## **2013 Retirement Choices**

Anita U. Hattiangadi • Lewis G. Lee • Robert W. Shuford • Aline O. Quester



DAB-2013-U-004158-Final March 2013



Photo credit line: LtCol John Kelley pins a third Meritorious Service Medal on the chest of MGySgt Richard Herald during his retirement ceremony at Paradise Point Officers' Club aboard Marine Corps Base Camp Lejeune, NC, Oct. 12, 2012. Herald retired after 26 faithful years of service to the Marine Corps. (Official Marine Corps photo by LCpl Caleb McDonald)

Approved for distribution:

- Quite Hottongodi

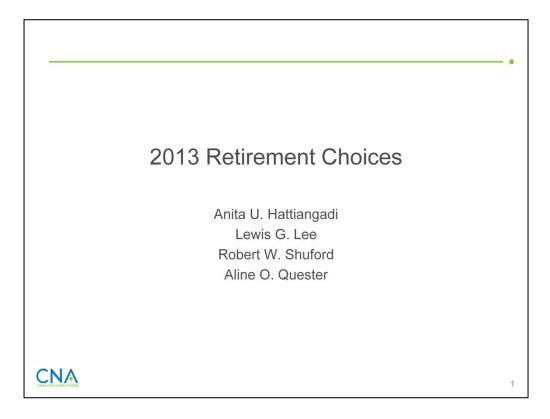
Anita Hattiangadi Research Team Leader Marine Corps Manpower Team

This document represents the best opinion of CNA at the time of issue. It does not necessarily represent the opinion of the Department of the Navy.

Approved for Public Release; Distribution Unlimited. Specific authority: N00014-11-D-0323 Copies of this document can be obtained through the Defense Technical Information Center at www.dtic.mil or contact CNA Document Control and Distribution Section at 703-824-2123.

## Copyright © 2013 CNA

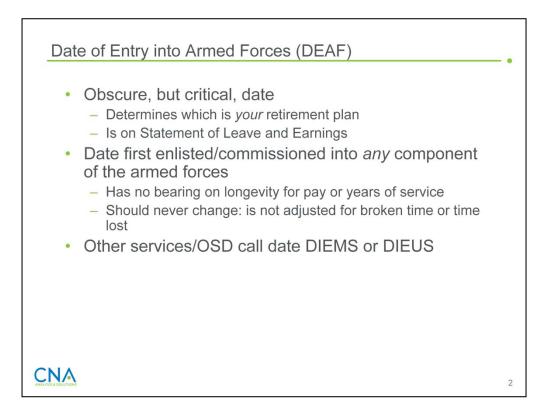
This work was created in the performance of Federal Government Contract Number N00014-11-D-0323. Any copyright in this work is subject to the Government's Unlimited Rights license as defined in DFARS 252.227-7013 and/or DFARS 252.227-7014. The reproduction of this work for commercial purposes is strictly prohibited. Nongovernmental users may copy and distribute this document in any medium, either commercially or noncommercially, provided that this copyright notice is reproduced in all copies. Nongovernmental users may not use technical measures to obstruct or control the reading or further copying of the copies they make or distribute. Nongovernmental users may not accept compensation of any manner in exchange for copies. All other rights reserved.



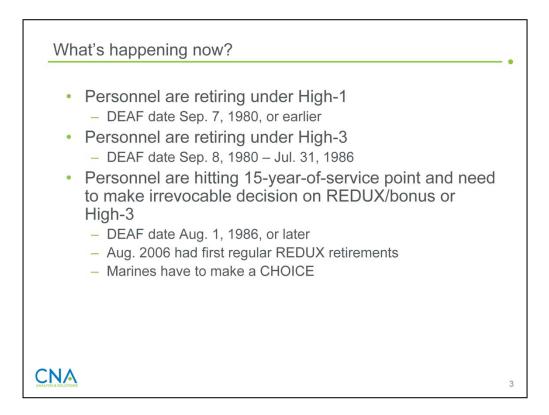
This briefing is designed to assist Marines considering the choice between a High-3 retirement and a REDUX retirement with a \$30,000 Career Status Bonus. For virtually every Marine, choosing REDUX/bonus results in a significant loss in retirement income over the course of a Marine's lifetime.

Military retirements come in the form of pensions. Pensions are risk-free, taxsheltered, inflation-adjusted annuities with options for spousal benefits (such as the Survivor Benefit Plan) on the death of the member. Such private pension provisions are very expensive, and only a few companies offer them.

But some Marines are making irrevocable choices that don't maximize their retirement incomes. This briefing addresses those choices and how decisions can be made that best suit a Marine's unique set of circumstances.

