for ordatin cells in above rate table may represent little to no exposure in the population, hence have minimal or no impact on results.

Blank cells should be considered a value of zero (0.000).

Enlisted Selected Reserve Reentrant Rates

By Entry Age

1	91.0								
9	0.168								
09	0.168 0.168 0.168								
23	0.168								
28	0.168 0.168 0.168 0.168 0.168								
2/	0.168 0.168 0.168 0.168 0.000 0.168	0.168							
8									
e c	38 0.168 38 0.168 38 0.168 38 0.168	38 0.168 38 0.168 38							
4	8 0.168 8 0.168 8 0.168 8 0.168	8 0.168 8 0.168 8 0.168							
ž,	3 0.168 3 0.168 3 0.168 3 0.168	8 0.168 0.168 0.168							
23	0.168	0.168	_						
25	0.168 0.168 0.168 0.168	0.168 0.168 0.168 0.168	0.168						
51	0.168 0.168 0.168 0.168	0.168 0.168 0.168 0.168	0.168						
20	0.168 0.168 0.168 0.168	0.168 0.168 0.168 0.168	0.168						
48	0.168 0.168 0.168 0.168	0.168 0.168 0.168 0.168	0.168 0.168 0.168						
8	0.168 0.168 0.168 0.168	0.168 0.168 0.168 0.168	0.168 0.168 0.168 0.168						
47	0.168 0.168 0.168 0.168	0.168 0.168 0.168 0.168	0.168 0.168 0.168 0.168	0.168					
49	0.168	0.168 0.168 0.168 0.168	0.168	0.168					
45	0.168 0.168 0.168 0.168 0.168	0.168 0.168 0.168 0.168 0.168	0.168 0.168 0.168 0.168 0.168	0.168 (0.168 (0.168					
44	0.169 0 0.143 0 0.364 0 0.267 0 0.286 0	0.960 0.412 0.171 0.240 0.107	0.107 0.107 0.107 0.107 0.107	0.107 0.107 0.107 0.107					
5	0.088 0. 0.136 0. 0.344 0. 0.563 0.	0.896 0 0.171 0 0.234 0 0.234 0	0.073 0.0	0.073 0.073 0.073 0.073 0.073					
42	0.084 0. 0.075 0. 0.397 0. 0.603 0.	1.155 0. 0.175 0. 0.258 0. 0.153 0.	0.075 0. 0.075 0. 0.075 0. 0.075 0.	0.075 0. 0.075 0. 0.075 0. 0.075 0.	0.075				
41	0.092 0.0 0.105 0.0 0.236 0.3 0.452 0.6	0.238 0.1 0.251 0.2 0.105 0.1 0.110 0.2	0.165 0.0 0.096 0.0 0.138 0.0 0.099 0.0		0.028 0.0				
40				15 0.028 15 0.028 15 0.028 15 0.028					
38	51 0.081 59 0.117 53 0.207 55 0.124	77 0.880 88 0.219 83 0.194 81 0.153 77 0.166	76 0.141 72 0.082 33 0.099 31 0.046 8 0.043	0.015 11 0.015 11 0.015 11 0.015	11 0.015 11 0.015				
	2 0.086 9 0.051 1 0.099 7 0.133 4 0.125	4 0.657 1 0.188 0 0.233 0 0.131 6 0.117	0 0.076 4 0.072 0 0.063 2 0.048	3 0.044 0 0.011 9 0.011	9 0.011 9 0.011 9 0.011				
38	7 0.082 7 0.059 1 0.081 2 0.127 9 0.104	5 0.181 7 0.220 4 0.140 8 0.096	9 0.090 7 0.054 2 0.074 5 0.060 2 0.052	8 0.023 2 0.021 7 0.009 1 0.009	60.009 60.009 60.009 60.009	ω.			
3/	0.101	0.336 0.165 0.237 0.084	0.079 0.087 0.062 0.035	0.038 0.032 0.032 0.017	900.0	0.00			
8	0.083 0.060 0.068 0.102 0.073	0.216 0.146 0.229 0.086 0.092	0.061 0.079 0.058 0.044 0.045	0.037 0.021 0.037 0.020 0.013	0.012 0.004 0.004 0.004	0.00			
32	0.081 0.056 0.110 0.081	0.155 0.161 0.284 0.090 0.073	0.063 0.066 0.056 0.053	0.038 0.025 0.024 0.010 0.016	0.012 0.011 0.006 0.006	0.006			
34	0.085 0.058 0.082 0.128 0.091	0.154 0.178 0.347 0.106 0.093	0.067 0.080 0.071 0.044 0.040	0.030 0.025 0.026 0.018 0.018	0.011 0.005 0.005 0.005	0.005 0.005 0.005			
33	0.073 0.057 0.080 0.142 0.088	0.109 0.208 0.430 0.108 0.092	0.074 0.091 0.076 0.065 0.064	0.031 0.033 0.028 0.028	0.020 0.009 0.010 0.012	0.003 0.003 0.003 0.003			
32	0.063 0.063 0.074 0.137 0.093	0.093 0.206 0.566 0.116 0.097	0.073 0.085 0.081 0.066 0.054	0.038 0.027 0.020 0.015 0.014	0.017 0.016 0.015 0.011	0.005 0.005 0.005 0.005	0.005		
3	0.064 0.057 0.078 0.138 0.083	0.089 0.205 0.605 0.119 0.084	0.074 0.095 0.080 0.060 0.073	0.037 0.035 0.032 0.028 0.021	0.014 0.015 0.010 0.010 0.009	0.007 0.007 0.007 0.007	0.007		
30	0.070 0.048 0.066 0.121 0.097	0.097 0.189 0.593 0.128 0.099	0.068 0.092 0.078 0.064 0.063	0.036 0.029 0.039 0.031 0.016	0.023 0.018 0.018 0.019 0.019	0.005 0.005 0.005 0.005	0.005		
58	0.060 0.046 0.077 0.128 0.105	0.097 0.230 0.536 0.114 0.098	0.086 0.070 0.069 0.060 0.057	0.047 0.026 0.025 0.025	0.013 0.018 0.013 0.012	0.009 0.009 0.010 0.004	0.004		
82	0.065 0.058 0.070 0.153	0.108 0.234 0.492 0.114 0.083	0.090 0.072 0.078 0.067 0.055	0.045 0.034 0.036 0.032	0.021 0.018 0.020 0.014 0.014	0.011 0.008 0.005 0.005	0.003		
72		0.112 0.220 0.433 0.107 0.091			0.016 0.019 0.013 0.013		0.0013 0.004 0.004 0.004	5.004	
92	0.059 0.052 0.080 0.163 0.138	0.129 0.198 0.435 0.118 0.087			0.025 0.016 0.019 0.017 0.016		0.000 0.000 0.000 0.000 0.000		
22	0.060 0.054 0.086 0.195 0.151				0.020 0.023 0.020 0.020 0.015	0.013 0.014 0.017 0.015 0.015		0.010	
24	0.053 0 0.052 0 0.083 0 0.186 0	0.131 0 0.185 0 0.318 0 0.115 0				0.017 0 0.019 0 0.015 0 0.012 0		0.004 0	
23		0.134 0. 0.181 0. 0.290 0. 0.103 0.			0.015 0. 0.020 0. 0.018 0. 0.020 0.			0.013 0. 0.002 0. 0.002 0. 0.002 0.	
77	0.048 0. 0.051 0. 0.083 0. 0.190 0.		0.075 0. 0.075 0. 0.061 0. 0.049 0.	0.042 0. 0.032 0. 0.028 0. 0.026 0.		0.017 0. 0.016 0. 0.020 0. 0.015 0.	0.009 0. 0.015 0. 0.021 0. 0.016 0.	0.013 0.009 0.0007 0.0007 0.0007 0.0007 0.0000	0.007
21		35 0.137 73 0.187 17 0.257 98 0.100 90 0.091							
R	38 0.043 11 0.046 70 0.080 76 0.187 14 0.139	33 0.135 36 0.173 37 0.217 88 0.098 32 0.090	71 0.064 55 0.066 53 0.059 19 0.051 17 0.050		9 0.018 19 0.019 22 0.016 18 0.022 15 0.021			11 0.008 18 0.008 11 0.008 13 0.008	3 0.008
6	9 0.038 0 0.041 8 0.070 9 0.176 4 0.144		0 0.071 3 0.065 1 0.053 2 0.049 1 0.047	6 0.035 0 0.033 6 0.028 5 0.024 2 0.021		8 0.025 8 0.018 1 0.014 7 0.012 5 0.016	3 0.011 4 0.017 0 0.010 9 0.010		0 0.003
			6 0.060 0 0.053 7 0.051 8 0.042 8 0.041		2 0.021 2 0.021 2 0.020 2 0.021 3 0.019			0.005 1 0.008 1 0.010 1 0.010	1 0.010
18			2 0.046 7 0.040 2 0.037 0 0.038		0.022			0.00	0.011
17	0.006 0.004 0.002	0.026 0.050 0.052 0.027	0.032 0.037 0.032 0.030	0.034	0.025	0.020	0.0026	0.026	0.026
16	000000	000000	000000000000000000000000000000000000000	00000	00000	00000	00000	00000	0.000
Service	Under 1 1 2 3 4			10.15	0 - "	10.15		10.15	_
1	<u>υ</u> ← α ω 4	9 4 4 6 5	0 1 2 2 4	15 17 19	82884	28222	8 2 2 2 2	88488	4 4

DESCRIPTION: Selected Reserve Reentrant Rates -- Members have a prior entry date.

Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).

Increment rate that a member enters reserve status during the fiscal year.

For PEBD YOS greater than 15, if the reentrant rate > loss rate then set the reentrant rate equal to the loss rate.

Additional adjustments are made in an open group valuation in order to prevent the population from becoming 'over-strengthear' relative to Dob-Comptroller projected endstrengths.

Values for certain cells in above rate table may represent little to no exposure in the population, hence have minimal or no impact on results.

Blank cells should be considered a value of zero ('0.000').

Officer Selected Reserve Net Separation Rates (Non-Transfer/Retirement)

Ф	
Αg	
Entry Age	
ò	

No. 0.00 Color C
Note: Not: Note: Note: Note: Note: Note: Note: Note: Note:

DESCRIPTION

Selected Reserve Net Separation Rates
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Probability that a member exits the status (due to non-retirement causes) offset by the rate that a member reenters during the fiscal year.
For PEBD YOS greater than 15, if reentrant rate > loss rate, then reentrant is set equal to the loss rate (i.e., nor allow any negative net loss).
Blank cells should be considered a value of zero ('0.000').

Enlisted Selected Reserve Net Separation Rates (Non-Transfer/Retirement)

,ge	
Entry A	
à	

00 00 00	-0.028 -0	1.000						
JG GG GG	-0.028 -0	-0.028 -0.028 -0.028 -0.028 -0.028 -0.028 -0.026 1.000 -0.028 -0.028 1.000 -0.028 1.000 1.000						
30 31 32	-0.028 -0	-0.028 -0.028 -0.028 -0.028 -0.028 -0.028 -0.028 -0.028 -0.028 -0.028 -0.028 -0.028 -0.028 -0.028 -0.028 -0.028	-0.028 -0.028 -0.028 1.000 -0.028 -0.028 1.000 -0.028 1.000 1.000					
0 40 49	9 -0.028 -0.028 -0.028 -0.028 9 -0.028 -0.028 -0.028 -0.028 9 -0.028 -0.028 -0.028 -0.028 9 -0.028 -0.028 -0.028 -0.028 9 -0.028 -0.028 -0.028	9 -0.028 -0.028 -0.028 -0.028 9 -0.028 -0.028 -0.028 -0.028 9 -0.028 -0.028 -0.028 -0.028 9 -0.028 -0.028 -0.028 -0.028	9 -0.028	9 -0.028 -0.028 1.000 9 -0.028 1.000 9 1.000				
4 44 44	45 0.053 0.071 -0.010 -0.009 132 0.062 0.023 0.016 -0.009 139 -0.280 -0.185 -0.205 -0.009 115 -0.466 -0.404 -0.108 -0.009 144 -0.180 -0.081 -0.127 -0.009	03 -1.018 -0.737 -0.801 -0.009 01 -0.038 -0.012 -0.253 -0.009 14 -0.121 -0.075 -0.012 -0.009 032 -0.016 -0.075 -0.081 -0.009 037 -0.066 0.086 0.052 -0.009	28 0.062 0.086 0.052 -0.009 141 0.062 0.086 0.052 -0.009 101 0.062 0.086 0.052 -0.009 138 0.062 0.086 0.052 -0.009 09 0.062 0.086 0.052 -0.009	09 0.062 0.086 0.052 -0.009 09 0.062 0.086 0.052 -0.009 09 0.062 0.086 0.052 1.000 09 0.062 0.086 0.052 1.000	09 0.062			
30 39 40	88 0.109 0.114 0.093 0.045 30 0.103 0.107 0.090 0.032 32 0.083 0.029 0.027 -0.099 34 0.025 0.002 -0.104 0.315 31 0.013 0.016 0.015 -0.094	77 -0.384 -0.517 -0.732 -1.003 130 -0.037 -0.054 -0.054 -0.101 168 -0.058 -0.073 -0.039 -0.114 166 0.006 0.022 0.003 0.032 164 0.041 0.032 -0.012 0.027	131 0.034 0.048 -0.034 -0.028 112 0.050 0.052 0.056 0.041 153 0.015 0.032 0.016 -0.001 142 0.005 0.042 0.017 0.038 145 0.036 0.048 0.044 0.109	42 0.052 0.005 0.060 0.109 38 0.038 0.045 0.064 0.109 33 0.047 0.028 0.047 0.109 129 0.038 0.037 0.030 0.109 67 0.081 0.063 0.030 0.109	67 0.047 0.030 0.030 0.109 47 0.012 0.058 0.030 0.109 28 0.017 -0.001 0.030 122 0.017 -0.001	69.		
30 30 30	0.088 0.112 0.111 0.107 0.088 0.088 0.089 0.106 0.089 0.130 0.095 0.047 0.055 0.062 0.032 0.012 -0.006 0.001 0.015 0.034 0.041 0.030 0.033 0.045 0.031	0.096 0.051 0.022 -0.022 -0.177 -0.056 -0.028 -0.013 -0.011 -0.030 -0.235 -0.160 -0.052 -0.061 -0.068 0.044 0.058 0.058 0.058 0.064 0.037 0.040 0.058 0.028 0.064	0.057 0.053 0.041 0.042 0.031 0.047 0.046 0.053 0.039 0.012 0.034 0.026 0.032 0.054 0.053 0.043 0.037 0.040 0.059 0.042 0.032 0.050 0.033 0.030 0.045	0.085 0.059 0.053 0.038 0.042 0.024 0.032 0.037 0.064 0.038 0.025 0.029 0.025 0.024 0.033 0.037 0.031 0.049 0.025 0.059 0.047 0.044 0.057 0.069 0.067	0.087 0.079 0.070 0.050 0.067 0.089 0.097 0.099	0.057 0.020 0.031 0.036 0.069 0.009 0.015 0.057 0.036 0.013 0.015 0.057 0.036 0.013 0.015 0.015		
20 00 02	0.119 0.118 0.130 0.107 0.102 0.099 0.071 0.054 0.064 0.007 -0.006 -0.011 0.043 0.042 0.029	0.120 0.137 0.119 -0.018 -0.053 -0.343 -0.401 -0.368 0.045 0.044 0.037 0.059 0.055 0.065	0.084 0.064 0.062 0.041 0.053 0.042 0.037 0.027 0.048 0.057 0.052 0.050 0.025 0.012 0.045	0.046 0.060 0.037 0.049 0.023 0.034 0.032 0.034 0.044 0.039 0.035 0.051 0.053 0.051 0.059	0.083 0.072 0.083 0.078 0.0 0.090 0.075 0.071 0.094 0.0 0.071 0.069 0.079 0.076 0.0 0.071 0.056 0.079 0.074 0.0 0.077 0.066 0.084 0.100 0.0	0.072 0.078 0.087 0.089 0.084 0.054 0.077 0.049 0.020 0.057 0.003 0.025 0.015 0.018 0.078	.007 0.006 0.018 0.078 017 0.006 0.018 017 0.006	
07 17 07 07	0.116 0.110 0.105 0.107 0.100 0.107 0.065 0.068 0.072 -0.019 -0.017 -0.011 -0.004 0.039 0.019	0.161 0.156 0.146 0.154 0. 0.032 0.008 -0.022 -0.031 -0. 0.087 -0.181 -0.174 -0.243 -0. 0.097 0.085 0.086 0.073 0. 0.081 0.083 0.071 0.084 0.	0.086 0.088 0.057 0.084 0.072 0.059 0.058 0.060 0.045 0.062 0.076 0.065 0.069 0.061 0.050	0.051 0.065 0.047 0.047 0.044 0.053 0.040 0.038 0.030 0.035 0.042 0.022 0.047 0.050 0.060	0.079 0.071 0.076 0.075 0.0080 0.0080 0.0080 0.0090 0.0090 0.0090 0.078 0.078 0.0090 0.046 0.056 0.056 0.056 0.056 0.056 0.056	0.064 0.057 0.073 0.045 0.050 0.055 0.057 0.056 0.051 0.022 0.042 0.068 0.048 0.053 0.036		
47 C7 77 17	0.112 0.113 0.118 0.097 0.098 0.096 0.058 0.048 0.054 -0.057 -0.064 -0.057 0.001 0.001 -0.006	0.182 0.176 0.164 0.042 0.045 0.034 0.051 0.002 -0.029 0.124 0.121 0.103 0.090 0.095 0.087		0.053 0.061 0.061 0.054 0.046 0.044 0.048 0.049 0.039 0.037 0.056 0.056	0.052 0.080 0.086 0.075 0 0.071 0.080 0.067 0.069 0 0.070 0.052 0.073 0.054 0 0.069 0.064 0.064 0.068 0 0.055 0.055 0.057 0.047 0		0.020 0.040 0.020 0.036 0 0.021 0.020 0.024 0.034 0 0.030 0.028 0.032 0.026 0 0.027 0.027 0.032 0.024 0 0.041 0.037 0.037 0.023 0	0.030 0.016
07 61 01 /1	0.007 0.139 0.135 0.115 0.227 0.202 0.119 0.100 0.151 0.112 0.088 0.067 0.091 0.043 0.028 0.047 0.071 0.029 0.015 0.009	0.201 0.220 0.201 0.209 0.183 0.112 0.091 0.072 0.177 0.205 0.182 0.138 0.212 0.191 0.164 0.145 0.151 0.122 0.109 0.102	0.113 0.098 0.101 0.100 0.151 0.128 0.102 0.096 0.129 0.096 0.076 0.082 0.118 0.095 0.090 0.093 0.071 0.073 0.072 0.085	0.060 0.071 0.058 0.062 0.071 0.052 0.056 0.056 0.056 0.048 0.046 0.047 0.017 0.038 0.036 0.035 0.077 0.075 0.062 0.065	0.133 0.099 0.082 0.081 0.114 0.089 0.074 0.075 0.097 0.077 0.066 0.062 0.081 0.067 0.059 0.071 0.090 0.057 0.060 0.059	0.059 0.058 0.048 0.040 0.075 0.040 0.042 0.044 0.065 0.039 0.029 0.036 0.048 0.021 0.030 0.031 0.035 0.024 0.032 0.025	0.026 0.024 0.023 0.027 0.026 0.021 0.020 0.018 0.026 0.015 0.016 0.019 0.026 0.017 0.002 0.022 0.026 0.010 0.024 0.030	0.026 0.020 0.022 0.031 0.026 0.014 0.024 0.020
201	Under 1 0,000 1 0,000 2 0,000 3 0,000 4 0,000	5 6 7 7 0,000 8 0,000 9 0,000	10 11 0.000 12 0.000 13 0.000 14	15 0,000 16 0,000 17 0,000 18 0,000 19 0,000	20 21 22 0000 22 23 0000 24 0000	25 0.000 26 0.000 27 0.000 28 0.000 29 0.000	30 31 0000 32 0000 33 0000 34	35 0.000

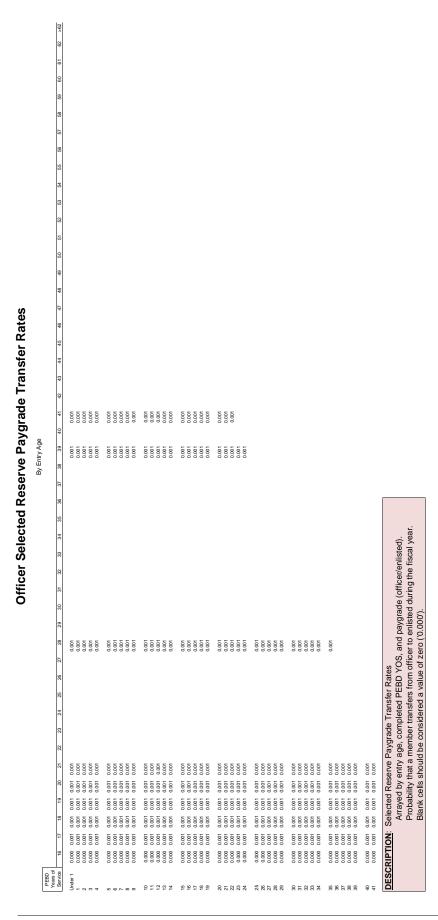
DESCRIPTION: Selected Reserve Net Separation Rates

Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).

Probability that a member exits the status (due to non-retirement causes)
offset by the rate in member renentes during the fiscal year.

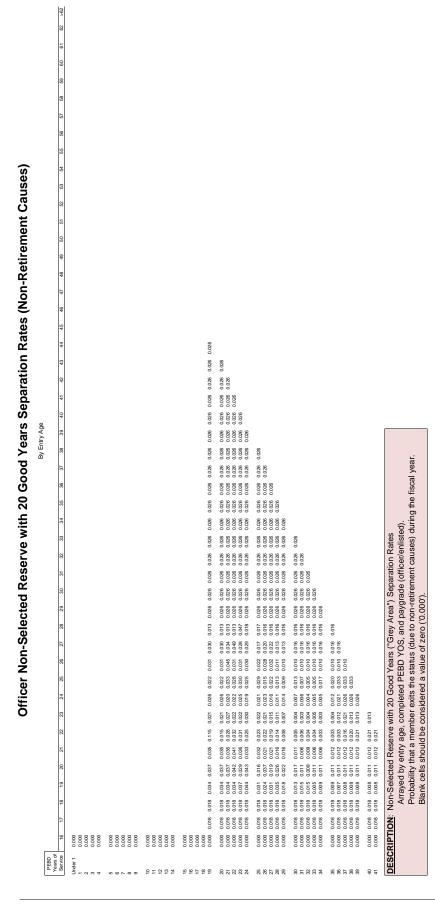
For PEBD YOS greater than 15, if reentrant rate > loss rate, then reentrant is set equal to the loss rate (i.e., not allow any negative net loss).

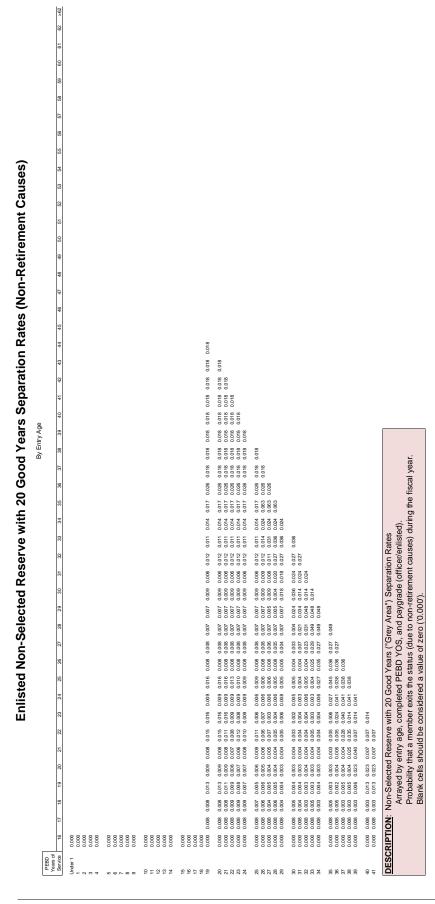
Blank cells should be considered a value of zero (0.000).



Enlisted Selected Reserve Paygrade Transfer Rates

By Entry Age 37 88 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 59 59 60	0.000 0.000 0.013 0.011 0.015 0.018 0.014 0.000 0.014 0.020 0.006 0.011 0.015									
PEED Yeard Service 16 17 16 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 36 29 30 31 32 33 34 35 36	Under 1 0,000 000 0001 0002 0004 0,000 0,000 0,000 0,000 0,001 0,0	5 0.000 0.007 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.007 0.007 0.010 0.008 0.009 0.009 0.010 0.006 0.008 0.009 0.000 0.00	10 0.000 0.016 0.013 0.011 0.009 0.012 0.010 0.011 0.011 0.010 0.010 0.010 0.010 0.011 0.006 0.001 0.005 0.004 0.006 0.004 0.000 0.004 0.0	15 0.000 0.012 0.010 0.009 0.008 0.008 0.008 0.008 0.009 0.000 0.007 0.007 0.007 0.004 0.005 0.004 0.005 0.004 0.007 0.0	20 0,000 0,005 0,004 0,003 0,000 0,003 22 0,000 0,003 0,003 0,003 0,004 22 0,000 0,003 0,003 0,003 0,004 24 0,000 0,005 0,003 0,000 0,000 0,000	25 0.000 0.003 0.002 0.003 27 0.000 28 0.000 29 0.000	39 0.000 32 0.000 38 0.000 44 0.000	88 0000 87 0000 89 0000	40 0.000 41 0.000	DESCRIPTION: Selected Reserve Paygrade Transfer Rates Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted). Probability that a member transfers from enlisted to officer during the fiscal year. Riant cells should be considered a value of zero (1000).



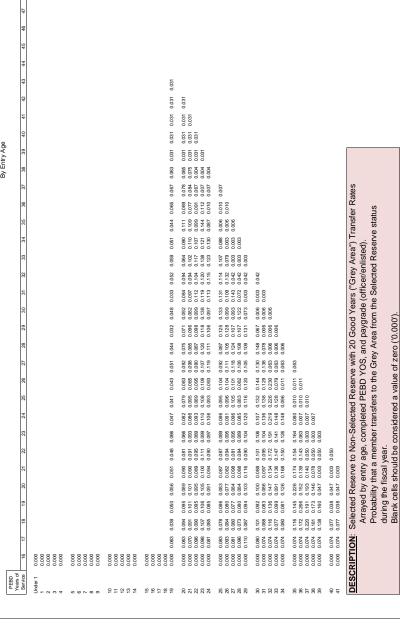


Officer Selected Reserve to Non-Selected Reserve with 20 Good Years Transfer Rates By Entry Age

	20										
	49										
	48										
	47										
	46										
	45										
	44										
	63				0.016						
	42				910.0	0.016					
	41				0.016	0.016					
	40				0.016 0.016 0.016	0.016					
By Entry Age	38				0.101	0.009					
By En	88				9/0.0	0.189 0.036 0.036 0.036					
	37				920.0	0.122 0.105 0.024 0.024 0.024	0.024				ites
	98				780:0	0.132 0.070 0.074 0.048	0.048				er Ra
	32				0.074	0.151 0.116 0.051 0.129 0.078	0.007				ansfe
	34				0.071	0.109 0.099 0.111 0.135 0.079	0.037 0.037 0.037				a") d).⊤
	33				0.060	0.093 0.134 0.095 0.126 0.102	0.070				Area nliste
	35				0.054	0.070 0.093 0.083 0.093 0.114	0.104 0.144 0.043 0.043	0.043			elected Reserve to Non-Selected Reserve with 20 Good Years ("Grey Area") Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted)
	31				0.072	0.082 0.085 0.088 0.098 0.098	0.110 0.112 0.157 0.008	0.008			ars (" (offic
	30				0.074	0.098 0.098 0.099 0.111	0.127 0.105 0.164 0.150 0.127	0.007			d Yea
	29				0.037	0.066 0.086 0.083 0.053 0.102	0.097 0.116 0.147 0.110 0.193	0.084 0.028 0.028 0.028			Goo
	28				0.047	0.070 0.062 0.098 0.144 0.081	0.106 0.121 0.136 0.165 0.236	0.167 0.086 0.009 0.009			h 20 and
	27				0.055	0.096 0.096 0.095 0.072 0.074	0.116 0.102 0.190 0.137 0.219	0.170 0.151 0.042 0.042 0.042	0.042		e wit
	58				0.044	0.090 0.083 0.095 0.095	0.110 0.110 0.185 0.147 0.252	0.197 0.146 0.059 0.059	0.059		eserv BD
	52				0.054	0.073 0.086 0.081 0.102	0.094 0.101 0.185 0.119 0.267	0.189 0.166 0.136 0.129 0.044	0.044		ed Re
	24				0.048	0.077 0.089 0.075 0.112 0.101	0.088 0.116 0.210 0.142 0.271	0.176 0.159 0.157 0.150	0.051		electe
	23				0.047	0.068 0.090 0.105 0.095	0.105 0.098 0.227 0.148 0.380	0.192 0.160 0.196 0.176 0.152	0.193 0.048 0.048 0.048		on-S
	22				0.038	0.085 0.085 0.095 0.095	0.106 0.110 0.198 0.146 0.367	0.201 0.139 0.170 0.240 0.164	0.180 0.189 0.053 0.053	0.053	to Nage,
	21				0.028	0.052 0.063 0.067 0.067	0.093 0.105 0.107 0.122	0.140 0.112 0.132 0.132 0.148	0.133 0.134 0.035 0.035	0.035	erve
	20				0.029	0.059 0.064 0.057 0.051 0.057	0.062 0.057 0.083 0.083	0.085 0.114 0.120 0.101 0.139	0.144 0.161 0.119 0.134 0.035	0.035	Res d by
	19				0.025	0.054 0.056 0.047 0.058 0.048	0.053 0.061 0.061 0.061	0.099 0.089 0.087 0.102 0.110	0.137 0.164 0.123 0.148	0.026	ectec
	18				0.022	0.049 0.056 0.053 0.050 0.047	0.049 0.056 0.058 0.058 0.072	0.078 0.061 0.092 0.112 0.091	0.085 0.121 0.133 0.210 0.130	0.095	Sele
	17				0.068	0.068 0.035 0.065 0.063	0.045 0.045 0.045 0.045	0.045 0.045 0.045 0.045	0.045 0.045 0.045 0.045	0.045	NO NO
	16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	000000000000000000000000000000000000000	0.000	RIPT
PEBD Years of	Service	Under 1 1 2 3 4	v ⊕ ≻ ∞ o	0 = 2 5 4	5 9 7 5 8 6 6 6 7 8 9 6 9	82884	88888	8 2 2 2 2 3	88488	0 4 4	DESCRIPTION: Selected Reserve to Non-Selected Reserve with 20 Good Years ("Grey Area") Transfer Rates Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).

