STRATEGY RESEARCH PROJECT

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MILITARY RETIREMENT -- IS IT TIME TO CHANGE?

BY

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Military Retirement --

Is it Time to Change?

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Preface

In 1998, over 1.5 million military retirees will draw over $28 billion in non-disability retirement pay. Eighteen percent of a given accession cohort serves the required 20 years in order to vest under the present retirement program. Then, within three years, almost two-thirds of these soldiers, sailors, airmen, and marines retire. Each service choreographs their senior-personnel management policies and practices around this 20-year mass-exodus point.

This paper focuses on two fundamental questions. First, what is the purpose of the *current* retirement program in the way it is presently structured? Second, what might be optimal goals for *future* retirement pay? After developing these goals, we consider the potential consequences to the present retirement program and outline possible next steps for action by the Department of Defense.

The basic design characteristics of the present retirement program were derived in the aftermath of World War II. Our research indicates four stated purposes for this Cold War era retirement pay program. These purposes form the cornerstone for present system design.

- Purpose 1. To provide a pool of experienced military manpower that can be called in time of war or national emergency to augment the active-duty forces and establish a mechanism whereby persons in this pool can move into and out of the active-duty force smoothly.
- Purpose 2. To enable the armed forces to remain generally competitive with private-sector employers and the Federal Civil Service.
- Purpose 3. To provide a means of keeping the military forces of the United States young and vigorous, thereby insuring promotion opportunities for younger members.
- Purpose 4. To provide a socially acceptable level of payments to members and former members of the armed forces during their old age.

Cold War era purposes for the Military Retirement Pay

In light of recent analysis by the 8th Quadrennial Review of Military Compensation, personnel management changes within the services, and numerous private sector retirement initiatives, we believe the Department of Defense should reconsider these stated purposes. The Department should adopt updated goals for a new 21st century retirement system.

We developed our goals from the perspective of the three major stakeholders in this retirement system -- the nation, the services and the service members. We consider this goal development to be *the* critical first step in system redesign. Our goals are presented below.

Reducing taxpayer costs is better for the nation. Large entitlement programs bear increasing political scrutiny due to their huge unfunded liability. Today's unfunded liability in the Military Retirement Fund exceeds $490B. Beginning in the year 2000, the Department's normal cost contribution to the fund exceeds $11B each year. Since 1993, there have been seventeen congressional proposals for changing military retirement -- all seeking to reduce system costs. There are no signs of abatement. As a *national* goal, cost is an overriding factor that serves as the centerpiece of congressional debate.

Vertical integration with the Department's human resource management (HRM) strategy is better for the services. The recommended HRM strategy for the Department of Defense is to facilitate change, assist leader effectiveness and enhance organizational performance. In our view, retirement policies should encourage *timely* retirement of specific *individuals*. The present method is predominantly supply-driven -- a one-size fits-all model with limited policy options. Presently, past the 20-year mark, the services take virtually whoever decides to stay. The new system should incorporate a demand component where the services pick and "incentivize" those *the services* want to stay -- and separate the rest. Under this model, the focus is on behavior, depth of knowledge, or experience that enhances organizational performance.

Horizontal alignment with other HRM sub-component policies and practices is better for the services. Among others, the retirement system should encourage recruiting, retaining, rewarding, distributing, and separating its members. We believe the 20-year vesting requirement is the primary culprit. A long vesting period stifles promotions and hinders rewarding. It may also be detrimental to recruiting and initial retention. It may overpower career retention, causing too many service members to remain. All these problems lead towards degraded organizational performance. The problem is that 20-year vesting does not encourage *selective* members to retire at an *optimal* time -- only *mass populations* to retire at a historically *arbitrary point in time*.

A more reliable system is better for the service member. From the service member's perspective, as political debate focuses on the liabilities generated by entitlement

programs, changing from a defined-benefit to a defined-contribution system *may* enhance reliability. With this change, service members initiate individual retirement accounts and invest their retirement funds in market securities. They effectively replace political risk with market risk. This option is especially attractive with the younger, "Generation X" crowd that forms the bulk of today's military. In general, these members hold little trust in entitlement programs not funded in real money and earmarked for specific individuals.

A more equitable system is better for the service member. Today, less than 18% stay long enough to vest and receive any retirement accrual for their time spent in service to the nation. These non-vesting members are disadvantaged every month they remain in the armed forces vis-à-vis their civilian counterparts. Equitability also includes other benefits available to most private sector employees such as encouragement and a medium for retirement savings, portability, funds for hardship, and expanded survivorship provisions.

Finally, a flexible retirement system is better for the service member. Flexibility is enhanced in a defined-contribution system. Here, service members choose the investment vehicle, portfolio allocation, contribution level, and anticipated rate of return based on life goals and risk tolerance. This requirement to choose also forces a higher individual rate of participation in retirement planning, increases saving awareness, and mitigates an entitlement mentality associated with the present system.

Better for the Nation	• To reduce the cost to the American taxpayer
Better for the Service	• To integrate retirement policies and practices vertically with human resource management strategy • To align retirement policies and practices horizontally with other human resource management sub-function policies and practices
Better for the Service Member	• To increase reliability • To enhance equitability • To create flexibility

Proposed Goals for the 21st Century Military Retirement System

Possible Consequences. We believe the possible consequences to the present retirement program of adopting our proposed goals may be numerous and varied. The two significant changes include replacing the defined-benefit program with a defined-contribution system and eliminating the 20-year vesting requirement. These changes and their possible second and third order effects are listed below.

1. **Replacing the current defined-benefit only program.** Leads to the possibility of:
   - Cost reductions using market equities to assist the Military Retirement Fund or --
   - Cost reductions using market investments for Individual Member Accounts.
   - Adoption of a defined contribution program with individual accounts that --
     - Replaces present political risk with future market risk.
     - Relies on long-term market returns and compounding interest to beat inflation.
     - Is potentially funded *totally* by Defense Department contributions.
     - Is less costly to the taxpayer than through the Military Retirement Fund.
     - Eliminates the need for the costly Survivor Benefit Plan.

2. **Discontinuance of the 20-year vesting requirement**. Necessary because it is:
   - Neutral or detrimental to recruiting
   - Neutral or detrimental to initial reenlistment
   - Tends to overpower career retention
   - Non-competitive in today's labor markets with 3-7 year vesting
   - Does not support HRM strategy of facilitating change (retains virtually everyone who stays past approximately12 years of service)
   - Does not support HRM strategy of enhancing organizational performance
   - Retires mass populations at an arbitrary point in time
   - Does not retain specific individuals until an optimal point in time
   - Contributes to grade/skill misalignment at the senior grades
   - Complicates major force changes, such as downsizing
   - May increase manpower costs
   - Tends to encourage risk-adverse behavior in mid-career personnel
   - Creates moral cost when dismissing service members just prior to vesting
   - May subsidize marginal performance and undermine organizational performance
   - Offers nothing to 82 percent of our citizens who chose to serve their country
   - Can be replaced with differential vesting that has the following characteristics --
     - Overcomes one-size fits all shortcomings listed above
     - Provides a powerful force-shaping tool
     - Promotes individual behaviors in support of desired organizational outcomes
     - Allows services or Department to set optimal vesting point
     - Can allow for more flexibility in capturing service specific personnel costs

Recommended next steps for the Department. Further study is required. Below is a synopsis of our recommendations concerning this critical $11B program.

1. The Department should survey a representative cross-section of its present service members. Our own informal survey of 299 Air Force senior first lieutenants and junior captains proved most enlightening (Appendix C).

   - What is the current level of understanding amongst service members vis-à-vis their own retirement program and alternative retirement systems?
   - What is the relative importance of potential desired system goals (earlier or differentiated vesting, flexibility, reliability, portability, etc.)?
   - What confidence do service members have in the government's promise to fund their current retirement system (COLA's, etc)? How eager are the members for change?
   - Do they believe their government may change their expected level of benefits?
   - How does the retirement system influence behavior today?

2. The Department of Defense should initiate a special study group to begin work with Congress on this critical issue. This could be a sub-set of other study groups contemplating entitlement reform. The study group should:

   - Identify the goals for the retirement system. Our proposed list could be used as a starting point for this effort.
   - Ensure vertical integration of policies and practices with the HRM strategy.
   - Ensure they align horizontally with other HRM sub-component practices and policies.
   - Establish a timetable for near-term, mid-term and long-term change.
   - Specify additional research, studies, pilot programs, or legislative changes required.

3. The Department must realize that change is inevitable and that:

   - Cost is not the only issue -- effectiveness should be the major consideration.
   - Momentum from the political process can be used to leverage and facilitate change.
   - Increasing benefits through the current Military Retirement Fund is a step backward.
   - Adopting market equities to assist retirement funding is a step forward.
   - The new system should consider all that choose to serve -- since they deserve consideration.
   - The Department must get in front of this issue and shape changes to best fit the needs of all stakeholders -- to include itself.

Chapter 1 -- Introduction

All great ideas are controversial, or have been at one time.
-- George Seldes

As the 21st Century approaches, the United States Department of Defense is confronted by many complex issues relating to recruiting and retaining quality personnel. Sustaining our military capability rests in large part on the Defense Department's ability to compete for high quality personnel in an increasingly competitive manpower market. An important key to continued success is the resolution of present and future issues before Congress regarding the Department of Defense's personnel compensation package.