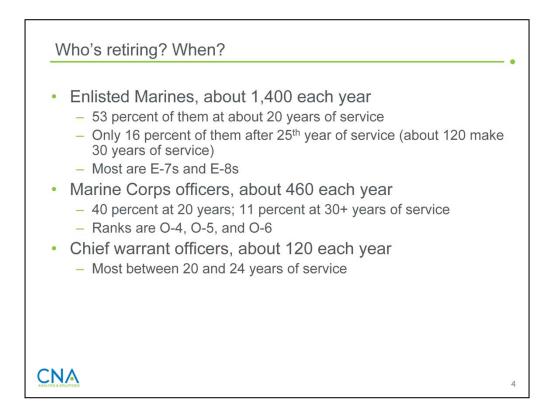


Military retirement is determined by federal laws and statutes that change when Congress periodically updates them. A Marine's eligibility for a certain retirement plan depends on the very first date that he or she entered military service. It will not change for those who were in both the active and reserve components or those who transferred from another branch of the military. It is called Date of Entry into Armed Forces (DEAF), Date of Initial Entry to Military Service (DIEMS), or Date of Initial Entry to Uniformed Services (DIEUS). This date is used to determine under which plan a Marine can retire, and it can be found on a Marine's Statement of Leave and Earnings.

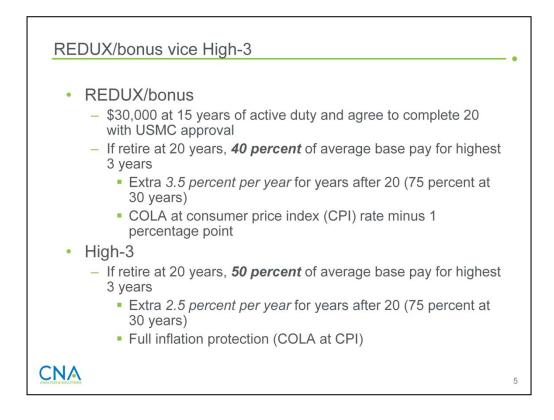


Retirement pay is based on the pay a Marine received while he or she was in the service. Those who initially entered service before Sep. 7, 1980, are retiring with their retirement pay calculated by the single highest paying year of basic pay (High-1). If a Marine entered the military between Sep. 8, 1980, and Jul. 31, 1986, his or her retirement is based on the average of the 3 highest paying years of basic pay—technically, the highest paying 36 months (High-3).

Those who entered service on or after Aug. 1, 1986, have the option of High-3 or a reduced retirement with a bonus paid up front (REDUX/bonus). That decision has to be made at the 15-year point and is irrevocable; a Marine CANNOT change his or her retirement plan after election. The rest of this briefing addresses the monetary differences between these alternatives and how a Marine can make the best decision based on his or her personal situation.



Over the last decade, approximately 1,980 Marines (1,400 enlisted Marines, 460 officers, and 120 chief warrant officers) have retired each year. Of retiring enlisted Marines each year, about 53 percent have 20 years of service, while 16 percent have 25+ years of service. Most are gunnery sergeants and master sergeants/first sergeants. Forty percent of officers retire at 20 years of service and range from major to colonel. Most warrant officers retire between 20 and 24 years of service.



This slide compares the two retirement alternatives.

Under the REDUX/bonus option, a Marine receives a \$30,000 Career Status Bonus, which is taxed, and agrees to complete at least 5 more years of active service (but must get the Marine Corps' approval for doing so). If the Marine retires at 20 years of service, he or she receives 40 percent of his or her average pay for the 3 highest paying years. For every year beyond 20 years of service (up to 30 years of service), the Marine receives an additional 3.5-percent increase to this amount. The retirement pay is adjusted each year to compensate for inflation (cost-of-living adjustment, or COLA) at the Consumer Price Index (CPI) rate minus 1 percent.

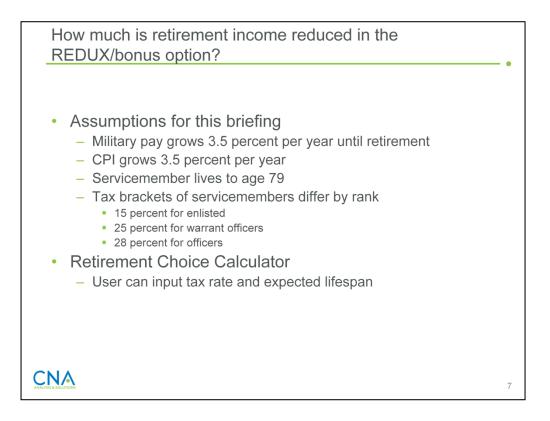
Under the High-3 option, a Marine who retires at 20 years of service receives 50 percent of his or her base pay. For every year beyond 20 years of service, the Marine receives an additional 2.5-percent increase to this amount (up to a maximum of 75 percent at 30 years of service). The retirement pay is adjusted each year to compensate for the full value of inflation (COLA) at the CPI rate.