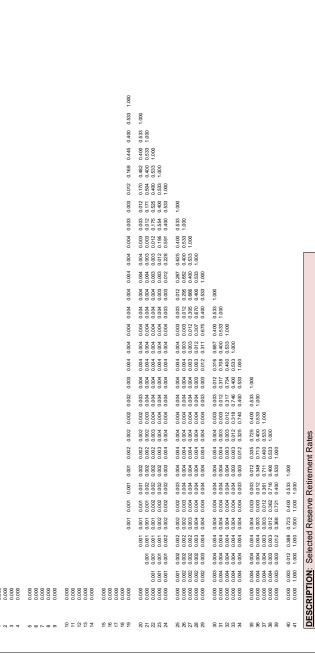
PTION: Selected Reserve to Non-Selected Reserve with 20 Good Years ("Grey Area") Transfer Rates Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Probability that a member transfers to the Grey Area from the Selected Reserve status during the fiscal year.
Blank cells should be considered a value of zero ('0.000').

Enlisted Selected Reserve to Non-Selected Reserve with 20 Good Years Transfer Rates



Appendix H

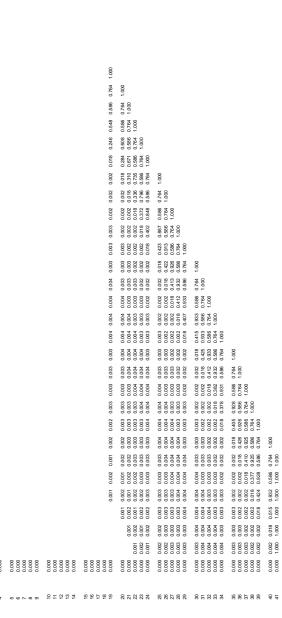
Officer Selected Reserve Retirement Rates



Appendix H

Probability that a member retires during the fiscar year.
Rates for all ages except 59-60 are constant across all years of service.
Ages 59-60 were graduated (smoothed') by age and years of service.
Blank cells should be considered a value of zero ('0.000).

Enlisted Selected Reserve Retirement Rates



Probability that a member retires during the fiscar year.
Rates for all ages except 59-60 are constant across all years of service.
Ages 59-60 were graduated (smoothed') by age and years of service.
Blank cells should be considered a value of zero ('0.000).

Selected Reserve Disability Retirement Rates

By Disability Type and Paygrade

PEBD Years of	Perma	anent	Temporary			
Service	Officer	Enlisted	Officer	Enlisted		
Under 1	0.00000	0.00002	0.00000	0.00040		
1	0.00000	0.00002	0.00000	0.00030		
2	0.00000	0.00013	0.00000	0.00055		
3	0.00000	0.00013	0.00000	0.00033		
4	0.00007	0.00017	0.00014	0.00071		
7	0.00017	0.00010	0.00014	0.00070		
5	0.00017	0.00025	0.00026	0.00092		
6	0.00017	0.00029	0.00039	0.00100		
7	0.00019	0.00025	0.00051	0.00104		
8	0.00018	0.00028	0.00058	0.00101		
9	0.00019	0.00038	0.00057	0.00112		
10	0.00025	0.00046	0.00055	0.00133		
11	0.00026	0.00051	0.00047	0.00164		
12	0.00020	0.00055	0.00042	0.00177		
13	0.00020	0.00058	0.00039	0.00164		
14	0.00024	0.00056	0.00037	0.00151		
15	0.00026	0.00051	0.00035	0.00156		
16	0.00023	0.00048	0.00039	0.00146		
17	0.00020	0.00048	0.00049	0.00144		
18	0.00023	0.00050	0.00048	0.00143		
19	0.00033	0.00066	0.00046	0.00152		
20	0.00047	0.00087	0.00052	0.00156		
21	0.00057	0.00092	0.00043	0.00168		
22	0.00060	0.00111	0.00043	0.00200		
23	0.00049	0.00132	0.00060	0.00213		
24	0.00046	0.00143	0.00090	0.00218		
25	0.00062	0.00152	0.00101	0.00223		
26	0.00080	0.00160	0.00096	0.00246		
27	0.00090	0.00169	0.00086	0.00264		
28	0.00088	0.00184	0.00088	0.00255		
29	0.00084	0.00189	0.00090	0.00234		
30	0.00087	0.00199	0.00091	0.00222		
31	0.00086	0.00206	0.00090	0.00216		
32	0.00084	0.00197	0.00094	0.00202		
33	0.00082	0.00179	0.00096	0.00188		
34	0.00068	0.00169	0.00091	0.00181		
35	0.00041	0.00178	0.00087	0.00188		
36	0.00000	0.00183	0.00093	0.00206		
37	0.00000	0.00171	0.00108	0.00221		
38	0.00000	0.00146	0.00120	0.00226		
39	0.00000	0.00115	0.00127	0.00217		
40	0.00000	0.00000	0.00000	0.00000		
41	0.00000	0.00000	0.00000	0.00000		
• •	3.30000	3.30000	5.50000	3.30000		

DESCRIPTION: Selected Reserve Disability Retirement Rates

Arrayed by disability type (Permanent/Temporary), completed PEBD YOS, and paygrade (officer/enlisted).

Probability that a member receives a disability retirement during the fiscal year.

Non-Selected Reserve with 20 Good Years Retirement Rates

By Paygrade

Age	Officer	Enlisted
17	0.000	0.000
18	0.000	0.000
19	0.000	0.000
20	0.000	0.000
21	0.000	0.000
22	0.000	0.000
23	0.000	0.000
24	0.000	0.000
25	0.000	0.000
26	0.000	0.000
27	0.000	0.000
28	0.000	0.000
29	0.000	0.000
30	0.000	0.000
31	0.000	0.000
32	0.000	0.000
33	0.000	0.000
34	0.000	0.000
35	0.000	0.000
36	0.000	0.000
37	0.000	0.000
38	0.000	0.000
39	0.000	0.000
40	0.000	0.000
41	0.001	0.000
42	0.000	0.000
43	0.002	0.000
44	0.002	0.000
45	0.001	0.000
46	0.001	0.000
47	0.001	0.000
48	0.001	0.000
49	0.001	0.000
50	0.002	0.000
51	0.001	0.000
52	0.002	0.000
53	0.001	0.000
54	0.001	0.000
55	0.001	0.000
56	0.000	0.000
57	0.000	0.000
58	0.001	0.001
59	0.470	0.450
60	0.950	0.930
61	0.289	0.303
62	0.199	0.186
>62	0.177	0.133

<u>DESCRIPTION</u>: Non-Selected Reserve with 20 Good Years ('Grey Area') Retirement Rates Arrayed by age and paygrade (officer/enlisted).

Probability that a member retires from the Grey Area during the fiscal year.

Officer Selected Reserve Average Points Per Year

¥ ¥

	28	¥								
	28	* * * * *	¥							
	22	4 4 4 4 4	4 F F F F F F F F F F F F F F F F F F F							
	99	* * * * *	¥ ¥ ¥							
	22	* * * * *	* * * *							
	25	4444	4 4 4 4 4							
	53	4444	4 4 4 4 4	<u>\$</u>						
	25	****	8 8 8 8 8	8 8						
	21	88888	88888	888						
	90	87 87 87 87 87	87 87 87 87 87 87 87 87 87 87 87 87 87 8	8 8 8 8 8						
	49	22255	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	118 82 103 95 82						
	48	94 94 94 84 84	75 84 82 73	94 96 82 85 75	70					
	47	87 87 89 89	72 87 108 108 108 108 108 108 108 108 108 108	88 91 0 10 8	0 8					
	46	8 8 8 8 8	8 2 2 3 3	88 88 79 79	96					
	42	87 87 86 87	90 82 72	12 8 8 7 8 8	97 83 83					
	4	48888	18 81 72 83 93	88 97 85 85	8 8 8 8 8					
	43	88888	77 91 86 69	101 101 80 86	85 101 100 88	8				
	45	97 97 88	97 78 87 98 88	01 00 102 103 88	8 8 8 8 8	8 8				
	41	87 87 87 87 87	88 91 88 88	88 88 31	101 701 88 88	8 8 8				
	40	113 91 89 87	76 85 78 85	88 84 88 88	96 95 97	93 97 97				
√ge	39	8 8 8 8 8	8 8 8 8 8	8 25 88 88 88	88 88 88	90 87 87 87				
Entry Age	38	99 98 78 81	88 83 74 74	88 93 101 97	98 93 93 105	97 88 106 106	901			
g.	37	22222	82 82 84 84 84 84 84 84 84 84 84 84 84 84 84 84 8	98 88 95 100 95	8 8 8 8 8	100 100 108 83	8 8			
	36	97 96 98	88 84 88	2 8 8 8 8	8 4 8 8 8	98 91 90 90	0 0 0			
	32	66688	84 83 83 90	90 87 95 92	90 95 91 97	90 105 90 88	103 118 82 82			
	8	8888	8 8 8 8 8	88 88 88 84 88 88	93 93 94 95 95 95 95 95 95 95 95 95 95 95 95 95	8 8 8 8 8	102 121 120 120			
	33	97 97 97 88	88 88 88 8	10 88 88 88	98 83 93	8 8 5 5 6	99 102 119 97	26		
	32	8 8 8 8 6	98 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 8 8 8	8 8 8 8 8 8 8 8	98 76 401 401	98 50 00 103 103 103 103 103 103 103 103 103	82 83		
	31	96 96 93 83	81 82 90 87	86 97 89 89	88 89 90 91	93 97 93 102	103 100 105 90	93		
	30	801 801 701 83	88888	97 93 97	8888	98 97 105	88484	8 1 1 1 1 8		
	53	116 116 79 97	96 8 8 8 8 8 8 8 8 8 8 8	8 8 9 8 9	9 9 9 9 9	99 101 101 20	D D D 8	108 22 22 22		
	28	8 2 1 2 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	97 97 97	93 33 33	98 8 8 8 8	101 101 88 88	10 to 10 to	98 to 10 88 88 88	8	
	22	131 131 116 107	108 104 95 99	95 99 94 101	103 100 97	98 97 102 103 97	101 94 93 97	101 1115 105 105	8 8 8	
	92	¥ ¥ ¥ £ £	122 108 107 97	105 105 103 101	100 100 100 100 100	105 105 99 101	96 10 10 10 10 10 10 10 10 10 10 10 10 10	105 110 104 104	9 9 9	
	52	142 142 130 120 130	122 112 105 107	108 107 107	20 to 20 to	105 102 101 101	8 4 5 5 6 4 8 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6	101 97 105 105 105	25 45 45 45 45 45 45 45 45 46 45 45 46 45 45 46 46 46 45 46 br>46 46 46 46 46 46 46 46 46 46 46 46	
	54	140 140 137 126	119 109 108	102 106 107 107	90 t 50 t 50 t 50 t	101 105 107 108	401 00 to 100 to	107 107 114 110	121 130 130 130	
	23	136 136 127 117	108 105 104 104	105 105 104 103	105 103 104	105 105 105 104	104 105 108 108	110 108 112 112	112 125 125 125	125
	22	131 132 127	110 107 107	4 to 4 to 7 to 7 to 7 to 7 to 7 to 7 to	8 50 T 50 T 50 T 50 T 50 T 50 T 50 T 50	201 201 201 E01	107 103 102 110	110 110 109	122 113	ΕE
	21	121 121 135 135	£ 6 1 2 2 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	126 121 116 112	117 108 110 109	107 108 118 111	108 108 112	115 106 102 97	8 5 8 8 8	124
	20	116 116 128 138	132 131 131 121	127 124 121 116	113 109 107 110	111 113	0 1 1 1 1 1 1	1 8 1 1 9 9 1 1 9 9 1	201 80 1 80 1 10 90 1	132
	19	117	138 139 131	133 131 126 120	116 117 112 108	111 108 109 111	113 108 112 111	105 105 106 94	108 108 106 118	111
	18	100 117	127 139 135 126	128 120 127 127	116 114 112 112	111 108 110	108 105 111	108 116 117 107	96 401 101 101	117
	17	87 87 87 87	135 128 138	141 125 123 118	119 115 123 116	111 109 108 113	123 106 115 108	102 133 88	129 108 107 89	8 8
	16	00000	00000	00000	00000	00000	00000	00000	00000	00
PEBD Years of	Service	Under 1 2 2 4 4	vn vp ► ∞ σ	5 = 5 = 4	5 6 7 8 6	8 2 2 2 2	28282	8 22 23 25	38 834	4 40

DESCRIPTION: Selected Reserve Average Points Earned Per Year

Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).

Annual retirement points (for benefit purposes) accumulated by a Selected Reserve during a fiscal year.

The Average Points Earned Per Year above appear after a 21.1% reduction due to a proposed

"half-mobilization" assumption.

Blank cells should be considered a value of zero (0').

Enlisted Selected Reserve Average Points Per Year

8 8

4	888									
S	8 8 8 8	8								
Q.	8888	806								
9	8888	8 8	8							
12	8888	8 8	88							
9	8888	8 8	888							
4	8888	8 8	8888							
2	8888	8 8	88888							
2	8888	8 8	88888	8						
2	8888	8 8	88888	88						
ž	8888	8 8	88888	888						
5	8888	8 8	88888	8888						
Q.	8888	8 8	88888	88888						
97	8 8 8 8	06	88888	88888	06					
44	8888	8 8	88888	88888	8 8					
46	8888	8 8	88888	88888	888					
Ą	501	50	501 501 501 501	50 50 50 50 50 50 50	105 201 201 201					
5	92 47	2 6	26 8 20 8 20	100 121 128	128 128 128 128					
ç	105	100	103 78 136 148	130 171 118 97	85 85 85 85	88				
5	1212	8	93 11 10 10 10	108 120 112 93	81111	22				
	82 118 108	8 8	50 50 50 51 50 50 51	115 105 105 105	2 t 8 8 8	8 8 8				
Ş	94 94	8 8	90 110 801 97	92 90 100 101	88 88 88 88	92 88 88 88				
90	18 8 8	88	88 80 102 101 101	£ 5 5 8 5 5 5 8 9	97 97 98	88888				
30	75 99 98	8 8	87 96 101 101	50 56 50	88 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 8 8	8			
32	101 88 8	8 8	85 85 101 101	105 103 97 87	98 83 83	55 38 38 38 38	98 98			
35	102 88	8 8	97 98 101 102	20 8 6 50 56 86 6 8 8 8 8 8	96 97 97 92	101 97 97	97			
35	101	36	88 4 50 1 104 50 4 8	104 101 99 100	95 97 97	93 105 103 103	£ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5			
25	06 201 80	8 8	88 to 45 to	201 00 00 00 00 00 00 00 00 00 00 00 00 0	00 88 98 98	101 102 102	5 5 5 5 5 5 5 5 5 5			
2	109	91	8 8 8 <u>5</u>	100 to 10	95 97 101 93	98 99 97 101	D D D D	101		
2	201 108 110	<u>\$</u>	96 70 10 10 10	\$5 to to to to to to to to to to to to to	97 98 97 98	10 00 88 88	97 97 97 97	97		
34	97 106 109	- 38	94 95 102 105	108 104 104 104	100 96 98 96 97	97 99 104 103	99 104 104 104	222		
8	108	8	28 8 25 55 55	50 8 00 E0	98 101 98	101 97 99 101	98 97 98	8888		
g	119	8 8	97 97 98 99 99	88888	01 98 98 97	97 105 101	55558	88888		
30	109	97	78 8 8 8 8 8 8 8 8 8	20 20 10 20 20 20 20 20 20 20 20 20 20 20 20 20	8 0 0 0 8	97	101	2 2 2 2 2	29	
24			97 93 100 105		102 1 100 1 99 1 97 1		101 101 102 102	103 100 100	8 8	
8			99 99 99 99 99 99 99 99 99 99 99 99 99		1 28 88 90			900000		
36			78 50 50			88228		88 03 2 2 2	8 8 8 8	
			88828	50 2 8 8			99 97 10	8 5 8 8 8	88888	
					101 101 100 100 100 100 100		03 10 101 10 99 9 97 9		97 10 99 10 10 10 10 10 10 10	88
,			0 100 8 97 4 101 1 103 5 105	02 105 02 102 01 103 01 103				96 98 10 20 10 97 10 99 9	·	
			00 100 2 4 104 3 105				2 2 101 2 2 100 2 100 101 101 101 101 10		4 98 98 102 4 112 112 112 1	4 112
5				201 201 201						5 5
8			0 8 8 9 4				102 00		20 20 20 20 20 20 20 20 20 20 20 20 20 2	117
•			102 101 105 107		101 101 100 99 99	101 102 104 104	102 102 102 102	101 102 103 99 99	96 100 102 104	120
9			501 801 701 701	9 5 5 5 9			00 00 00 00 00 00 00 00 00 00 00 00 00		90 106 201 701	93
44			20 20 50				108		12 12 12 12 12 12 12 12 12 12 12 12 12 1	112
3			00000	00000	00000	00000	00000	00000	00000	00
PEBD Years of Service	Under 1			0 1 2 2 4	98765	0 = 0 to 4	28488	0 = 0 w +	200-00	4 40
	2-44	0.4	9 8 7 8 9	=====	+++±*	44444	ипипи	<i>ବ</i> ୦ ୫ ୫ ୫	88488	4.4

DESCRIPTION: Selected Reserve Average Points Earned Per Year

Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).

Annual retirement points (for benefit purposes) accumulated by a Selected Reserve during a fiscal year.

The Average Points Earnerde Per Year above appear after a 21.1% reduction due to a proposed "half-mobilization" assumption.

Blank cells should be considered a value of zero ('0').

Officer Selected Reserve Career Points Adjustment

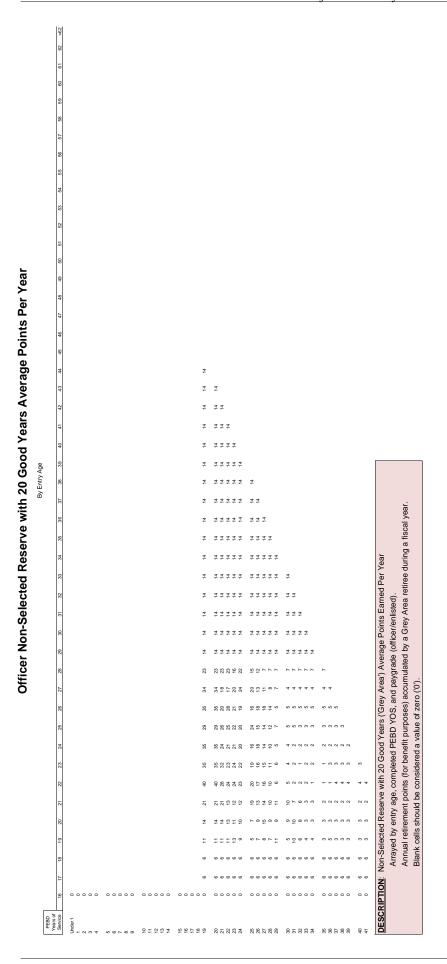
>62	1.606								
9	1.606								
61	1.606 1.606 1.606								
9	0.951 0.951 0.951								
99	0.396 0.396 0.396 0.396								
86	1,000	1.000							
27	1,000	1.000							
8	0.919 0.919 0.919 0.919	0.919							
22	1,043 1,043 1,043 1,043	1.043 1.043 1.043							
Š	1.000 1.000 0.925 1.000 0.978	1.071 1.420 1.420 1.420							
23	1.000 0.908 0.926 1.163	1.216 1.022 0.620 1.000	1.000						
25	1,000 1,000 1,008 1,008	1.051 1.055 1.055 1.055	1.055						
5	1,000 1,000 0,968 1,013	0.998 1.062 0.951 0.951	0.951						
20	0.999 0.999 1.013 1.030	1.031 1.053 1.000 1.000	1.000						
49	1.000 0.914 1.018 1.019	0.978 1.049 0.987 1.025	1.025 1.025 1.025 1.025						
84	1.006 1.006 1.006 1.006	1.000 0.999 1.049 1.031	1.026 1.026 1.026 1.026	1.026					
47	1.000 1.036 0.968 0.930 1.001	1,015 1,013 1,002 0,995	0.979 1.048 1.091 1.091	1.091					
46	0.318 0.954 1.026 1.037 0.998		1.044 0.997 1.011 1.060 1.060	1.060 1.060 1.060					
45	1,737 1,007 1,019 1,023 1,006	1.023 0.955 1.033 0.995	0.991 1.006 0.960 1.013	0.995 0.995 0.995 0.995					
44	0.758 1.090 0.943 0.988 1.004	1.011 1.069 1.009 1.005	0.994 1.040 1.016 1.027 1.016	1.006 1.052 1.039 1.039					
5	1.159 1.018 1.099 0.983	0.971 1.072 0.942 1.039 1.083	0.999 1.009 1.013 0.990	1.023 1.035 0.973 0.973	0.973				
42	1.000 0.924 0.979 1.042 0.953	1.004 0.994 1.042 0.995	1,020 1,024 1,010 1,010	1,000 1,009 1,058 0,977	776.0				
41	1,000 0,983 1,043 0,985	1.003 1.048 0.992 0.975 0.978	1.057 0.987 0.998 0.992	0.975 1.018 0.978 1.024	1.030				
40	1.000 1.008 0.986 1.024 0.999	1.026 0.967 0.981 1.017	1.008 0.994 1.027 0.999 1.009	1.002 1.003 0.997 1.011	0.921 0.901 0.901				
38	1.000 0.986 0.993 1.027	0.987 1.009 1.018 0.989	0.991 1.017 1.008 1.013	1.002 1.006 0.976 1.000 1.028	0.984 1.018 1.097 1.097				
38	0.809 1.028 0.996 1.020	0.999 1.011 1.058 0.998	1.003 1.003 0.996 1.010	1.008 0.999 0.994 1.024	0.991 0.948 0.981 0.981	0.981			
37	1,066 1,036 1,005 1,005	1,006 1,021 1,029 1,070 1,050	1,027 1,016 1,003 1,003	1.008 1.004 1.021 0.997 1.020	0.987 0.980 1.021 0.956 0.965	0.965			
8	1,000 1,000 1,012 1,016		1.035 0.960 1.003 1.011 0.997		0.992 1.009 0.995 0.977	1.040			
32	1.029 1.010 0.994 1.019		0.982 1.011 1.019 0.996 1.004		1.002 0.996 0.999 1.009	0.955 0.980 0.980 0.980			
34	1.008	1.000 1.009 0.980 1.032	0.993 0.975 1.000		1.012 0.985 1.005 0.983	1.005	_		
33	0.979 1.017 1.017 0.999	0.981 0.986 1.004 1.019	1.005 0.999 0.999 1.023	0.978 0.996 0.995 0.982 0.982	1.018 0.983 0.990 1.005	1.008 0.990 0.942 0.962 0.962	0.962		
32	1,060 1,018 1,018 3 0,992 0 1,001	3 0.992 3 1.028 5 1.028 7 0.988	7 0.968 5 1.013 3 1.022 3 1.022 1 0.993	0.993 0.999 1.003 1.009	1.007 1.0087 2.1.006 3.0.969 7.0.989	0.994 0.991 0.951 0.945 0.856	3 0.856		
31	9 1.024 9 1.043 4 1.000 2 1.008 0 0.980	4 0.995 0 1.013 1 1.026 6 1.010 3 0.997	3 1.007 8 0.986 3 0.973 3 0.983 8 1.001		7 1.013 8 0.981 9 0.992 1 0.993 6 0.997	2 1.001 1 0.986 0 1.000 6 0.998 3 0.998	9 1.003 6 1.003 6 1.003		
30			0.993 0.988 0.993 0.988						
8 29		8 0.998 8 1.010 7 0.989 1 0.996			6 0.988 6 0.990 8 0.998 7 0.998		9 0.939 2 0.917 0 0.924 4 0.924	4	
7 28	0 1.048 9 0.979 7 1.028 6 1.005				1.016 7 0.994 3 0.988 5 0.985 0 0.981		5 0.999 5 0.962 5 0.990 3 0.884 6 0.884	988.	
27	0 1.000 6 0.999 2 0.987 5 1.016 2 1.001	0 0.988 9 1.006 7 0.994 2 1.013 1 1.004	7 1.003 1 0.995 6 0.988 4 1.008 5 0.999	0 1.009 2 0.992 7 0.999 4 0.990 8 0.995	5 0.997 3 1.003 9 0.995 6 0.990	6 0.989 8 1.004 3 0.993 8 0.980 2 0.993		1 0.876 1 0.876	
92	7 1.000 5 1.006 3 1.002 5 1.015 3 0.982	4 0.989 5 0.989 2 0.997 5 1.012 9 1.001	9 0.997 1 0.991 8 1.006 6 0.994 3 1.005	8 1.000 2 0.997 4 0.994 2 0.998	7 0.995 3 0.995 7 0.999 1 0.996	6 0.976 5 0.998 4 1.003 5 0.978 9 0.962	8 0.937 8 0.995 7 1.005 3 1.026 5 0.922	8 0.841 9 0.841 9 0.841	
23	0 0.957 3 0.995 4 1.003 6 0.995 1 1.013	7 0.994 1 0.995 0 1.012 2 1.015 3 0.999		7 1.008 0 0.996 0 0.992 4 0.994 1 0.992	8 0.997 7 0.988 7 0.993 6 0.997 2 0.981	4 0.996 6 0.985 0 0.984 3 0.985 7 0.989		0 0.898 0 1.009 7 1.009	
23 24	0 1.000 8 0.993 2 1.004 8 1.016 3 1.001	2 0.987 6 0.991 5 1.000 3 1.002 3 1.013	8 1.001 6 1.002 4 1.007 4 0.996 1 1.002	5 0.997 8 1.000 1 0.994 6 0.991	3 0.997 3 0.997 7 0.996 5 0.992	4 0.994 9 0.996 5 0.983 5 0.977	2 0.994 3 0.980 1 1.001 2 0.993	7 0.990 2 0.940 3 0.980 8 0.797 8 0.797	80
	7 1.000 89 1.008 4 0.992 4 1.008	7 0.992 1 0.976 11 1.005 15 1.013		6 0.998 7 0.998 8 1.001 5 0.996	7 0.994 6 0.993 11 0.993 11 0.995	6 0.994 0 0.995 2 0.995 1 0.975	6 0.992 2 0.973 6 0.991 6 0.992	6 0.997 6 1.002 5 1.053 8 0.928 4 0.928	3 0.928
21 2	00 0.977 06 0.989 78 0.984 96 0.990 77 0.984	77 0.997 00 0.971 00 0.995 00 0.999	29 1,008 20 1,003 31 1,000 33 1,002 35 1,002	25 0.998 26 0.998 30 0.997 38 0.998 38 0.995	00 0.997 33 0.995 39 0.993 32 0.991	88 0.995 37 0.992 39 0.990 31 0.992	76 0.996 28 1.005 39 1.012 30 0.976 35 0.999	35 0.976 35 0.998 35 0.955 32 0.984	13 0.893
2			19 1.009 2 1.000 19 0.991 16 0.995			14 0.988 16 0.987 15 0.989 16 0.981 12 0.979		6 0.985 14 0.995 10 1.015 15 0.962	1.043
18			00 1.012 00 1.012 03 0.989 05 0.996		30 0.997 39 0.987 30 0.986 34 0.987 31 0.984	33 0.984 35 0.996 30 0.985 35 0.996	33 0.965 34 0.992 77 0.979 82 0.992 79 1.001		17 1.013
18	00 1.000 00 1.000 00 0.996 09 0.997 12 1.030	28 1.008 29 1.011 20 0.999 22 1.005 24 1.007	22 1.001 38 1.000 36 1.003 35 0.995 32 0.993	00 0.997 31 0.993 30 0.993 36 0.993	28 0.990 27 0.989 24 0.980 30 0.984	11 0.983 24 0.985 31 0.990 32 0.985 39 0.978	79 0.983 74 0.984 81 0.977 83 0.982 84 0.979	22 0.989 28 0.980 24 0.975 36 1.000	17 0.991 10 1.047
17	02 1.000 02 1.000 02 1.000 02 1.009 02 1.012	25 1.008 97 1.009 06 1.008 93 1.002 12 0.994	86 0.992 07 0.998 12 1.006 00 0.995 61 0.992	95 0.990 97 0.990 78 0.981 59 0.996 83 0.986	75 0.988 85 0.987 79 0.984 83 0.980 71 0.990	81 0.981 70 0.984 90 0.981 77 0.982 15 0.989	83 0.979 86 0.974 00 0.981 94 0.983 86 0.984	86 0.992 86 0.964 86 0.964 86 0.966 86 1.010	86 0.947 86 1.010
16	00 1.002 00 1.002 00 1.002 00 1.002	00 1.025 00 0.997 00 1.006 00 0.983 00 1.012	00 0.986 00 1.007 00 1.012 00 1.000 00 0.961	00 0.995 00 0.978 00 0.959 00 0.959	00 0.975 00 0.985 00 0.983 00 0.983	00 0.981 00 0.970 00 0.990 00 0.977 00 1.015	00 0.886 00 0.886 00 1.000 00 0.994 00 0.986	00 0.986 00 0.986 00 0.986 00 0.986	00 0.986
4	00000	00000	00000	00000	00000	00000	00000	00000	0.000
Service	Under 1 1 2 3 4	0 9 1 8 6	0 1 2 2 4	16 17 19 19	82884	2222	88838	88488	4 4
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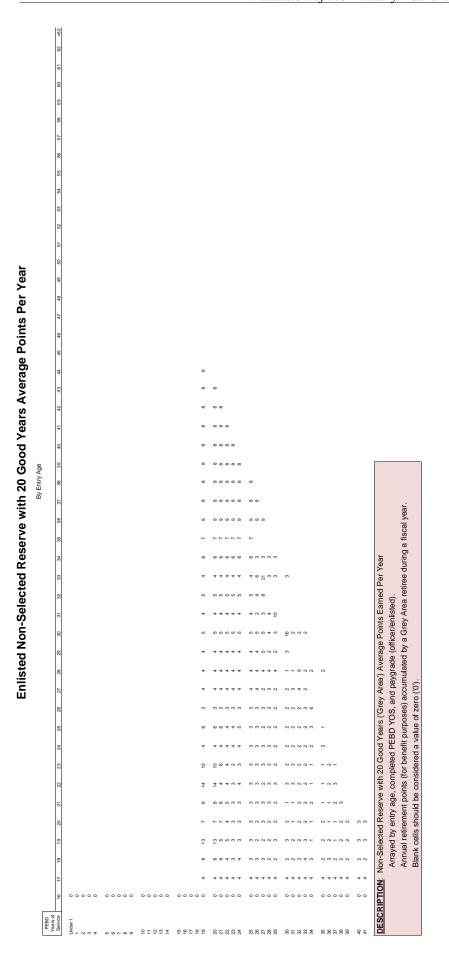
DESCRIPTION: Selected Reserve Career Points Adjustment
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Adjustment to Average Career Points for Selected Reserve members to capture the effect of losses (e.g., separation, retirement, transfer) during the fiscal year.
Blank cells should be considered a value of zero ('0.000').