Since 1993, there have been seventeen congressional proposals for changing military retirement (Appendix A).[1] House Speaker Newt Gingrich's recent "Goals for a Generation" initiative may be the most significant yet. This initiative outlines his desire to make social entitlements and retirement a centerpiece of political discussion in the next several years.[2]

From a strategic viewpoint, we identify three major stakeholders in the military retirement pay program -- the nation, the branches of military service and service members. The Department of Defense has two broad options for engaging in this upcoming debate. One approach is for the Department to sit passively, defend the status quo, and fend off top-down change proposals from outside political forces and interest groups. The second approach is to proactively take the lead by shaping policy ahead of changes proposed by political interest groups in a way that best meets the needs of all stakeholders. We suggest the latter. The time may be right to consider a synchronized effort to overhaul retirement pay not only to better serve the Department -- but the nation and its service members as well.

Goal Development

Military retirement pay, benefits and other entitlement programs are regularly studied and evaluated by various interest groups. Most of these efforts analyze current policies, procedural initiatives and alternatives to existing policy. These studies typically focus on

specific, narrow stakeholder issues. For instance, Congress may commission a study to investigate alternatives for conserving military retirement outlays or the Defense Department may study the effect of retirement policies on military recruitment and retention. It is beyond the scope of this report to conduct a substantiated, comprehensive review of military retirement or to propose a plan that might be presented to either Congress or the Department of Defense for adoption. Instead, this paper focuses on two fundamental questions. First, what is the purpose of the *current* retirement program in the way it is presently structured? Second, what might be optimal goals of each stakeholder for *future* retirement pay?[3] Within the context of these two questions, we discuss potential future alternatives for restructuring military retirement pay and the consequences and implications of the alternatives on the current retirement pay program. Finally, we recommend actions for further consideration by the Department of Defense.

How we got here

The last major change to retirement pay was in 1986. Although it retained most characteristics of previous plans, the focus was in recalculating the pay formulas to scale back benefits for future retirees. The primary congressional intent was simple -- reduce federal outlays for military retirement.[4]

Changes to military retirement benefits are not new. The Continental Congress considered retirement pay proposals as early as the Revolutionary War.[5] Today, active duty members receive retirement benefits under three different legislative acts based on when they

Short Form Reference	**Final Basic Pay**	**High-Three Year Average**	**Military Retirement Reform Act of 1986**
Applies to:	Persons in service before 8 Sep 1980	Persons joining service from 8 Sep 1980 thru 31 Jul 1986	Persons joining service after 31 Jul 1986
Basis of Computation (Retired Pay Base):	Final rate of monthly basic pay	Ave. monthly basic pay for highest 36 months of basic pay	Ave. monthly basic pay for highest 36 months of basic pay
Multiplier	2.5 percent per year of service	2.5 percent per year of service	2.5 percent per year of service, less 1.0 percent for each year of < 30 (restored at age 62)
Cost-of-Living Adjustment	Full Consumer Price Index -Workers (CPI-W)	Full CPI-W	CPI-W minus 1.0 percent (one-time catch-up at age 62)

Figure 1 - Retirement Calculations of Current Active Duty Service Members

entered service. The Army and Air Force Vitalization Act of 1948 (with minor adjustments) establishes retirement policy for service members who came on active duty prior to 7 September 1980. Retirement benefits for service members entering active federal service between 7 September 1980 and 31 July 1986 are computed using the High-Three Computational Method. The Military Retirement Reform Act (MRRA) of 1986, also referred to as REDUX, applies to all members entering service after 31 July 1986.[6] Notable highlights of each plan are in Figure 1.

Our research indicates four stated purposes of the post World War II retirement pay (Figure 2).[7] They form the cornerstone of the present program.

- Purpose 1. To provide a pool of experienced military manpower that can be called in time of war or national emergency to augment the active-duty forces and establish a mechanism whereby persons in this pool can move into and out of the active-duty force smoothly.
- Purpose 2. To enable the armed forces to remain generally competitive with private-sector employers and the Federal Civil Service.
- Purpose 3. To provide a means of keeping the military forces of the United States young and vigorous, thereby insuring promotion opportunities for younger members.
- Purpose 4. To provide a socially acceptable level of payments to members and former members of the armed forces during their old age.

Figure 2 - Purposes of Present Military Retirement System - Cold War Era

Our analysis of these stated purposes, plus the reality of the changes adopted during the 1980's, leads us to five distinct conclusions. These conclusions and our subjective categorization of the Cold War Era purposes are detailed in Figure 3.

- Purpose 1 suggests the potential for recall of service members after retirement (hence the official title -- Non-Disability Retirement *and Retainer* Pay). We classify this particular purpose as primarily a national interest -- or better for the nation.
- Purpose 2 indicates a characteristic assisting the services in retention. This we assign in the interest of the services -- or better for the service.
- Purpose 3 assists promotion, youth and vigor -- therefore better for the service.
- Purpose 4 signifies a somewhat altruistic characteristic designed for the individual. We classify this as better for the service member.
- Finally, our analysis indicates that *none* of the stated purposes seems to suggest consideration of overall costs of the military retirement system.

Figure 3 - Analysis and Subjective Categorization of Cold War Era Purposes

A 1978 Presidential Commission on Retirement made numerous recommendations for changes to retirement pay.[8] We discuss them through the course of this report. Although released just prior to 1980, few of their recommendations were adopted in either the 1980 or the 1986 legislative reform packages. In both packages, Congress effectively developed its own goal -- *reduce program costs* -- and made it number one priority on their list.[9]

This report

Our review will be in light of recent analysis conducted by the 8th Quadrennial Review of Military Compensation, on-going personnel management initiatives within the services, and numerous private sector retirement initiatives.

Since we believe retirement pay serves three distinct stakeholders, we postulate future goals in three different chapters. Chapter 2 addresses goals for military retirement we believe are better for the nation. Likewise, chapters 3 and 4 distinguish goals better for the services and better for the service member. These chapters are, by design, independent. They focus only on goal development for their respective stakeholder. Chapter 5 summarizes probable consequences of adopting these goals and provides analysis of some possible alternatives. Finally, chapter 6 lists our recommendations for Defense Department action.

Although our list of goals, consequences and recommendations ends this particular report, we consider goal development for this program (and others) to be the critical first step in *system* redesign. One should note that this is the first occurrence of the term *system* in this report. The Defense Department contributes over $11B annually as its normal cost contribution to a military retirement pay *program*.[10] This program works well in the sense that monies are allocated and retirees receive their paychecks. However, it is our studied opinion that this *program* does not necessarily possess a set of well-defined goals that are synchronized and aligned as a sub-component of any integrated Defense Human Resource Management *System*. We address this distinction more thoroughly in Chapter 3.

Chapter 2 -- Goals for the Nation

The art of progress is to preserve order amid change and to preserve change amid order.
-- Alfred North Whitehead

The present retirement program, formulated in the aftermath of World War II, has served the nation well. However, dramatic changes in the post Cold War period and the approaching new millenium suggest the 50-year-old mechanism for compensating military retirees is itself an anachronism and should be retired. The one stated national purpose of the current program is to provide a pool of experienced manpower, subject to recall to active duty.[11] This stated purpose has seldom been exercised in the last half century and we propose it be dropped as a future design goal.[12] We believe the nation, through their elected representatives in the Congress, will continue to focus on attempts to reduce program costs.

Cold War Era Purpose	Proposed 21st Century Goal
• To provide a pool of experienced military manpower that can be called in time of war or national emergency to augment the active-duty forces and establish a mechanism whereby persons in this pool can move into and out of the active-duty force smoothly.	• To reduce the cost to the American taxpayer.

Figure 4 - Military Retirement Goals for the Nation

This is not to say that cost is the *only* national concern -- just the *primary* concern. Certainly, goals leading toward increased efficiencies, effective policies, a quality force, support for recruiting and retention, etc. are better for the nation. These goals, however, are also goals of the services or the service member. As a specific *national* goal of the system, cost is an overriding factor that serves as the centerpiece in most congressional debate.[13]

The new retirement program should reduce costs to the taxpayer

Pressure is building for entitlement reform. The Department of Defense's failure to lead the 1986 REDUX transformation resulted in Congress unilaterally legislating a 30

percent reduction in lifetime benefits for future soldiers, sailors, airmen, and marines.[14] Even so, the military retirement system remains one of the Nation's most valuable, and this makes it subject to change once again unless the Department implements innovative compensation reform -- to include retirement reform for our 21st century forces.