Feature	REDUX/Bonus	High-3
reature	REDOA/Bollus	rigii-s
% of basic pay (highest 36 months)	40	50
Risk	None – backed by US Gov't	None – backed by US Gov't
Taxes	Tax deferred until retirement begins	Tax deferred until retirement begins
Inflation Protection	Annual COLA increase (CPI – 1 percent)	Annual COLA increase (CPI)

Both retirement choices have the following features:

- Retirement income is a percentage of the average of the highest 36 months of basic pay. There is no risk; the retirement payments are specified by law and are guaranteed by the full faith and credit of the U.S. government.
- Income is deferred compensation for which no taxes are paid until the retired pay is received. Such plans are called tax-sheltered retirement plans. The service pays into the retirement fund each year, and the fund grows while the Marine is in the service. The Marine has no tax liability for the service's contributions to the retirement fund.
- Income is protected from inflation. The High-3 has full inflation protection because it changes yearly with the CPI, whereas REDUX/bonus has less protection (CPI minus 1 percentage point). The value of inflation protection for retirement pay cannot be overemphasized. Most military members will be retired in about 40 years. In 40 years, one can expect prices to increase at least four times, meaning that what costs \$1 at military retirement will end up costing \$4.<sup>1</sup>

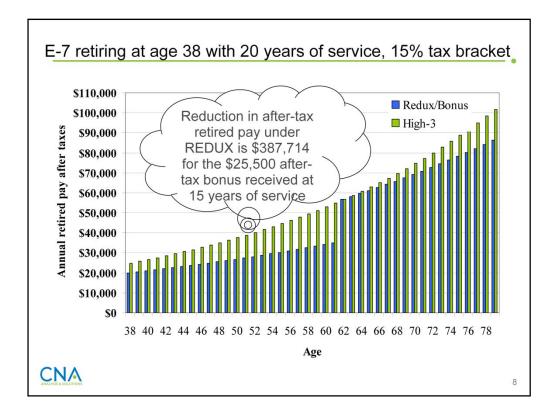
<sup>&</sup>lt;sup>1</sup> The CPI in 2012 was nearly 8 times the level it was in 1960. This period includes the sharp inflation in 1974 (12.3 percent), 1979 (13.3 percent), and 1980 (12.5 percent). The commonly assumed 3.5-percent inflation rate leads to a fourfold increase in prices over a 40-year period.



To compare the two retirement plans, we must keep some aspects constant by making some assumptions. First, we assume that both military pay and the CPI will grow 3.5 percent each year. We also assume that the Marine lives to age 79 because the average life expectancy in the United States is approximately 79.<sup>2</sup> For tax purposes, we assume that enlisted Marines will fall in the 15-percent tax bracket, warrant officers will fall in the 25-percent tax bracket, and officers will be in the 28-percent tax bracket.

The calculator we developed allows the user to input the appropriate tax rate and expected life span to customize the information to his or her personal future circumstances. The calculator provides a more refined approximation of the differences between the two plans.

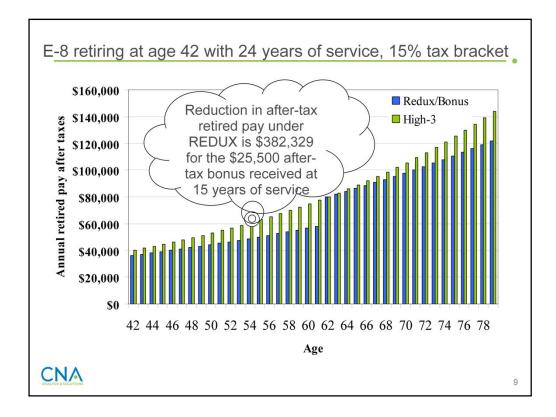
<sup>&</sup>lt;sup>2</sup> The National Vital Statistics Reports show an additional 40.1 years for someone age 40, so we err on the side of caution and use an overall life expectancy of 79 years for military retirees. In a later section, we explore what happens if the servicemember lives past age 79. See http://www.cdc.gov/nchs/data/nvsr/ nvsr61/nvsr61\_03.pdf.