Enlisted Selected Reserve Career Points Adjustment

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1.093	
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1,004 1,005 1,006	
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1,002 1,003	1.092
1,002 1,003	0.985 0.985 0.985
1,029 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	1.019 1.019 1.019
1,033 1,001 1,001 1,000	0.978 0.972 0.972 0.972
	0.987 0.986 1.058 1.058 1.058
	0.984 0.979 0.998 1.171 1.171
	0.987 0.985 0.989 0.989 0.989
1.0074 1.0044 1.0044 1.0046 1.0085 1.0085 1.0086 1.	0.992 0.992 0.982 0.982 0.982
1,006 1,006 1,006 1,000	0.985 0.984 0.973 0.973 0.973
	0.988 0.985 0.988 0.994 0.988 0.973 0.988 0.973 0.988 0.973
	0.985 0.984 0.973 0.973 0.973

DESCRIPTION: Selected Reserve Career Points Adjustment
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Adjustment to Average Career Points for Selected Reserve members to capture the effect of losses (e.g., separation, retirement, transfer) during the fiscal year.
Blank cells should be considered a value of zero ('0.000').





Officer Reentering Selected Reserve Average Points

54 241 415 689 618 54 241 415 689 618 1,014 743 1,399 1,487 2,058 2,173 2,173 1,884 1,638 1,638 54 241 415 689 618 1,014 743 1,399 1,487 2,058 2,058 2,058 2,058 3,349 3,349 54 415 689 689 618 1,014 743 1,399 1,439 1,439 1,439 1,633 1,633 1,603 1 57 468 374 1,321 1,526 1,686 903 736 2,510 3,930 1,522 3,175 3,175 46 176 871 11107 11107 11100 11503 11615 11634 11634 11634 11791 10791 10791 10791 10791 10791 10791 10791 10791 10791 10791 1 1,475 2,045 2,112 2,112 2,112 2,116 1,197 1,4826 1,1209 1,442 2,030 2,030 2,030 3,146 2,072 2,72 101 174 174 1084 11084 11586 11586 11586 11586 11586 11984 1 83 843 804 804 11,246 11,235 11,315 1 142 505 570 1,000 1,1,296 1,598 1,598 1,598 2,091 2,481 2,485 2,382 3,412 2,884 3,412 2,884 3,412 2,884 3,412 2,884 3,412 2,884 3,412 4,317 4,485 1,583 1,967 1,967 1,967 1,967 1,967 1,067 1,067 1,067 1,158 1,158 1,067 1,158 2,281 2,281 2,281 2,281 2,283 3,151 3,298 3,188 3,188 3,590 3,590 3,540 3,422 3,875 1,276 1,389 3,008 3,238 3,487 3,436 3,528 3,528 3,734 4,737 4,743 4,711 1,743 4,743 2,813 3,088 3,165 3,486 3,526 3,900 4,050 4,081 4,574 4,517 5,592 5,496 5,511 5,692 6,249 6,249 5,988 6,249

SCRIPTION: Average Career Points Transferred to the Selected Reserve via Reentering Members
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Career retirement points (for benefit purposes) accumulated by reentrants transferring to the Selected Reserve during fascal year.
The Selected Reserve during a fiscal year.

Enlisted Reentering Selected Reserve Average Points

321 38 32 1 111, 111 954 528 173 418 733 980 1,165 1,165 1,204 955 955 1,918 2,172 3,557 1,832 269 559 722 722 1,167 1,113 1,413 1,550 2,183 2,025 2,183 3,476 1,759 1,759 1,759 1,759 1,759 1,759 224 3372 704 1,1112 1,208 1,528 1,621 1,623 1,723 2,709 2,70 249 908 908 908 1,014 1,007 1,007 1,318 1,518 1,776 2,093 1,766 2,673 2,583 2,583 3,629 1,743 3,629 1,744 3,411 4,115 4,115 4,115 255 875 1,180 1,114 1,141 1,444 1,342 1,758 2,113 1,268 1,346 1,347 1,934 1,934 1,937 1,901 4,304 4,280 4,958 4,910 4,910 5,253 5,268 5,508 4,998 4,998 4,214 5,007 5,007 5,007 4,946 3,074 5,164 6,968 7,132 5,089 5,560 5,500 4,504 4,332 5,302 8,028 5,271 5,271

Appendix H

Non-Selected Reserve with 20 Good Years Blow-up Factors

By Modeling Type and Paygrade

	Pers	son	Pay			
Age	Officer	Enlisted	Officer	Enlisted		
17	0.000	0.000	0.000	0.000		
18	0.000	0.000	0.000	0.000		
19	0.000	0.000	0.000	0.000		
20	0.000	0.000	0.000	0.000		
21	0.000	0.000	0.000	0.000		
22	0.000	0.000	0.000	0.000		
23	0.000	0.000	0.000	0.000		
24	0.000	0.000	0.000	0.000		
25	0.000	0.000	0.000	0.000		
26	0.000	0.000	0.000	0.000		
27	0.000	0.000	0.000	0.000		
28	0.000	0.000	0.000	0.000		
29	0.000	0.000	0.000	0.000		
30	0.000	0.000	0.000	0.000		
31	0.000	0.000	0.000	0.000		
32	0.000	0.000	0.000	0.000		
33	0.000	0.000	0.000	0.000		
34	0.000	0.000	0.000	0.000		
35	0.000	0.000	0.000	0.000		
36	0.000	0.000	0.000	0.000		
37	0.000	0.000	0.000	0.000		
38	0.000	0.000	0.000	0.000		
39	0.000	0.000	0.000	0.000		
40	0.000	0.000	0.000	0.000		
41	0.000	0.000	0.000	0.000		
42	0.000	0.000	0.000	0.000		
43	0.000	0.000	0.000	0.000		
44	0.000	0.000	0.000	0.000		
45	0.000	0.000	0.000	0.000		
46	0.000	0.000	0.000	0.000		
47	0.000	0.000	0.000	0.000		
48	0.000	0.000	0.000	0.000		
49	0.000	0.000	0.000	0.000		
50	0.000	0.000	0.000	0.000		
51	0.000	0.000	0.000	0.000		
31	0.000	0.000	0.000	0.000		
52	0.000	0.000	0.000	0.000		
53	0.000	0.000	0.000	0.000		
54	0.000	0.000	0.000	0.000		
55	0.000	0.000	0.000	0.000		
56	0.000	0.000	0.000	0.000		
57	0.000	0.000	0.000	0.000		
58	0.000	0.000	0.000	0.000		
59	1.097	1.170	0.995	0.982		
60	1.304	1.401	0.996	0.988		
61	3.793	3.950	0.930	0.916		
62	5.839	5.581	0.897	1.023		
>62	4.624	5.248	0.948	0.896		
- 0=		3.2.3	0.0.0	0.000		

DESCRIPTION: Non-Selected Reserve with 20 Good Years ('Grey Area') Nondisabled Retirement Ratios ("Blow-up" factors or "Loads")

Arrayed by modeling type (person/pay) age, and paygrade (officer/eplisted)

Arrayed by modeling type (person/pay), age, and paygrade (officer/enlisted).

These factors are applied to each year's new-retirement-from-the-Grey-Area projections to account for new retirees who were not present in the prior year's reserve data files.

Officer Selected Reserve to Non-Selected Reserve with 20 Good Years Transfer Blow-up Factors

25										
91										
49 50										
48										
47 4										ased
46										Int-B
45										- Cor
44				73						- ("sp
43				0.173 0.173 0.173	£					"Loa
42				73 0.1	0.173 0.173 0.173					rs or ea.
44				173 0.1	0.173 0.173 0.173 0.173					factor
40				0.173 0.	0.173 0. 0.173 0. 0.173 0. 0.173					"dn-
39				0.173 0.	0.173 0. 0.173 0. 0.173 0. 0.173 0.					Blow fers t
88				0.173 0.	0 571.0 0 271.0 0 571.0 0 571.0	0.173				ios (" trans
37				0.173 0	0.173 0.173 0.173 0.173 0.173	0.173 0				e Rat
88				0.173 0	0.173 0.173 0.173 0.173 0.173	0.173 0.173 0.173				r Rate
35				0.173 0.173	0.173 0.173 0.173 0.173 0.173	0.173				ansfe the p
34				0.173	0.173 0.173 0.173 0.173	0.173 0.173 0.173 0.173				d). d). erve
33				0.183 0.173	0.183 0.183 0.183 0.183	0.183 0.183 0.183 0.183	0.183			Area nliste I Res
32				0.158	0.158 0.158 0.158 0.158	0.158 0.158 0.158 0.158	0.158			Grey cer/el ectec
34				0.141 0.127 0.158	0.127 0.127 0.127 0.127 0.127	0.127 0.127 0.127 0.127 0.127	0.127			ars (' 'offii e Sel
30				0.141	0.141 0.141 0.141 0.141	0.141 0.141 0.141 0.141 0.141	0.14 0.14 1.44 0.14 1.44			d Yei grade in the 0').
29				0.917	0.400 0.308 0.107 0.107 0.107	0.107 0.107 0.107 0.107	0.107 0.107 0.107 0.107			Goo payg , not ,0.00
28				0.857	0.278 0.333 0.092 0.092 0.092	0.092 0.092 0.092 0.092 0.092	0.092 0.092 0.092 0.092 0.092	0.115 0.092 0.115		th 20 , and , (i.e. ero ('
27				0.700	0.245 0.241 0.298 0.333 0.188	0.115 0.115 0.115 0.115	0.115 0.115 0.115 0.115	0.115		YOS YOS ated
56				799'0	0.309 0.303 0.177 0.141 0.224	0.136 0.136 0.136 0.136	0.136 0.136 0.136 0.136	0.136		eser EBD nticip value
52				0.830 0.700	0.513 0.342 0.136 0.258 0.182	0.127 0.127 0.127 0.127 0.127	0.127 0.127 0.127 0.127 0.127	0.127 0.127 0.127 0.127		ed Red PE
24					0.411 0.310 0.248 0.132 0.115	0.212 0.100 0.096 0.122 0.049	0.234 0.234 0.234 0.234 0.234	0.234 0.234 0.234 0.234 0.234		relect nplete nt for sider
23				0.928	0.597 0.392 0.202 0.197 0.172	0.112 0.138 0.071 0.114	0.152 0.181 0.146 0.275 0.409	0.133 0.788 0.788 0.788	0.788	lon-S cour
22				0.925	0.620 0.348 0.211 0.218	0.114 0.049 0.049 0.046	0.161 0.135 0.221 0.210 0.186	0.258 0.329 0.364 0.364 0.364	0.364	y age to ac uld be
21				0.367	0.325 0.226 0.108 0.212 0.104	0.192 0.209 0.143 0.204	0204 0204 0204 0204	0204 0204 0204 0204	0.204	serve entr rates shou
20				0.411 0.298	0.135 0.155 0.153 0.174 0.132	9 0.252 5 0.252 1 0.252 0 0.252	0.252 0.252 0.252 0.252 0.252	0.252 0.252 0.252 0.252 0.252	0.252	d Re
3 19					5 0.148 3 0.217 3 0.217 9 0.189	7 0.159 7 0.125 7 0.161 7 0.360 7 0.207	7 0.108 7 0.157 7 0.200 7 0.368 7 0.278	7 0.340 7 0.340 7 0.340 7 0.340	7 0.340	Selected Reserve to Non-Selected Reserve with 20 Good Years ('Grey Area') Transfer Rate Ratios ("Blow-up" factors or "Loads") Count-Based. Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted). Increment rates to account for "unanticipated" (i.e., not in the Selected Reserve the prior year) transfers to Grey Area. Blank cells should be considered a value of zero ('0.000').
7 18				7 0.390	7 0.126 7 0.129 7 0.143 7 0.179 7 0.127	7 0.217 7 0.217 7 0.217 7 0.217	7 0.217 7 0.217 7 0.217 7 0.217	7 0.217 7 0.217 7 0.217 7 0.217	7 0.217	Se = E
16 17	00000			000000000000000000000000000000000000000	0 0.247 0 0.247 0 0.247 0 0.247 0 0.247	0 0.247 0 0.247 0 0.247 0 0.247	0 0.247 0 0.247 0 0.247 0 0.247	0 0.247 0 0.247 0 0.247 0 0.247 0 0.247	0 0.247	OIL
	00000	00000	00000	00000	00000	00000	00000	00000	00000	DESCRIPTION:
Years of Service	Under 1 1 2 3 4	0 0 7 0 0	0 1 2 5 4	5	8 2 2 2 2 4	88488	8 8 8 8 8	88488	04 4	DES

Enlisted Selected Reserve to Non-Selected Reserve with 20 Good Years Transfer Blow-up Factors

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41				0.10	4 0.104 4 0.104					actors / Are
				0.104	4 0.104 4 0.104 4 0.104					dr. Gre
9 40				4 0.104	0.104					low-u
39				3 0.104	0 0 0 0 0 2 2 2 2 2 2 3 3 4 5 5	0				s ("B
38				2 0.133	0.133 0.100 0.100 0.100 0.100	0.100				Ratio ar) tra
37				3 0.182	3 0.182 3 0.182 3 0.182 3 0.182 3 0.182	3 0.182				ate F
98				0.083	0.083	0.083				fer R
35				0.081	0.081	0.08				rans e the
34				290.0	0.067	0.067 0.067 0.067 0.067	_			ea') T ted). eserv
33				0.083	0.083 0.083 0.083 0.083	0.083 0.083 0.083 0.083	0.083			y Are enlis
32				0.102	0.102 0.102 0.102 0.102	0.102 0.102 0.102 0.102	0.102			('Gre ficer/
34				0.094	0.094 0.094 0.094	0.094 0.094 0.094 0.094	0.094 0.094 0.094			e (of
30				0.075 0.096	0.096 0.096 0.096 0.096	0.096 0.096 0.096 0.096	0.096 0.096 0.096 0.096			od Yagrad
29					0.075 0.075 0.075 0.075 0.075	0.075 0.075 0.075 0.075 0.075	0.075 0.075 0.075 0.075 0.075			Go Go
28				0.084	0.084 0.0984 0.0984	0.084 0.084 0.084 0.084	0.084 0.084 0.084 0.084	0.084		ith 20 5, and 1" (i.e
27				0.090	0.090 0.090 0.090 0.090	0.090 0.090 0.090 0.090	0.090 0.090 0.090 0.090 0.090	0.090		ve w YOS
28				0.100	0.10 0.10 0.10 0.10 0.10	0.10 0.10 0.10 0.10 0.10	0.10 0.10 0.10 0.10 0.10	0.100		eser EBD nticip
52				0.092	0.092 0.092 0.092 0.092	0.092 0.092 0.092 0.092	0.092 0.092 0.092 0.092 0.128	0.128 0.128 0.128 0.128		ted Red Ped Puna
24				0.095	0.052 0.049 0.038 0.034	0.047 0.088 0.093 0.151 0.126	0.098 0.239 0.059 0.181 0.284	0.256 0.256 0.256 0.256 0.256		re to Non-Selected Reserve with 20 Good Years ('Grey Area') Transfer Rate Ratios ("Blow-up" factors or "Loads") Count-Based. ry age, completed PEBD YOS, and paygrade (officer/enlisted). s to account for "unanticipated" (i.e., not in the Selected Reserve the prior year) transfers to Grey Area.
23				0.066	0.039 0.058 0.075 0.079	0.085 0.106 0.125 0.130	0.121 0.134 0.089 0.195 0.253	0.138 0.270 0.270 0.270 0.270	0.270	lon-S cour
22				0.070	0.043 0.099 0.059 0.059	0.072 0.103 0.190 0.180	0.173 0.160 0.088 0.206 0.149	0.218 0.310 0.310 0.310	0.310	to ac
21				0.042	0.023 0.040 0.052 0.044 0.065	0.083 0.070 0.065 0.203 0.092	0.295 0.212 0.157 0.156 0.124	0.137 0.255 0.258 0.258 0.258	0.258	entry ates
20				0.048	0.069 0.033 0.048 0.052 0.081	0.072 0.101 0.134 0.153 0.109	0.187 0.200 0.140 0.225 0.119	0.085 0.223 0.149 0.315	0.315	Selected Reserve to Non-Selected Reserve with 20 Good Years (Grey Area) Transfer Rate Ratios ("Blow-up" factors Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted). Increment rates to account for "unanticipated" (i.e., not in the Selected Reserve the prior year) transfers to Grey Area
19				0.066	0.053 0.060 0.035 0.069	0.060 0.128 0.144 0.193 0.168	0.140 0.303 0.123 0.156 0.253	0.115 0.113 0.113 0.113	0.113	ectec rraye crem
18				0.088	0.029 0.059 0.077 0.062 0.070	0.092 0.163 0.141 0.192	0.158 0.211 0.130 0.194	0.122 0.118 0.233 0.182 0.182	0.182	Se
17				0.105	0.105 0.105 0.105 0.105	0.105 0.105 0.105 0.105	0.105 0.105 0.105 0.105	0.105 0.105 0.105 0.105	0.105	ON NO
16	0.0000	0.0000	0.0000	0.0000	0.0000000000000000000000000000000000000	0.0000000000000000000000000000000000000	0.0000	0.0000	0.000	DESCRIPTION
PEBD Years of Service	Under 1 2 2 3									ESC
- ≻ w	2 - 2 E 4	6 9 1 8 6	0 1 2 2 4	5 t 7 t 8 t 6 t	82884	2222	8 2 2 2 2 4	88488	8 4	

Officer Non-Selected Reserve with 20 Good Years Career Points Adjustment Due To Transfer Blow-ups By Entry Age

	49 50										
	48										
	47										
	46										
	45										<u>e</u>
	44				1.033						ti t
	43				1.033	1.033					ou ":
	42				1.033	0.982					on-Selected Reserve with 20 Good Years ('Grey Area') Career Points Adjustment due to Transfer Blow-up factors Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted). Adjustment to Average Career Points for Grey Area retirees – effect on Average Career Points of "unanticipated" (i.e., not in the Selected Reserve the prior year) transfers to Grey Area due to transfer blow-up factors. Blank cells should be considered a value of zero ('0.000').
	41				1.033	0.982 1.023 1.023					Non-Selected Reserve with 20 Good Years ('Grey Area') Career Points Adjustment due to Transfer Blow-up factors Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted). Adjustment to Average Career Points for Grey Area retirees — effect on Average Career Points of "unanticipated" Selected Reserve the prior year) transfers to Grey Area due to transfer blow-up factors. Blank cells should be considered a value of zero ('0.000').
ge	40				1.033	0.982 1.023 0.896 0.896					w-up antici
By Entry Age	39				1.033	0.982 1.023 0.896 1.000					r Blov
Ą.	38				1.033	0.982 1.023 1.000 0.954	0.954				insfei
	37				1.033	0.982 1.023 0.896 1.000 0.954	0.954				o Tra
	38				1.033	0.982 0.896 0.1000 1.000	0.954				areel
	35				1.033	0.982 0.896 0.0896 0.954	0.954 0.954 0.954 0.954				ge C
	34				0.982	1.023 1.030 0.992 1.013	0001 0001 1000 1000 1000 1000 1000 100	_			justrr ted). tvera low-u
	33				9 0.985	3 0.825 3 0.980 3 1.000 9 0.995 3 1.000	0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	3 1.014			on-Selected Reserve with 20 Good Years ('Grey Area') Career Points Adjustment due I Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted). Adjustment to Average Career Points for Grey Area retirees – effect on Average Caree Selected Reserve the prior year) transfers to Grey Area due to transfer blow-up factors Blank cells should be considered a value of zero ('0.000').
	32				7 0.959	7 0.908 7 0.956 3 0.968 0 0.999 8 0.943	7 1.000 2 0.998 0 0.998 0 0.998	0.998			Poin ficer/ effect trans
	31				7260 9	5 0.927 5 1.003 6 1.000 3 0.968	1 1.007 7 0.922 9 0.990 0 1.000 5 1.000	1,000			de (of
	9 30				9 1.036	2 1.016 6 0.993 4 0.995 0 1.006 3 1.003	5 0.981 8 0.947 9 0.989 0 1.000 0 0.965	0 0.965 0 0.965 0 0.965 0 0.965			ygrac ygrac etiree ea du
	8 29				9 0.996	8 0.922 0 1.036 8 0.994 4 1.000 6 1.003	1 0.975 7 0.958 4 0.979 2 1.000 0 0.990	8 0.990 0 0.990 0 0.990 0 0.990	0		Area d pay
	7 28				8 0.956	8 0.908 1 1.040 1 0.998 5 0.994 5 0.976	2 1.011 8 1.007 1 0.974 9 0.992 3 1.000	2 0.958 6 1.000 9 1.000 9 1.000	000.1		Grey S, an ey Al o Gre zero
	5 27				7 0.938	0 0.958 0 0.981 4 0.961 9 0.995 0 0.975	7 1.022 6 0.988 4 0.991 1 0.989 2 0.953	9 1.022 4 0.966 6 1.059 6 1.059 6 1.059	6 1.059 6 1.059 6		ars (') YOS Or Gr ers to
	25 26				8 0.957	1 0.980 9 0.980 3 0.974 5 0.989 0 0.990	6 1.007 9 0.966 7 1.014 6 0.981 9 1.022	0 1.009 8 1.004 8 0.986 3 0.986 5 0.986	5 0.986 5 0.986 5 0.986 5		d Yek PEBD nts for ansfi
					6 0.958	8 1.001 3 0.979 5 1.003 2 0.995 7 1.030	5 0.996 8 1.009 2 0.977 1 0.966 4 0.999	6 1.000 1 0.998 5 1.038 5 0.965	5 0.965 5 0.965 5 0.965 5 0.965		Good ted F r Poi ar) tr
	3 24				7 0.976	1 0.978 2 0.973 8 0.995 2 1.002 4 1.007	3 0.985 8 0.988 7 1.002 8 0.991 0 1.004	2 0.996 8 0.991 6 1.005 2 0.995 8 1.035	5 1.035 7 1.035 7 1.035 7 1.035 7 1.035	_	h 20 mple karee or ye
	22 23				3 0.957	1 1.001 4 1.002 2 0.998 2 1.002 4 0.994	9 1.003 5 0.998 9 0.997 4 0.988 6 1.000	9 1.002 6 1.018 0 1.006 0 0.982 0 1.008	0 1.005 0 1.057 0 1.057 0 1.057	1.057	on-Selected Reserve with 20 Good Years ('Grey Area') C Arrayed by entry age, completed PEBD YOS, and paygrs Adjustment to Average Career Points for Grey Area retire Selected Reserve the prior year) transfers to Grey Area c Blank cells should be considered a value of zero ('0,000)
	Ш				9 0.943	3 1.001 5 0.994 3 1.002 9 0.992 9 1.024	2 1.009 1 1.015 9 0.999 6 0.994 9 0.996	5 1.009 3 1.006 7 1.010 6 1.010 4 1.010	5 1.010 4 1.010 4 1.010 4 1.010	1.010	y ag y ag tvera ve th
	0 21				1 0.869	3 0.933 0 0.936 0 0.993 3 0.989 4 0.969	3 0.972 8 0.971 0 1.009 6 0.976 8 0.989	5 1.016 5 1.013 7 1.027 6 1.016 7 1.004	3 0.985 4 1.024 9 1.024 9 1.024 9 1.024	9 1.024	ed Re
	9 20				0.901	4 0.923 5 1.000 2 0.990 4 1.003 4 1.004	8 0.993 7 0.998 9 1.000 6 0.986 5 1.008	1 1.005 6 1.015 6 0.997 5 1.026 6 0.997	1 1.013 8 1.014 3 0.999 9 0.999	1 0.999	electe ed by tmen ted F
	3 19				7 0.920	3 0.924 3 0.985 9 0.972 2 0.964 0 0.994	1 0.978 1 1.027 5 1.009 2 0.966 2 1.005	1.001 1.036 1.046 5 0.945	1.041 3 1.008 3 1.013 8 0.999 7 1.001	1.001	on-Se Array Adjus Selec Slank
	7 18				7 0.907	3 0.968 3 0.958 9 0.979 2 0.962 0 0.980	1 0.984 1 1.001 5 0.995 2 0.992 2 1.002	1.000 0.970 1.061 1.061 7.1.007	3 1.043 3 0.968 3 1.018 3 1.003 7 0.817	1.000	Ž
	16 17	00000	00000	00000	00000	0 0.968 0 0.958 0 0.979 0 0.962 0 0.980	0 0.984 0 1.001 0 0.995 0 0.992 0 1.002	0 1.000 0 0.970 0 1.061 0 1.036	0 1.043 0 0.968 0 1.018 0 1.003	0 1.000	Ó
	Ш	00000	000000	00000	00000	000000	00000	000000	000000	0.000	SRIP
PEBD Vears of	Service	Under 1 2 2 3 4 4	10 00 ~ ∞ 50	0 1 2 2 4	51 71 81 81	82882	88788	88838	88388	4 4	DESCRIPTION:

Enlisted Non-Selected Reserve with 20 Good Years Career Points Adjustment Due To Transfer Blow-ups

By Entry Age

	48									
	47									
	46									
	45									
	44				0.937					
	43				0.937	0.937				
	42				0.937	0.937				
	41				0.937 (0.937 (0.937 (0.937				
	40				1.046	0.046 0.046 0.046				
By Entry Age	39				0.951	0.825 1.421 1.421 1.421				
By Ent	38				1.254	0.910 0.953 0.953 0.953	0.953			
	37				0.918	1.047 0.918 0.941 1.413	1413			
	36				961:1	1.069 1.014 0.978 0.923	8 8 8			
	35				0.991	1.129 1.038 1.021 0.975	1.652 1.652 1.652 1.652			
	34				7.20	0.975 0.886 1.007 1.083 0.985	1.022 1.022 1.022 1.022 1.022			
	33				0.987	0.960 1.001 1.046 0.938 1.024	0.981 1.001 1.455 1.455	1.455		
	32				1.006	0.993 0.979 0.997 1.020 0.935	0.948 1.028 0.962 0.962	0.962		
	31				0.982	1.006 0.932 0.991 1.007	1.050 0.979 1.010 0.994 0.994	0.994		
	30				0.985	0.997 0.999 0.986 1.000	1.026 0.939 0.996 1.001	1.158 1.158 1.158		
	29				1.006	0.993 1.004 0.997 1.000	0.985 1.010 0.951 1.002 0.998	0.981 1.073 1.073 1.073		
	28				0.988	1.000 1.006 1.001 0.991	0.994 0.998 0.985 1.035	0.999 1.000 0.824 0.824	0.824	
	27				0.999	0.995 0.989 0.994 1.001 0.998	0.998 1.006 1.011 1.011	0.982 0.981 1.040 1.040	1.040	
	26				0.983	0.972 0.999 0.981 0.998	0.994 0.984 0.990 0.987 0.994	0.987 1.024 0.996 0.980 1.170	0.1.1.2 0.1.1.2 0.0.1.1.2	
	22				0.970	0.999 0.992 1.009 0.996	0.987 0.997 1.004 1.007	1.005 1.004 1.014 0.966	1.148 1.148 1.148 1.148	
	24				1.007	0.984 0.999 0.999 0.996	0.994 0.975 0.995 0.991	0.997 0.998 1.015	1.019 1.070 1.070 1.070	
	23				0.994	0.993 0.992 0.989 1.007	0.998 0.999 1.006	1.011 1.007 0.992 1.015	1.039 1.035 1.035 1.035	1.035
	22				0.987	0.996 0.993 0.994 0.994	1,005 0,992 1,017 1,002 0,995	1,009 0,982 1,004 1,012	1.012 1.053 0.992 0.992 0.992	0.992
	21				0.997	1,002 0,996 0,995 0,995	0.997 1.001 0.990 0.996	1,003 0,993 1,010 1,010	1.024 0.981 1.029 0.992	0.992
	20				0.999	0.996 1.001 0.994 1.001 0.997	0.996 0.997 1.001 0.997	1.019 1.015 0.998 1.029	1.019 1.027 1.048 0.983	1.309
	19				0.988	0.991 0.995 1.000 1.004	0.998 0.989 1.001 1.002	0.993 1.009 1.020 1.020	0.995 1.006 1.010 1.131	1.009
	18				0.998	0.996 0.992 1.000 1.000	0.999 1.005 1.007 0.994 0.992	1.005 1.008 0.987 1.012 0.991	1.017 1.000 1.024 1.000 0.996	0.939
	17				0.998	0.996 0.992 0.993 1.000	0.999 1.005 1.007 0.994 0.992	1.005 1.008 0.987 1.012 0.991	1.017 1.000 1.000 0.996	0.939
_	16	00000	00000	00000	000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	00000	000000	0.000
PEBD Years of	Service	Under 1 2 3 4	v @ ≻ ® Ø	0 1 2 2 4	15 7 7 8 8 19 8	82882	88588	82828	88388	40

DESCRIPTION: Non-Selected Reserve with 20 Good Years ('Grey Area') Career Points Adjustment due to Transfer Blow-up factors
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Adjustment to Average Career Points for Grey Area retirees — effect on Average Career Points of "unanticipated" (i.e., not in the Selected Reserve the prior year) transfers to Grey Area due to transfer blow-up factors.
Blank cells should be considered a value of zero ('0.000').