How did we get here? Following World War II, Congress established the Hook Commission.[15] This commission regarded non-disability retirement compensation as part of their charter. They considered various characteristics as underlying principles for their retirement proposals. Fresh from World War II, most felt the military forces needed *youth and vigor*. This characteristic became a dominant factor in deliberations and outweighed most other principles in subsequent retirement planning legislation. Congress also instituted a generous 20-year vesting system. This seemed appropriate given the low military pay scales (at the time), aggressive post world war II downsizing, and the "youth and vigor" argument of the day.[16]

The financial implications of this generous package took generations to be felt. Retirement rolls expanded to approximately 1,552,000 current beneficiaries.[17] Total government outlays for military non-disability retirement escalated from $4.1 billion in FY 1974 to over $28.3 billion in FY 98 (Figure 5).[18] Today's typical retiree receives more earnings in retirement than while on active duty.[19]

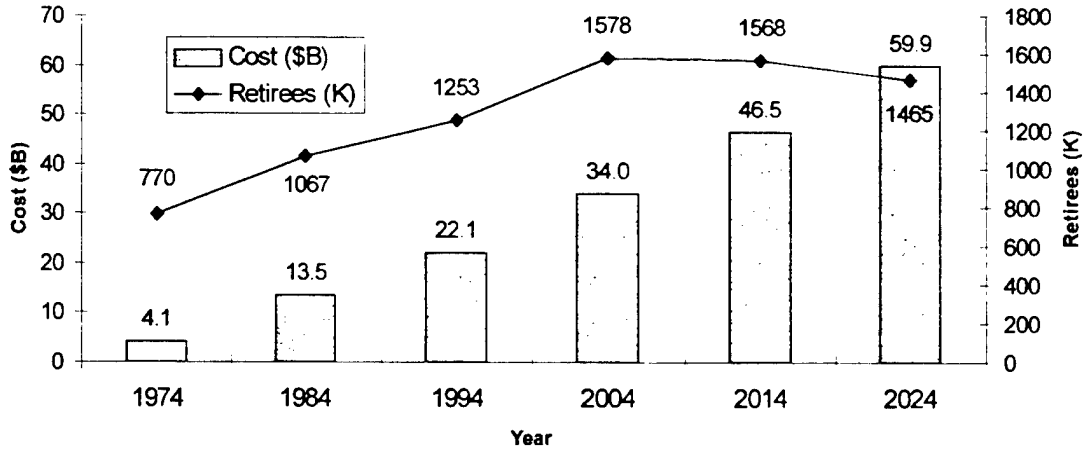

Figure 5 - Non-Disability Retirees and Cost of Retirement Pay 1964 - 2024

Can the nation afford the continued cost consequences of this generous program whose basic design is half a century old? What is sensible to Congress and the American taxpayer? Several commissions or studies offer insights into these questions.

The April 1978 President's Commission on Military Compensation found the cost of military retirement excessive. They believed retirement after 20 years of service at one-half basic pay could no longer be justified on a cost basis. Additionally, they felt the retirement program itself needed restructuring.[20]

In 1984, the Fifth Quadrennial Review of Military Compensation (QRMC), deemed military pensions overly generous. This study concluded military retirement costs 1.2 to 2.0 times the average of a large sampling of private sector plans.[21]

The more recent Concord Coalition study of July, 1995 also compared military and civil service retirement pensions to those in the private sector. Their Regular Military Compensation (RMC) calculations resulted in 20-year retiree costs of 26.2 percent of payroll and 30-year retiree costs of 20.7 percent. This equates to roughly 1.7 to 2.1 *times* the cost of typical private sector plans which average only 12.2 percent of payroll. Driving these costs are Cost of Living Adjustments (COLAs) indexed to inflation via the Consumer Price Index (CPI). Although the Bureau of Labor Statistics has substantially reduced the generosity of the COLA benefit, the inflation protection benefit is rare, expensive and typically found only in government programs.[22] The Concord Coalition indicates very few private pension plans adjust for inflation -- and virtually none receive full COLAs.[23]

The Concord Coalition also criticized the early retirement ages, now averaging 42 years for enlisted members and 46 years for officers. They found the current program produced disproportionate benefits. The average military pensioner could serve the nation for only 22 years but expect to collect benefits for over 35 years, *inflation protected.* By comparison, the average retirement age in the private sector is 62.[24]

Criticisms like these are not new and have already led to some reform. The 1986 reform act significantly reduced the pay benefits of *future* retirees. The Congressional Research Service (CRS) estimated these reductions as 32 percent less pay for officers and 39 percent less for enlisted members under the pre-1980 formula. Under the High-3 system, the benefits are 25 percent less for officers and 30 percent less for enlisted members.[25] *The significance of the 1986 changes is that Congress adopted this construct knowing there*

would likely be deleterious effects on force quality, retention, etc.[26] Post cold war force structure reductions likely spared the services from these effects. CRS believes these reductions masked the affects of the 1986 act on the military career force and the suggested true impact of REDUX will never be known.[27]

Reduce costs -- Synchronize change -- Focus on effectiveness

Two tough questions remain. Should American taxpayers continue to sustain a retirement program with such high relative costs? Can the Department continue to win the argument that these cost levels are justified because of the unique contributions provided by the uniformed services? These questions remain because entitlement reform continues to focus special interest competition on limited federal outlays. The Department must convince legislators and the public that cost should not be the sole issue. It should be effectiveness. More specifically, it should be effectiveness for all stakeholders. If retirement reform can enhance shareholder effectiveness *and* reduce cost -- so much the better.

That is why the Defense Department needs to synchronize the political efforts in entitlement reform with its own requirements to integrate this program (and others) with its Human Resource Management Strategy. If the goal of cost reduction is an inevitable change that is better for the nation, Congress will eventually dictate it. The Department's challenge is to shape this change to benefit all stakeholders. This includes the services -- the focus of Chapter 3.

Chapter 3 -- Goals for the Services

It is the nature of a man as he grows older...to protest against change, particularly change for the better.
-- John Steinbeck

We categorized two cold war era purposes as better for the services. Maintaining a relatively competitive retirement program enhanced the Defense Department's ability to market a career in the armed forces. Unclogging promotions and keeping young and vigorous members was the lesson learned by the aforementioned Hook Commission.

These purposes served the department well over the last half-century, but are they still relevant? Do other goals, essentially accomplishing these purposes, better elucidate the Defense Department's design for its 21st century retirement program? We propose two.

Cold War Era Purpose	Proposed 21st Century Goal
• To enable the armed forces to remain generally competitive with private-sector employers and the Federal Civil Service. • To provide a means of keeping the military forces of the United States young and vigorous, thereby insuring promotion opportunities for younger members.	• To integrate retirement policies and practices vertically with the human resource management strategy • To align retirement policies and practices horizontally with other human resource management sub-component policies and practices

Figure 6 - Retirement Goals for the Services

The 8th QRMC proposed a Defense Department human resource management model based on individual behaviors and organizational strategies. Although detailed findings are outside the scope of this paper, this QRMC presents an extensive discussion on the absolute need to *integrate and align* personnel policies and procedures both *vertically and horizontally.*[28]

When developing corporate-level strategies, the Defense Department must consider human resource management as a separate function (along with technology, procurement,

logistics, etc.). Each separate function develops its own "functional strategy" to integrate not only with the Defense Department's corporate-level strategy (vertical integration), but also with each individual functional strategy (horizontal integration). At the sub-component level, policies (and practices) must align vertically with the HRM strategy and horizontally with other HRM sub-component policies and practices (Figure 7). Hence, we offer vertical and horizontal integration and alignment as our two primary design goals for the services.

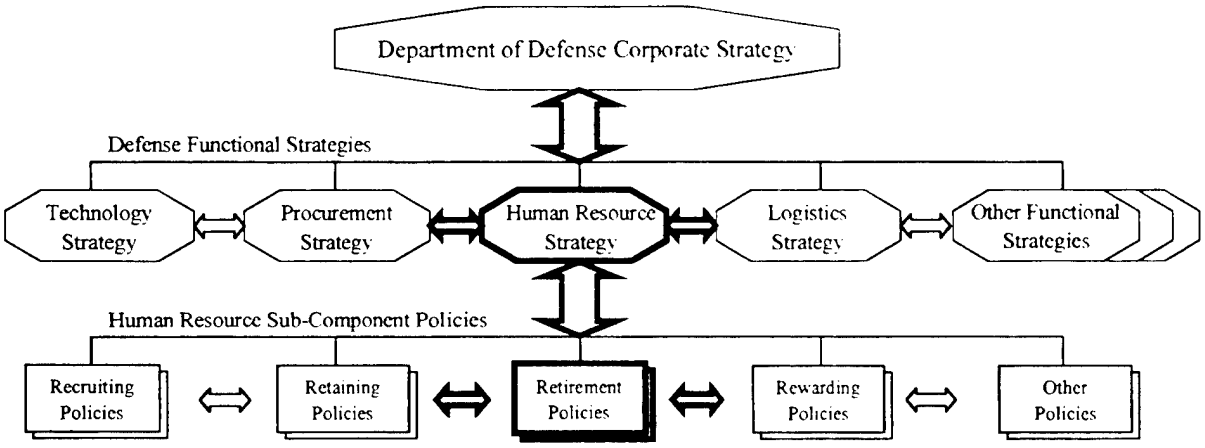

Figure 7 - Vertical and Horizontal Strategy and Policy Integration and Alignment

The cold war purposes still possess validity (competitive system, youth, vigor, etc.), but these are also subsumed within our two proposed goals. Details are examined below.

Integrate retirement policies and practices vertically with HRM strategy

What is the Defense Department's human resource management strategy? The 8th QRMC proffers the following -- *the human resource management strategy is to facilitate change, make leaders more effective, and enhance organizational performance.*[29] Do current retirement policies support such a strategy? We argue that the 20-year vesting requirement does not. In fact, it may hinder it.

The services identify many members as non-progressive prior to their 20th year -- typically through non-selection for promotion. Both senior officer and senior enlisted promotions are constrained by law and, each year, thousands of service members are "non-

select" for promotion.[30] The reasons for non-selection are varied. Many are fully qualified for promotion, but have limited upward mobility due to fewer senior grade requirements in their specialty. Some may be fully competent in their grade but may not be as competitive as their peers in terms of potential. Others may be identified as only marginally productive.[31]

This does not imply that all non-selects have no value to the services. Many have significant value and continue to perform admirably in critical jobs. Yet, for numerous reasons, many may only have marginal value.[32] The services typically use grade as the qualifier. Once the grade of E-6 (enlisted) and O-4 (officer) are achieved, the service's policy is to allow virtually all members to stay until retirement.[33] Herein lies one problem with 20-year vesting. It tends to retain mass populations of members, wanted or not -- needed or not.