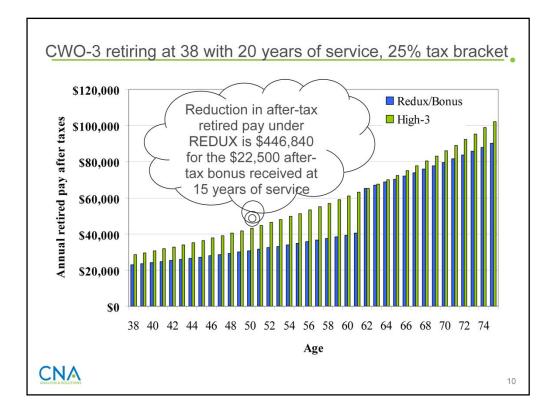
Some Marines may think that getting a lower amount of retirement income under the REDUX/bonus plan is appropriately offset by the bonus; however, over the life of a Marine, this \$25,500 (after taxes) amount is drastically smaller than the reduction in future retirement income.

For an E-7 who retires at age 38 with 20 years of service and who is in the 15percent tax bracket, the difference between retiring under High-3 and REDUX/bonus is \$387,714 over his or her lifetime, assuming that he or she lives until age 79. The design of the two plans makes the annual payout equal when the Marine is 62; however, before and after that age, the Marine receives less retirement pay under REDUX/bonus than the High-3 plan, largely because of the reduced COLA.

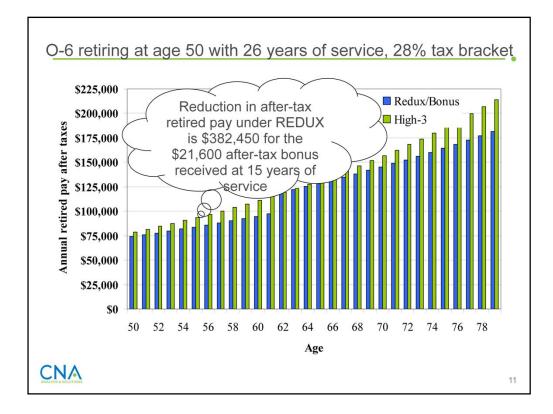
The higher the Marine's grade and the lower the years of service at retirement, the greater the reduction. In other words, fast-trackers who retire very early are penalized most severely. For *all* military personnel, however, REDUX retirement income is *substantially lower* than retirement income under High-3.



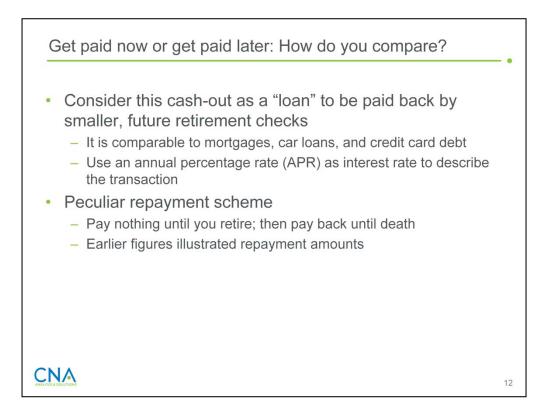
This slide shows the difference in payments for a Marine who expects to retire as an E-8 at age 42 with 24 years of service. Here, the reduction in retired pay (\$382,329) is just a little less than that for the E-7 who retires at 38 with 20 years of service (previous slide).



This slide shows the situation for a CWO-3 who expects to retire at age 38 with 20 years of service. Here, the reduction in retirement pay is substantially higher under REDUX/bonus (\$446,840).



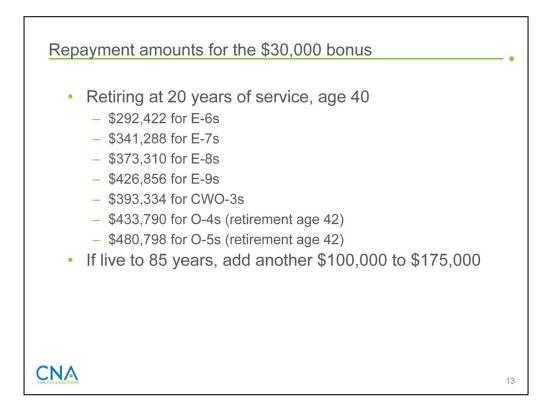
This slide shows the situation for an O-6 who expects to retire at age 50 with 26 years of service. Here the officer's retired after-tax pay is \$382,450 less under REDUX/bonus than it would have been under High-3.



Bonus-takers will get some of their retirement income early, at the 15-year-ofservice point. The best way to think about this is to consider REDUX's \$30,000 Career Status Bonus as an early cash-out of part of a Marine's retirement pension. We can calculate how much this cash-out costs the Marine by thinking of it as a "loan" to be paid back later in the form of lower retirement checks.