Appendix H

Officer Selected Reserve Promotion and Merit Increase Scales (PAMS)

1.067 1.048 1.095 1.067 1.048 1.095 1.067 1.048 1.095 1.067 1.048

	55	1.072 1.072 1.072 1.072	1.072 1.072 1.072 1.072						
	24	1.031 1.082 1.062 1.040	1.057 1.037 1.037 1.037						
	23	1.018 1.172 1.072 1.000	1.088 1.054 1.000 0.967	1.000					
	25	1,006 1,228 1,087 1,078 1,000	1.064 1.025 1.025 1.025	1.025					
	21	1.007 1.199 1.110 1.026	1.095 1.003 1.033 1.033	1.033 1.033					
	20	1.013 1.203 1.106 1.050	1.082 1.032 1.041 1.016	1.016 1.016 1.016					
	49	1.044 1.173 1.084 1.016	1.065 1.035 1.046 1.014	4 4 4 4 4					
	48	1.056 1.163 1.070 1.035	1.062 1.016 1.071 1.008 1.085	1.038 1.038 1.038 1.038	1.038				
	47	1.033 1.135 1.066 1.019	1.069 1.016 1.059 1.064	1.021 1.051 1.035 1.035	1.035				
	46	1,053 1,208 1,153 1,078	1,066 1,006 1,012 1,012 1,065	1.030 1.046 0.998 1.040	1.040 1.040 1.040				
	45	1.041 1.205 1.129 1.078	1.058 1.012 1.047 1.034 1.075	1.016 1.068 1.046 1.015	1.053 1.053 1.053				
	44	1.037 1.182 1.125 1.075 1.015	1.075 1.015 1.061 1.037 1.072	1.022 1.030 1.046 1.003	1.021 1.044 1.044 1.044				
	43	1.193 1.148 1.077 1.026	1.067 1.006 1.023 1.059	1.023 1.047 1.002 1.047 1.003	1.049 1.048 1.023 1.023	1.023			
	42	1.199 1.142 1.086 1.015	1,066 1,012 1,062 1,016	1.019 1.008 1.008 1.041	1.050 1.010 1.030 1.017	1.035			
	41	1.063 1.191 1.144 1.083 1.017	1,058 1,010 1,005 1,007	1.028 1.054 1.010 1.042 1.012	1.044 1.015 1.039 1.005	1.033 1.033			
Ф	40	1.065 1.176 1.153 1.088 1.014	1.070 1.012 1.051 1.057	1.064 1.064 1.045 1.022	1.048 1.008 1.033 1.042	1.053 1.053 1.053			
Entry Age	39	1.049 1.152 1.089 1.010	1.065 1.024 1.052 1.018	1.024 1.061 1.039 1.039	1.049 1.035 1.040	1.024 1.043 1.059 1.059			
By Er	38	1.055 1.187 1.137 1.088 1.018	1.071 1.008 1.057 1.010 1.046	1.032 1.055 1.069 1.052 1.012	1.056 1.018 1.035 1.012	1.021 1.043 1.035 1.035	1.035		
	37	1.043 1.193 1.179 1.073	1,071 1,014 1,009 1,009	1,019 1,071 1,019 1,052	1,045 1,022 1,038 1,011	1.018 1.022 1.058 1.058	1.040		
	88	1.032 1.194 1.088 1.024	1.021 1.021 1.060 1.023 1.074	1.014 1.065 1.040 1.040	1.045 1.040 1.040 1.015	1.024 1.043 1.040 1.040	1.014 1.014 1.014		
	35	1.039 1.162 1.162 1.026	1.068 1.016 1.062 1.013 1.064	1.027 1.058 1.016 1.053 1.020	1.048 1.012 1.037 1.010 1.036	1.020 1.036 1.013 1.018 1.019	1.068 1.003 1.003		
	34	1.041 1.190 1.100 1.028	1.069 1.018 1.015 1.015	1.021 1.058 1.043 1.043	1.051 1.014 1.039 1.039	1.016 1.033 1.034 1.034	1.034 1.064 1.064 1.064		
	33	1.042 1.194 1.181 1.104 1.027	1.062 1.023 1.021 1.021 1.063	1.017 1.071 1.015 1.061 1.061	1.045 1.011 1.040 1.016 1.035	1.019 1.029 1.041 1.041	1.024 0.996 1.014 1.046	1.046	
	32	1.030 1.185 1.178 1.093 1.031	1.068 1.022 1.024 1.020 1.070	1.019 1.063 1.027 1.051 1.017	1.047 1.020 1.034 1.018 1.039	1.024 1.047 1.007 1.010	1.031 0.999 1.023 1.016	1.017	
	31	1.030 1.183 1.171 1.106 1.030	1.067 1.030 1.053 1.017 1.064	1.026 1.061 1.021 1.055 1.017	1.039 1.013 1.037 1.014 1.038	1.023 1.042 1.006 1.021 1.020	1.030 1.017 1.018 1.013 1.022	1.026 1.026 1.026	
	30	1.032 1.191 1.185 1.105 1.032	1.076 1.019 1.053 1.019 1.063	1.035 1.065 1.023 1.053 1.017	1.046 1.014 1.039 1.012 1.035	1.020 1.035 1.019 1.025 1.011	1.037 1.006 1.019 1.007 1.004	0.969 1.005 1.005	
	29	1.018 1.182 1.200 1.101 1.043	1.069 1.027 1.026 1.028 1.062	1.038 1.072 1.044 1.020	1.050 1.023 1.037 1.016 1.031	1.025 1.035 1.029 1.008	1.033 1.021 1.020 1.010	0.996 1.044 1.066 1.066	
	28	1.022 1.178 1.204 1.108	1.024 1.024 1.029 1.072	1.040 1.068 1.025 1.049	1.045 1.016 1.037 1.014 1.036	1.041 1.020 1.026 1.014	1.033 1.014 1.019 1.015	0.997 1.007 1.024 1.082 1.082	1.082
	27	1.040 1.160 1.235 1.114 1.056	1.076 1.034 1.057 1.025 1.067	1,039 1,029 1,053 1,054	1,041 1,020 1,038 1,018 1,033	1.023 1.041 1.014 1.021 1.010	1.031 1.018 1.015 1.003	1.003 1.009 0.986 0.989 1.063	1.063
	56	1.022 1.165 1.251 1.101 1.062	1,070 1,035 1,062 1,030 1,073	1,032 1,072 1,033 1,055	1.046 1.023 1.037 1.017 1.036	1.014 1.042 1.015 1.025	1.032 1.018 1.008 1.009	1.012 1.002 1.002 0.997 0.964	0.988 0.988 0.988
	52	1.022 1.168 1.266 1.113 1.061	1.071 1.032 1.061 1.030 1.073	1.040 1.076 1.030 1.056 1.021	1,041 1,020 1,030 1,019 1,035	1.022 1.046 1.015 1.025 1.013	1.030 1.010 1.018 0.996	0.992 1.003 1.018 1.016	1.010 1.028 1.028 1.028
	24	1.016 1.175 1.264 1.136 1.075	1.027 1.027 1.026 1.026 1.079	1.038 1.074 1.024 1.052	1.041 1.017 1.034 1.032	1.023 1.042 1.019 1.023 1.017	1.029 1.013 1.015 0.998	0.997 1.014 1.004 1.018 0.995	1.021 1.022 1.016 1.086 1.086
	23	1.012 1.199 1.247 1.142 1.071	1.072 1.018 1.060 1.023 1.084	1.037 1.068 1.021 1.046 1.017	1.043 1.034 1.035 1.035	1.023 1.045 1.018 1.024 1.014	1.032 1.011 1.028 1.016 0.996	1.007 1.016 1.012 1.010 1.010	1,009 1,009 1,058 1,058
	22	1.007 1.141 1.262 1.141 1.081	1.080 1.032 1.064 1.028 1.084	1.040 1.070 1.021 1.048 1.022	1.043 1.034 1.035 1.035	1.023 1.046 1.020 1.026	1.031 1.014 1.021 1.013 0.993	1.005 1.011 1.019 1.019	0.992 0.991 1.012 1.041
	21	1.011 1.096 1.242 1.093 1.077	1.074 1.061 1.078 1.056 1.070	1.051 1.081 1.070 1.070	1.050 1.035 1.028 1.028 1.030	1.024 1.033 1.026 1.027	1.032 1.024 1.015 1.015	1.003 1.013 1.006 1.007	0.999 1.000 1.013 0.990 1.007
	8	1.007 1.104 1.211 1.057 1.076	1.087 1.065 1.082 1.055 1.075	1.063 1.063 1.067 1.067	1.051 1.038 1.034 1.033	1.025 1.038 1.025 1.032 1.025	1.033 1.023 1.017 1.017 1.020	1.012 1.014 1.007 1.011 1.016	1.012 1.013 1.007 0.997 0.995
	19	1.053 1.220 1.033 1.060	1.086 1.070 1.069 1.080	1.065 1.080 1.061 1.074 1.050	1.051 1.046 1.052 1.035 1.035	1.031 1.029 1.030 1.032	1.034 1.027 1.019 1.021 1.023	1.020 1.016 1.010 1.002 1.019	1.009 1.004 1.005 1.000
	18	1.161 1.161 1.045 1.037	1.077 1.073 1.076 1.066	1.070 1.087 1.063 1.077	1.057 1.045 1.039 1.038	1.033 1.030 1.031 1.029	1.025 1.025 1.026 1.026 1.027	1.020 1.014 1.021 1.003	1.012 1.009 1.010 0.985

Arrayed Reserve Promotion and Merit Increase scales (PAMS)

Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).

Additional basic pay increases (beyond across-the-board) earned by a Selected Reserve during a fiscal year. Paygrade transfers are excluded in the development, Reentrants are included.

Blank cells should be considered a value of zero (0.000).

Enlisted Selected Reserve Promotion and Merit Increase Scales (PAMS)

1231 1231 1231 1231 1231 1231

	26	123 123 123 123 123 123	2 2 2							
	22	22222	1.231 1.231 1.231 1.231							
	55	22222	123 123 12							
	53	88888	22222	1.23						
	25	1.275 1.352 1.071 0.999 0.999	0.999 0.999 0.999 0.999	0.999						
	51	1,063 1,206 1,082 1,328 1,218	1218 1218 1218 1218 1.218	1.218 1.218 1.218						
	20	1.261 1.199 1.181 1.113	1.018 1.018 1.018 1.018	1.018 1.018 1.018						
	49	1.233 1.290 1.154 1.088 1.024	1.086 1.120 1.056 1.056 1.056	1.056 1.056 1.056 1.056 1.056						
	48	1,20 1,077 1,061 1,061	1.041 1.132 1.000 1.089 1.089	1.089 1.089 1.089 1.089	1.089					
	47	1.164 1.118 1.095 1.050	1.025 1.049 1.067 1.067	1.024 1.024 1.024 1.024	1.024					
	46	1.154 1.133 1.140 1.044	1.026 1.026 1.000 0.997	0.994 0.994 0.994 0.994	0.994 0.994 0.994					
	45	1.152 1.221 1.093 1.153	1.068 1.086 1.034 1.053	0.997 1.006 1.006 1.006 1.006	1.006 1.006 1.006					
	44	1.133 1.088 1.090 1.049	1.089 1.024 1.034 1.064	1.061 1.015 0.992 0.992 0.992	0.992 0.992 0.992 0.992					
	43	1.140 1.137 1.116 1.057 1.022	1.076 1.011 1.044 1.060	1.025 1.076 1.018 0.998 1.035	1.006 1.000 1.000 1.000 1.000	1:000				
	42	1.097 1.128 1.120 1.038	1.038 1.041 1.020 1.020	1.027 1.048 1.061 0.997 1.031	1.067 1.002 0.997 0.997 0.997	0.997				
	41	1.097 1.127 1.066 1.082 1.045	1.066 1.019 1.028 1.028 1.050	1.023 1.063 1.026 1.013	1.012 1.018 1.023 1.023 1.033	1.033 1.033				
9	40	1.075 1.110 1.085 1.083 1.034	1.038 1.033 1.075 1.023 1.063	1.024 1.046 1.023 1.030 1.011	1.030 1.018 1.035 1.009 1.008	1.028 1.028 1.028				
Entry Age	38	1.077 1.082 1.089 1.028	1.034 1.023 1.023 1.052	1,026 1,022 1,025 1,025 1,031	1,021 1,022 1,023 1,023	1.024 1.024 1.024 1.024				
By Er	38	1.074 1.083 1.072 1.028	1.041 1.022 1.054 1.037 1.064	1.043 1.024 1.028 1.022	1.027 1.024 1.008 1.029	1.027 1.016 0.917 0.917 0.917	0.917			
	37	1.069 1.106 1.077 1.025	1.051 1.021 1.028 1.028	1,020 1,048 1,018 1,031	1.024 1.020 1.031 1.029 1.024	1.027 1.037 1.011 0.980 0.980	0.980			
	98	1.079 1.110 1.082 1.071	1.057 1.020 1.058 1.029 1.062	1.020 1.044 1.023 1.031	1.039 1.024 1.021 1.021	1.021 1.051 1.030 1.031	1.042 1.042 1.042			
	35	1.073 1.111 1.083 1.068 1.024	1.062 1.019 1.051 1.033 1.056	1.028 1.048 1.024 1.033 1.016	1.027 1.020 1.035 1.019 1.022	1.020 1.050 1.023 1.046 1.011	1.028 1.028 1.028 1.028			
	34	1.074 1.108 1.078 1.071 1.024	1.066 1.044 1.028 1.063	1.028 1.042 1.034 1.034	1,024 1,024 1,022 1,027	1.021 1.049 1.030 1.026	1.067 0.906 0.906 0.906 0.906			
	33	1.074 1.106 1.084 1.023	1.074 1.034 1.034 1.031	1.027 1.045 1.021 1.032	1.041 1.015 1.039 1.016 1.021	1.026 1.040 1.040 1.025	1.067 1.001 0.881 0.881	0.881		
	32	1.072 1.112 1.079 1.023	1.075 1.012 1.027 1.031 1.065	1.027 1.047 1.023 1.038	1,033 1,021 1,042 1,019 1,024	1.022 1.041 1.045 1.022	1.056 1.022 1.026 1.045	1.045		
	31	1.074 1.109 1.082 1.071	1,079 1,022 1,029 1,064	1.032 1.048 1.023 1.038 1.019	1.035 1.039 1.020 1.020	1.019 1.024 1.029 1.029	1.069 1.025 1.016 1.016	1.024 1.024 1.024		
	30	1.071 1.109 1.080 1.072 1.023	1.075 1.011 1.022 1.029 1.062	1.028 1.052 1.023 1.036 1.021	1.025 1.025 1.035 1.018 1.026	1.045 1.045 1.046 1.046	1.057 1.023 1.018 1.017 1.013	0.923 0.923 0.923 0.923		
	29	1.074 1.078 1.078 1.071 1.023	1.076 1.025 1.034 1.060	1.050 1.050 1.026 1.035	1.025 1.040 1.019 1.028	1.021 1.023 1.039 1.031	1.064 1.027 1.020 1.028	1,003 1,030 1,030 1,030		
	28	1.074 1.110 1.081 1.071 1.024	1.076 1.012 1.026 1.026	1.050 1.050 1.025 1.024	1.035 1.021 1.039 1.023 1.023	1.024 1.027 1.034 1.034	1.064 1.020 1.018 1.019 1.035	1.012 0.996 1.043 1.043	1.043	
	27	1.075 1.110 1.082 1.073 1.024	1.078 1.034 1.034 1.066	1.028 1.049 1.029 1.026	1.036 1.023 1.024 1.028	1.024 1.045 1.025 1.026	1.061 1.020 1.024 1.013	1.021 1.008 0.995 1.050 1.050	1.050	
	56	1.075 1.110 1.081 1.071	1.077 1.012 1.037 1.031	1.034 1.052 1.029 1.038	1,033 1,024 1,024 1,025	1.023 1.042 1.031 1.025	1.061 1.027 1.022 1.016	1.024 1.017 1.013 1.013 0.936	0.936 0.936 0.936	
	52	1.074 1.108 1.082 1.073 1.023	1.078 1.014 1.045 1.031 1.063	1.052 1.052 1.023 1.041	1.040 1.022 1.040 1.022 1.027	1.021 1.045 1.023 1.028	1.068 1.020 1.020 1.018 1.018	1.013 1.009 1.017 1.017	0.938 0.938 0.938 0.938	
	24	1.077 1.109 1.081 1.072 1.024	1.077 1.016 1.050 1.030 1.063	1.029 1.053 1.040 1.040	1.023 1.023 1.026 1.026	1.021 1.023 1.023 1.024	1.065 1.019 1.024 1.017	1.012 1.008 1.022 1.006	0.993 1.024 1.024 1.024	
	23	1.077 1.108 1.080 1.072 1.025	1.076 1.016 1.029 1.029 1.063	1.029 1.052 1.027 1.040 1.027	1.026 1.022 1.041 1.023	1.023 1.025 1.025 1.026	1.065 1.018 1.021 1.017	1.013 1.005 1.025 1.006	1.005 1.007 0.973 0.973 0.973	0.973
	22	1.082 1.080 1.069 1.024	1.079 1.016 1.063 1.063	1.028 1.052 1.028 1.040 1.029	1.036 1.025 1.020 1.020	1.022 1.047 1.027 1.041	1.068 1.022 1.021 1.021	1.018 1.013 1.026 1.026	1.011 1.007 1.009 1.040 1.040	1.040
	21	1.084 1.110 1.070 1.023	1.079 1.018 1.067 1.031	1.026 1.054 1.027 1.038	1.034 1.022 1.037 1.023	1.025 1.048 1.028 1.026	1.067 1.024 1.019 1.022 1.034	1.014 1.015 1.016 1.027 1.009	1.008 1.010 1.019 1.009 1.087	1.087
	20	1.090 1.111 1.080 1.070 1.024	1.079 1.017 1.029 1.029	1.025 1.052 1.027 1.040 1.027	1.023 1.023 1.040 1.027	1.022 1.049 1.026 1.026	1.067 1.021 1.023 1.017 1.031	1.010 1.018 1.012 1.024 1.015	1.008 1.011 1.025 0.999 1.009	1.009
	19	1.095 1.118 1.080 1.068 1.023	1.079 1.019 1.076 1.030 1.063	1.054 1.054 1.040 1.040	1.023 1.023 1.042 1.021 1.028	1.024 1.049 1.027 1.039	1.066 1.022 1.019 1.019	1.015 1.016 1.027 1.027	1.009 1.008 1.008 1.008	1.008
	18	1.090 1.133 1.085 1.086 1.021	1.020 1.020 1.075 1.030 1.062	1.023 1.027 1.027 1.040	1.023 1.023 1.021 1.029	1.024 1.030 1.031 1.041	1.020 1.020 1.020 1.013 1.013	1.014 1.013 1.027 1.007	1.006 1.019 1.019 1.006	1.006
	17	1.086 1.148 1.110 1.065	1,074 1,022 1,069 1,034 1,062	1.026 1.050 1.037 1.037		1.018 1.034 1.028 1.028		1.028 1.015 1.030 0.998 1.000	1.000 1	1.000
	16	00000	00000	00000	88888	88888	00000	88888	00000	000

Selected Reserve Promotion and Merit Increase scales (PAMS)
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Additional basic pay increases (beyond across-the-board) earned by a Selected Reserve during a fiscal year.
Paygrade transfers are excluded in the development; Reentrants are included.
Blank cells should be considered a value of zero ('0.000').

Officer Non-Selected Reserve with 20 Good Years Promotion and Merit Increase Scales (PAMS) By Entry Age

	47 48 49 50 51 52										
	45 46										
	44				0.992						
	43				0.992	0.992					
	42				0.992	0.992					
	41				0.992	0.992 0.992 0.992					
0	40				0.992	0.992 0.992 0.992					ar.
By Entry Age	39				0.992	0.992 0.992 0.992 0.992					S) al ye
By En	38				0.992	0.992 0.992 0.992 0.992	0.992				PAM i fisc
	37				1.000	1,000 1,015 1,029 1,029	1.029				ales (
	98				1.000	1,000 1,015 1,009 1,009	1.009				e scanning dui
	35				1.007	1.007 1.020 1.000 0.999 1.005	1.005 1.005 1.005				statu statu pme
	34				1.008	1.008 1.027 1.005 0.998	0.999 0.999 0.999 0.999				rit Inc ed). Area evelo
	33				1.007	1.007 1.004 1.003 0.995	1.009 0.998 0.998 0.998	0.998			Non-Selected Reserve with 20 Good Years ('Grey Area') Promotion and Merit Increase scales (PAMS) Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted). Additional basic pay increases (beyond across-the-board) earned in Grey Area status during a fiscal year Paygrade transfers and Grey Area transfer blow-ups are excluded in the development. Blank cells should be considered a value of zero ('0.000').
	35				1.002	1.002 1.001 1.004 0.998	1.000 1.001 0.996 0.996 0.996	0.996			n and Ser/e d in G d in t
	31				1.002	1,002 1,027 0,998 1,005	1.011 1.002 0.993 0.993 0.993	0.993			motio t (offi arnec
	30				1.009	1.009 1.015 0.999 1.003 0.998	1.007 1.002 0.995 0.997 0.995	0.995 0.995 0.995 0.995			Pror grade rd) e re exe e exe
	29				0.997	0.997 1.001 0.999 1.001	1.003 1.001 0.999 0.996 1.004	0.991 0.991 0.991 0.991			payg payg boa ps ar
	28				1.002	1.002 1.005 1.000 0.998	1.006 0.999 1.002 0.998 1.001	0.999 1.002 1.002 1.002	1.002		and s-the ow-u
	27				1.005	1,005 1,001 1,004 0,999	1,009 0.998 0.997 1,003	0.999 1.000 1.000 1.000	1,000		s ('G YOS, acros er bl
	56				1.007	1,007 1,019 1,002 1,001 0,999	1,006 0.998 0.999 1,002	1,000 1,001 1,000 0,997 1,068	1.068		Year :BD ` ond a ransf
	22				1.008	1.008 0.999 1.001 0.999	1.003 1.000 0.999 0.999 1.003	1.000 0.999 1.000 1.000 0.999	1.017 1.012 1.005		tood d PE (bey rea t
	24				1.005	1.005 1.001 1.001 0.998	1.004 0.998 0.998 0.998 1.002	0.999 1.000 1.000 1.000	1.006 1.028 0.977 1.011		20 G aplete ases rey A
	23				1.005	1.005 1.001 1.002 0.999	1,005 0.998 0.999 1,003	0001100001100001	1.000 1.006 1.051 0.977 0.990	0.990	with com- nd G
	22				1.005	1.005 1.002 1.002 0.999	1.005 0.998 0.998 1.003	0.999 1.000 1.000 1.000	1.000 1.000 0.997 1.037 0.982	1.020	on-Selected Reserve with 20 Good Years ('Grey Area') P Arrayed by entry age, completed PEBD YOS, and paygradditional basic pay increases (beyond across-the-board Paygrade transfers and Grey Area transfer blow-ups are Blank cells should be considered a value of zero ('0.000')
	21				1.001	1,001 1,002 1,004 1,000	1.002 0.998 0.996 0.996 0.999	1.000 0.998 0.999 1.001	1.000 0.999 1.000 0.992 1.052	1.007	d Resentry asic ansfe
	20				1.006	1.006 1.000 1.003 0.999	1.006 0.995 0.998 0.996 0.997	0.999 1.000 0.998 0.999	1.000 1.000 1.000 1.000	1.038	d by nal b ade tr
	19				1.008	1.008 1.004 1.000	1.004 1.000 0.998 0.998	0.998 0.998 1.000 0.999	0.998 1.001 1.000 0.999	0.990	raye dditio
	18				1.006	1.006 1.002 1.006 1.006	1.002 0.997 0.998 0.998 1.001	0.999 0.999 0.998 0.998	1.000 1.001 1.001 0.999	1.001	ž · ·
	17				1.000	0.983 0.983 0.999 0.999	1.003 1.005 1.003 1.003	0.996 1.000 1.011 0.978 1.004	00011	1.000	NOI
۶ ۵	16	0.000	00000	00000	00000	00000	00000	00000	00000	0.000	DESCRIPTION:
PEBD	Service	Under 1 1 2 3 4	8 9 7 8 8	0 1 2 2 4	15 17 18 19	82884	88488	888388	88488	40	DE

Enlisted Non-Selected Reserve with 20 Good Years Promotion and Merit Increase Scales (PAMS)

By Entry Age

	47										
	46										
	45										
	44				0.946						
	43				0.946	0.946					
	42				0.946 0	0.946 0					
	41				0.946 0	0.946 0 0.946 0					Γ
	40				0.946 0	0.946 0 0.946 0 0.946 0					
y Age	39				0.975 0	0.975 0 0.975 0 0.975 0 0.975 0					١.
By Entry Age	38				0 200.1	0.976 0.976 0.976 0.976 0.976	0.976				
	37				1.003	0.995 1 1.013 0 1.019 0 0.939 0 0.902 0	0.975 0				
	36				1 776:0	0.996 1.017 1.000.1 0.977 0.977	0.927 0				
	32				0 400.1	1.001 1.019 0.999 1.010 0.990	0.966 0 0.962 1 0.962 1				
	34				1.002	1.003 1.017 1.010 1.010 1.000	0.925 0.925 0.994 0.994				
	33				0.964	1.0001	0.997 0.997 0.961 0.961 0.980	0.980			
	32				1.000	0.995 1.014 0.996 1.009 1.002	1.033 0.999 0.998 0.956 0.00.1	0.997			
	31				1.003	1,003 1,000 1,010 1,000 1,000	1.034 1.000 1.000 0.998 0.915	1.069			
	30				1.012	0.989 1.023 1.010 0.999	1.000 1.000 0.994 0	0.935 0.978 1.006			١,
	29				000.1	1.000	1.000	0.993 0.981 0.971 1.022			
	28				1.005	1.000 1.015 0.999 1.006	1.030 0.999 0.999 1.005	0.990 0.990 0.990 1.024	1.024		
	27				1.016	1,001 1,014 1,010 1,001	1.031 1.000 0.999 1.005	1,000 0,999 0,911 1,033	1.025		
	56				0.992	0.997 1.016 1.001 1.010 0.999	1.029 0.999 1.000 1.004	0.999 1.000 0.999 0.927	1.015 0.987 0.987		
	52				1:001	1.001 1.015 1.000 1.010 0.999	1.030 0.999 1.000 1.003	0.999 1.000 0.999 1.003 0.999	0.949 1.008 1.009		-
	24				1.008	1.001 1.017 1.009 1.009	1.031 0.999 1.000 0.999 1.003	1.000 1.000 1.000 1.000	1.007 0.933 0.966 1.012		
	23				1.012	1.000 1.019 1.010 1.010	1.003	1,000	1.000 0.997 0.922 0.981 1.002	1.002	
	22				1.003	1,001 1,017 1,000 1,011	1.032 0.999 1.000 1.004	1,000 1,000 1,000 1,000	1,000 1,000 0,917 0,967	0.992	
	21				1.011	1.000 1.017 1.011 0.999	1.033 1.000 0.999 1.003	0.999 1.000 1.003	1,000 1,000 0,996 0,911	0.999	
	20				1.012	1.001 1.000 1.000 1.000	1.032 0.999 1.000 1.004	1,000	1.000 1.005 1.005 0.996	0.984	
	19				1.002	1.000 1.020 1.011 1.011	1.034 1.000 0.999 1.004	1.000 1.000 0.999 1.004 0.999	1,000 1,006 1,006 1,000	0.996	
	18				1.010	0.999 1.020 0.999 1.011	1.035 0.999 0.999 1.005	1,000 1,000 1,000 1,000	0.999 1.000 0.999 1.000	0.964	
	17				1.000	1.021 1.021 0.999 1.014 1.000	1.037 1.002 1.000 1.005	0.999 0.997 1.002 1.000	0.997 1.000 1.005 1.006	1.000	1
	16	00000	00000	00000	00000	00000	00000	00000	00000	0.000	
PEBD Years of	Service	Under 1 1 2 3 4	v o ≻ ∞ o	0 1 2 2 4	15 17 18 19	82884	282783	8 2 2 2 2	88488	4 40	

DESCRIPTION: Non-Selected Reserve with 20 Good Years ('Grey Area') Promotion and Merit Increase scales (PAMS)
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Additional basic pay increases (beyond across-the-board) earned in Grey Area status during a fiscal year.
Paygrade transfers and Grey Area transfer blow-ups are excluded in the development.
Blank cells should be considered a value of zero ('0.000').

APPENDIX I

RETIREE AND SURVIVOR RATES

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RETIREE AND SURVIVOR RATES DESCRIPTION

The military retiree and survivor decrement rates are used to estimate death, "other" losses from pay status, and rates of transfer from temporary disability to permanent disability. The "other" losses consist primarily of returns to active duty and full waiver of retired pay to receive a higher annuity from the Veterans Affairs or Civil Service. In order to compute the normal cost contributions with and without regard to Concurrent Receipt benefits (Public Law (P.L.) 108-136), DoD- and Treasury-specific "other" loss rates, among others, are used to calculate the appropriate amounts. These rates were developed by age nearest birthday for officers and enlistees separately, and were further subdivided by three types of retirement: nondisability, temporary disability, and permanent disability. For temporary disability retirees, select rates were created for each of the first five years of retirement. After five years, those who are still in the temporary disability status are transferred to a permanent disability status.

The data for the rates were taken from the Defense Manpower Data Center Retiree and Survivor Files as of September 30 for the years 2006 through 2010. These files were created by the Finance Centers of the military services (now consolidated under the Defense Finance and Accounting Service), which have responsibility for sending monthly retired pay checks to military retirees. A military retiree can be in "paid status" or "nonpaid status." Nonpaid status indicates that a retiree has an entitlement to an annuity, but the annuity is fully reduced by offsets. Retirees who terminate from paid status during a fiscal year are on the retiree file at the end of that fiscal year with a termination code indicating the type of termination.

The rate development process begins by matching two consecutive fiscal year-end files by Social Security number. Cases no longer in paid status are categorized by type of loss. Cases returned to paid status (from non-paid status at the start of the year) are subtracted from a given type of loss. After following the above procedures, crude rates are created using the formulas given on the following pages. These rates are smoothed using a Whittaker-Henderson type B ("Method B") graduation, or by fitting a polynomial to the crude rates. Where there is reason to suspect valid discontinuities in the underlying rates, those segments are not smoothed. A summary of the years on which various rates are based is given on the page following the formulas.

RETIREE AND SURVIVOR DECREMENT RATE FORMULAS

<u>DEATH OF NONDISABILITY RETIRES</u> (by age nearest birthday and retired from active/reserve duty)

Nondisability deaths during the year
[Number at beginning of year - ½ (Nondisability deaths + other losses)]

<u>DEATH OF PERMANENT DISABILITY RETIREES</u> (by age nearest birthday)

Permanent disability deaths during the year [Number at beginning of year - ½ (Permanent disability deaths + other losses)]

DEATH OF TEMPORARY DISABILITY RETIREES (by age nearest birthday and years retired)

Temporary disability deaths in category during the year¹
[Number at beginning of year - ½ (Deaths + transfers + other losses)]

OTHER LOSSES FROM NONDISABILITY (by age nearest birthday and retired from active/reserve duty)

Losses other than death during the year Number at beginning of year

OTHER AND NON-TRANSFER LOSSES FROM TEMPORARY DISABILITY (by age nearest birthday and years retired)

Losses other than death or transfers to permanent disability during the year

Number at beginning of year

TRANSFER FROM TEMPORARY TO PERMANENT DISABILITY (by age nearest birthday and years retired)

<u>Transfers to permanent disability during the year</u> Number at beginning of year

OTHER LOSSES FROM PERMANENT DISABILITY (by age nearest birthday)

Losses other than death during the year Number at beginning of year

Includes deaths of members who were temporarily disabled at the beginning of the year, then transferred to permanent disability, and later died before the end of the year. Determined for each year of the temporary disability retirement category (1-5).