In this regard, Figure 8 is intriguing.[34] The nearly 50 percent drop in inventory between 19 and 20 years-of-service clearly portrays the consequences of 20-year vesting. Although the analysis is beyond the scope of this paper, three questions arise. First, to what degree is the Departments "requirements based" analysis tainted by this available inventory? In other words, how many "requirements" (especially at the grade and skill level of detail) are in the system just because it is known that this inventory is available to fill them? Second, what would the inventory look like without 20-year vesting? Finally, what is the difference in total manpower costs between these two competing paradigms?

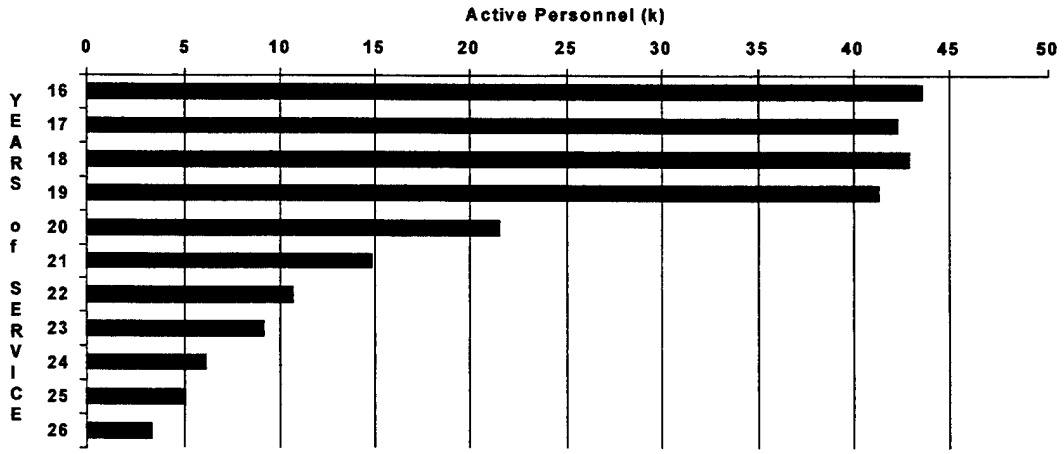

Figure 8 - Inventory of Active Duty Personnel by Years of Service (1996)

In our view, retirement policies should encourage *timely* retirement of specific *individuals*. The present method is predominantly supply-driven -- a one-size fits-all model where the services take whoever decides to stay (especially past 20 years of service). The new system should incorporate a demand component where the services pick and "incentivize" those they want to stay -- and separate the rest. Under this model, the focus is on behavior, depth of knowledge, or experience that enhances organizational performance.

Align retirement policies and practices horizontally with other human resource management sub-component policies and practices

Retirement policies and practices should align horizontally with other HRM policies and practices. The complete vetting of other sub-component policies is beyond our purview. However, we discuss three components -- recruiting, retaining and rewarding -- to briefly illustrate how today's retirement policies may not align.

Recruiting. A long 20-year vesting requirement may be a detriment to recruiting. Currently retirement compensation is not a major recruiting incentive.[35] The Defense Department should attempt to leverage retirement to advantage recruiting whenever possible and ensure it contributes in a positive manner. A 20-year time frame is too long for most young members to consider. Private industry markets their portable, tax-qualified retirement plans with *three-to-seven year* vesting as a subset of their overall compensation packages.

Retention. A long 20-year vesting requirement may be a detriment to *initial* retention. Young service members heavily discount the value of retirement.[36] As with recruiting, 20-year vesting seems too far away. There is little doubt, however, about its effect on retention in older cohorts. At about the 12th year-of-service, the present system tends to retain *everybody.*[37] Is this desired at every grade and skill level? Obviously not.

Rand's 1997 study, among others, indicates retirement compensation is actually an inefficient retention tool. Skill retention bonuses are more cost effective because 1) they can be directed at critically needed skills and 2) service members tend to have higher discount rates and value today's in-hand bonus dollars over tomorrow's promised retirement dollars.[38]

Rewarding. A long vesting may be detrimental to *positive individual* rewarding. The obvious example regards promotion. When vesting causes the personnel system to retain

significant percentages of career service members -- some of marginal utility and some just awaiting retirement -- promotions and upward mobility suffer. Highly productive junior members are unable to receive early advances for their extraordinary efforts.

There are also *negative individual* rewards to long vesting. As stated earlier, long vesting can retain undesired personnel. This constrains the organization and limits the number of personnel changes the organization can effect. Negative individual rewards include a loss of morale and increased service member frustration due to this inability to make timely organizational changes. Morale loss and frustration lead to sub-optimal unit performance. In the final analysis, the inability to make organizational changes and its causation of sub-optimal unit performance are directly contrary to the HRM strategy.

Finally, there may even be *negative organizational* rewards due to long vesting. This includes the fact that a long vesting requirement tends to encourage risk-adverse behavior among mid-grade personnel.[39] This may not be in the best interests of the services.

Integration and alignment - the key to effectiveness

If effectiveness is the key to systemic change, there remains much work to be done. The Department first needs to promulgate a Human Resource Management Strategy. Then, its sub-component policies need to be developed, refined, de-conflicted, and disseminated. All must pass the analytic question -- do our HRM sub-component policies vertically integrate with our HRM strategy and are all our policies and practices mutually supportive?

Our view is current retirement policies do not fully support the 8th QRMC's proposed HRM strategy. A program that retains thousands waiting retirement cannot *facilitate change* in a timely manner.[40] A program that cannot induce and reward desired individual behaviors, knowledge or experience struggles to contribute in *enhancing organizational performance*.

Nor do current retirement policies fully support other HRM sub-component policies. If vesting stifles promotions -- then rewarding is hindered. If vesting is too long -- then recruitment and initial retention are harmed. If career retention is over-incentivized -- then too many service members may remain and organizational performance may be degraded. The problem is that 20-year vesting does not encourage *selective* members to retire at an *optimal* time -- only *mass populations* to retire at a historically *arbitrary point in time*.

Chapter 4 -- Goals for the Service Member

My interest is in the future because I am going to spend the rest of my life there.
-- Charles F. Kettering

As discussed in the first chapter, one of the long-standing purposes of military retirement is to provide a socially acceptable level of compensation for former military members in their old age. As we enter the next century, we propose three goals designed to accomplish that same purpose. However, our three goals realize that very few transitioning military personnel are retirees, and even fewer would be considered in "old age". In fact, most military pensioners move directly into a second career.[41] We believe future members desire a retirement system with characteristics listed in Figure 9.[42]

Cold War Era Purpose	Proposed 21st Century Goal
• To provide a socially acceptable level of payments to members and former members of the armed forces during old age.	• To increase reliability • To enhance equitability • To create flexibility

Figure 9 - Retirement Goals for the Service Member

The military changed dramatically during the Cold War era. It transformed to an all-volunteer force, employed advanced weapons, and redefined the operational art of warfare. But, its personnel compensation policies have not experienced such revolutionary progress. Corporate America, however, rides the cutting edge of human resource management, including the development of sophisticated personnel compensation programs and retirement plans. With the enactment of the Employment Retirement Income Security Act of 1974 (ERISA), the defined benefit-only system has all but disappeared from most corporate, state and federal employee compensation packages. As of 1995, 96 percent of all companies with more than 5000 employees offered 401(k) plans.[43]

What design features of these programs could benefit the uniformed services? How do they integrate with service member goals of our twenty-first century retirement system? We discuss these questions below.

The new retirement system should increase reliability

Which is more reliable, a defined-contribution plan employing individual 401(k) accounts invested in market instruments, or a defined-benefit system relying on year-to-year federal appropriations for cost of living adjustments? In times past, most individuals contemplating this question chose the latter. However, times have changed. Today's question is one of risk. More precisely, it is a question of political risk versus market risk.

It is unlikely the government would default and be physically incapable of providing scheduled payments. However, Congress has shown its willingness to reduce the level of these payments -- especially in the form of reduced or delayed COLA increases (see Appendix A). In both 1980 and 1986, Congress changed retirement pay formulas almost entirely to save money.[44] Fortunately for the then-serving member, these changes were "grandfathered". Recently however, the House National Security Committee debated a proposal (the so-called "High-One" method) to apply reductions retroactively.[45] The bill ultimately died in conference. Although contemplated reductions were *monetarily* small, the moral implications of retroactive changes were enormous. Heretofore, all modern retirement legislation had included grandfathering. Talk of retroactive reductions diminished the faith in the long-term security of promised benefits among retirees and serving members.

We are already witnessing pressure to change the present program.[46] It will certainly become a hot topic by the year 2006. Beginning that year, retirees will exist under all three programs and will draw vastly different levels of compensation. This situation progressively worsens since pre-1986 cohorts receive full-COLA protection, while REDUX cohorts receive only partial protection. Will Congress react? If so, will the remedy add more benefits to the REDUX cohorts or merely propose legislative changes "cross-leveling" or re-balancing these inequities at the expense of pre-REDUX retirees? Certainly, the latter will be an option for consideration and it would further question the reliability of the present program.

The new retirement system should enhance equitability

The uniformed services are currently exempt from ERISA.[47] Since its enactment in 1974, many provisions of ERISA have proved extremely valuable to private sector

employees and their families. The following ERISA provisions should be characteristics of a revamped military retirement system.