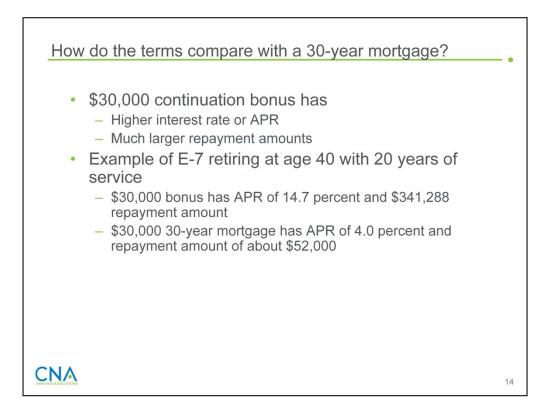
This so-called loan, given at 15 years of service, is paid back over the Marine's entire retired lifetime. Most people are familiar with car loans, mortgages, and credit card debt. Car loans and mortgages have fixed loan periods, often 5 years for cars and 30 years for mortgages. Credit card debt is a little different, requiring only a minimum payment per month. We characterize all of these loans by the interest rates and interest payments attached to them.

The \$30,000 bonus has a rather peculiar payback scheme. The Marine pays nothing until retirement, pays quite a bit from the beginning of retirement until age 62, and then continues to pay back smaller amounts over the rest of his or her life. The "payments" are the differences in the height of the High-3 and REDUX/bonus bars in the four previous slides. Although this payment scheme is peculiar, we can calculate the implied interest rate, or annual percentage rate (APR).



If an E-6 expects to retire at age 40 with 20 years of service and lives to age 79, our calculations show that, by selecting REDUX/bonus at 15 years of service, the Marine: loses \$292,422 in after-tax retirement income.

If the Marine lives until age 85, the retirement income loss includes roughly another \$100,000 to \$175,000.

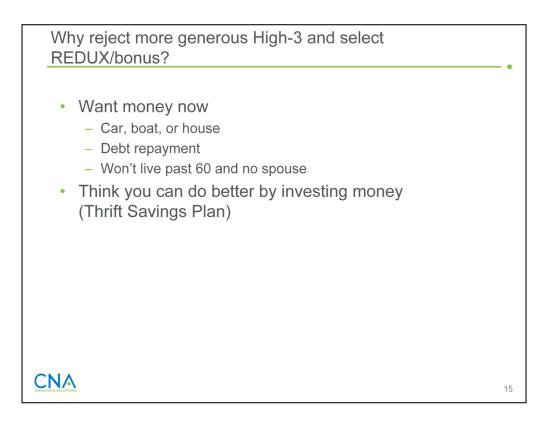


Even for a 9-percent, 30-year home mortgage loan—a *very high* interest rate by current standards—one pays back a little under three times the amount borrowed. For the current 4% mortgage rate, the Marine's payback is less than double the amount borrowed. For the after-tax portion of the \$30,000 bonus, our calculations show that the Marine is paying back from 10 to 19 times the bonus (i.e., the amount "borrowed")!<sup>3</sup> One might ask, "Why are the repayment amounts so large for this \$30,000 'loan'?"

If the Marine dies at the retirement point, there is no repayment; the Marine received the \$30,000 at the 15-year point but died before collecting any retirement monies. But most Marines will live well beyond the retirement point, so one reason why repayment amounts are so large is because the terms of this financial arrangement are *reduced retirement checks over the entire lifetime.*<sup>4</sup> Indeed, average life expectancy is roughly 79 and Marines (who are in better physical condition than comparably aged civilians) likely live longer and lose more money since this "loan" cannot be paid off early and has no termination point.

<sup>&</sup>lt;sup>3</sup> All calculations are after taxes. An E-6 with 20 years of service who retires at age 42 pays back \$256,374 for the \$25,500 (\$256,374/\$25,500) = 10.1; an E-9 who retires with 20 years of service at age 38 pays back 19 times the amount borrowed (\$484,922/\$25,500).

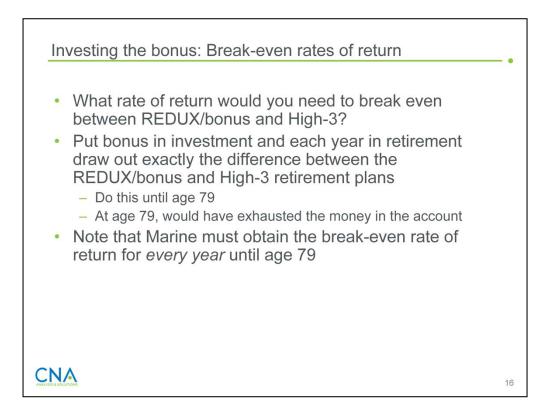
<sup>&</sup>lt;sup>4</sup> We have not addressed survivor benefits in this analysis, but the reduced retirement income may make the Survivor Benefit Plan (SBP) unaffordable for some REDUX retirees.