RETIREE AND SURVIVOR DECREMENT RATE FORMULAS (cont.)

<u>DIVORCE OF RETIREE</u> (weighted by coverage amount, by age nearest birthday)

Net retiree divorces during the year

Number at beginning of year

REMARRIAGE OF SURVIVING SPOUSE (by age nearest birthday)

Surviving spouse remarriages during the year Number at beginning of year

TERMINATION OF SURVIVING CHILD (by age nearest birthday)

Child terminations during the year Number at beginning of year

<u>DEATH OF SURVIVING SPOUSE</u> (by age nearest birthday)²

Surviving spouse deaths during the year

Number at beginning of year

OTHER LOSS OF SURVIVING SPOUSE (by age nearest birthday)

Survivor losses other than deaths during the year
Number at beginning of year

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Death rates of spouses of living retirees who elected SBP spouse, or spouse & child, coverage are based on a standard actuarial mortality table incorporating U.S. population experience. This table is published by the Society of Actuaries (SOA) as GAM-94_Female (Group Annuity Mortality, study year 1994, females).

SUMMARY OF YEARS ON WHICH RETIREE AND SURVIVOR RATES ARE BASED

By Fiscal Year

DEATH RATES	<u>2006</u>	<u>2007</u>	2008	2009	<u>2010</u>
ND Officer/Enlisted			X	X	
PD Officer/Enlisted	X	X	X		
TD Officer/Enlisted		X	X	X	X
OTHER LOSS RATES					
ND Officer/Enlisted			X	X	
PD Officer/Enlisted	X	X	X		
TD Officer/Enlisted		X	X	X	X
TRANSFER RATES FROM TD					
TO PD					
Officer/Enlisted		X	X	X	X
DETIDEE DIVODCE			X	V	
<u>RETIREE DIVORCE</u>			Λ	X	
SURVIVOR RATES					
Remarriage				X	X
Child Termination				X	X
Surviving Spouse Death				X	X
Surviving Spouse Other Loss				X	X

Key: ND = Nondisabled

PD = Permanently Disabled

TD = Temporarily Disabled

OFFICER RETIRED DEATH RATES

(Age Nearest Birthday)

Temporary Disability Non-Disability Year of Retirement Permanent Age Active Reserve Disability One Two Three Four Five 16 0.00036 0.00036 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 17 0.00036 0.00036 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 18 0.00036 0.00036 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 19 0.00036 0.00036 0.00533 0.00939 0.00890 0.00841 0.00792 0.0074220 0.00036 0.00036 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 21 0.00036 0.00036 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 22 0.00841 0.00792 0.00036 0.00036 0.00533 0.00939 0.00890 0.00742 23 0.00792 0.00036 0.00036 0.00533 0.00939 0.00890 0.00841 0.00742 24 0.00036 0.00036 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 25 0.00036 0.00036 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 26 0.00841 0.00792 0.00742 0.00036 0.00036 0.00533 0.00939 0.00890 27 0.00036 0.00036 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 28 0.00036 0.00036 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 29 0.00036 0.00036 0.00533 0.00841 0.00792 0.00742 0.00939 0.00890 30 0.00030 0.00031 0.00533 0.00939 0.00841 0.00792 0.00742 0.00890 31 0.00030 0.00031 0.00533 0.00939 0.00841 0.00792 0.007420.0089032 0.00792 0.007420.00030 0.00031 0.00533 0.00939 0.00890 0.00841 33 0.007420.00030 0.00031 0.00533 0.00939 0.008900.00841 0.00792 34 0.00030 0.00031 0.00533 0.00939 0.00890 0.00841 0.00792 0.0074235 0.00030 0.00031 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 36 0.00030 0.00031 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 37 0.00742 0.00030 0.00031 0.00533 0.00939 0.00890 0.00841 0.00792 38 0.00030 0.00031 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 39 0.00030 0.00031 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 0.00792 40 0.00841 0.00742 0.00039 0.00040 0.00533 0.00939 0.00890 41 0.00841 0.00742 0.000480.00049 0.00533 0.00939 0.00890 0.00792 42 0.00742 0.00057 0.000590.00533 0.00939 0.00841 0.00792 0.00890 43 0.00059 0.000600.00533 0.00841 0.00792 0.007420.00939 0.00890 44 0.00061 0.00063 0.00533 0.00939 0.00890 0.00841 0.00792 0.0074245 0.00065 0.00066 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 46 0.00069 0.00071 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 47 0.00075 0.00077 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 48 0.00082 0.00533 0.00841 0.00792 0.00742 0.00084 0.00939 0.00890 49 0.00090 0.00093 0.00533 0.00939 0.00890 0.00841 0.00792 0.00742 50 0.00100 0.00103 0.00574 0.00939 0.00890 0.00841 0.00792 0.00742 51 0.00792 0.00112 0.00115 0.00596 0.00939 0.00890 0.00841 0.00742 52 0.00620 0.00841 0.00792 0.00742 0.00124 0.00128 0.00939 0.00890 53 0.00139 0.00143 0.00647 0.00939 0.00890 0.00841 0.00792 0.00742 54 0.00157 0.00161 0.00677 0.00939 0.008900.00841 0.00792 0.00742 55 0.00178 0.00182 0.00710 0.00939 0.00890 0.00841 0.00792 0.00742 56 0.00202 0.00206 0.00747 0.00939 0.00890 0.00841 0.00792 0.00742 57 0.00231 0.00234 0.00791 0.00939 0.00890 0.00841 0.00792 0.00742 58 0.00265 0.00267 0.00843 0.00939 0.00890 0.00841 0.00792 0.00742 59 0.00905 0.00792 0.00304 0.00305 0.00939 0.008900.00841 0.00742 60 0.00348 0.00337 0.00981 0.00939 0.00890 0.00841 0.00792 0.00742

0.00939

0.00890

0.00841

0.01072

61

0.00400

0.00342

0.00792

0.00742

^{***} As noted in Item 2 in the Retiree section of Appendix F, additional adjustments are made for retirees who elect SBP spouse coverage.

OFFICER RETIRED DEATH RATES (continued)

					Ter	mporary Disabi	lity	
	Non-D	isability	Permanent		Y	ear of Retireme	nt	
Age	Active	Reserve	Disability	One	Two	Three	Four	Five
62	0.00458	0.00363	0.01180	0.00939	0.00890	0.00841	0.00792	0.00742
63	0.00525	0.00404	0.01307	0.00939	0.00890	0.00841	0.00792	0.00742
64	0.00599	0.00470	0.01455	0.00939	0.00890	0.00841	0.00792	0.00742
65	0.00682	0.00549	0.01626	0.00939	0.00890	0.00841	0.00792	0.00742
66	0.00774	0.00617	0.01820					
67	0.00877	0.00684	0.02036					
68	0.00993	0.00775	0.02272					
69	0.01124	0.00889	0.02526					
70	0.01272	0.01031	0.02799					
71	0.01434	0.01206	0.03089					
72	0.01626	0.01416	0.03397					
73	0.01846	0.01657	0.03723					
74	0.02098	0.01905	0.04069					
75	0.02386	0.02159	0.04440					
76	0.02715	0.02453	0.04839					
77	0.03091	0.02824	0.05272					
78	0.03520	0.03267	0.05746					
79	0.04010	0.03774	0.06273					
80	0.04571	0.04304	0.06866					
81	0.05209	0.04883	0.07538					
82	0.05938	0.05540	0.08299					
83	0.06767	0.06256	0.09158					
84	0.07707	0.07030	0.10114					
85	0.08769	0.07935	0.11163					
86	0.09963	0.09075	0.12303					
87	0.11300	0.10465	0.13536					
88	0.12787	0.12054	0.14869					
89	0.14436	0.13745	0.16318					
90	0.16177	0.15486	0.17906					
91	0.18157	0.17439	0.19663					
92	0.20314	0.19637	0.21622					
93	0.22651	0.22167	0.23813					
94	0.25172	0.25026	0.26260					
95	0.27881	0.28145	0.28982					
96	0.30779	0.31429	0.31992					
97	0.33868	0.34764	0.35296					
98	0.36984	0.38066	0.38897					
99	0.40266	0.41081	0.42795					
100	0.43712	0.43889	0.45779					
101	0.47324	0.46424	0.48763					
102	0.51101	0.48643	0.51747					
103	0.55042	0.50531	0.54731					
104	0.59149	0.52083	0.57715					
105	0.62858	0.55349	0.60699					
106	0.66461	0.58521	0.63683					
107	0.66667	0.61404	0.66667					
108	0.66667	0.64218	0.66667					
109	0.66667	0.66667	0.66667					
110	0.66667	0.66667	0.66667					

^{***} As noted in Item 2 in the Retiree section of Appendix F, additional adjustments are made for retirees who elect SBP spouse coverage.

ENLISTED RETIRED DEATH RATES

(Age Nearest Birthday)

Temporary Disability Non-Disability Year of Retirement Permanent Age Active Reserve Disability One Two Three Four Five 16 0.00044 0.00044 0.00290 0.00616 0.00565 0.00514 0.00463 0.00413 17 0.00044 0.00044 0.00290 0.00616 0.00565 0.00514 0.00463 0.00413 18 0.00044 0.00044 0.00290 0.00616 0.00565 0.00514 0.00463 0.00413 19 0.000440.00044 0.00290 0.00616 0.005650.005140.00463 0.0041320 0.00044 0.00044 0.00290 0.00616 0.005650.00514 0.00463 0.00413 21 0.00044 0.00044 0.00290 0.00616 0.00565 0.005140.00463 0.0041322 0.00044 0.00044 0.00290 0.00616 0.00565 0.00514 0.00463 0.00413 23 0.00044 0.00044 0.00290 0.00616 0.00565 0.00514 0.00463 0.00413 24 0.00044 0.00044 0.00290 0.00616 0.00565 0.005140.00463 0.0041325 0.00044 0.00044 0.00290 0.00616 0.00565 0.00514 0.00463 0.00413 26 0.00044 0.00044 0.00290 0.00463 0.00413 0.00616 0.00565 0.00514 27 0.00044 0.00044 0.00290 0.00616 0.00565 0.00514 0.00463 0.00413 28 0.00044 0.00044 0.00290 0.00616 0.00565 0.00514 0.00463 0.00413 29 0.00044 0.00044 0.00290 0.00616 0.00514 0.00463 0.00413 0.00565 30 0.00037 0.00039 0.00290 0.00616 0.00565 0.00514 0.00463 0.00413 31 0.00037 0.00039 0.00290 0.00616 0.005140.00463 0.004130.00565 32 0.00290 0.00413 0.00037 0.00039 0.00616 0.00565 0.00514 0.00463 33 0.00037 0.00039 0.00290 0.00616 0.00565 0.00514 0.00463 0.00413 34 0.00037 0.00039 0.00290 0.00616 0.00565 0.00514 0.00463 0.0041335 0.00037 0.00039 0.00290 0.00616 0.00565 0.00514 0.00463 0.00413 36 0.00037 0.00039 0.00290 0.00616 0.00565 0.00514 0.00463 0.00413 37 0.00290 0.00413 0.00037 0.00039 0.00616 0.00565 0.00514 0.00463 38 0.00037 0.00039 0.00290 0.00616 0.00565 0.00514 0.00463 0.00413 39 0.00037 0.00039 0.00351 0.00616 0.00565 0.00514 0.00463 0.00413 0.00514 40 0.00369 0.00463 0.00413 0.00049 0.00052 0.00616 0.00565 41 0.00393 0.00514 0.00463 0.00413 0.000600.00064 0.00616 0.0056542 0.00071 0.000750.00421 0.00565 0.005140.00463 0.00413 0.00616 43 0.000820.000880.00455 0.005650.005140.00463 0.00413 0.00616 44 0.00095 0.00100 0.00493 0.00616 0.00565 0.005140.00463 0.0041345 0.00109 0.00115 0.00534 0.00616 0.00565 0.00514 0.00463 0.00413 46 0.00122 0.00129 0.00580 0.00616 0.00565 0.00514 0.00463 0.00413 47 0.00138 0.00145 0.00629 0.00616 0.00565 0.00514 0.00463 0.00413 48 0.00680 0.00565 0.00463 0.00413 0.00156 0.00163 0.00616 0.00514 49 0.00176 0.00184 0.00734 0.00616 0.00565 0.00514 0.00463 0.00413 50 0.00199 0.00208 0.00790 0.00616 0.00565 0.00514 0.00463 0.00413 51 0.00227 0.00236 0.00848 0.00616 0.00565 0.00514 0.00463 0.00413 52 0.00910 0.00514 0.00463 0.00413 0.00260 0.00269 0.00616 0.00565 53 0.00299 0.00307 0.00975 0.00616 0.00565 0.00514 0.00463 0.00413 54 0.00344 0.00353 0.01047 0.00616 0.00565 0.00514 0.00463 0.00413 55 0.00397 0.00406 0.01127 0.00616 0.00565 0.00514 0.00463 0.00413 56 0.00458 0.00467 0.01217 0.00616 0.00565 0.00514 0.00463 0.0041357 0.00529 0.00536 0.01320 0.00616 0.00565 0.00514 0.00463 0.00413 58 0.006060.00614 0.01438 0.006160.00565 0.005140.00463 0.00413 59 0.00514 0.00463 0.00413 0.00695 0.00621 0.01571 0.00616 0.00565 60 0.00792 0.00628 0.01719 0.00616 0.00565 0.00514 0.00463 0.00413 61 0.00900 0.00660 0.01884 0.00616 0.00565 0.00514 0.00463 0.00413

^{***} As noted in Item 2 in the Retiree section of Appendix F, additional adjustments are made for retirees who elect SBP spouse coverage.

ENLISTED RETIRED DEATH RATES (continued)

Name						Ter	mporary Disabi	lity	
62 0.01018 0.00710 0.02065 0.00616 0.00565 0.00514 0.00463 0.00413 63 0.01140 0.00784 0.02262 0.00616 0.00565 0.00514 0.00463 0.00413 65 0.01277 0.00879 0.02476 0.00616 0.00565 0.00514 0.00463 0.00413 65 0.01426 0.00994 0.02706 0.00616 0.00565 0.00514 0.00463 0.00413 66 0.01586 0.01124 0.02953 67 0.01752 0.01277 0.03219 68 0.01943 0.01448 0.03506 69 0.02153 0.01636 0.03815 70 0.02387 0.01834 0.04149 71 0.02635 0.02062 0.04511 72 0.02924 0.02316 0.04902 73 0.03249 0.02605 0.05327 74 0.03615 0.02921 0.05379 75 0.04008 0.03293 0.06292 76 0.04466 0.05338 0.08819 77 0.04980 0.04201 0.07442 78 0.00555 0.04725 0.08100 79 0.06166 0.05338 0.08819 80 0.06876 0.06066 0.05338 0.08819 81 0.07663 0.06796 0.10466 82 0.08534 0.07616 0.11403 83 0.09452 0.08556 0.12422 84 0.10504 0.09590 0.13526 85 0.11657 0.10721 0.14718 86 0.12916 0.11901 0.16000 87 0.14224 0.13238 0.17374 88 0.15704 0.14690 0.18843 89 0.17305 0.16261 0.25683 99 0.17905 0.20615 0.20607 90 0.19029 0.17878 0.22067 91 0.20785 0.19701 0.23826 92 0.22754 0.21661 0.25683 93 0.24853 0.23656 0.27628 94 0.26962 0.25780 0.29693 95 0.29184 0.28035 0.31846 96 0.31519 0.30423 0.34098 97 0.339067 0.32916 0.36004 98 0.36528 0.35604 0.36064 99 0.39020 0.38398 0.41614 100 0.41890 0.44392 0.46625 102 0.47903 0.47911 0.51635 103 0.50555 0.50117 0.51635 104 0.4890 0.44392 0.46625 105 0.57671 0.56722 0.56646 106 0.66977 0.59973 0.59151 107 0.66667 0.65812 0.61615 108 0.66667 0.65812 0.61615		Non-Di	isability	Permanent		Y	ear of Retireme	nt	
63	Age	Active	Reserve	Disability	One	Two	Three	Four	Five
63	62	0.01018	0.00710	0.02065	0.00616	0.00565	0.00514	0.00463	0.00413
64 0.01277 0.00879 0.02476 0.00616 0.00565 0.00514 0.00463 0.00413 65 0.01426 0.00994 0.02206 0.00616 0.00565 0.00514 0.00463 0.00413 66 0.01586 0.01124 0.022953 67 0.01752 0.01277 0.03219 68 0.01943 0.01438 0.03506 69 0.02153 0.01636 0.03815 70 0.02387 0.01834 0.04149 71 0.02635 0.02002 0.04511 72 0.02924 0.02316 0.03902 73 0.03249 0.02605 0.05327 74 0.03615 0.02921 0.05789 75 0.04008 0.03293 0.06292 76 0.04466 0.03718 0.06842 77 0.04980 0.04201 0.07442 78 0.05555 0.04725 0.08100 79 0.06166 0.05338 0.08819 80 0.06876 0.06026 0.09606 81 0.07663 0.06796 0.11403 83 0.09452 0.08556 0.12422 84 0.10504 0.09900 0.13526 85 0.11657 0.10721 0.14718 86 0.12916 0.11901 0.16000 87 0.14224 0.13238 0.17374 88 0.15704 0.14690 0.18843 89 0.17305 0.16261 0.22067 90 0.19029 0.17878 0.22067 91 0.20785 0.19701 0.23826 92 0.22754 0.21661 0.25883 93 0.24853 0.23656 0.27638 94 0.26962 0.25780 0.29093 95 0.29184 0.28035 0.31846 96 0.31519 0.30423 0.34098 97 0.33967 0.32946 0.36604 98 0.36528 0.35604 0.39109 99 0.39202 0.38398 0.41614 101 0.44890 0.44892 0.46625 102 0.47903 0.47114 0.49130 103 0.50955 0.50117 0.15635 104 0.54268 0.53375 0.54140 105 0.57671 0.56722 0.56646 106 0.66977 0.56973 0.59151 107 0.6381 0.66967 0.66667 0.66667									
65									
66 0.01586 0.01124 0.02953 67 0.01752 0.01277 0.03219 68 0.01943 0.01448 0.03506 69 0.02153 0.01636 0.03815 70 0.02387 0.01834 0.04149 71 0.02635 0.02062 0.04511 72 0.03249 0.02605 0.05327 73 0.03249 0.02605 0.05327 74 0.03615 0.02921 0.05789 75 0.04008 0.03293 0.06292 76 0.04466 0.03718 0.06842 77 0.04980 0.04201 0.07442 78 0.05555 0.04725 0.08100 79 0.06166 0.05338 0.08819 80 0.06876 0.06026 0.09606 81 0.07663 0.06796 0.10466 82 0.08534 0.07616 0.11403 83 0.09452 0.08556 0.12422 84 0.11657 0.10721 0.14718 86 0.12916 0.11901 0.16000 87 0.1422 0.14718 88 0.15704 0.14690 0.18843 89 0.17305 0.16261 0.20407 90 0.19029 0.17878 0.22067 91 0.20785 0.16261 0.20407 90 0.19029 0.17878 0.22067 91 0.20785 0.16261 0.20407 90 0.19029 0.17878 0.22067 91 0.20785 0.19421 0.28826 92 0.22754 0.21661 0.20407 90 0.19029 0.17878 0.22067 91 0.20785 0.19421 0.28826 93 0.24853 0.23656 0.27638 94 0.26962 0.25780 0.29693 95 0.29184 0.28035 0.31846 96 0.31519 0.30423 0.34098 97 0.33967 0.32946 0.36604 98 0.36528 0.35604 0.39109 99 0.39020 0.38398 0.41614 100 0.41989 0.41327 0.44119 101 0.44890 0.44392 0.46625 102 0.47903 0.47114 0.49130 103 0.59055 0.50117 0.51635 104 0.54268 0.53375 0.54140 105 0.57671 0.56722 0.56646 106 0.66067 0.56967 0.66667									
67 0.01752 0.01277 0.03219 68 0.01943 0.01448 0.03506 69 0.02153 0.01636 0.03815 70 0.02387 0.01834 0.04149 71 0.02635 0.02062 0.04511 72 0.02924 0.02316 0.04902 73 0.03249 0.02605 0.05327 74 0.03615 0.02921 0.05789 75 0.04008 0.03293 0.06292 76 0.04466 0.03718 0.06842 77 0.04980 0.04201 0.07442 78 0.05555 0.04725 0.08100 79 0.06166 0.05338 0.08819 80 0.06876 0.06026 0.09606 81 0.07666 0.05338 0.08819 80 0.06876 0.06026 0.09606 82 0.08534 0.07616 0.11403 83 0.09452 0.08556 0.12422 84 0.10504 0.09590 0.13526 85 0.11657 0.10721 0.14718 86 0.12916 0.19901 0.16000 87 0.14224 0.13238 0.17374 88 0.15704 0.14690 0.18843 89 0.17305 0.16261 0.20407 90 0.19029 0.17878 0.22667 91 0.20785 0.19701 0.23826 92 0.22754 0.21661 0.25683 93 0.24853 0.23656 0.25683 94 0.26965 0.25780 0.29693 95 0.29184 0.28035 0.31846 96 0.31519 0.30423 0.34199 97 0.33967 0.30246 0.36604 98 0.36528 0.35604 0.39109 99 0.3902 0.38398 0.41614 100 0.41989 0.41327 0.44119 101 0.44890 0.44392 0.46625 102 0.47903 0.47114 0.49130 103 0.50955 0.50117 0.51635 104 0.54268 0.53375 0.59151 107 0.63981 0.62028 0.61656 108 0.66667 0.656812 0.61656					0.00010	0.00505	0.00514	0.00403	0.00413
68 0.01943 0.01448 0.03506 69 0.02153 0.01636 0.03815 70 0.02387 0.01834 0.04149 71 0.02635 0.02062 0.04511 72 0.02924 0.02316 0.04902 73 0.03249 0.02605 0.05327 74 0.03615 0.02921 0.05789 75 0.04008 0.03293 0.06292 76 0.04466 0.03718 0.06842 77 0.04980 0.04201 0.07442 78 0.05555 0.04725 0.08100 79 0.06166 0.05338 0.08819 80 0.06876 0.06026 0.09606 81 0.07663 0.06796 0.10466 82 0.08534 0.07616 0.11403 83 0.09452 0.08556 0.12422 84 0.10504 0.09590 0.13526 85 0.11657 0.10721 0.14718 86 0.12916 0.11901 0.16000 87 0.1422 0.11878 0.17374 88 0.15704 0.14690 0.18843 89 0.17305 0.16261 0.20407 90 0.19029 0.17878 0.22667 91 0.20785 0.19701 0.23826 92 0.2754 0.21661 0.25683 93 0.24853 0.23656 0.27638 94 0.26962 0.25780 0.29693 95 0.29184 0.28035 0.31846 96 0.31519 0.30423 0.34098 97 0.33967 0.32946 0.36604 98 0.36528 0.35604 0.39109 99 0.3902 0.38398 0.41614 100 0.41989 0.41327 0.44119 101 0.44890 0.44392 0.46625 102 0.47903 0.47114 0.49130 103 0.59055 0.50117 0.51635 104 0.54268 0.53375 0.54140 105 0.57671 0.56722 0.56646 106 0.66067 0.59913 0.59151 107 0.63981 0.62928 0.61656									
69 0.02153 0.01636 0.03815 70 0.02387 0.01834 0.04149 71 0.02635 0.02062 0.04511 72 0.02924 0.02316 0.04902 73 0.03249 0.02605 0.05327 74 0.03615 0.02921 0.05789 75 0.04008 0.03293 0.06292 76 0.04466 0.03718 0.06842 77 0.04980 0.04201 0.07442 78 0.05555 0.04725 0.08100 79 0.06166 0.05338 0.08819 80 0.06876 0.06026 0.09606 81 0.07663 0.06026 0.09606 82 0.08534 0.07616 0.11403 83 0.09452 0.08556 0.12422 84 0.10504 0.09590 0.13526 85 0.11057 0.10721 0.14718 86 0.12916 0.11901 0.16000 87 0.14224 0.13238 0.17374 88 0.15704 0.14690 0.18843 89 0.17305 0.16261 0.20407 90 0.19029 0.17878 0.22067 91 0.20785 0.19029 0.13826 92 0.22754 0.21661 0.22407 90 0.19029 0.17878 0.22067 91 0.20785 0.19040 0.19891 93 0.24853 0.23656 0.22663 93 0.24853 0.23656 0.22663 93 0.24853 0.23656 0.25780 0.25693 95 0.29184 0.28035 0.31846 100 0.41989 0.41327 0.44119 101 0.44890 0.4393 0.44119 101 0.44890 0.4392 0.46625 102 0.47903 0.47114 0.49130 103 0.50955 0.50117 0.51635 104 0.54268 0.53375 0.56464 105 0.66667 0.66667 0.566667									
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109 0.66667 0.66667 0.66667	107	0.63981	0.62928	0.61656					
	108	0.66667	0.65812	0.64161					
110 0.66667 0.66667 0.66667	109		0.66667						
	110	0.66667	0.66667	0.66667					

^{***} As noted in Item 2 in the Retiree section of Appendix F, additional adjustments are made for retirees who elect SBP spouse coverage.

ACTIVE DUTY OTHER LOSSES FROM NONDISABILITY

	D	oD	Treasury			D	DoD		Treasury	
Age	Officer	Enlisted	Officer	Enlisted	Age	Officer	Enlisted	Officer	Enlisted	
16	0.0000	0.0000	0.0000	0.0000	56	0.0005	0.0047	0.0000	0.0000	
17	0.0000	0.0000	0.0000	0.0000	57	0.0010	0.0051	0.0000	0.0000	
18	0.0000	0.0000	0.0000	0.0000	58	0.0013	0.0059	0.0000	0.0000	
19	0.0000	0.0000	0.0000	0.0000	59	0.0012	0.0069	0.0000	0.0000	
20	0.0000	0.0000	0.0000	0.0000	60	0.0010	0.0077	0.0000	0.0000	
21	0.0000	0.0000	0.0000	0.0000	61	0.0007	0.0077	0.0000	0.0000	
22	0.0000	0.0000	0.0000	0.0000	62	0.0007	0.0081	0.0000	0.0000	
23	0.0000	0.0000	0.0000	0.0000	63	0.0011	0.0087	0.0000	0.0000	
24	0.0000	0.0000	0.0000	0.0000	64	0.0016	0.0088	0.0000	0.0000	
25	0.0000	0.0000	0.0000	0.0000	65	0.0019	0.0088	0.0000	0.0000	
26	0.0000	0.0000	0.0000	0.0000	66	0.0019	0.0084	0.0000	0.0000	
27	0.0000	0.0000	0.0000	0.0000	67	0.0018	0.0082	0.0000	0.0000	
28	0.0000	0.0000	0.0000	0.0000	68	0.0017	0.0084	0.0000	0.0000	
29	0.0000	0.0000	0.0000	0.0000	69	0.0018	0.0080	0.0000	0.0000	
30	0.0163	0.0700	0.0000	0.0000	70	0.0018	0.0072	0.0000	0.0000	
31	0.0163	0.0700	0.0000	0.0000	71	0.0017	0.0068	0.0000	0.0000	
32	0.0163	0.0700	0.0000	0.0000	72	0.0014	0.0069	0.0000	0.0000	
33	0.0163	0.0700	0.0000	0.0000	73	0.0010	0.0071	0.0000	0.0000	
34	0.0163	0.0700	0.0000	0.0000	74	0.0009	0.0073	0.0000	0.0000	
35	0.0163	0.0700	0.0000	0.0000	75	0.0008	0.0073	0.0000	0.0000	
36	0.0163	0.0700	0.0000	0.0000	76	0.0008	0.0067	0.0000	0.0000	
37	0.0163	0.0700	0.0000	0.0000	77	0.0000	0.0058	0.0000	0.0000	
38	0.0163	0.0700	0.0000	0.0000	78	0.0000	0.0051	0.0000	0.0000	
39	0.0163	0.0404	0.0000	0.0000	79	0.0000	0.0049	0.0000	0.0000	
40	0.0096	0.0234	0.0000	0.0000	80	0.0000	0.0048	0.0000	0.0000	
41	0.0055	0.0154	0.0000	0.0000	81	0.0000	0.0045	0.0000	0.0000	
42	0.0034	0.0111	0.0000	0.0000	82	0.0000	0.0041	0.0000	0.0000	
43	0.0022	0.0084	0.0000	0.0000	83	0.0000	0.0034	0.0000	0.0000	
44	0.0015	0.0063	0.0000	0.0000	84	0.0000	0.0028	0.0000	0.0000	
45	0.0011	0.0054	0.0000	0.0000	85	0.0000	0.0024	0.0000	0.0000	
46	0.0007	0.0049	0.0000	0.0000	86	0.0000	0.0022	0.0000	0.0000	
47	0.0005	0.0044	0.0000	0.0000	87	0.0000	0.0022	0.0000	0.0000	
48	0.0004	0.0041	0.0000	0.0000	88	0.0000	0.0025	0.0000	0.0000	
49	0.0007	0.0039	0.0000	0.0000	89	0.0000	0.0029	0.0000	0.0000	
50	0.0012	0.0037	0.0000	0.0000	90	0.0000	0.0033	0.0000	0.0000	
51	0.0011	0.0038	0.0000	0.0000	91	0.0000	0.0034	0.0000	0.0000	
52	0.0006	0.0041	0.0000	0.0000	92	0.0000	0.0028	0.0000	0.0000	
53	0.0002	0.0040	0.0000	0.0000	93	0.0000	0.0017	0.0000	0.0000	
54	0.0001	0.0039	0.0000	0.0000	94	0.0000	0.0010	0.0000	0.0000	
55	0.0002	0.0043	0.0000	0.0000	95	0.0000	0.0006	0.0000	0.0000	

^{***} The above DoD/Treasury distinction is needed for P.L. 108-136 calculations.

[&]quot;Treasury" rates of '0.0000' are shown for effect.

^{***} As noted in Item 2 in the Retiree section of Appendix F, additional adjustments are made for retirees who elect SBP spouse coverage.