Encourage Savings. Private-sector employers governed by ERISA regulations encourage retirement savings for their employees -- especially their newest members.[48] For the vast majority of new entrants in the armed forces. the military is their first job. The services get high grades for teaching technical skills, self-discipline and teamwork to young people. However, they fall short of the mark in coaching and encouraging the personal, long-term benefits of a retirement savings program.

Provide a Medium for Retirement Savings. Not only do private-sector employers encourage savings -- they provide the medium to do so. Currently, only traditional and Roth IRAs are available for service member contributions into retirement accounts. The Department provides no medium for formal retirement savings for uniformed members. The federal government imposes taxes on income from savings with only three major exceptions: deferral on capital gains until realized, the personal residence exclusion, and qualified retirement plans.[49] Congress obviously deemed investing capital, owning a home, and saving for retirement as socially desirable goals worthy of taxpayer subsidy. Low relative pay scales, frequent world-wide moves and a lack of a qualified retirement plan disadvantages service members from attempting any of these. If possible, the Department should leverage this tax advantage for its uniformed members.

Ensure Portability. Virtually every soldier, sailor, airman and marine leaving the service transits to a second career -- even those that presently "retire". Why not transfer retirement accounts to their new jobs? Why not adopt special provisions for transfer to the reserve component? Transferring accounts allows service members to continue their tax-advantaged investments, effectively extending time in the market and increasing the odds of greater returns. Portable retirement benefits are a dominant characteristic of compensation packages in private industry. The armed services should provide the same.

Provide for Hardship. Private sector qualified plans allow for distributions under certain hardship provisions.[50] These are governed by IRS regulations and are restrictive -- but do include purchase of a principle residence; tuition payments for spouse and children; and payments to prevent foreclosure. Service members presently have no comparable employer-sponsored benefit for any such hardship cases.

Allow for Earlier Vesting. Only 18 percent of all military entrants stay long enough to qualify for 20-year vesting.[51] Although arguable, the system is perceived inequitable to the 82 percent who serve insufficient time and receive no retirement benefits whatsoever.[52] Furthermore, the Internal Revenue Service considers all service members covered by an employee-sponsored retirement plan. This limits the tax advantage of Individual Retirement Accounts for many members and their families.[53] Several studies and commissions, including the 1978 President's Commission on Military Compensation and the 1984 Presidents Private Sector Survey (Grace Report), highlighted this unfairness of the current system and the need to vest service members at an earlier point.[54]

Expand Survivorship. Presently, a service member's only option to ensure benefits for survivors is the Survivor Benefit Plan election. By law, the benefit can only be passed to select individuals (typically a spouse or children) and only if the member irrevocably elects to pay the premium beginning when the member retires. Although a good value in relative terms, the Survivor Benefit Plan remains an expensive insurance product. Under a defined-contribution plan, the service member can eliminate the need for this expenditure. This is because the remaining capital in the individual retirement account (and all future accumulated returns on investment) becomes an asset of the deceased member's estate.

The new retirement system should create flexibility

The financial services industry has become increasingly sophisticated over the past quarter century. Typically, a diversified portfolio of market equity instruments (stocks, bonds, etc) is the recommended route to achieving retirement goals and objectives. If the Department of Defense adopts a defined-contribution program for its members, it should leverage the resources and methods of this industry and provide a range of investment instruments for its members.[55] Our sense is that the vast majority of young service members want expanded retirement planning options (see Appendix C).

In our future retirement system, *individuals* assume responsibility for providing at least some portion of their retirement income. They would routinely deposit new money into long-term, tax-advantaged accounts. Therefore, they must be able to establish, monitor and update life-long financial goals. They must understand both pre-tax and after-tax investment

returns. They must learn how to target portfolio allocations within the context of their own individual financial situation, timeline, and level of risk tolerance.

With notable exceptions, this level of sophistication is not typically found in today's soldier, sailor, airman or marine.[56] That is unfortunate. It contributes to an entitlement mentality of "I'll let the government take care of my retirement". Service members who adopt this simplistic approach are not acting in their own best interest. An array of investment instruments forces the individual to confront the options and make a choice. In our opinion, this process is good for the service member. In fact, the adoption of a defined-contribution system may force the member to develop and understand a basic set of lifelong financial skills. In that regard, implementing this goal may be the greatest benefit of all.

Defined-contribution may be most effective for service members

Private-sector employees value routine, employer-sponsored methods of tax-deferred retirement savings.[57] From the service member's perspective, earlier vesting with a portable, 401(k)-type plan is a highly desirable goal of his or her twenty-first century retirement program. The Army Family Support Council lists some form of a Thrift Savings Plan as its number-one legislative priority for Army family members.[58]

The Department of Defense should consider innovations in their retirement compensation to benefit its uniformed service members. It should leverage lessons learned from corporate America. It should review and implement the earlier vesting recommendations of numerous studies and commissions. It should move to counter risks associated with the current political system. It should promote the socially desirable goal of long-term retirement saving. It should focus on individual planning skills and adopt policies that prompt service members to discard deleterious government entitlement mentalities.

One fundamental issue remains. Over 80 percent of those who chose to serve their country accumulate no retirement consideration during their tenure. These non-vesting members are disadvantaged for every month they remain in the armed forces. Their service represents considerable lost personal opportunity (especially considering the effects of compounding interest) vis-a-vis their private-sector counterparts who use this time to amass valuable tax-advantaged retirement benefits.

Chapter 5 - Consequences for the Present System

Sacred cows make the best hamburger meat.

-- Unknown

In summary, we recommend the replacement of four post-World War II purposes with the following six twenty-first century goals. Each is designed to address the concerns of each specific stakeholder -- the nation, the services or the service member.

Better for the Nation	• To reduce the cost to the American taxpayer
Better for the Service	• To integrate retirement policies and practices vertically with human resource management strategy • To align retirement policies and practices horizontally with other human resource management sub-function policies and practices
Better for the Service Member	• To increase reliability • To enhance equitability • To create flexibility

Figure 10 - Proposed Goals for the 21st Century Military Retirement System

What are the likely consequences of adopting these goals? In our search for common ground amongst all stakeholders, two prominent consequences of changing the present retirement system emerge. They are 1) discontinuing the defined-benefit only system and 2) eliminating the 20-year vesting requirement.

Consequence 1 - Discontinue the current defined benefit only program.

Chapter 2 highlighted the costs associated with continuing a COLA-adjusted, defined-benefit retirement program with immediate annuities for members upon retirement. Reducing this cost is a goal for the nation. Chapter 4 concludes that a defined-contribution program with individualized accounts, market returns, etc., has potential for being better for service members and more effective for them. Is the current program, a defined-benefit only plan, in anyone's best interest? Might it even be detrimental to the services?

We first address the issue of cost. How can taxpayer costs be reduced? The unsophisticated answer is to follow the 1980 and 1986 precedents and just reduce benefits to future entrants who will eventually retire. We suggest two alternatives. Both use outside investing through market equities to assist taxpayer funding. This discussion also highlights the salient procedures used to fund the *current* retirement pay program.

Cost Reduction Alternative One - Market equities to assist the Military Retirement Fund. One solution involves revamping the current Military Retirement Fund Transaction Process (Figure 11). This Military Retirement "trust" fund was created inside the Unified Budget of the Federal government specifically to pay military retiree benefits. It works quite well in the sense that taxpayers pay taxes, money is transferred into the fund, and retirees get their paycheck.

The fund itself receives monies via three types of intragovernmental transfers.[59] The first is the Department of Defense normal cost payments (arrow C). This is the Department's contribution to pay the retirement costs of active duty members who will retire in the future. The second transfer into the Military Retirement fund is unfunded liability payments from the Treasury Department (arrow D). These monies pay for service members retiring prior to 1984 when normal cost accounting was adopted. (This means that, by design, the entire cost of paying pre-1984 retirement pay is born by *present* tax dollars). Finally, the third contribution comes from interest earned from non-negotiable U.S. Treasury securities (arrow E). From the perspective of the Military Retirement Fund, this is money earned from investing its normal cost contributions from the Department of Defense (arrow F). However, from the taxpayer perspective, it is a cost -- just like interest paid on any Government savings bonds.

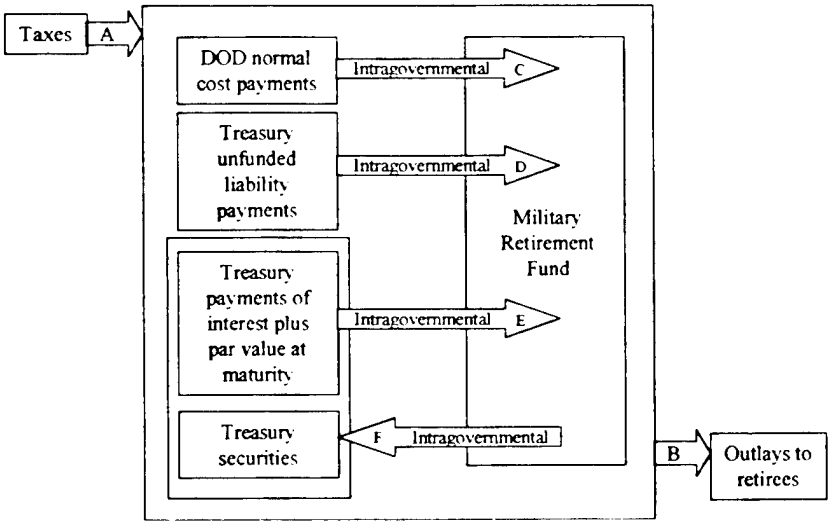

Figure 11 - Current Military Retirement Fund Transaction Process

The problem for the taxpayer is that each source of intragovernmental transfer (arrows C, D, and E) really stems from one source -- the taxpayer at arrow A. No mechanism exists for outside funding assistance. This 100 percent taxpayer subsidy creates a 100 percent liability for the taxpayer at A. In addition, since Congress controls tax dollars, this method also creates 100 percent political risk for retirees receiving benefits at B.