Why would anyone reject the more generous High-3 retirement plan and select the bonus and associated reduced retirement payments under REDUX? There are two main reasons:

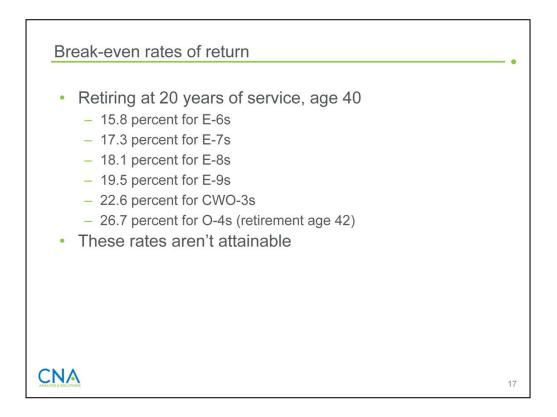
- Marines want or need money now.
- Marines think that they can do better by investing the \$30,000.

Many have immediate financial needs, and many believe that the federal government's Thrift Savings Plan (TSP) provides especially good investment opportunities. Neither of these reasons, however, should justify the REDUX/ bonus choice. Marines who want or need money now should look into other (less costly) ways to obtain money. Are there alternatives for borrowing \$30,000 that do not entail several hundred thousand dollars of interest payments?

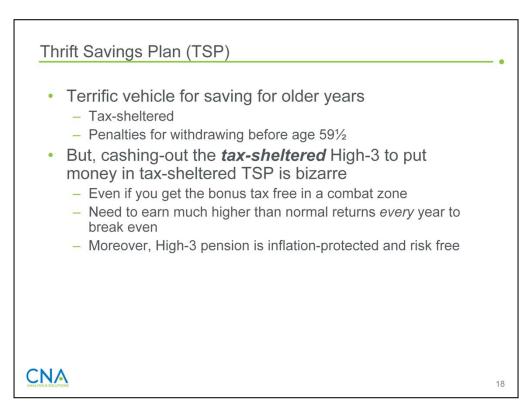


The break-even interest rate is the before-tax interest rate that a Marine would have to earn to equalize compensation under the High-3 and REDUX/bonus retirement packages. For example, if the Marine put the after-tax bonus into an investment account, that investment account would have to earn the break-even interest rate *every* year to generate an income equal to the yearly difference in retirement pensions. And, at age 79, the account would be exhausted. If, for only one year, the Marine earned less than the break-even interest rate, the account would be exhausted before the Marine's death.<sup>5</sup> The break-even interest rates are high enough that it will be virtually impossible for anyone to break even.

<sup>&</sup>lt;sup>5</sup> The break-even interest rate is higher than the after-tax interest rate because taxes must be paid on investment income. The break-even interest rate times the tax rate is equal to the after-tax implicit interest rate.



In a strong and growing economy (which is not the current economic environment), investors commonly use 8 percent to indicate average or slightly above average growth in stocks. Sustaining a 15.8-percent rate of return *every* year during a Marine's retirement is unattainable.



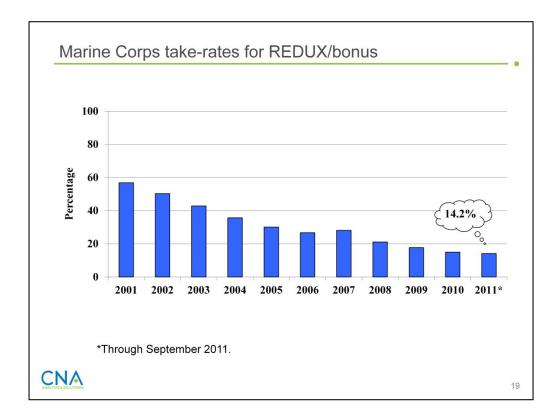
Marines now can contribute pre-tax dollars to a TSP. By doing so, uniformed personnel can save additional monies for the years in which they are truly retired. However, TSPs were designed to provide savings for a members' older years, so there are tax penalties for withdrawals before age 59½. In short, Marines should not put savings that they anticipate needing before their sixties in TSPs.<sup>6</sup>

Retirement savings plans such as the TSP share one feature with conventional military retirement plans—namely, the tax sheltering of pre-retirement income. Many Marines, in fact, do not seem to realize that military pensions are tax sheltered. Retirement tax sheltering means that no taxes are paid until the money is received in retirement. With military pensions, the Marine pays no taxes on the accrued benefits until the pensions are paid in retirement. TSPs involve pre-tax contributions, and taxes are not paid until the money is withdrawn. However, TSPs lack the two other important features of the High-3 retirement plan:

- Risk-free, guaranteed payments or returns
- Full inflation protection.