RESERVE DUTY OTHER LOSSES FROM NONDISABILITY

	D	oD	Treasury			DoD		Treasury	
Age	Officer	Enlisted	Officer	Enlisted	Age	Officer	Enlisted	Officer	Enlisted
16	0.0000	0.0000	0.0000	0.0000	56	0.0005	0.0047	0.0000	0.0000
17	0.0000	0.0000	0.0000	0.0000	57	0.0010	0.0051	0.0000	0.0000
18	0.0000	0.0000	0.0000	0.0000	58	0.0013	0.0059	0.0000	0.0000
19	0.0000	0.0000	0.0000	0.0000	59	0.0012	0.0069	0.0000	0.0000
20	0.0000	0.0000	0.0000	0.0000	60	0.0060	0.0277	0.0000	0.0000
21	0.0000	0.0000	0.0000	0.0000	61	0.0042	0.0241	0.0000	0.0000
22	0.0000	0.0000	0.0000	0.0000	62	0.0012	0.0108	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000	63	0.0012	0.0064	0.0000	0.0000
24	0.0000	0.0000	0.0000	0.0000	64	0.0021	0.0054	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000	65	0.0024	0.0048	0.0000	0.0000
26	0.0000	0.0000	0.0000	0.0000	66	0.0020	0.0036	0.0000	0.0000
27	0.0000	0.0000	0.0000	0.0000	67	0.0022	0.0032	0.0000	0.0000
28	0.0000	0.0000	0.0000	0.0000	68	0.0019	0.0029	0.0000	0.0000
29	0.0000	0.0000	0.0000	0.0000	69	0.0016	0.0029	0.0000	0.0000
30	0.0163	0.0700	0.0000	0.0000	70	0.0013	0.0019	0.0000	0.0000
31	0.0163	0.0700	0.0000	0.0000	71	0.0009	0.0017	0.0000	0.0000
32	0.0163	0.0700	0.0000	0.0000	72	0.0009	0.0024	0.0000	0.0000
33	0.0163	0.0700	0.0000	0.0000	73	0.0011	0.0026	0.0000	0.0000
34	0.0163	0.0700	0.0000	0.0000	74	0.0008	0.0021	0.0000	0.0000
35	0.0163	0.0700	0.0000	0.0000	75	0.0008	0.0016	0.0000	0.0000
36	0.0163	0.0700	0.0000	0.0000	76	0.0011	0.0019	0.0000	0.0000
37	0.0163	0.0700	0.0000	0.0000	77	0.0010	0.0021	0.0000	0.0000
38	0.0163	0.0700	0.0000	0.0000	78	0.0009	0.0023	0.0000	0.0000
39	0.0163	0.0404	0.0000	0.0000	79	0.0013	0.0024	0.0000	0.0000
40	0.0096	0.0234	0.0000	0.0000	80	0.0013	0.0023	0.0000	0.0000
41	0.0055	0.0154	0.0000	0.0000	81	0.0009	0.0024	0.0000	0.0000
42	0.0034	0.0111	0.0000	0.0000	82	0.0007	0.0033	0.0000	0.0000
43	0.0022	0.0084	0.0000	0.0000	83	0.0014	0.0033	0.0000	0.0000
44	0.0015	0.0063	0.0000	0.0000	84	0.0020	0.0030	0.0000	0.0000
45	0.0011	0.0054	0.0000	0.0000	85	0.0026	0.0028	0.0000	0.0000
46	0.0007	0.0049	0.0000	0.0000	86	0.0023	0.0029	0.0000	0.0000
47	0.0005	0.0044	0.0000	0.0000	87	0.0016	0.0033	0.0000	0.0000
48	0.0004	0.0041	0.0000	0.0000	88	0.0018	0.0037	0.0000	0.0000
49	0.0007	0.0039	0.0000	0.0000	89	0.0020	0.0039	0.0000	0.0000
50	0.0012	0.0037	0.0000	0.0000	90	0.0015	0.0042	0.0000	0.0000
51	0.0011	0.0038	0.0000	0.0000	91	0.0010	0.0041	0.0000	0.0000
52	0.0006	0.0041	0.0000	0.0000	92	0.0008	0.0041	0.0000	0.0000
53	0.0002	0.0040	0.0000	0.0000	93	0.0006	0.0041	0.0000	0.0000
54	0.0001	0.0039	0.0000	0.0000	94	0.0005	0.0040	0.0000	0.0000
55	0.0002	0.0043	0.0000	0.0000	95	0.0004	0.0040	0.0000	0.0000

^{***} The above DoD/Treasury distinction is needed for P.L. 108-136 calculations.

[&]quot;Treasury" rates of '0.0000' are shown for effect.

^{***} As noted in Item 2 in the Retiree section of Appendix F, additional adjustments are made for retirees who elect SBP spouse coverage.

OTHER LOSS AND NONTRANSFER LOSSES FROM TEMPORARY DISABILITY ***

			Officers			Enlisted				
		Ve	ear of Retirem	ent		Year of Retirement				
Age	One	Two	Three	Four	Five	One	Two	Three	Four	Five
16	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
17	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
18	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
19	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
20	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
21	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
22	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
23	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
24	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
25	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
26	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
27	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
28	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
29	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
30	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
31	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
32	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
33	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
34	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
35	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
36	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
37	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
38	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
39	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
40	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
41	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
42 43	0.0264 0.0264	0.0881 0.0881	0.1498 0.1498	0.2115 0.2115	0.2732 0.2732	0.1740 0.1740	0.2433 0.2433	0.3127 0.3127	0.3821 0.3821	0.4515 0.4515
43 44	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127		0.4515
45	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821 0.3821	0.4515
46	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
47	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
48	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
49	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
50	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
51	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
52	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
53	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
54	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
55	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
56	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
57	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
58	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
59	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
60	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
61	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
62	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
63	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
64	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515
65	0.0264	0.0881	0.1498	0.2115	0.2732	0.1740	0.2433	0.3127	0.3821	0.4515

 $^{***} The above Other/Nontransfer Loss \ rates \ are \ used \ to \ calculate \ both \ the \ DoD \ and \ Treasury \ NCPs \ per \ P.L. \ 108-136.$

TRANSFER RATES FROM TEMPORARY DISABILITY TO PERMANENT DISABILITY

		Offi	cers		Enlisted				
		Vear of R	etirement			Vear of R	etirement		
Age	One	Two	Three	Four	One	Two	Three	Four	
16	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
17	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
18	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
19	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
20	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
21	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
22	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
23	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
24	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
25	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
26	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
27	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
28	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
29	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
30	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
31	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
32	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
33	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
34	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
35	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
36	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
37	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
38	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
39	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
40	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
41	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
42	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
43	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
44	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
45	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
46	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
47	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
48	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
49	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
50	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
51	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
52	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
53	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
54	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
55	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
56	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
57	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
58	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
59	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
60	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
61	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
62	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
63	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
64	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	
65	0.1281	0.1740	0.2199	0.2658	0.0626	0.0947	0.1268	0.1589	

OTHER LOSSES FROM PERMANENT DISABILITY

	D	oD	Treasury			D	oD	Tre	asury
Age	Officer	Enlisted	Officer	Enlisted	Age	Officer	Enlisted	Officer	Enlisted
16	0.0703	0.4892	0.0294	0.4046	54	0.0110	0.0309	0.0070	0.0182
17	0.0703	0.4892	0.0294	0.4046	55	0.0106	0.0339	0.0066	0.0203
18	0.0703	0.4892	0.0294	0.4046	56	0.0101	0.0363	0.0062	0.0218
19	0.0703	0.4892	0.0294	0.4046	57	0.0098	0.0381	0.0058	0.0229
20	0.0703	0.4892	0.0294	0.4046	58	0.0095	0.0391	0.0055	0.0236
21	0.0703	0.4222	0.0294	0.4046	59	0.0092	0.0394	0.0052	0.0233
22	0.0703	0.3595	0.0294	0.4046	60	0.0090	0.0384	0.0050	0.0212
23	0.0703	0.3012	0.0294	0.3165	61	0.0089	0.0373	0.0048	0.0193
24	0.0703	0.2484	0.0294	0.2461	62	0.0087	0.0379	0.0046	0.0184
25	0.0703	0.2024	0.0294	0.1924	63	0.0086	0.0391	0.0044	0.0174
26	0.0703	0.1646	0.0294	0.1536	64	0.0085	0.0396	0.0043	0.0151
27	0.0703	0.1349	0.0294	0.1263	65	0.0085	0.0390	0.0041	0.0123
28	0.0703	0.1127	0.0294	0.1071	66	0.0084	0.0379	0.0041	0.0098
29	0.0703	0.0967	0.0294	0.0936	67	0.0083	0.0367	0.0040	0.0084
30	0.0703	0.0856	0.0294	0.0843	68	0.0082	0.0360	0.0039	0.0082
31	0.0703	0.0770	0.0294	0.0771	69	0.0080	0.0353	0.0039	0.0081
32	0.0317	0.0690	0.0294	0.0699	70	0.0079	0.0344	0.0039	0.0078
33	0.0301	0.0607	0.0294	0.0623	71	0.0077	0.0336	0.0039	0.0072
34	0.0286	0.0531	0.0294	0.0554	72	0.0075	0.0330	0.0040	0.0065
35	0.0272	0.0467	0.0294	0.0495	73	0.0072	0.0329	0.0040	0.0060
36	0.0258	0.0419	0.0294	0.0445	74	0.0070	0.0328	0.0035	0.0057
37	0.0246	0.0386	0.0294	0.0402	75	0.0067	0.0322	0.0030	0.0056
38	0.0234	0.0362	0.0294	0.0355	76	0.0065	0.0309	0.0025	0.0053
39	0.0223	0.0351	0.0294	0.0313	77	0.0062	0.0288	0.0020	0.0045
40	0.0212	0.0355	0.0166	0.0285	78	0.0060	0.0268	0.0015	0.0036
41	0.0203	0.0367	0.0156	0.0269	79	0.0058	0.0258	0.0022	0.0034
42	0.0193	0.0373	0.0148	0.0261	80	0.0056	0.0257	0.0029	0.0037
43	0.0185	0.0363	0.0139	0.0256	81	0.0054	0.0255	0.0035	0.0041
44	0.0176	0.0345	0.0131	0.0252	82	0.0053	0.0255	0.0038	0.0042
45	0.0169	0.0330	0.0123	0.0248	83	0.0053	0.0260	0.0038	0.0036
46	0.0161	0.0323	0.0116	0.0240	84	0.0052	0.0270	0.0035	0.0042
47	0.0154	0.0328	0.0109	0.0237	85	0.0052	0.0282	0.0033	0.0042
48	0.0147	0.0329	0.0102	0.0229	86	0.0053	0.0292	0.0034	0.0042
49	0.0140	0.0319	0.0096	0.0214	87	0.0053	0.0297	0.0039	0.0042
50	0.0133	0.0304	0.0090	0.0201	88	0.0054	0.0295	0.0044	0.0042
51	0.0127	0.0290	0.0084	0.0190	89	0.0056	0.0289	0.0053	0.0042
52	0.0121	0.0281	0.0079	0.0176	90	0.0057	0.0291	0.0068	0.0042
53	0.0116	0.0287	0.0074	0.0171					

^{***} The above DoD/Treasury distinction is needed for P.L. 108-136 calculations.

^{***} As noted in Item 2 in the Retiree section of Appendix F, additional adjustments are made for retirees who elect SBP spouse coverage.

RETIREE DIVORCE RATES ***

	Act	tive	Res	serve		Ac	tive	Res	serve
Age	Officer	Enlisted	Officer	Enlisted	Age	Officer	Enlisted	Officer	Enlisted
16	0.0900	0.0900	0.0900	0.0900	50	0.0080	0.0080	0.0080	0.0080
17	0.0900	0.0900	0.0900	0.0900	51	0.0070	0.0070	0.0070	0.0070
18	0.0900	0.0900	0.0900	0.0900	52	0.0060	0.0060	0.0060	0.0060
19	0.0900	0.0900	0.0900	0.0900	53	0.0050	0.0050	0.0050	0.0050
20	0.0830	0.0830	0.0830	0.0830	54	0.0050	0.0050	0.0050	0.0050
21	0.0750	0.0750	0.0750	0.0750	55	0.0040	0.0040	0.0040	0.0040
22	0.0680	0.0680	0.0680	0.0680	56	0.0040	0.0040	0.0040	0.0040
23	0.0610	0.0610	0.0610	0.0610	57	0.0030	0.0030	0.0030	0.0030
24	0.0530	0.0530	0.0530	0.0530	58	0.0010	0.0010	0.0010	0.0010
25	0.0460	0.0460	0.0460	0.0460	59	0.0020	0.0020	0.0020	0.0020
26	0.0420	0.0420	0.0420	0.0420	60	0.0040	0.0040	0.0040	0.0040
27	0.0380	0.0380	0.0380	0.0380	61	0.0020	0.0020	0.0020	0.0020
28	0.0360	0.0360	0.0360	0.0360	62	0.0030	0.0030	0.0030	0.0030
29	0.0360	0.0360	0.0360	0.0360	63	0.0010	0.0010	0.0010	0.0010
30	0.0330	0.0330	0.0330	0.0330	64	0.0010	0.0010	0.0010	0.0010
31	0.0310	0.0310	0.0310	0.0310	65	0.0000	0.0000	0.0000	0.0000
32	0.0280	0.0280	0.0280	0.0280	66	0.0000	0.0000	0.0000	0.0000
33	0.0240	0.0240	0.0240	0.0240	67	0.0000	0.0000	0.0000	0.0000
34	0.0200	0.0200	0.0200	0.0200	68	0.0000	0.0000	0.0000	0.0000
35	0.0210	0.0210	0.0210	0.0210	69	0.0000	0.0000	0.0000	0.0000
36	0.0240	0.0240	0.0240	0.0240	70	0.0000	0.0000	0.0000	0.0000
37	0.0310	0.0310	0.0310	0.0310	71	0.0000	0.0000	0.0000	0.0000
38	0.0390	0.0390	0.0390	0.0390	72	0.0000	0.0000	0.0000	0.0000
39	0.0420	0.0420	0.0420	0.0420	73	0.0000	0.0000	0.0000	0.0000
40	0.0370	0.0370	0.0370	0.0370	74	0.0000	0.0000	0.0000	0.0000
41	0.0300	0.0300	0.0300	0.0300	75	0.0000	0.0000	0.0000	0.0000
42	0.0250	0.0250	0.0250	0.0250	76	0.0000	0.0000	0.0000	0.0000
43	0.0190	0.0190	0.0190	0.0190	77	0.0000	0.0000	0.0000	0.0000
44	0.0170	0.0170	0.0170	0.0170	78	0.0000	0.0000	0.0000	0.0000
45	0.0140	0.0140	0.0140	0.0140	79	0.0000	0.0000	0.0000	0.0000
46	0.0130	0.0130	0.0130	0.0130	80	0.0000	0.0000	0.0000	0.0000
47	0.0110	0.0110	0.0110	0.0110	81	0.0000	0.0000	0.0000	0.0000
48	0.0100	0.0100	0.0100	0.0100	82	0.0000	0.0000	0.0000	0.0000
49	0.0080	0.0080	0.0080	0.0080					

^{***} Due to Section 647 of NDAA 2008 (P.L. 110-181) the reserve rates shown above apply in the early years of the projection. See Item 4 in the Reserve Duty section in Appendix F for a description of the parameter used to model the phase-in to an average age 58 reserve retirement. As the transitions to earlier average retirement ages occur, the ages applicable to some of the rates change.

^{***} The "Retiree Divorce" rates are the same for officer/enlisted status, and by active/reserve. The rates are displayed for effect.

SURVIVING SPOUSE REMARRIAGE RATES

16 0.0294 38 0.0278 17 0.0294 39 0.0278 18 0.0294 40 0.0110 19 0.0294 41 0.0110 20 0.0294 42 0.0110 21 0.0294 43 0.0110 22 0.0294 44 0.0110 23 0.0294 45 0.0061 24 0.0294 46 0.0061 25 0.0294 47 0.0061 26 0.0294 48 0.0061 27 0.0294 49 0.0061 28 0.0294 50 0.0035 29 0.0294 51 0.0035 30 0.0337 52 0.0035
18 0.0294 40 0.0110 19 0.0294 41 0.0110 20 0.0294 42 0.0110 21 0.0294 43 0.0110 22 0.0294 44 0.0110 23 0.0294 45 0.0061 24 0.0294 46 0.0061 25 0.0294 47 0.0061 26 0.0294 48 0.0061 27 0.0294 49 0.0061 28 0.0294 50 0.0035 29 0.0294 51 0.0035
19 0.0294 41 0.0110 20 0.0294 42 0.0110 21 0.0294 43 0.0110 22 0.0294 44 0.0110 23 0.0294 45 0.0061 24 0.0294 46 0.0061 25 0.0294 47 0.0061 26 0.0294 48 0.0061 27 0.0294 49 0.0061 28 0.0294 50 0.0035 29 0.0294 51 0.0035
20 0.0294 42 0.0110 21 0.0294 43 0.0110 22 0.0294 44 0.0110 23 0.0294 45 0.0061 24 0.0294 46 0.0061 25 0.0294 47 0.0061 26 0.0294 48 0.0061 27 0.0294 49 0.0061 28 0.0294 50 0.0035 29 0.0294 51 0.0035
21 0.0294 43 0.0110 22 0.0294 44 0.0110 23 0.0294 45 0.0061 24 0.0294 46 0.0061 25 0.0294 47 0.0061 26 0.0294 48 0.0061 27 0.0294 49 0.0061 28 0.0294 50 0.0035 29 0.0294 51 0.0035
22 0.0294 44 0.0110 23 0.0294 45 0.0061 24 0.0294 46 0.0061 25 0.0294 47 0.0061 26 0.0294 48 0.0061 27 0.0294 49 0.0061 28 0.0294 50 0.0035 29 0.0294 51 0.0035
23 0.0294 45 0.0061 24 0.0294 46 0.0061 25 0.0294 47 0.0061 26 0.0294 48 0.0061 27 0.0294 49 0.0061 28 0.0294 50 0.0035 29 0.0294 51 0.0035
24 0.0294 46 0.0061 25 0.0294 47 0.0061 26 0.0294 48 0.0061 27 0.0294 49 0.0061 28 0.0294 50 0.0035 29 0.0294 51 0.0035
25 0.0294 47 0.0061 26 0.0294 48 0.0061 27 0.0294 49 0.0061 28 0.0294 50 0.0035 29 0.0294 51 0.0035
26 0.0294 48 0.0061 27 0.0294 49 0.0061 28 0.0294 50 0.0035 29 0.0294 51 0.0035
27 0.0294 49 0.0061 28 0.0294 50 0.0035 29 0.0294 51 0.0035
28 0.0294 50 0.0035 29 0.0294 51 0.0035
29 0.0294 51 0.0035
30 0.0337 52 0.0035
31 0.0337 53 0.0035
32 0.0337 54 0.0035
33 0.0337 55 0.0035
34 0.0337 56 0.0000
35 0.0278 57 0.0000
36 0.0278 58 0.0000
37 0.0278 59 0.0000

SURVIVING CHILD TERMINATION RATES

Age	Rate
0	0.005
1	0.000
2	0.000
3	0.000
4	0.000
5	0.000
6	0.000
7	0.000
8	0.000
9	0.000
10	0.000
11	0.000
12	0.000
13	0.000
14	0.000
15	0.000
16	0.000
17	0.198
18	0.333
19	0.127
20	0.036
21	0.365
22	0.578
23	0.146

SURVIVING SPOUSE DEATH RATES ***

Age	Rate	Age	Rate
0	0.00544	55	0.00236
1	0.00049	56	0.00350
2	0.00032	57	0.00457
3	0.00024	58	0.00558
4	0.00018	59	0.00652
5	0.00016	60	0.00740
6	0.00015	61	0.00825
7	0.00014	62	0.00913
8	0.00013	63	0.01001
9	0.00012	64	0.01097
10	0.00012	65	0.01197
11	0.00013	66	0.01310
12	0.00014	67	0.01429
13	0.00015	68	0.01569
14	0.00018	69	0.01721
15	0.00021	70	0.01881
16	0.00024	71	0.02054
17	0.00026	72	0.02225
18	0.00027	73	0.02408
19	0.00028	74	0.02590
20	0.00028	75	0.02796
21	0.00027	76	0.03021
22	0.00028	77	0.03295
23	0.00028	78	0.03607
24	0.00029	79	0.03982
25	0.00029	80	0.04410
26	0.00030	81	0.04865
27	0.00031	82	0.05372
28	0.00032	83	0.05891
29	0.00034	84	0.06470
30	0.00037	85	0.07090
31	0.00041	86	0.07826
32	0.00044	87	0.08656
33	0.00046	88	0.09654
34	0.00048	89	0.10770
35	0.00050	90	0.12078
36	0.00053	91	0.13541
37	0.00056	92	0.15098
38	0.00060	93	0.16834
39	0.00064	94	0.18616
40	0.00066	95	0.20483
41	0.00071	96	0.22421
42	0.00077	97	0.24420
43	0.00082	98	0.26472
44	0.00085	99	0.28573
45	0.00089	100	0.30719
46	0.00093	101	0.32910
47	0.00099	102	0.35146
48	0.00107	103	0.37426
49	0.00116	104	0.39753
50	0.00129	105	0.42129
51	0.00144	106	0.44555
52	0.00163	107	0.46713
53	0.00185	108	0.48860
54	0.00208	109	0.51070

^{*** &}quot;Surviving Spouses" are defined as spouses of <u>deceased</u> retirees who elected SBP spouse, or spouse & child, coverage.

Rates based on actual plan experience.

SPOUSE DEATH RATES ***

(Age Nearest Birthday)

Age	Rate	Age	Rate
0	0.00592	55	0.00162
1	0.00053	56	0.00181
2	0.00035	57	0.00207
3	0.00026	58	0.00238
4	0.00019	59	0.00274
5	0.00018	60	0.00314
6	0.00016	61	0.00361
7	0.00015	62	0.00421
8	0.00013	63	0.00482
9	0.00017	64	0.00561
10	0.00013	65	0.00636
11	0.00013	66	0.00727
12	0.00014	67	0.00808
13	0.00016	68	0.00900
14	0.00019	69	0.00901
15	0.00017	70	0.01071
16	0.00024	71	0.01189
17	0.00024	72	0.01312
18	0.00027	73	0.01312
19	0.00027	74	0.01467
20	0.00028	75	0.01874
21	0.00029	76	0.02092
22	0.00029	70 77	0.02389
23	0.00029	78	0.02672
24	0.00029	78 79	0.03036
25	0.00029	80	0.03447
26	0.00029	81	0.03447
27	0.00029	82	0.03840
28	0.00031	83	0.04893
29	0.00031	84	0.05544
30	0.00035	85	0.06158
31	0.00037	86	0.06982
32	0.00040	87	0.07786
33	0.00042	88	0.08861
34	0.00045	89	0.09879
35	0.00048	90	0.11193
36	0.00040	91	0.12633
37	0.00055	92	0.13930
38	0.00060	93	0.15593
39	0.00065	94	0.17068
40	0.00050	95	0.18621
41	0.00054	96	0.20254
42	0.00054	97	0.21966
43	0.00062	98	0.23771
44	0.00065	99	0.25671
45	0.00069	100	0.27643
46	0.00073	101	0.29663
47	0.00079	102	0.31709
48	0.00075	103	0.33851
49	0.00093	104	0.36102
50	0.00073	105	0.38360
51	0.00101	106	0.40522
52	0.00111	107	0.42485
53	0.00125	108	0.44437
54	0.00148	109	0.46447

^{*** &}quot;Spouses" are defined as spouses of \underline{living} retirees who elected SBP spouse, or spouse & child, coverage.

Rates based on standard actuarial mortality table -- SOA GAM-94_Female '

SURVIVING SPOUSE OTHER LOSS RATES

Age	Rate	Age	Rate
0	0.0000	55	0.0061
1	0.0000	56	0.0060
2	0.0000	57	0.0059
3	0.0000	58	0.0057
4	0.0000	59	0.0056
5	0.0000	60	0.0055
6	0.0000	61	0.0053
7	0.0000	62	0.0052
8	0.0000	63	0.0052
9	0.0000	64	0.0049
10	0.0000	65	0.0048
11	0.0000	66	0.0047
12	0.0000	67	0.0047
13	0.0000	68	0.0044
14	0.0000	69	0.0043
15	0.0000	70	0.0041
16	0.0000	71	0.0040
17	0.0000	72	0.0039
18	0.0000	73	0.0037
19	0.0000	74	0.0036
20	0.0000	75	0.0035
21	0.0000	76	0.0033
22	0.0000	70 77	0.0033
23	0.0000	78	0.0032
24	0.0000	79	0.0029
25	0.0101	80	0.0029
26	0.0101	81	0.0028
27	0.0099	82	0.0027
28	0.0097	83	0.0024
29	0.0096	84	0.0023
30	0.0095	85	0.0023
31	0.0093	86	0.0021
32	0.0092	87	0.0019
33	0.0091	88	0.0018
34	0.0089	89	0.0016
35	0.0088	90	0.0015
36	0.0087	91	0.0014
37	0.0085	92	0.0012
38	0.0084	93	0.0011
39	0.0083	94	0.0010
40	0.0081	95	0.0008
41	0.0080	96	0.0000
42	0.0079	97	0.0000
43	0.0077	98	0.0000
44	0.0076	99	0.0000
45	0.0075	100	0.0000
46	0.0073	101	0.0000
47	0.0072	102	0.0000
48	0.0071	103	0.0000
49	0.0069	104	0.0000
50	0.0068	105	0.0000
51	0.0067	106	0.0000
52	0.0065	107	0.0000
53	0.0064	108	0.0000
54	0.0063	109	0.0000

^{***} The above Other Loss rates are used to calculate both the DoD and Treasury NCPs per P.L. 108-136.

APPENDIX J

MORTALITY IMPROVEMENT FACTORS

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MORTALITY IMPROVEMENT FACTORS DESCRIPTION

Mortality rates in the valuation for active duty members, nondisabled retirees (from Active and Reserve Duty), and survivors/spouses are decreased (or "improved") over time in order to reflect the long-term trend toward such declines. No mortality improvement is assumed for disabled retirees because their mortality patterns are too easily affected by economic variables, periods of war, and by the policies of administering the disability retirement program (i.e., periods of relative laxity or stringency in determining an individual's degree of disability or recovery from disability).

The factors are not year-specific; therefore, the same set is used year after year. Nondisabled retiree and survivor/spouse mortality improvement factors are generally based on plan experience.

Nondisabled retiree factors are based on military mortality experience over the period 1975-2010. The nondisabled retiree factors are graduated (smoothed) using least squares regression technique.

Survivor/spouse factors are based on military annuitant (survivor) mortality experience over the period 1984-2011. The survivor/spouse factors are graduated (smoothed) using a basic linear regression technique.

Alternatively, active duty factors were formed using Scale AA, a trend created by the Society of Actuaries in 1995 to project the 1994 Uninsured Pensioner Mortality Table (UP-94). It is based on based on Civil Service and Social Security 1977-1993 experience. Adjustments were made to reflect the military-specific gender mix by officer/enlisted status.

Even though some mortality improvement factors are based on Social Security and Civil Service data, they should apply reasonably well to the Military Retirement System. While the average military person may be somewhat healthier than the average person in these populations, the mortality improvement factors are in the form of percentages. If the mortality for relatively healthy military lives is already small, then the improvement in terms of fewer deaths is slight, even though the percentage improvement is the same as for relatively less healthy lives.

Projecting future mortality trends is an inherently uncertain exercise. Care will be taken to ensure emerging experience is continually monitored and new concepts developed by the research community reflected as appropriate.