Conceptually, one solution offers an additional input mechanism (Figure 12) using market equities to assist funding.[60] Obviously, if outlays (arrow B) remain constant, each

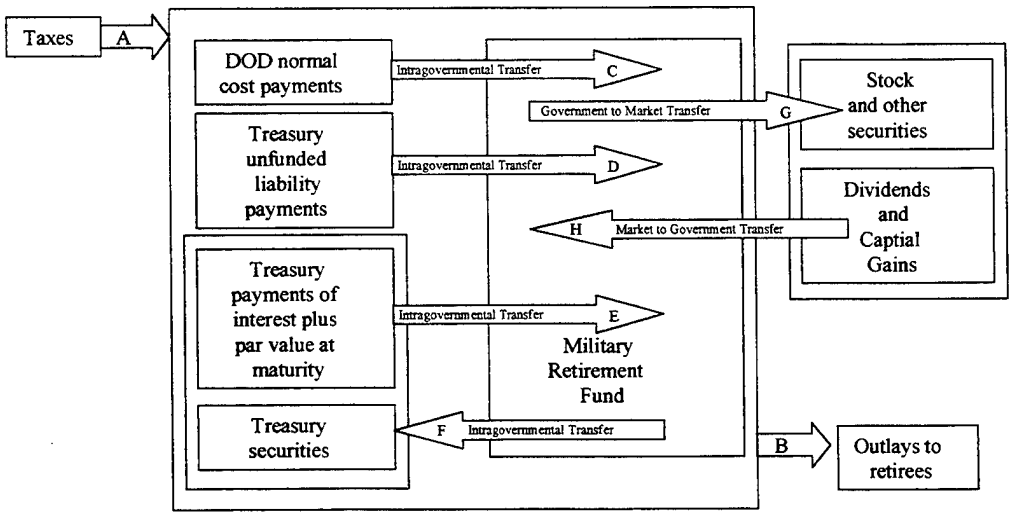

Figure 12 - A Proposed Modification to the Military Retirement Fund Transaction Process

additional dollar input through arrow H (dividend and capital gain returns) results in a corresponding *decrease* in requirements through arrow A. Any positive return through dividends and capital gains is a win for the taxpayer. Depending on congressional generosity, the Department of Defense could also win. Market equities could be used to reduce Defense normal cost payments through arrow C -- freeing funds for other higher priority programs. For the magnitude of the payments, 1996 transfers into and out of the retirement fund are listed in Figure 13.[61]

- Arrow B - Fund Disbursements to Retirees - $28.8 B
- Arrow C - Normal Cost Payments from DOD - $11.2 B
- Arrow D - Amortization of Unfunded Liability - $10.7 B
- Arrow E - Investment Income from Treasury Securities - $11.2 B

Figure 13 - Military Retirement Fund Cash Flows for 1996

Cost Reduction Alternative Two - Use market equities to assist the Individual Service Member Retirement Accounts. Alternative one is valid and obviously better for the nation. Budget cynics, however, argue that Congress's reaction might be to take the market returns and associated taxpayer savings -- and *still* reduce the level of benefits to military retirees. This would not be unprecedented. There are other stakeholders and, in an attempt to circumvent this possibility, we offer alternative two. This establishes a defined-contribution, 401(k)-type program with individual accounts for uniformed service members.

A recent Rand study, Reforming the Military Retirement System, suggests the same. It calls for a Military Federal Employees Retirement System (MFERS) patterned after the Federal Employees Retirement System (FERS). The study also advocates skewed pay raises, a pay raise to offset the cost of the member contributions, and a system of cash separation payments and retention bonuses to enhance personnel productivity.[62]

Adopting a MFERS-type system may make sense, but, as discussed in Chapter 4, the market risks must be considered. Of the numerous reasons for adopting a 401(k) plan, the primary question for service members is the question of replacing the political risk of a defined-benefit program with the market risk of a defined-contribution program. Our conditional response is they should. The condition is based on 1) the understanding of market risk, 2) the understanding of political risk, and 3) the level of the contributions into individual accounts.

Market Risk. Just what is the market risk? Stock market returns (represented by the S&P 500 index) historically exceed US Treasury returns by several percentage points (Figure 14).[63] Presently, Defense Department actuaries must calculate normal cost payments (arrow C, Figure 11) based on assumptions of US Treasury returns (arrow E). The current assumption is 6.5 percent.[64] (Remember, however, although it is a 6.5 percent return to the Military Retirement Fund -- it is a *zero* percent return to the American taxpayer since the taxpayer pays the "interest" on long-term government

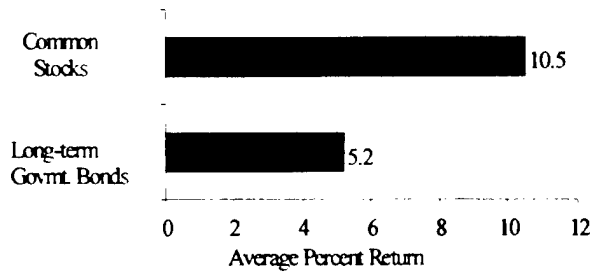

Figure 14 - Annual Rates of Return, 1926 - 1995

bonds). With stocks returning a historical 10.5 percent, even a mixture of treasury and stock returns could require billions less in DOD normal cost payments to the Retirement Fund.

Some argue the market risk and volatility are huge downsides associated with such a concept. We disagree. Figure 15 provides insight. In the post-Cold War period, the stock market, as exemplified by the S&P 500 index, has never lost money in any 10-year period. Further, even in its worst 20-year period, its 6.3 percent return beat the average return earned on long-term government securities of 5.2 percent (Figure 13).[65] Over the long term, the strong argument is that the *real* risk of not investing in stocks is loss of purchasing power through inferior returns on dollars invested solely in government securities.

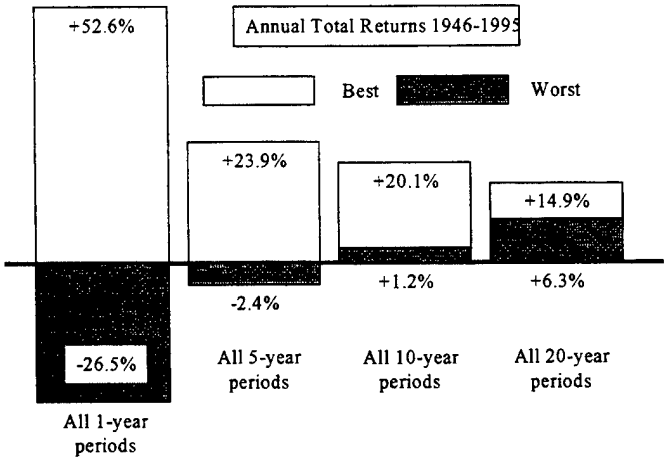

Fig. 15-S&P 500's Best & Worst Performance 1946-1995

The military retirement fund is doing just that -- investing exclusively in government securities. Further, the interest paid by these government securities comes entirely from the American taxpayer! As we will see in the following paragraphs, failing to take advantage of market returns costs the taxpayers of this nation billions of dollars -- dollars that could be spent on other higher priority programs.

Political Risk. Although we have posed this as a question of market versus political risk, in the context of military retirement, these two risks may actually be highly correlated. Support for high levels of government spending rely (to some degree) on a strong economy. To the extent that the market reflects the economy, market and political risks are correlated. If the economy were to plummet, government tax revenues would also plummet. Historically, this brings about calls for reduced government spending -- to include outlays for retirement programs. Therefore, the reliability of the current defined-benefit program may very well rely on a continued strong economy.

Given this condition, market risk may be preferred over political risk. This is because the market (under a defined-contribution scheme) has a much higher potential return/benefit than does the present defined-benefit system relying strictly on Congress's largess for increased levels of benefits.

Levels of Contributions. Once risks are understood, the next question becomes the level of contribution. We will start by determining the *present* level of contributions into the Military Retirement Fund. This is the Defense Department's normal cost contribution in Figure 12 and is equal to $11.2B, or 30.5 percent of the total costs for basic pay ($36.7B) for FY 1996. That is correct -- in 1996, normal retirement costs contribution by the Department of Defense into the Military Retirement Fund equaled *thirty-and one-half percent* of current member's basic pay.[66]

This level is expected to decrease to a steady state of 26.3 percent of base pay by the year 2011. This is when virtually all pre-REDUX members have retired. When considering the fact that the typical corporation contributes around 12.2 percent of payroll, the "excessive costs" conclusion of the numerous studies and commissions outlined in Chapter 2 is understandable.[67] Further, when combined with the 12.4 percent employer/employee contribution into Social Security, the U.S. Government (in 1996) received the equivalent of almost 42.9 percent of each service member's base pay each month in order to provide him a pension.