The TSP offered to military members allows the member to choose the fund, or funds, in which to invest the savings. These funds differ by the level of risk or variability of the investment returns. Funds that have higher risk will have higher average returns for long-term investors, but those returns will be more variable. None of the funds, however, have inflation protection or guaranteed returns.

<sup>&</sup>lt;sup>6</sup> Under exceptional circumstances, the tax penalties for early withdrawals can be waived.



Despite the significant downsides of the REDUX/bonus choice, many Marines still choose this option every year. Through September 2011, more than 23,000 Marines had made their choices. Of those who had decided:

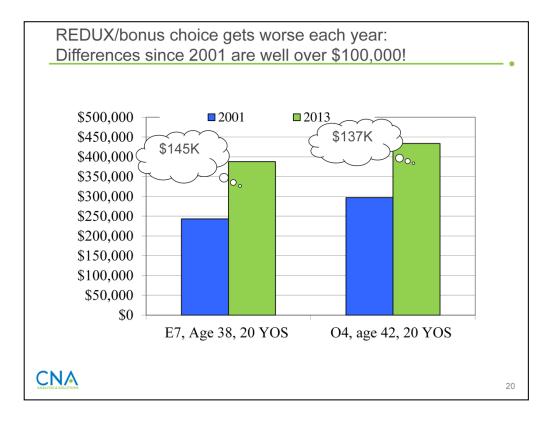
- A third of enlisted Marines chose the REDUX/bonus retirement
- 26 percent of warrant officers chose REDUX/bonus
- 7 percent of officers chose REDUX/bonus, O1Es through O3Es chose it at much higher rates.

These take-rates have fallen sharply over time. Overall, the percentage of all Marines selecting the bonus declined from 57 percent in 2001 to 14 percent in September 2011. Thus, by 2011, fully 86 percent of Marines selected High-3 as their retirement plan.

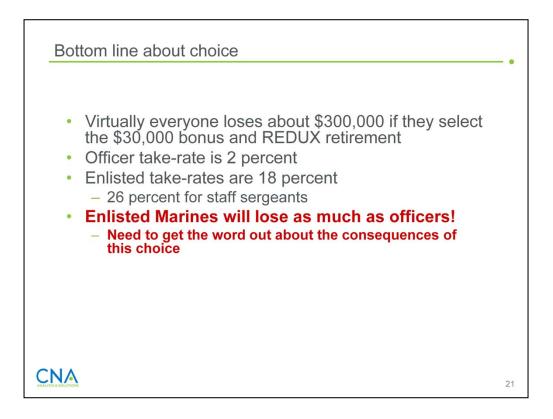
The take-rates in 2011 (through September) were:

- 18 percent for enlisted Marines (26 percent for staff sergeants)
- 11 percent for warrant officers
- 2 percent for officers (6 percent for O1Es through O3Es).

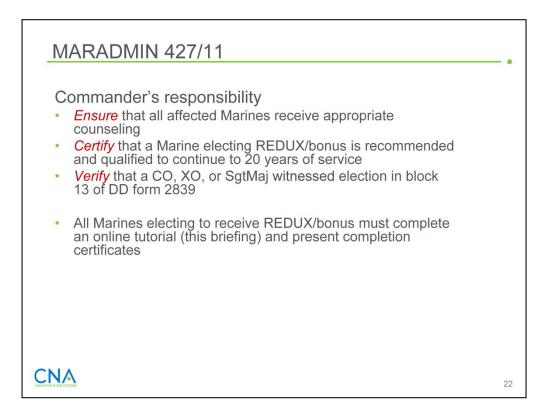
Gunnery sergeants make up the largest group to face the retirement choice; their take-rate for REDUX/bonus dropped from 54 percent to 16 percent over the 2001–2011 time period.



As each year passes, the difference between REDUX/bonus and High-3 retirement income increases. For example, the *additional* reduction in retirement income under REDUX/bonus for those making the choice in 2013 (compared with 2001) is well over \$100,000 for virtually all retirees! An E-7 who retires at age 38 with 20 years of service in 2012 loses \$145,000 more under REDUX/bonus than if he or she had retired in 2001. For an O-4, the difference between 2001 and 2013 retirement pay values is \$137,000.