ACTIVE DUTY MORTALITY IMPROVEMENT FACTORS

(Age Nearest Birthday)

Age	Officer	Enlisted
16	0.982	0.982
17	0.982	0.982
18	0.982	0.982
19	0.982	0.982
20	0.981	0.981
21	0.982	0.982
22	0.983	0.983
23	0.985	0.985
24	0.987	0.987
25	0.989	0.989
26	0.993	0.993
27	0.994	0.994
28	0.994	0.994
29	0.994	0.994
30	0.994	0.994
31	0.995	0.995
32	0.995	0.995
33	0.994	0.994
34	0.994	0.994
35	0.994	0.994
36	0.994	0.994
37	0.994	0.994
38	0.993	0.993
39	0.992	0.992
40	0.991	0.991
41	0.990	0.990
42	0.989	0.989
43	0.988	0.988
44	0.988	0.988
45	0.987	0.987
46	0.986	0.986
47	0.985	0.985
48	0.984	0.984
49	0.983	0.983
50	0.982	0.982
51	0.981	0.981
52	0.981	0.981
53	0.981	0.981
54	0.982	0.981
55	0.983	0.983
56	0.984	0.984
57	0.985	0.985
58	0.986	0.986
59	0.986	0.986
60	0.986	0.986

NONDISABLED RETIRED MORTALITY IMPROVEMENT FACTORS

(Age Nearest Birthday)

	Activ	e Duty	Reserv	ve Duty		Activ	e Duty	ty Reserv	
Age	Officer	Enlisted	Officer	Enlisted	Age	Officer	Enlisted	Officer	Enlisted
16	1.000	1.000	1.000	1.000	64	0.969	0.978	0.969	0.979
17	1.000	1.000	1.000	1.000	65	0.970	0.979	0.970	0.980
18	1.000	1.000	1.000	1.000	66	0.971	0.980	0.971	0.980
19	1.000	1.000	1.000	1.000	67	0.972	0.980	0.971	0.981
20	1.000	1.000	1.000	1.000	68	0.973	0.981	0.972	0.982
21	1.000	1.000	1.000	1.000	69	0.974	0.982	0.973	0.983
22	1.000	1.000	1.000	1.000	70	0.975	0.983	0.974	0.983
23	1.000	1.000	1.000	1.000	71	0.975	0.983	0.975	0.984
24	1.000	1.000	1.000	1.000	72	0.976	0.984	0.976	0.985
25	1.000	1.000	1.000	1.000	73	0.977	0.985	0.977	0.986
26	1.000	1.000	1.000	1.000	74	0.978	0.986	0.978	0.986
27	1.000	1.000	1.000	1.000	75	0.979	0.986	0.979	0.987
28	1.000	1.000	1.000	1.000	76	0.980	0.987	0.980	0.988
29	1.000	1.000	1.000	1.000	77	0.981	0.988	0.981	0.989
30	0.959	0.962	0.965	0.976	78	0.982	0.989	0.981	0.989
31	0.959	0.962	0.965	0.976	79	0.983	0.989	0.982	0.990
32	0.959	0.962	0.965	0.976	80	0.984	0.990	0.983	0.991
33	0.959	0.962	0.965	0.976	81	0.985	0.991	0.984	0.992
34	0.959	0.962	0.965	0.976	82	0.986	0.992	0.985	0.992
35	0.959	0.962	0.965	0.976	83	0.987	0.992	0.986	0.993
36	0.959	0.962	0.965	0.976	84	0.988	0.993	0.987	0.994
37	0.959	0.962	0.965	0.976	85	0.989	0.994	0.988	0.995
38	0.959	0.962	0.965	0.976	86	0.990	0.995	0.989	0.995
39	0.959	0.962	0.965	0.976	87	0.991	0.995	0.990	0.996
40	0.959	0.962	0.965	0.976	88	0.992	0.996	0.991	0.997
41	0.959	0.962	0.965	0.976	89	0.993	0.997	0.992	0.998
42	0.959	0.962	0.965	0.976	90	0.993	0.998	0.992	0.998
43	0.959	0.962	0.965	0.976	91	0.994	0.998	0.993	0.999
44	0.959	0.963	0.965	0.976	92	0.995	0.999	0.994	1.000
45	0.959	0.964	0.965	0.976	93	0.996	1.000	0.995	1.000
46	0.959	0.964	0.965	0.976	94	0.997	1.000	0.996	1.000
47	0.959	0.965	0.965	0.976	95	0.998	1.000	0.997	1.000
48	0.959	0.966	0.965	0.976	96	0.999	1.000	0.998	1.000
49	0.959	0.967	0.965	0.976	97	1.000	1.000	0.999	1.000
50	0.959	0.967	0.965	0.976	98	1.000	1.000	1.000	1.000
51	0.959	0.968	0.965	0.976	99	1.000	1.000	1.000	1.000
52	0.959	0.969	0.965	0.976	100	1.000	1.000	1.000	1.000
53	0.959	0.970	0.965	0.976	101	1.000	1.000	1.000	1.000
54	0.959	0.970	0.965	0.976	102	1.000	1.000	1.000	1.000
55	0.960	0.971	0.965	0.976	103	1.000	1.000	1.000	1.000
56	0.961	0.972	0.965	0.976	104	1.000	1.000	1.000	1.000
57	0.962	0.973	0.965	0.976	105	1.000	1.000	1.000	1.000
58	0.963	0.973	0.965	0.976	106	1.000	1.000	1.000	1.000
59	0.964	0.974	0.965	0.976	107	1.000	1.000	1.000	1.000
60	0.965	0.975	0.965	0.976	108	1.000	1.000	1.000	1.000
61	0.966	0.976	0.966	0.977	109	1.000	1.000	1.000	1.000
62	0.967	0.977	0.967	0.977	110	1.000	1.000	1.000	1.000
63	0.968	0.977	0.968	0.978					

SURVIVOR/SPOUSE MORTALITY IMPROVEMENT FACTORS

(Age Nearest Birthday)

Age	Rate	Age	Rate
0	1.000	56	0.982
1	1.000	57	0.982
2	1.000	58	0.982
3	1.000	59	0.982
4	1.000	60	0.982
5	1.000	61	0.982
6	1.000	62	0.983
7	1.000	63	0.983
8	1.000	64	0.984
9	1.000	65	0.984
10	1.000	66	0.985
11	1.000	67	0.985
12	1.000	68	0.985
13	1.000	69	0.987
14	1.000	70	
			0.987
15	1.000	71 72	0.988
16	1.000		0.988
17	1.000	73	0.989
18	1.000	74 75	0.989
19	1.000	75 76	0.990
20	1.000	76 77	0.990
21	1.000	77	0.991
22	1.000	78 70	0.991
23	1.000	79	0.992
24	1.000	80	0.993
25	1.000	81	0.993
26	1.000	82	0.994
27	1.000	83	0.994
28	1.000	84	0.995
29 30	1.000	85 86	0.995 0.996
31	1.000 1.000	87	0.996
32	1.000	88	0.997
33		89	0.997
34	1.000 1.000	90	0.998
34 35	1.000	90 91	0.998
36	1.000	92	0.999
37	1.000	93	1.000
38		93 94	1.000
39	1.000 1.000	94 95	1.000
40	0.982	96 96	1.000
40	0.982	90 97	1.000
42 43	0.982 0.982	98 99	1.000 1.000
44	0.982	100	1.000
45	0.982	100	1.000
46	0.982	101	1.000
47	0.982	102	1.000
48	0.982	103	1.000
46 49	0.982	104	1.000
50	0.982	105	1.000
51	0.982	107	1.000
52	0.982	107	1.000
53	0.982	109	1.000
54	0.982	110	1.000
55	0.982	110	1.000
55	0.702		

APPENDIX K

25 YEAR PROJECTIONS

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PROJECTION NOTES

The following are relevant notes to the projections depicted in this appendix:

- Refer to the "NOTE REGARDING OPEN GROUP PROJECTIONS" in the Table 9 Footnotes for important caveats related to this appendix.
- Columns in this appendix may not add due to rounding.
- In some cases the number of personnel may show zero with the corresponding pay showing a non-zero value. This is a result of rounding the display to the nearest person.
- Future mortality improvement is assumed throughout this appendix (with the exception of disabled retirees).
- Although Combat Related Special Compensation (CRSC) is not technically considered retired pay, it is paid from the MRF; hence these projections include CRSC.
- The FY 2011 National Defense Authorization Act (P.L. 111-383) allowed for retired pay to be paid on the previous business day if the first of the month falls on a weekend or holiday. This is not accounted for in the projected Fund Disbursements/Outlays in order to give the projection a smooth trajectory.
- The following economic assumptions are applied to the projection of pay only. This table is partially replicated from the Table 9 footnotes in the main text.

ANNUAL ECONOMIC ASSUMPTIONS USED IN PROJECTIONS OF BASIC PAY AND RETIRED OUTLAY

Fiscal Year	<u>Full COLA</u>	Basic Pay
2013	1.7%	1.7%
2014	1.1	1.0
2015	2.1	1.0
2016	2.2	1.0
2017	2.2	1.5
2018	2.2	2.8
2019	2.2	2.8
2020	2.2	2.8
2021	2.2	2.8
2022	3.0	2.8
2023+	3.0	3.5

ACTIVE DUTY PERSONNEL AND PAY BY FISCAL YEAR

(Dollar Amounts in Thousands)

Fiscal	People a	at Year End (Septen	nber 30th)	Dollars During Fiscal Year				
Year	Officers	Enlisted	Total	Officers	Enlisted	Total		
2012	255,156	1,208,954	1,464,110					
2012	254,150	1,212,785	1,466,935	\$18,409,117	\$38,939,708	\$57,348,825		
2013	254,150	1,172,887	1,427,038	\$18,462,379	\$38,929,124	\$57,391,503		
2015	251.586	1,163,104	1,414,690	\$18,539,741	\$38,712,038	\$57,251,779		
2016	248,327	1,151,968	1,400,295	\$18,563,151	\$38,807,562	\$57,370,713		
2017	246,492	1,142,950	1,389,442	\$18,677,590	\$39,066,757	\$57,744,347		
2018	246,698	1,143,546	1,390,244	\$19,078,444	\$39,940,838	\$59,019,281		
2019	246,698	1,143,546	1,390,244	\$19,525,264	\$40,974,490	\$60,499,754		
2020	246,698	1,143,546	1,390,244	\$19,994,076	\$42,016,754	\$62,010,830		
2021	246,698	1,143,546	1,390,244	\$20,496,665	\$43,089,686	\$63,586,351		
2022	246,698	1,143,546	1,390,244	\$21,016,622	\$44,185,616	\$65,202,238		
2023	246,698	1,143,546	1,390,244	\$21,694,399	\$45,598,109	\$67,292,508		
2024	246,698	1,143,546	1,390,244	\$22,398,476	\$47,039,814	\$69,438,290		
2025	246,698	1,143,546	1,390,244	\$23,137,782	\$48,526,104	\$71,663,886		
2026	246,698	1,143,546	1,390,244	\$23,909,811	\$50,070,980	\$73,980,791		
2027	246,698	1,143,546	1,390,244	\$24,713,067	\$51,655,055	\$76,368,122		
2028	246,698	1,143,546	1,390,244	\$25,552,431	\$53,300,786	\$78,853,217		
2029	246,698	1,143,546	1,390,244	\$26,433,847	\$55,008,071	\$81,441,918		
2030	246,698	1,143,546	1,390,244	\$27,360,818	\$56,815,087	\$84,175,905		
2031	246,698	1,143,546	1,390,244	\$28,333,606	\$58,729,257	\$87,062,863		
2032	246,698	1,143,546	1,390,244	\$29,346,969	\$60,752,145	\$90,099,114		
2033	246,698	1,143,546	1,390,244	\$30,391,909	\$62,822,472	\$93,214,381		
2034	246,698	1,143,546	1,390,244	\$31,469,914	\$64,992,585	\$96,462,499		
2035	246,698	1,143,546	1,390,244	\$32,606,007	\$67,320,312	\$99,926,319		
2036	246,698	1,143,546	1,390,244	\$33,812,237	\$69,729,600	\$103,541,837		
2037	246,698	1,143,546	1,390,244	\$35,071,618	\$72,226,811	\$107,298,428		

NONRETIRED RESERVISTS PERSONNEL AND PAY BY FISCAL YEAR

(Dollar Amounts in Thousands)

Fiscal	People at	Year End (Septen	nber 30th)	Dollars During Fiscal Year					
Year	Officers	Enlisted	Total	Officers	Enlisted	Total			
2012	109,742	652,633	762,375						
2013	118,456	645,059	763,515	\$2,204,474	\$5,323,282	\$7,527,755			
2014	118,812	636,617	755,429	\$2,302,191	\$5,325,419	\$7,627,610			
2015	120,572	629,206	749,778	\$2,364,174	\$5,334,752	\$7,698,927			
2016	121,439	628,739	750,178	\$2,441,846	\$5,370,214	\$7,812,060			
2017	122,257	628,176	750,433	\$2,527,396	\$5,459,234	\$7,986,630			
2018	122,617	628,814	751,431	\$2,645,322	\$5,621,626	\$8,266,948			
2019	122,617	628,814	751,431	\$2,765,713	\$5,790,595	\$8,556,308			
2020	122,617	628,814	751,431	\$2,885,204	\$5,956,861	\$8,842,066			
2021	122,617	628,814	751,431	\$3,008,020	\$6,123,724	\$9,131,744			
2022	122,617	628,814	751,431	\$3,138,575	\$6,290,356	\$9,428,931			
2023	122,617	628,814	751,431	\$3,297,640	\$6,503,741	\$9,801,381			
2024	122,617	628,814	751,431	\$3,463,592	\$6,721,331	\$10,184,923			
2025	122,617	628,814	751,431	\$3,634,908	\$6,948,170	\$10,583,077			
2026	122,617	628,814	751,431	\$3,821,613	\$7,195,293	\$11,016,907			
2027	122,617	628,814	751,431	\$4,012,023	\$7,453,807	\$11,465,829			
2028	122,617	628,814	751,431	\$4,212,958	\$7,720,233	\$11,933,191			
2029	122,617	628,814	751,431	\$4,413,607	\$7,993,133	\$12,406,740			
2030	122,617	628,814	751,431	\$4,618,747	\$8,272,031	\$12,890,778			
2031	122,617	628,814	751,431	\$4,830,195	\$8,558,668	\$13,388,863			
2032	122,617	628,814	751,431	\$5,048,098	\$8,856,213	\$13,904,311			
2033	122,617	628,814	751,431	\$5,264,080	\$9,161,675	\$14,425,755			
2034	122,617	628,814	751,431	\$5,474,857	\$9,476,665	\$14,951,522			
2035	122,617	628,814	751,431	\$5,694,353	\$9,812,271	\$15,506,624			
2036	122,617	628,814	751,431	\$5,920,956	\$10,161,316	\$16,082,271			
2037	122,617	628,814	751,431	\$6,141,113	\$10,522,460	\$16,663,573			

TOTAL NUMBER OF RETIREES ON SEPTEMBER 30 OF EACH FISCAL YEAR

Fiscal	Nondi	sabled (non-CSB/	(Redux)	Nond	isabled (CSB/Re	edux)	Disabled			Grand
Year	Officers	Enlisted	Total	Officers	Enlisted	Total	Officers	Enlisted	Total	Total
2012	509,341	1,303,998	1,813,339	1,285	33,515	34,800	17,257	84,971	102,228	1,950,367
2012	512,377	1,303,998	1,813,339	1,283	43,145	34,800 44,945	16,721	82,914	99,635	1,950,367
2013	514,728	1,303,894	1,818,622	2,289	51,636	53,925	16,237	81,141	97,378	1,969,925
2014	517,094	1,302,304	1,819,398	2,289	59,410	62,181	15,803	79,532	95,335	1,976,915
	,									
2016	519,630	1,301,869	1,821,499	3,245	66,723	69,967	15,411	77,981	93,392	1,984,858
2017	522,147	1,301,961	1,824,108	3,723	73,851	77,575	15,057	76,476	91,533	1,993,216
2018	524,470	1,302,622	1,827,092	4,177	80,355	84,532	14,746	75,046	89,792	2,001,416
2019	526,781	1,304,091	1,830,872	4,599	86,372	90,971	14,473	73,710	88,183	2,010,026
2020	529,053	1,306,707	1,835,761	4,964	91,672	96,636	14,237	72,456	86,693	2,019,089
2021	531,510	1,311,294	1,842,803	5,284	96,184	101,469	14,031	71,280	85,311	2,029,583
2022	534,117	1,317,018	1,851,135	5,585	100,094	105,678	13,850	70,171	84,021	2,040,834
2023	536,885	1,323,068	1,859,953	5,838	103,308	109,146	13,687	69,119	82,806	2,051,905
2024	545,550	1,345,474	1,891,024	6,052	105,789	111,841	13,539	68,117	81,656	2,084,521
2025	547,548	1,349,384	1,896,932	6,215	107,460	113,675	13,401	67,150	80,550	2,091,157
2026	549,058	1,352,696	1,901,754	6,341	108,470	114,811	13,271	66,221	79,492	2,096,056
2027	550,179	1,355,336	1,905,515	6,438	109,066	115,504	13,150	65,326	78,476	2,099,496
2028	550,561	1,357,220	1,907,780	6,513	109,363	115,876	13,037	64,467	77,504	2,101,161
2029	550,473	1,357,492	1,907,760	6,570	109,424	115,994	12,931	63,639	76,570	2,100,529
2030	549,669	1,356,005	1,905,674	6,609	109,424	115,994	12,833	62,835	75,667	2,097,242
2030	547,884	1,351,093	1,898,977	6,633	109,292	115,632	12,740	62,051	74,791	2,089,400
2031	,		1,889,167							
2032	545,551	1,343,617	1,889,167	6,645	108,570	115,215	12,655	61,291	73,946	2,078,328
2033	546,301	1,343,534	1,889,835	6,644	108,023	114,667	12,578	60,578	73,156	2,077,658
2034	543,545	1,333,241	1,876,786	6,635	107,365	113,999	12,509	59,883	72,392	2,063,177
2035	540,446	1,323,017	1,863,463	6,614	106,597	113,211	12,444	59,220	71,663	2,048,338
2036	537,227	1,312,885	1,850,112	6,588	105,729	112,317	12,384	58,600	70,984	2,033,413
2037	533,930	1,302,634	1,836,564	6,556	104,771	111,327	12,331	58,016	70,347	2,018,238

^{*}This projection includes retired from active and reserve duty.

Non-CSB/Redux figures include both active and reserve duty retirees, while CSB/Redux figures include only active duty retirees.

^{**}The number of retirees projected only considers those receiving non-zero retired pay from the Military Retirement Fund.

^{***}Disabled enlisted retirees include overturned cases from the Physical Disability Board of Review (PDBR) established as part of the 2008 NDAA.

TOTAL ANNUAL RETIRED PAY FOR EACH FISCAL YEAR

(Dollar Amounts in Thousands)

Fiscal	None	Nondisabled (non-CSB/Redux) Nondisabled (CSB/Redux)			Disabled			Grand		
Year	Officers	Enlisted	Total	Officers	Enlisted	Total	Officers	Enlisted	Total	Total
2013	\$21,345,375	\$26,781,400	\$48,126,775	\$51,325	\$706,930	\$758,255	\$523,719	\$917,441	\$1,441,161	\$50,326,191
2014	\$21,810,556	\$27,127,903	\$48,938,458	\$73,167	\$914,265	\$987,432	\$508,527	\$905,296	\$1,413,822	\$51,339,713
2015	\$22,390,581	\$27,616,327	\$50,006,908	\$96,645	\$1,117,068	\$1,213,713	\$497,424	\$898,654	\$1,396,078	\$52,616,699
2016	\$23,053,573	\$28,198,808	\$51,252,381	\$121,483	\$1,317,131	\$1,438,614	\$488,557	\$893,070	\$1,381,627	\$54,072,621
2017	\$23,731,938	\$28,803,703	\$52,535,641	\$148,380	\$1,522,236	\$1,670,616	\$480,482	\$886,855	\$1,367,337	\$55,573,593
2018	\$24,417,458	\$29,427,971	\$53,845,429	\$176,780	\$1,728,407	\$1,905,188	\$473,304	\$880,877	\$1,354,182	\$57,104,799
2019	\$25,115,683	\$30,088,084	\$55,203,766	\$205,044	\$1,928,016	\$2,133,061	\$467,325	\$876,214	\$1,343,539	\$58,680,366
2020	\$25,829,266	\$30,792,924	\$56,622,190	\$231,890	\$2,118,150	\$2,350,040	\$462,810	\$873,305	\$1,336,115	\$60,308,345
2021	\$26,564,762	\$31,555,262	\$58,120,023	\$257,072	\$2,292,426	\$2,549,498	\$459,700	\$871,984	\$1,331,684	\$62,001,205
2022	\$27,487,471	\$32,566,840	\$60,054,311	\$283,468	\$2,468,427	\$2,751,895	\$460,537	\$876,676	\$1,337,213	\$64,143,419
2023	\$28,493,723	\$33,704,416	\$62,198,138	\$310,002	\$2,639,353	\$2,949,355	\$463,212	\$883,600	\$1,346,811	\$66,494,304
2024	\$29,631,811	\$35,040,572	\$64,672,382	\$335,577	\$2,801,152	\$3,136,729	\$466,884	\$891,438	\$1,358,322	\$69,167,434
2025	\$30,782,361	\$36,399,185	\$67,181,546	\$360,010	\$2,951,970	\$3,311,980	\$471,374	\$900,216	\$1,371,590	\$71,865,116
2026	\$31,858,547	\$37,664,293	\$69,522,839	\$384,097	\$3,094,323	\$3,478,419	\$476,640	\$909,901	\$1,386,541	\$74,387,799
2027	\$32,950,679	\$38,975,590	\$71,926,269	\$409,102	\$3,232,039	\$3,641,141	\$482,734	\$920,581	\$1,403,315	\$76,970,725
2028	\$34,052,184	\$40,331,880	\$74,384,063	\$434,894	\$3,370,614	\$3,805,507	\$489,692	\$932,190	\$1,421,881	\$79,611,452
2029	\$35,162,200	\$41,717,553	\$76,879,753	\$460,630	\$3,515,218	\$3,975,848	\$497,387	\$944,603	\$1,441,991	\$82,297,592
2030	\$36,279,417	\$43,114,904	\$79,394,321	\$486,128	\$3,677,217	\$4,163,344	\$505,888	\$957,697	\$1,463,586	\$85,021,251
2031	\$37,394,163	\$44,499,649	\$81,893,812	\$511,877	\$3,867,532	\$4,379,409	\$515,217	\$971,248	\$1,486,465	\$87,759,686
2032	\$38,513,239	\$45,866,413	\$84,379,652	\$538,172	\$4,079,648	\$4,617,820	\$525,318	\$985,330	\$1,510,647	\$90,508,119
2033	\$39,727,677	\$47,348,728	\$87,076,404	\$562,967	\$4,288,825	\$4,851,792	\$536,392	\$1,000,484	\$1,536,876	\$93,465,073
2034	\$40,964,172	\$48,825,302	\$89,789,474	\$585,020	\$4,478,908	\$5,063,928	\$548,419	\$1,016,518	\$1,564,937	\$96,418,339
2035	\$42,146,767	\$50,222,977	\$92,369,743	\$604,826	\$4,647,110	\$5,251,937	\$561,295	\$1,032,993	\$1,594,288	\$99,215,968
2036	\$43,344,009	\$51,664,424	\$95,008,433	\$623,063	\$4,800,554	\$5,423,617	\$574,949	\$1,050,501	\$1,625,450	\$102,057,500
2037	\$44,566,774	\$53,146,561	\$97,713,336	\$640,293	\$4,944,852	\$5,585,144	\$589,439	\$1,069,279	\$1,658,717	\$104,957,197

^{*}This projection includes retired from active and reserve duty.

Non-CSB/Redux figures include both active and reserve duty retirees, while CSB/Redux figures include only active duty retirees.

**Disabled enlisted retirees include overturned cases from the Physical Disability Board of Review (PDBR) established as part of the 2008 NDAA.

RETIREE GAIN STATEMENT

	Gains During the Fiscal Year							Average Starting Net Retired Pay Before CPI Increase				
Fiscal	al Nondisabled (non-CSB/Redux)		Nondisabled (CSB/Redux)		Disa	Disabled		Nondisabled (non-CSB/Redux)		Nondisabled (CSB/Redux)		abled
Year	Officers	Enlisted	Officers	Enlisted	Officers	Enlisted	Officers	Enlisted	Officers	Enlisted	Officers	Enlisted
2013	16.543	30,855	516	9,669	544	4,676	\$44,505	\$19,539	\$41.898	\$22,389	\$37,445	\$14.825
2014	15,818	29,994	490	8,544	539	4,616	\$44,128	\$19,992	\$45,214	\$23,597	\$37,822	\$15,006
2015	15,781	29,954	484	7,840	535	4,537	\$44,877	\$20,118	\$48,361	\$24,652	\$38,293	\$15,224
2016	15,899	31,774	476	7,392	532	4,480	\$45,311	\$20,243	\$50,604	\$25,162	\$38,710	\$15,432
2017	15,836	32,930	482	7,224	528	4,434	\$45,721	\$20,214	\$55,323	\$27,091	\$39,154	\$15,661
2018	15,614	34,085	457	6,616	527	4,399	\$46,756	\$20,804	\$57,925	\$27,882	\$39,737	\$15,961
2019	15,591	35,444	427	6,147	525	4,391	\$47,777	\$21,538	\$59,751	\$28,729	\$40,566	\$16,316
2020	15,564	37,102	369	5,451	524	4,383	\$48,761	\$22,249	\$62,576	\$29,390	\$41,513	\$16,739
2021	15,786	39,547	326	4,683	524	4,381	\$49,817	\$22,814	\$64,910	\$29,859	\$42,538	\$17,191
2022	16,000	41,124	307	4,104	523	4,380	\$50,751	\$23,567	\$68,346	\$30,842	\$43,702	\$17,665
2023	16,249	41,858	261	3,434	521	4,377	\$51,462	\$24,555	\$72,604	\$32,349	\$44,938	\$18,183
2024	22,261	58,628	222	2,728	519	4,378	\$47,139	\$22,917	\$75,489	\$34,676	\$46,356	\$18,767
2025	15,725	40,516	172	1,950	516	4,365	\$54,877	\$26,859	\$82,472	\$38,964	\$47,898	\$19,380
2026	15,374	40,237	136	1,322	514	4,360	\$56,958	\$28,460	\$89,276	\$45,423	\$49,613	\$20,023
2027	15,129	39,876	108	945	513	4,354	\$59,050	\$29,531	\$95,535	\$51,128	\$51,352	\$20,692
2028	14,537	39,426	88	686	513	4,353	\$61,690	\$31,053	\$102,367	\$56,646	\$53,181	\$21,358
2029	14,219	38,118	71	495	513	4,350	\$64,107	\$32,281	\$109,056	\$62,397	\$55,036	\$22,051
2030	13,659	36,660	55	352	513	4,341	\$67,002	\$33,869	\$116,320	\$68,241	\$57,017	\$22,737
2031	12,838	33,543	42	243	513	4,328	\$71,172	\$35,853	\$124,941	\$73,958	\$59,063	\$23,439
2032	12,450	31,288	32	165	513	4,317	\$74,568	\$38,428	\$132,844	\$80,303	\$61,233	\$24,182
2033	15,693	39,001	21	109	515	4,329	\$70,361	\$36,402	\$143,069	\$85,611	\$63,528	\$25,011
2034	12,344	29,106	15	66	516	4,310	\$80,333	\$41,669	\$152,140	\$90,837	\$66,039	\$25,810
2035	12,146	29,474	8	30	514	4,304	\$82,996	\$42,780	\$167,752	\$96,598	\$68,488	\$26,615
2036	12,154	29,850	5	9	512	4,310	\$85,293	\$43,949	\$183,935	\$107,200	\$71,058	\$27,551
2037	12,169	29,992	3	4	512	4,309	\$88,214	\$45,235	\$198,538	\$115,707	\$73,680	\$28,490

^{*}This projection includes retired from active and reserve duty.

Non-CSB/Redux figures include both new active and reserve duty retirements, while CSB/Redux figures include only new active duty retirements.

**Gains during the year include those people who die before year end. All figures are after total and partial VA offsets.

***The dramatic retiree gain increases in FY 2024 and FY 2033 are a result of the modeling due to section 647 of the 2008 NDAA.

Please refer to Appendix F and Appendix H for more information.

TOTAL NUMBER OF SURVIVORS ON SEPTEMBER 30 OF EACH FISCAL YEAR

Fiscal Year	SBP Non-CSB/Redux	SBP CSB/Redux	RCSBP	Minimum Income	Death on Active Duty	RSFPP	Special Survivor Indemnity Allowance	Total
				' <u></u>		<u> </u>		
2012	191,233	0	84,096	95	9,284	8,416	58,093	293,124
2013	193,783	9	85,901	82	9,399	7,765	61,250	296,938
2014	195,806	21	87,544	72	9,479	7,114	62,891	300,036
2015	197,350	37	89,124	63	9,528	6,481	64,411	302,583
2016	198,454	58	90,676	56	9,537	5,871	65,807	304,652
2017	199,161	84	92,230	49	9,490	5,290	63,912	306,305
2018	199,505	116	93,810	43	9,399	4,740	0	307,614
2019	199,508	156	95,437	38	9,273	4,225	0	308,637
2020	199,197	202	97,127	33	9,118	3,746	0	309,424
2021	198,590	258	98,886	29	8,933	3,305	0	310,001
2022	197,707	323	100,722	25	8,719	2,901	0	310,397
2023	196,569	399	102,633	22	8,492	2,536	0	310,651
2024	195,194	486	104,686	19	8,265	2,208	0	310,858
2025	193,604	586	106,763	16	8,041	1,916	0	310,927
2026	191,826	701	108,889	14	7,835	1,657	0	310,921
2027	189,889	831	111,048	11	7,649	1,431	0	310,860
2028	187,831	978	113,229	10	7,496	1,234	0	310,778
2029	185,697	1,144	115,418	8	7,384	1,065	0	310,716
2030	183,533	1,330	117,598	7	7,300	921	0	310,689
2031	181,385	1,538	119,745	5	7,228	799	0	310,701
2032	179,302	1,769	121,834	4	7,182	698	0	310,789
2033	177,321	2,024	123,865	3	7,162	614	0	310,990
2034	175,474	2,307	125,783	3	7,148	545	0	311,260
2035	173,785	2,618	127,577	2	7,138	488	0	311,607
2036	172,267	2,959	129,216	2	7,133	442	0	312,019
2037	170,919	3,333	130,669	1	7,132	404	0	312,458

^{*}This projection includes retired from active and reserve duty.

Non-CSB/Redux figures include both survivors of active and reserve duty retirees, while CSB/Redux figures include only survivors of active duty retirees.

**The number of survivors projected only considers those receiving non-zero pay from the Military Retirement Fund.

***RCSBP survivors include all survivors of reservists, not just those electing pre-age 60 coverage.

****The Special Survivor Indemnity Allowance counts are shown for informational purposes and are not included in the Total column. They include the impact of both the 2008 NDAA and P.L. 110-181.

TOTAL ANNUAL SURVIVOR BENEFITS FOR EACH FISCAL YEAR

(Dollar Amounts in Thousands)

Fiscal Year	SBP Non-CSB/Redux	SBP CSB/Redux	RCSBP	Minimum Income	Death on Active Duty	RSFPP	Special Survivor Indemnity Allowance	Total
2013	\$2,975,009	\$41	\$701,685	\$692	\$84,894	\$23,092	\$64,445	\$3,849,859
2014	\$3,029,579	\$158	\$723,676	\$609	\$87,906	\$21,471	\$110,364	\$3,973,763
2015	\$3.095.599	\$333	\$749,335	\$548	\$91,183	\$19,836	\$150,798	\$4,107,631
2016	\$3,166,051	\$578	\$777.645	\$495	\$94,589	\$18,239	\$211.955	\$4,269,551
2017	\$3,232,469	\$905	\$806,928	\$448	\$97,699	\$16,685	\$231,882	\$4,387,016
2018	\$3,294,443	\$1,330	\$837,390	\$405	\$100,407	\$15,184	\$0	\$4,249,159
2019	\$3,352,330	\$1,878	\$869,406	\$365	\$102,738	\$13,750	\$0	\$4,340,467
2020	\$3,406,457	\$2,568	\$903,310	\$328	\$104,845	\$12,398	\$0	\$4,429,907
2021	\$3,457,161	\$3,424	\$939,424	\$295	\$106,620	\$11,132	\$0	\$4,518,056
2022	\$3,525,372	\$4,495	\$983,810	\$265	\$108,579	\$9,965	\$0	\$4,632,486
2023	\$3,598,072	\$5,808	\$1,033,352	\$238	\$110,462	\$8,901	\$0	\$4,756,834
2024	\$3,668,760	\$7,395	\$1,086,797	\$213	\$112,243	\$7,934	\$0	\$4,883,341
2025	\$3,737,508	\$9,308	\$1,144,336	\$189	\$113,848	\$7,060	\$0	\$5,012,249
2026	\$3,804,424	\$11,599	\$1,205,556	\$168	\$115,348	\$6,276	\$0	\$5,143,370
2027	\$3,869,747	\$14,328	\$1,270,761	\$148	\$116,988	\$5,579	\$0	\$5,277,550
2028	\$3,933,912	\$17,580	\$1,340,047	\$129	\$118,796	\$4,966	\$0	\$5,415,431
2029	\$3,997,438	\$21,461	\$1,413,455	\$112	\$120,865	\$4,434	\$0	\$5,557,765
2030	\$4,061,062	\$26,030	\$1,490,997	\$96	\$123,249	\$3,976	\$0	\$5,705,411
2031	\$4,125,610	\$31,321	\$1,572,590	\$81	\$125,817	\$3,587	\$0	\$5,859,007
2032	\$4,192,265	\$37,379	\$1,658,112	\$68	\$128,594	\$3,260	\$0	\$6,019,679
2033	\$4,262,296	\$44,292	\$1,747,500	\$57	\$131,702	\$2,989	\$0	\$6,188,836
2034	\$4,336,655	\$52,191	\$1,840,530	\$46	\$135,035	\$2,767	\$0	\$6,367,226
2035	\$4,416,431	\$61,199	\$1,936,672	\$38	\$138,556	\$2,589	\$0	\$6,555,485
2036	\$4,502,530	\$71,433	\$2,035,583	\$30	\$142,292	\$2,445	\$0	\$6,754,313
2037	\$4,595,825	\$83,035	\$2,136,641	\$24	\$146,277	\$2,330	\$0	\$6,964,133

^{*}This projection includes retired from active and reserve duty.