The question arises: what routine level of contributions *is sufficient* to provide an adequate old age annuity? Recognizing the thousands of analytical permutations that could answer this question, we offer one possible example in Appendix B. Using our assumptions, a service member could reasonably expect a *pre-1980 retirement benefit-level* (50 percent of basic pay at 20 years-of-service) with a monthly contribution of between 13.4 and 16.7 percent of base pay. This is approximately 37 to 50 percent below the Department's steady-state normal cost projections of 26.3 percent.[68] Reductions at these magnitudes could have saved the nation (or the Department of Defense) between $4.1B and $5.6B in 1996 contributions to the Military Retirement Fund.

We provide some sensitivity analysis to our calculations in Figure 16. Readers should consult the Appendix B for detailed assumptions.[69] Figure 16 shows differing returns based on differing investing choices. For instance, if an officer invests (tax-deferred)

13.4 percent of his base pay for 20 years, achieves S&P 500 average returns of 10.5 percent, and experiences 3.5 percent inflation, he would accumulate $294,853 upon retirement. Using this as a lump sum, the officer could withdraw $2472 per month, *inflation protected*, for the next 384 months (his life expectancy).

This is the same amount, inflation protected, he presently receives (using 1998 pay tables) retiring as an O-5 with exactly 20 years of service. He could achieve the same amount ($2472 per month) with less risk in a 50 percent bond and 50 percent stock fund. However, he would have to invest approximately 14.4 percent of his base pay and would require a retirement lump sum of $304,855.[70] The 26.3 percent in Figure 16 represents the projected steady-state contributions by Defense Department Actuaries. The 38.7 percent number is the total of both Defense contributions (26.3 percent) plus employer/employee Social Security contributions (12.4 percent). Finally, the 42.9 percent number is the 1996 contributions of 30.5 percent plus Social Security (12.4 percent). *In every instance above a*

	Amount and Type of Investment Instrument		
Monthly % of Base Pay (first 20 YOS)	100% S&P 500	50% S&P 500 & 50% Bond Fund	100% Bonds
13.4%	294,853	282,660	261,551
	2,472	2,292	1,989
14.4%	317,995	304,855	282,089
	2,666	2,472	2,145
16.7%	366,547	351,401	325,159
	3,073	2,849	2,472
26.3%	578,425	554,582	513,196
	4,849	4,497	3,902
38.7%	851,142	816,058	755,159
	7,136	6,617	5,742
42.9%	943,514	904,622	837,114
	7,910	7,335	6,365
Nominal Rate of Return			
Annual	10.5000%	7.8500%	5.2000%
Rate of Inflation			
Annual	3.5000%	3.5000%	3.5000%
Inflation Adjusted Rate of Return			
Annual	6.7630%	4.2030%	1.6430%
Monthly	0.7989%	0.7679%	0.7101%
Number of Payments	384	384	384

Figure 16 - Lump Sum and Monthly Payment - O-5

16.7 percent investment, the member does better taking his portion of the normal cost contributions for his own retirement and investing it himself. If he could receive his entire normal cost contributions *and* his employer and employee social security contribution at steady state (38.7 percent), he could almost triple his retirement income (from $2474 per month to $7136 per month).

Of note, there would be no need to require service member "matching" contributions to a 401(k) retirement account. Low participation and contribution rates are a problem with 401(k) accounts. It is a major argument used by the Defense Department against 401(k) adoption by the uniformed services.[71] However, using only today's budgeted dollars, the Defense Department could establish a 401(k) type of retirement program -- *fully funded with Defense Department contributions only* -- and not require the service member to contribute one additional dime. Further, in terms of budgeted dollars, the system would be cheaper than today's defined-benefit program investing only in the Military Retirement Fund.[72]

Suffice to say, when considering figures 14 through 16, outside funding through market equities must be contemplated if attempting to reduce taxpayer contributions to the system. This could be accomplished through reforming the current Military Retirement Fund Transaction Process or, more appropriately for the service member, adopting individual retirement accounts with a range of investment options.

Consequence 2 - Discontinue 20-year vesting

Both Chapter 3 and Chapter 4 detailed the undesirability of the 20-year vesting requirement. Among its shortcomings we have detailed thus far are the following:

- Neutral or detrimental to recruiting
- Neutral or detrimental to initial reenlistment
- Tends to overpower career retention
- Non-competitive in today's labor markets with 3-7 year vesting
- Does not support HRM strategy of facilitating change (keeps virtually everybody past 12 years of service)
- Does not support HRM strategy of enhancing organizational performance (keeps those of marginal utility, stifles promotions)
- Retires mass populations at an arbitrary point in time
- Does not retain specific individuals until an optimal point in time
- Contributes to grade/skill misalignment at the senior grades

- Complicates major force changes, such as downsizing
- May increase manpower costs
- Tends to encourage risk-adverse behavior in mid-career personnel
- Creates moral cost when dismissing service members just prior to vesting
- May subsidize marginal performance which can undermine organizational performance
- Offers nothing to 82 percent of our citizens who chose to serve their country

We offer a potential alternative to 20-year vesting -- the concept of differentiated vesting.

Five reasons dictate adopting intra-service and/or inter-service differentiated vesting. First, *any* one-size-fits-all vesting requirement across the entire spectrum of personnel specialties, both within and between the services, leads to many of the shortcomings listed above. Singular vesting becomes especially problematic when attempting to align retirement policies horizontally with other HRM sub-component policies and practices.

Second, differentiated vesting provides a powerful force-shaping tool. The services could set longer vesting periods for specialties requiring extended training, depth of experience, or possessing a high degree of civilian application. Likewise, shorter vesting may be appropriate for hard to recruit specialties, those requiring youth and vigor, or those providing relatively fewer promotional opportunities to higher grades.[73]

Third, although many ERISA provisions are beneficial to service members (and we recommend their adoption in Chapter 4), the services should take full advantage of the fact that they are exempted from many of its provisions. This federal law requires private sector employers to vest employees in one of two ways -- either 100 percent vested at five years ("cliff-vesting") or 20 percent vested per year between the third and seventh year of employment ("graded-vesting").[74] Congressional willingness to exempt the uniformed services from ERISA laws provides a unique opportunity to establish powerful incentives promoting specific individual behaviors in support of desired organizational outcomes.[75] With differentiated vesting, the Department establishes the vesting point appropriate for the grade/skill/service.

Fourth, the services are uniformly worried about the effect of dropping the present 20-year vesting requirement -- especially on retention. Without an alternative, they will continue to resist change. Through differentiated vesting, the Department and the services

could set the optimal vesting point within/between the services or between personnel specialties. They can retain the vesting point at 20 years -- or any other appropriate point.

Finally, inter-service differentiated vesting offers a potentially desirable feature. With proper accounting mechanisms and a system of credits, the services could better control retiree costs. Differentiated vesting could allow the individual services to weigh the relative merits (to include costs) of youth and vigor versus experience and maturity within and amongst its specialties. This is a point of contention among some of the services. The Department of Defense distributes its normal costs uniformly across the services. Those services with lower grade structures, such as the Army, tend to subsidize the higher grade-structures of some other services. Obviously, under a defined-contribution system, those with lower average vesting points incur lower average retirement costs, but there currently exists no real incentive to do so.[76]

The time may be right for a synchronized, sweeping retirement reform. We propose a corollary to a basic tenet asserted by the 8th QRMC. *To maximize the effectiveness of the Department's retirement system, each service and/or specialty field may require a different retirement system, or a single system with sufficient policy flexibility to meet the variety of service or specialty field needs.*[77] If the Defense Department can vary enlistment bonuses, reenlistment bonuses, educational benefits, college loan repayment options, length of required service, tour lengths, etc. by grade, skill or branch of service, then why not vary retirement options in the same manner? For retirement, optimal policy flexibility may come in the form of differentiated vesting. If the Department searches for a specific organizational outcome in any functional area such as retention or distribution, it may require a <u>unique</u> set of policies and procedures specifically designed to achieve that particular outcome.

The current debate on the US Payroll Savings Plan (USPSP) offers an interesting case in point. Few could argue its worth to service members. The Navy, Marine Corps and most of the Joint and Department of Defense staffs favor the program. However, the Army and Air Force are concerned about this policy's effect on their own human resource sub-component goals -- primarily retention.[78] Hence, the USPSP, a helpful policy for one service, may not be implemented due to its detrimental effect on another.

Differentiated vesting could provide a unique and powerful retirement policy tool to support other HRM strategies. Although certainly adding complexity over the current system, these differentiated vesting points should be explored both within *and* between the services.[79]

The consequence of change -- a more effective program for all stakeholders

We believe the Department should move away from a pure defined-benefit program. It is 100 percent taxpayer funded with total reliance on congressional support. It reminds service members and retirees of the constant political risk associated with virtually every passing budget cycle. Many members, some at critical retention points in their careers, perceive a shifting commitment and are increasingly skeptical about the nature and content of future benefits (see Appendix A and C). This continuous political risk creates an unsettling dynamic that benefits neither the services nor the service members.

A defined-contribution plan may be in everyone's best interest. It allows the nation's equity markets to assist in funding the retirement system. Our calculations indicate that a defined-contribution system could lead to large cost reductions to the nation and could provide much better benefits -- especially as compared under REDUX -- without requiring *any* out-of-pocket expenses to service members. Further, individual accounts enhance the appeal of continued service by providing tangible assets each member can routinely monitor. These accounts meet the service member's goal of being more reliable, equitable and flexible.

Differentiated vesting allows the nation to recover its direct costs of acquiring and training new members while also creating an influential recruiting, retention, distribution and separation tool to achieve desired personnel management objectives. It would enhance the timely transition of non-progressive members, unclog the promotion system and reward more productive junior members. It is equitable for service members since they make the de-facto choice of their vesting point when selecting the specialty or the service they enter. Finally, differential vesting could force the services to adopt better business strategies and hold them accountable for the retirement costs of their personnel policies.