Retiring under REDUX/bonus results in lost retirement income—income that cannot be made up by investing the bonus. Enlisted Marines lose just as much money as officers under this retirement option, but only a small portion of officers take the REDUX/bonus option, compared with over a quarter of staff sergeants. Enlisted Marines need to know how much they stand to lose if they choose REDUX/bonus over High-3.

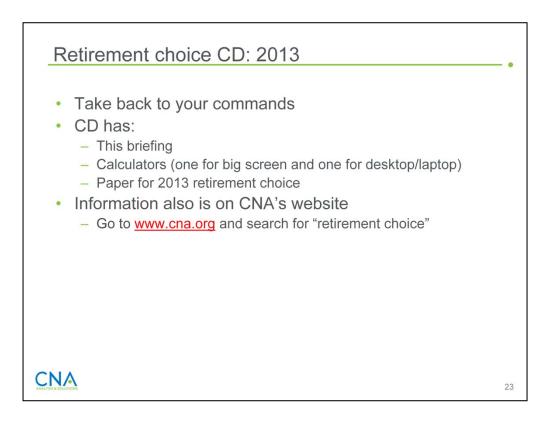


In an attempt to further educate its Marines, the Marine Corps has issued MARADMINs since 2007 that reinforce the Commander's responsibilities.<sup>7</sup> If a Marine chooses the REDUX/bonus, the Commander must be certain that:

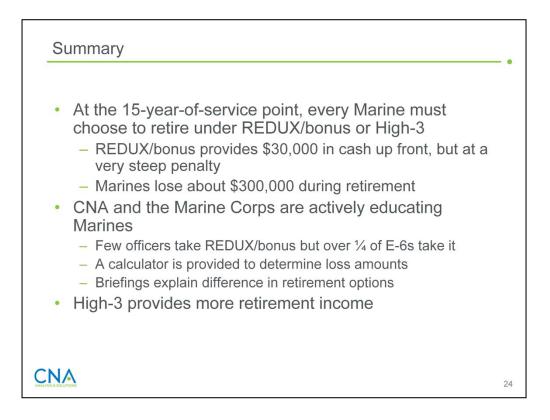
- He or she receives appropriate counseling about this choice
- He or she is recommended and qualified to continue to 20 years of service
- A commanding officer, executive officer, or sergeant major witnessed the election in block 13 of the DD form 2839.

Any Marine electing to receive REDUX/bonus must work through an online tutorial (namely, this briefing) and present certificates of completion.

<sup>&</sup>lt;sup>7</sup> The latest one to date is MARADMIN 427-11.

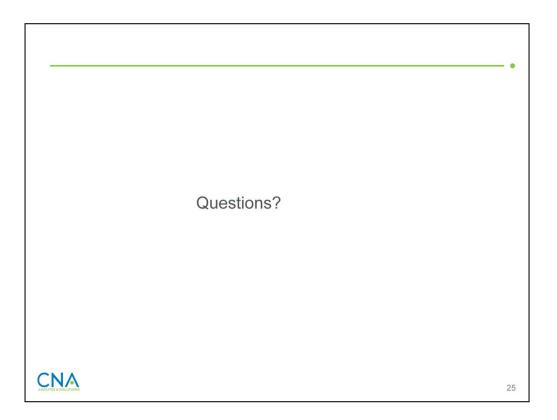


CNA has developed a CD that contains this briefing along with calculators so that you can run numbers for yourself and your people. There are two versions of the calculator—one designed to be shown on a big screen monitor and one for a desktop or laptop. The CD also includes the paper that presents our findings. In addition, the information is available on CNA's website (www.cna.org); just search for "retirement choice." All of this information is for you to take back to your commands and your people. Please copy and distribute freely.



According to law, every Marine who entered on or after Aug. 1, 1986, has the choice to retire under REDUX/bonus or High-3. This decision is made at the 15-year-of-service point and is irrevocable. Through detailed analysis, CNA has determined the loss amounts for those who choose REDUX/bonus, which is at least \$300,000 and, for some, almost \$500,000. About 2 percent of officers take the REDUX/bonus retirement option, but 26 percent of staff sergeants take this option.

CNA and the Marine Corps have developed several products—including briefings and a retirement calculator—to assist in this decision. Educating Marines to ensure that they have the most accurate information for their personal situations is critical so that they can make informed decisions about their retirements.



If you have questions about the content of this briefing, please contact the authors at CNA: 703-824-2000 or <u>inquiries@cna.org</u>.

This page intentionally left blank.

DAB-2013-U-004158-Final