Non-CSB/Redux figures include both survivors of active and reserve duty retirees, while CSB/Redux figures include only survivors of active duty retirees.

**RCSBP survivors include all survivors of reservists, not just those electing pre-age 60 coverage.

***The Special Survivor Indemnity Allowance dollars are included in the Total column. They include the impact of both the 2008 NDAA and P.L. 110-181.

TOTAL PROJECTED BASIC PAY AND RETIRED OUTLAYS

(Dollar Amounts in Thousands)

Fiscal Year	Total Projected Basic Pay	Total Projected Outlays	Retired Outlays Over Basic Pay
Teur	Busic Tuy	<u> </u>	Over Busic Luy
2013	\$64,876,580	\$54,176,050	83.5%
2014	\$65,019,113	\$55,313,475	85.1%
2015	\$64,950,706	\$56,724,330	87.3%
2016	\$65,182,773	\$58,342,173	89.5%
2017	\$65,730,977	\$59,960,610	91.2%
2018	\$67,286,230	\$61,353,957	91.2%
2019	\$69,056,062	\$63,020,833	91.3%
2020	\$70,852,896	\$64,738,252	91.4%
2021	\$72,718,095	\$66,519,261	91.5%
2022	\$74,631,169	\$68,775,905	92.2%
2023	\$77,093,889	\$71,251,138	92.4%
2024	\$79,623,213	\$74,050,775	93.0%
2025	\$82,246,963	\$76,877,364	93.5%
2026	\$84,997,698	\$79,531,169	93.6%
2027	\$87,833,952	\$82,248,274	93.6%
2028	\$90,786,408	\$85,026,883	93.7%
2029	\$93,848,658	\$87,855,357	93.6%
2030	\$97,066,683	\$90,726,662	93.5%
2031	\$100,451,725	\$93,618,693	93.2%
2032	\$104,003,424	\$96,527,798	92.8%
2033	\$107,640,135	\$99,653,909	92.6%
2034	\$111,414,021	\$102,785,565	92.3%
2035	\$115,432,943	\$105,771,453	91.6%
2036	\$119,624,109	\$108,811,813	91.0%
2037	\$123,962,001	\$111,921,331	90.3%

^{*}Basic pay includes reserve and active duty basic pay; outlays include retired pay and survivor benefits.

^{**}This projection includes retired from active and reserve duty.

^{***}This projection includes pay for those retirees eligible for Concurrent Receipt.

^{****}This projection is adjusted for the increase in survivor benefits due to P.L. 110-181.

^{*****}This projection includes overturned cases from the Physical Disability Board of Review (PDBR) established as part of the 2008 NDAA.

APPENDIX L

FINANCIAL STATEMENT DISCLOSURES

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STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS

Federal trust funds like the Military Retirement Fund are not subject to the same pension regulations as private sector and state/local governmental plans. Under generally accepted accounting principles (GAAP), both private sector and state/local pension plans have been required to include a table showing the "Statement of Net Assets Available for Benefits" and a "Statement of Changes in Net Assets Available for Benefits," where assets are valued at fair market value in their accounting statements. For the Military Retirement Fund, fair market value is based on the bid prices of public issue securities with the same maturity dates and coupon rates as the special issue securities held by the Fund. These statements are included in Tables L-1 and L-2, respectively.

Common measures of a retirement system's liabilities (frequently required for private sector plans under GAAP) are the "Accumulated Plan Benefits" and the "Market Value of Assets." In prior years, both these items and explanatory notes were included in this appendix. Only the "Market Value of Assets" is currently shown for informational purposes.

The market values shown in this appendix can be found in the *Fiscal Year 2012 Military Retirement Fund Audited Financial Statements*. The financial statements are available through the website of the Office of the Under Secretary of Defense (Comptroller) at http://comptroller.defense.gov/financialmanagement/reports/cfs2012.aspx.

\$(4,052)

\$<u>536,256</u>

\$(4,200)

\$436,404

TABLE L-1

DEPARTMENT OF DEFENSE MILITARY RETIREMENT FUND STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS (\$ in millions)

For the Plan Year Ended September 30: 2012 2011 <u>Assets</u> 1) Investments, at fair market value, in U.S. Government securities: 1 \$536,545 \$436,596 2) Accounts receivable: a) Accrued interest² \$3,673 \$3,405 b) Due from military retirees or their survivors \$47 \$67 c) Intragovernmental \$0 \$186 3) Cash: \$23 \$370 Total Assets (1 + 2 + 3): \$540,308 \$440,603

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Accounts payable:

Total Assets Available for Benefits

Fair market value of securities has been measured by quoted prices (bid price) in the active U.S. Government securities market. Bid price used represents the over-the-counter quotations as of 4 p.m. eastern time as reported by the U.S. Department of Treasury – Bureau of Public Debt on September 30, 2012, and September 30, 2011, respectively. Additional adjustment made as a result of FY 2011 National Defense Authorization Act (P.L. 111-383) regarding retired pay date as follows:

	<u>2012</u>	<u>2011</u>
Investments, at fair market value (actual)	\$536,545	\$432,742
October Expenditures paid in September	\$0	\$3,854
Investments, at fair market value (adjusted)	\$536,545	\$436,596

² Includes accrued interest receivable and interest purchased.

TABLE L-2

DEPARTMENT OF DEFENSE MILITARY RETIREMENT FUND STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

(\$ in millions)

For the Plan Year Ended September 30:

	2012	<u>2011</u>
Net assets available for benefits at beginning of plan year:	\$436,404	\$350,025
1) Investment/Inflation income (coupons received)	\$16,102	\$20,179
2) Net appreciation (depreciation) in fair market value of investments	\$44,256	\$29,873
3) Contributions from services	\$21,863	\$20,970
4) Appropriation to amortize the initial unfunded liability	\$64,751	\$61,404
5) Appropriation for Treasury Normal Cost Contribution	\$5,376	\$4,950
Total additions $(1+2+3+4+5)$	\$ <u>152,348</u>	\$ <u>137,376</u>
Less: Benefits paid to participants ¹	\$ <u>52,496</u>	\$ <u>50,997</u>
Net assets available for benefits at end of plan year	\$ <u>536,256</u>	\$ <u>436,404</u>

¹ The statement has been revised to show benefits paid to participants on an accrual basis:

	<u>2012</u>	<u>2011</u>
Benefits paid on cash basis	\$52,643	\$51,007
Change in liability for benefits due at end of year	\$(147)	\$(10)
Benefits paid on accrual basis	\$52,496	\$50,997

COMPARISON OF DOD BOARD AND SFFAS 33 ACTUARIAL LIABILITIES

For Military Retirement Fund liabilities, DoD Office of the Actuary (OACT) performs two annual valuations. The primary one is for funding purposes—this valuation is governed by Chapter 74 of Title 10 U.S.C. and must use methods and assumptions approved by the DoD Board of Actuaries (Board). The other is for financial statement purposes and is governed by Federal Accounting Standards Advisory Board (FASAB) standards.

Historically, OACT has used Board valuation methods and assumptions to calculate liabilities for financial statement purposes. However, even using the same assumptions, liabilities from the Board valuation differ from financial statement numbers because of financial statement deadlines. For example, the September 30, 2012, actuarial liability for the financial statements (which was due in early October 2012) was projected based on the September 30, 2011, Board valuation. The September 30, 2012, Board valuation (documented in this report) was performed at a later time, based on actual September 30, 2012 data, and therefore resulted in a different September 30, 2012 actuarial liability. A comparison of these respective actuarial liabilities is shown in Table L-3. Note that the 'Actuarial Certification' (page 2) only applies to Board valuation results for purposes of meeting the requirements of Chapter 74, Title 10, United State Code.

Currently, a separate financial statement valuation (i.e., with different assumptions) is necessary to satisfy a recently published financial statement regulation called the Statement of Federal Financial Accounting Standards 33 (SFFAS 33). A separate financial statement valuation is needed because SFFAS 33 requires the use of a yield curve to discount cash flows, whereas the Board valuation uses an interest rate assumption based on methodologies described in Appendix D.

SFFAS 33 requires a minimum of five years of historical rates for the yield curve input and a consistency in the number of historical rates used from period to period. OACT used ten years of quarterly zero coupon Treasury spot rates (as published by the Office of Thrift Supervision), from June 30, 2002 to March 31, 2012 (40 quarterly interest rates), which resulted in a single-equivalent interest rate of 4.6%. This is comparable to the Board valuation interest rate of 5.5%.

SFFAS 33 also directs the interest rate, underlying inflation rates, and other economic assumptions to be consistent with one another. A change in the interest rate may cause other assumptions to change as well. For the September 30, 2012, financial statement valuation, SFFAS 33 required the long-term inflation and salary increase assumptions to be consistent with the underlying Treasury spot rates used in the valuation. The September 30, 2012, SFFAS 33 economic assumptions are shown in the concluding note of Table L-3.

SFFAS 33 permits the use of a single average interest rate if the resulting present value is not materially different from what would be obtained using the yield curve. Using the SFFAS 33 as opposed to Board economic assumptions increases the MRF actuarial liability by approximately 9%.

TABLE L-3

MILITARY RETIREMENT SYSTEM COMPARISON OF DOD BOARD AND SFFAS 33 ACTUARIAL LIABILITIES (\$ in billions)

Valuation For the Plan Year Ended September 30, 2012:

		DoD Board ¹	SFFAS 33 ²
1.	Present value of future benefits		
	a. Annuitants now on roll	\$854.6	
	b. Nonretired reservists	\$187.5	
	c. Active duty personnel ³	\$ <u>565.8</u>	
	TOTAL	\$1,607.9	\$1,748.0
2.	Present value of future normal cost contributions	\$246.4	\$270.0
3.	Actuarial accrued liability	\$1,361.5	\$1,477.9
4.	Actuarial value of assets ⁴	\$428.0	\$420.2
5.	Unfunded accrued liability	\$933.5	\$1,057.8
6.	Funded Ratio (4. / 3.)	31%	28%

¹ Reproduced from Table 7 in main text.

DoD Office of the Actuary

NOTE: The following long-term economic assumptions are used in computing the respective actuarial liabilities:

	DoD Board	SFFAS 33
Full COLA:	3.00%	2.60%
Basic Pay:	3.50%	3.00%
Interest:	5.50%	4.60%

² Reproduced from the 'Fiscal Year 2012 Military Retirement Fund Audited Financial Statements.' The financial statements are available through the website of the Office of the Under Secretary of Defense (Comptroller) at http://comptroller.defense.gov/financialmanagement/reports/cfs2012.aspx. The 'Actuarial Certification' (page 2) does not apply to these figures. Line 1 components are not displayed ("-----"). The more comparable figure is the line 1 total.

³ The future benefits of active duty personnel expected to retire as reservists are counted on line 1.b.

⁴ For DoD Board results, the actuarial value of assets is determined using the amortized cost method from Table 4 in main text. For SFFAS 33 results, the actuarial value of assets is reduced by the accounts receivable (i.e., accrued interest) and accounts payable. Actual assets displayed on financial statements may be different than those shown here.

APPENDIX M

TREASURY PAYMENTS

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METHOD OF AMORTIZING CHANGES IN THE UNFUNDED LIABILITY OF THE MILITARY RETIREMENT SYSTEM

Introduction

Section 1465 of Title 10 states that the Secretary of Defense shall determine amortization methods and schedules for the annual amortization of changes in the unfunded liability (UFL) of the Military Retirement System. The section also states that these methods and assumptions must be approved by the DoD Board of Actuaries. The resulting payments are made by the Department of the Treasury to the Military Retirement Fund and do not affect the DoD budget.

There are three causes of change in the Military Retirement System's unfunded liability: (1) changes in benefits, (2) annual experience gains or losses resulting from actual experience deviating from expected experience, and (3) changes in actuarial assumptions used in the projected liability calculations. When a change in the unfunded liability does not fit perfectly into one of the three categories, OACT and the Board of Actuaries will determine the most appropriate one. The following describes the technical procedure of amortizing these types of changes, as approved by the Board.

Amortization Procedure

All three types of changes in the UFL are amortized by means of payment schedules so that: (1) the annual amortization payments increase each year by the long-term basic pay scale assumption (currently 3.5 percent); (2) the payment stream completely liquidates the additional liability over 30 years; and (3) the payments are expressed to the nearest million dollars. The amortization payments increase at the same rate as the increase in the total basic payroll for a particular year—an outcome that is consistent with the way the normal cost payments and payments to amortize the system's initial UFL are determined. This method is no longer common for many private sector pension plans and has given way to an amortization schedule with level payments in order to cover interest costs. It is also required for these pension plans to amortize changes in unfunded liabilities over shorter than a 30-year schedule. However, the methods applied to the Military Retirement Fund are similar to those of other federal and public sector pension plans. Additionally, the Board has annual discussions regarding the appropriateness of the amortization procedure.

Experience gains and losses, which create changes in the UFL, occur every year. Because these changes are usually small in relative terms, the payment streams to amortize them are combined. This produces one single payment stream for the category of experience gains and losses and eliminates the tedious tracking of up to thirty different small amortization schedules. The DoD Office of the Actuary can identify the separate segments if the need arises.

A similar method of combining amortization schedules is used for changes in the UFL caused by changes in actuarial assumptions. Beginning with the September 30, 1995, valuation,

changes to the UFL due to all benefit changes are being combined and amortized in a single stream of payments. Detailed examples of how the amortization payments are calculated follow.

Actuarial gains and losses are changes in the UFL that result from actual experience in a pension plan deviating from what was expected. An actuarial gain is a *decrease* in the UFL and is expressed as a positive number. Conversely, a loss represents an *increase* in the UFL and is expressed as a negative number. To avoid confusion, the terms negative and positive "experience changes" will be used in place of "experience gains" and "experience losses."

The amortization payment for a positive experience change (gain) is also expressed as a positive number. These positive amortization payments reduce any positive amortization payments otherwise payable, including the (negative) payments amortizing the system's initial UFL.

Amortization payments for changes in the UFL are structured to increase each year with the basic pay scale increase. When the payments are negative, their absolute values are made to increase. Although this means that the payments are actually decreasing mathematically, for simplicity of expression both positive and negative amortization payments are said to "increase" by the basic pay scale increase.

Benefit and Experience Changes

Below is an example of how three years' changes in UFL due to actual experience differing from expected experience would be amortized. The amortization schedules would be identical if these changes in the UFL had been due to changes in benefits. This example is hypothetical.

In FY 2012 there is an assumed experience change of -\$13,800 million (representing a loss of \$13,800 million) determined as of the end of the fiscal year, or September 30, 2012. Since this is the first experience change in the example, it does not need to be combined with a schedule for a prior year. It is amortized with 30 annual payments that increase each year at the rate of the assumed annual increase in basic pay. The payment stream commences on October 1, 2013, and the last payment is made on October 1, 2042. The final payment reduces the amortization base to zero.

The amount of the first payment, -\$632 million, is determined by means of the following steps:

1. Bring forward unamortized balance with interest to September 30, 2013:

$$-\$13,800 \text{ million} \times (1 + \mathbf{i}) = -\$14,559 \text{ million}$$

2. Calculate annuity due factor for 30 years at interest rate $\mathbf{j} = [(1 + \mathbf{i}) \div (1 + \mathbf{s})] - 1$:

$$= 23.04297$$

3. Divide unamortized balance by annuity factor to get annual payment:

$$-$14,559 \text{ million} \div 23.04297 = -$632 \text{ million}$$

where the annual increase in the basic pay scale $\mathbf{s} = .035$ and the valuation rate of interest $\mathbf{i} = .055$. The amortization period is 30 years. In general, the amortization interest rate, \mathbf{j} , is defined by

$$\mathbf{j} = [(1 + \mathbf{i}) \div (1 + \mathbf{s})] - 1.$$

A hypothetical experience gain in FY 2013 creates a change in the UFL of +\$8,400 million, calculated as of the end of that fiscal year, or September 30, 2013. The amortization schedules for this change and for the FY 2012 change are combined as follows. First, the unamortized balance of the FY 2012 experience change is determined. After the -\$632 million amortization payment is made on October 1, 2013, the remaining unamortized balance is -\$13,927 million. This balance is calculated as $[-13,927 = (-13,800 \times 1.055) - (-632)]$. The +\$8,400 million experience change for FY 2013 is then added to the -\$13,927 unamortized balance, leaving a combined balance of -\$5,527 million (-5,527 = -13,927 + 8,400).

This combined balance will be amortized over a "combined amortization period." The combined amortization period is equal to the weighted average of the remaining 29-year amortization period for the FY 2012 experience change and a new 30-year period for the FY 2013 experience change. The weights used in the calculation are the absolute values of the \$13,927 million unamortized balance and the +\$8,400 million experience change, respectively.

Thus the combined amortization period is equal to:

$$(13,927 \times 29) + (8,400 \times 30) = 29.38 \text{ years}$$

 $13.927 + 8.400$

An initial combined amortization payment of -\$257 million is determined by the following procedure:

1. Bring forward unamortized balance with interest to September 30, 2014:

$$-\$5,527 \text{ million} \times (1 + \mathbf{i}) = -\$5,831 \text{ million}$$

2. Calculate annuity due factor for 29.38 years at interest rate $\mathbf{j} = [(1 + \mathbf{i}) \div (1 + \mathbf{s})] - 1$:

$$= 22.68619$$

3. Divide unamortized balance by annuity factor to get annual payment:

The payments in the amortization streams will increase at 3.5 percent (the annual increase in the basic pay scale) per year. The payment at the end of the 29th year is -\$673 million. A final, partial payment will be made at the end of the 30th year and is equal to the unamortized balance, or -\$264 million.

Because experience changes normally occur every year, the only payment that would actually be made under this particular combined schedule is the -\$257 million on October 1, 2014. A new combined amortization schedule covering FY 2012, FY 2013, and the new UFL caused by experience changes in FY 2014 is determined as follows.

First, the combined FY 2012 and FY 2013 amortization base of -\$5,527 million is increased by one year's interest and credited with the payment of -\$257 million. The remaining unamortized balance as of October 1, 2013, is -\$5,574 million [-5,574 = (-5,527 \times 1.055) – (-257)]. This amount (-\$5,574) is then combined with an assumed FY 2014 experience change of +\$10,300 million, resulting in a new combined unamortized balance of \$4,726 million (4,726 = -5,574 + 10,300). This combined amortization base of \$4,726 million is then amortized over a new combined amortization period of 29.43 years, which is equal to the weighted average of the 28.38 years remaining for the old schedule and the 30-year period for the FY 2014 change. The new combined amortization period is calculated as follows:

$$(5,574 \times 28.38) + (10,300 \times 30) = 29.43 \text{ years}$$

5,574 + 10,300

The October 1, 2015, payment to amortize the new combined base of \$4,726 million is \$219 million and is determined by means of the following procedure:

1. Bring forward unamortized balance with interest to September 30, 2014:

$$\$4,726 \text{ million} \times (1 + \mathbf{i}) = \$4,986 \text{ million}$$

2. Calculate annuity due factor for 29.43 years at interest rate $\mathbf{i} = [(1 + \mathbf{i}) \div (1 + \mathbf{s})] - 1$:

$$= 22.71701$$

3. Divide unamortized balance by annuity factor to get annual payment:

$$4,986 \text{ million} \div 22.71701 = 219 \text{ million}$$

This is the payment to amortize the combined experience changes for all three years. This procedure continues for the active lifetime of the Military Retirement Fund.

Table M-1 shows the schedule of amortization payments for the experience changes in FY 2012; FY 2012 and FY 2013 combined; and FY 2012, FY 2013, and FY 2014 combined.

TABLE M-1				
Projected Amortization Payments for Experience Changes (Amounts in Millions)				
<u>Date</u>	FY 2012	Combined FY 2012 and FY 2013	Combined FY 2012, FY 2013 and FY 2014	
10/1/13	\$ -632			
10/1/14	-654	\$ -257		
10/1/15	-677	-266	\$ 219	
10/1/16	-701	-275	227	
10/1/17	-725	-285	235	
10/1/18	-750	-295	243	
:	:	:	:	

Changes in Actuarial Assumptions

The third type of change in the UFL is due to changes in actuarial assumptions. These assumption changes are amortized by the same method used for experience gains and losses and for benefit changes, i.e., by means of a combined schedule with initial 30-year payments that increase at the rate of the assumed basic pay scale increases.

If changes in economic assumptions include a change in either the valuation interest rate or the assumed basic pay scale increase, the amortization payments that have already been scheduled for all three categories of change in the UFL will be modified. Specifically, new series of payments will be determined to amortize the current amortization bases over their remaining periods, with payments that increase with the new basic pay scale assumption and are computed using the new valuation interest rate. The following example illustrates how this is done.

Suppose that on October 1 of a particular fiscal year, an amortization base is \$27,405 million, calculated immediately after the scheduled amortization payment is made. Say the remaining amortization period is 18 years. Also suppose that the valuation interest rate is changed to 5.25 percent and that the basic pay scale increase is changed to 3.0 percent.

The initial, revised payment, to be made on the following October 1, is determined by the following procedure:

1. Bring forward unamortized balance with interest to September 30 of next year:

$$27,405 \text{ million} \times (1 + \mathbf{i}) = 28,844 \text{ million}$$

where in this case, $\mathbf{i} = .0525$

2. Calculate annuity due factor for 18 years at interest rate $\mathbf{j} = [(1 + \mathbf{i}) \div (1 + \mathbf{s})] - 1$:

$$= 15.073946$$

where $\mathbf{i} = .0525$ and $\mathbf{s} = .03$

3. Divide unamortized balance by annuity factor to get annual payment:

$$28,844 \text{ million} \div 15.073946 = 1,913 \text{ million}$$

The second and succeeding payments will increase at the rate of 3.0 percent per year, which is the new basic pay scale increase. The \$27,405 million amortization base will be credited with 5.25 percent interest. This new series of amortization payments will reduce the \$27,405 million amortization base to zero at the end of the 18th year.

CALCULATION OF THE OCTOBER 1, 2013, TREASURY PAYMENT

The following pages (Tables M-2 through M-6) display the calculation of the October 1, 2013, Treasury payment based on the September 30, 2012, valuation results and on amortization methods and assumptions approved by the DoD Board of Actuaries. In order to avoid a projected shortfall in the Military Retirement Fund, the Board determined that, beginning with the FY 1998 payment, the total amortization period of the initial unfunded liability would be decreased from 60 to 50 years. The Board again shortened the initial unfunded liability amortization period in 2007 to 42 years in order for the payments to cover interest on the unfunded liability each year.

Public Law (P.L.) 108-136 required the Department of Treasury to pay for the increase in the normal cost due to Concurrent Receipt. Beginning with FY 2005, Treasury includes the annual normal cost payment due to Concurrent Receipt along with the unfunded liability payment in the October 1st contribution. For the October 1, 2013, Treasury payment, the amount due to Concurrent Receipt totals \$6.337 billion. This is computed using the full-and part-time normal cost percentages (NCPs) in Table 7 of the main text (item 8). The NCPs are multiplied by the DoD Comptroller-budgeted FY 2014 full- and part-time basic pay, \$57.6 billion and \$9.1 billion, respectively, or \$7.026 billion--the sum of \$57.6 billion x 11.7% and \$9.1 billion x 2.9%. Due to the 'Budget Control Act of 2011', this amount was reduced (or sequestered) by 9.8%, or \$0.689 billion. The Treasury payment of \$6.337 billion is the difference between the actuarially calculated amount (\$7.026 billion) and the sequestered amount (\$0.689 billion). The Board will consider ways of accounting for the sequestered amount in the future. Note that the above FY 2014 budgeted basic pay for part-time personnel differs from the projected amount shown in Table 10 of the main text due to recent mobilizations.

TOTAL TREASURY PAYMENT OCTOBER 1, 2013 AND OCTOBER 1, 2012

		October 1, 2013	October 1, 2012
Amortization	payment for:		
1.	Initial unfunded liability	\$81.373	\$78.598
2.	Changes in benefits	\$8.211	\$7.930
3.	Gains and Losses Amortization		
	a. Changes in actuarial assumptions	\$3.150	\$0.386
	b. Actuarial experience	\$(19.849)	\$(19.181)
	Total amortization payment	\$ <u>72.885</u>	\$ <u>67.733</u>
Norm	al cost payment	\$ <u>6.337</u>	\$ <u>6.791</u>
	Total Treasury payment	\$ <u>79.222</u>	\$ <u>74.524</u>

CALCULATION OF OCTOBER 1, 2013, PAYMENT ON INITIAL UNFUNDED LIABILITY (UFL)

1.	Unamortized balance of initial UFL $(10/1/11 \text{ balance} \times 1.0575)$	9/30/12	\$ 974.816
2.	Payment on UFL	10/1/12	\$ 78.598
3.	Unamortized balance of initial UFL (1 2.)	10/1/12	\$ 896.218
4.	Balance on 9/30/13 (3. × 1.055)	9/30/13	\$ 945.510
5.	Number of Annual Payments Remaining	9/30/13	13
6.	Value of an annuity due for remaining amortization period at interest rate equal to $(1.055 \div 1.035)$ - 1		11.6194
7.	Payment on initial UFL due $10/1/13$ $(4. \div 6.)$		\$ 81.373

CALCULATION OF OCTOBER 1, 2013, PAYMENT ON UNFUNDED LIABILITY (UFL) RESULTING FROM BENEFIT CHANGES

1. Unamortized UFL balance due to benefit changes (10/1/11 balance x 1.0575)	9/30/12	\$ 144.141
2. Payment on UFL	10/1/12	\$ 7.930
3. Unamortized UFL balance after payment (1 2.)	10/1/12	\$ 136.211
4. Additional (new) UFL due to benefit changes	9/30/12	\$ 0.000
5. Unamortized UFL balance due to benefit changes (3. + 4.)	10/1/12	\$ 136.211
6. Balance on 9/30/13 (5. × 1.055)	9/30/13	\$ 143.703
7. Total number of years of prior amortization schedule		22.06
 Remaining number of years of prior amortization schedule (7 1) 		21.06
9. Total number of years of new amortization schedule (absolute values used for all numbers)		
$[(3. \times 8.) + (4. \times 30)] \div (3. + 4.)$		21.06
10. Value of an annuity due for remaining amortization period at interest rate equal to $(1.055 \div 1.035)$ - 1		17.5015
11. Payment on UFL due to benefit changes $(6. \div 10.)$	10/1/13	<u>\$ 8.211</u>

CALCULATION OF OCTOBER 1, 2013, PAYMENT ON UNFUNDED LIABILITY (UFL) RESULTING FROM ASSUMPTION CHANGES

1.	Unamortized balance of UFL due to assumption changes $(10/1/11 \text{ balance} \times 1.0575)$	9/30/12	\$ 8.499
2.	Payment on UFL	10/1/12	\$ 0.386
3.	Unamortized UFL balance after payment (1 2.)	10/1/12	\$ 8.113
4.	Additional (new) UFL	9/30/12	\$ 60.121
5.	Unamortized UFL balance due to assumption changes (3. + 4.)	10/1/12	\$ 68.235
6.	Balance on 9/30/13 (5. × 1.055)	9/30/13	\$71.988
7.	Number of years in prior amortization schedule		28.23
8.	Remaining number of years in prior amortization schedule (7 1)		27.23
9.	Number of years in new amortization schedule (absolute values used for all numbers) $[(3. \times 8.) + (4. \times 30)] \div (3. + 4.)$		29.67
10	. Value of an annuity due for remaining amortization period at interest rate equal to $(1.055 \div 1.035)$ - 1		22.8553
11	. Payment on UFL due to assumption changes $(6. \div 10.)$	10/1/13	<u>\$ 3.150</u>

CALCULATION OF OCTOBER 1, 2013, PAYMENT ON UNFUNDED LIABILITY (UFL) RESULTING FROM EXPERIENCE GAINS AND LOSSES

1.	Unamortized UFL balance due to experience gains and losses $(10/1/11 \text{ balance} \times 1.0575)$	9/30/12	\$ (247.093)
2.	Payment on UFL	10/1/12	\$ (19.181)
3.	Unamortized UFL balance after payment (1 2.)	10/1/12	\$ (227.912)
4.	Additional (new) UFL	9/30/12	\$ (6.948)
5.	Unamortized UFL balance due to experience gains and losses (3. + 4.)	10/1/12	\$ (234.860)
6.	Balance on 9/30/13 (5. × 1.055)	9/30/13	\$ (247.777)
7.	Number of years in prior amortization schedule		14.62
8.	Remaining number of years in prior amortization schedule (7 1)		13.62
9.	Number of years in new amortization schedule (absolute values used for all numbers) $[(3. \times 8.) + (4. \times 30)] \div (3. + 4.)$		14.11
10	. Value of an annuity due for remaining amortization period at interest rate equal to $(1.055 \div 1.035)$ - 1		12.4830
11	Payment on UFL due to experience gains and losses $(6. \div 10.)$	10/1/13	<u>\$ (19.849)</u>

OACT ENDNOTES

VISION STATEMENT Dod Office of the actuary

To be the leading professionals in the measurement of contingent events and risk related to military benefits and to provide world-class actuarial support to the Department and other stakeholders on matters related to military benefits.

MISSION STATEMENT Dod Office of the actuary

The Office of the Actuary is responsible for performing annual valuations and providing actuarial cost estimates by applying theories, methods and techniques of actuarial science to the Department for four trust funds: the Military Retirement Fund, Medicare-Eligible Retiree Health Care Fund, Education Benefits Fund, and Voluntary Separation Incentive Fund. We provide requisite actuarial support to the DoD Boards of Actuaries, and are responsible for calculating actuarial liabilities and providing actuarial input for the Department's and government-wide financial statements, producing actuarial analysis and products for the Survivor Benefit Plan, developing quarterly incurred claim reserves for the Medicare-Eligible Retiree Health Care Fund, and providing statistical information about the Military Retirement System for analysts and other interested offices and individuals.

CONTACT INFORMATION Dod Office of the actuary

Located in the 'Actuarial Certification' section of this report (page 2).

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