Chapter 6 - Next Steps

Long range planning does not deal with future decisions, but with the future of present decisions.
-- Peter Drucker

In chapter 1, we outlined the purposes and evolution of the Military Retirement Program over the post-Cold War years. The current program, REDUX, has yet to stand the test of time. All members entering under its provisions are just now entering the primary "lock-in" period -- those 12 to 20 year cohorts who tend to stay at very high rates under previous plans. In chapters 2 through 4 we outlined goals for systemic change to the retirement system that we perceived to be independently better for each stakeholder. Chapter 5 searched for common ground amongst all stakeholders. It highlighted potential future consequences for change (discontinue the defined-benefit only system and discard 20-year vesting) and offered some potential alternatives (defined contribution, market-assisted funding, individualized accounts, differentiated vesting, etc.) Are these actions in the best interest of each stakeholder? Our sense is they are. However, further studies are required. We recommend three "next steps" for the Department-- a survey, a study group and, most importantly, Department recognition of the inevitability of change.

Recommendation 1 - Survey

Our discussions with numerous service members indicate not only a general lack of detailed knowledge concerning the various military retirement systems (Figure 1), but also of private industry programs. We also detected an acute level of skepticism concerning the future of their military retirement benefits. Intrigued, we informally commissioned a short survey amongst one graduating class of 299 senior first lieutenants (O-2) and junior captains (O-3's) at their Squadron Officer School at Maxwell Air Force Base, Alabama. The survey and results are found in Appendix C.

No known large-scale, cross-service scientific survey exists that details current member attitudes concerning retirement. We recommend such a survey to increase the Department's understanding in several important areas. What is the level of understanding

amongst service members of their own retirement system and alternative retirement systems? Are the goals of equitability, reliability and flexibility important? What confidence do members have in the government's commitment to fund future retirement obligations with full cost of living adjustments? Are service members eager for alternative proposals for changes to their retirement system?

We found our survey results interesting. We believe the intergenerational results of a full-blown Department-wide survey may be enlightening. Current surveys indicate a distinct difference in opinion between younger and older citizens concerning entitlement programs and the level of individual versus government involvement in such matters.[80] We believe the senior leadership in the Department could be spending political capital defending a retirement system that many members, especially the young, perceive as sub-optimal.

Recommendation 2 - Study Group

The Department of Defense should initiate a special study group to work with Congress on this critical issue. This could be a subset of other groups contemplating entitlement reform. As a minimum, the group should strive to integrate this critical $11B program vertically with the Department's HRM strategy and align the program with other HRM policies and practices. It should finalize a workable set of design goals that support stakeholder interests (our proposed list could be used as a starting point for this effort). The study group should conceptualize a timetable for near-term, mid-term and long-term change and specify additional research, studies, or pilot programs required.

Recommendation 3 - Recognition of inevitable change -- move forward

In light of recent political proposals for entitlement reform, recommendations by the 8th QRMC and other service personnel management initiatives, the time is right for a set of synchronized reforms in the high-cost, decades-old retirement program. The Department must realize that many forces for change are surfacing. Appendix A of this report will only continue to grow with each passing Congress.

We do not believe that change should be contemplated using the current Military Retirement Fund. *ANY* proposal to increase benefits for current members (especially those under REDUX) through this funding mechanism will only increase normal cost charges to the Department (thereby reducing obligation authority for other programs). This would ultimately increase political liability and costs to the American taxpayer -- a backward movement.

The Department needs to move forward and establish a different funding mechanism using market equities to reduce costs. Further, this twenty-first century retirement *system* should not only reduce costs -- but enhance effectiveness. This is accomplished by adopting the best characteristics of private sector programs, synchronizing other efforts in the Department's human resource management arena, and leveraging the Department's exemption from ERISA laws. These efforts should focus on providing enhanced benefits for *all* members who chose to serve their country.

Change can be better for each stakeholder. The Department must get in front, provide leadership, and shape changes to best fit the needs of each stakeholder -- to include itself.

Appendix A - Proposed Changes to Military Retirement Since 1993

Date	Title of	Proposed
Nov-93	Kerrey-	1) Deny COLAs for FY 94-99 on retired pay > 2) Zero COLAs until age 62 for all new
Nov-93	Kerry-	Zero COLA's until age 62 - catch up at
Jan-94	Concord	Means - test Fed Compensation / < $40K -- receive all $40K - $50K -- receive 90 percent of $50K - $60K -- receive 80 percent of " " " $120K+ -- receive 15 percent of
1994	Derrey- (Entitlements	1) Change 2) Change CSRS/FERS 3) Change MRRA to flat 2% YOS and drop age 62
Apr-95	Gregg	1) Zero COLA's until age 62 - catch up at 2) Zero COLA's on retired pay over 3) Cut COLA's 0.5 percent below
May-95	S. 822 (Kerrey-	Means - test COLA's for Soc. Sec. And Mil/Civ Only lowest 30 percent get flat-rate
May-95	S. 820 (Kerrey-	Flat 2 percent per year for MRRA and no catchup at
Oct-95	Blue	Flat Dollar COLA for each retirement category, ie Mil/Civ,
Oct-95	FY 96 Budget	High-One CPI reform (cut by 0.2% year, starting in
May-96	Simpson-Kerry-Brown-Nunn- (Defeated 63-	1) Cut retired pay (full entitlement if retired before 2) Limit COLA's to $50K of retired 3) Set COLAs at CPI minus
May-96	Chafee- (Defeated 53-	1) Delay mil/civ ret COLAs to Apr (Through 2) Delay entitlement to retired pay until 3) COLAs - CPI minus .05% in 4) COLAs - CPI minus 0.3%
May-96	Senate Budget	Sense of Senate that mil/civ retiree COLA's should be
May-96	House Budget	Delay mil/civ retiree COLA until Civ retirees '97 and on mil retirees in '98 and
May-96	Senate Budget	Delay Federal Civilian COLAs to April through
Dec-96	Boskin	CPI overstates inflation by 1.1 % per
Feb-97	Blue	COLA = CPI- Flat dollar amount for
Mar-97	CBO Optons to Reduce	1) Defer COLA to age 62 for all 2) COLAs limited to half CPI, with no 3) Cap COLA 1% below inflation for old 4) Cap COLAs on retired pay above poverty 5) Require Military to contribute to their 6) Drop retirement multiplier from 3.5 at 20 to 2.0 for all new

Appendix B - Contributions Required

This annex prescribes one solution for calculating the individual contributions required under a defined-contribution scheme. In particular, what level of officer contributions over a twenty-year career provides a lump-sum equivalent to the benefits provided by the pre-1980 retirement program? Since the purpose of this annex is only to provide a simple illustration, we will use the least complex assumptions possible. Several assumptions must be made and they are outlined below.

ASSUMPTIONS

a) The officer begins service at age 22 and contributes to his retirement for 20 years. He retires at age 42 with exactly 20 years of service. Based on 1998 pay tables, he receives a total of $849,330 in base pay (in 1998 dollars) during his 20-year career.
b) At age 42, the officer expects to live an additional 32 years for a normal conditional life expectancy of 74 years.
c) The officer decides to draw equal monthly payments and completely consume his retirement account (adopts a capital *utilization* versus a capital *preservation* approach) during his life expectancy. Under capital utilization, his last payment at age 74 depletes his retirement account.
d) Fifty percent of his contributions are invested in stocks and 50 percent are invested in long term government bonds. The officer achieves S&P 500 and US government long-term bond historical annual returns of 10.5 percent and 5.2 percent respectively (see Figure 15) for an annual average of 7.85 percent ([10.5+5.2]/2). This equates to a 1.1873 percent per month rate of return (12th root of 7.85 percent). He receives this rate of return during the entire 52 years (20 contributing years and 32 withdrawing years) that he is in the program.
e) All investments are made at the end of the investment period (ordinary annuity).
f) 1998 pay tables are used and base pay for an O-5 with 20 YOS = $4944. Therefore, retirement pay = $2472 per month ($4944 x .5).
g) Period calculations are monthly so the officer contributes to his retirement account for 240 periods (20x12=240) and withdrawals from his retirement account for 384 periods (32x12=384).
h) Inflation remains constant over the 52 years at 3.5 percent.
i) In calculating contributions, Defense Officer Personnel Management Act (DOPMA) target pin-on points are assumed for promotions.
j) The officer is single with no dependents.
k) He selects no Survivor Benefit Plan options.
l) Retirement pay COLA adjustments equal inflation (COLA = CPI(W)).
m) We will assume expenses to operate and maintain the investment funds are negligible.
n) No calculations will be made for Social Security contributions or withdrawals.

CALCULATIONS.

1. Calculate the present value (PV) at age 42 of retirement benefits under pre-1980 system.

- He receives benefits for 384 months (32 years x 12 months per year). Therefore, n=384.
- Since he elects no SBP, his future value (upon death) = 0. Therefore, FV = 0.
- Since the government provides the annuity, he has no monies invested. Therefore, his rate of return (i) equals 0. Also, payments (Pmt) = $2472 per month.
- The cash flows are shown graphically in Figure A-1. Since COLA payments negate inflation, PV = {Pmt *n}. Therefore, the present value of his retirement under the pre-1980 system = $949,248. In essence, the officer would need $949,248 at age 42 invested at the inflation rate to receive $2472 inflation protected dollars per month for 32 years.

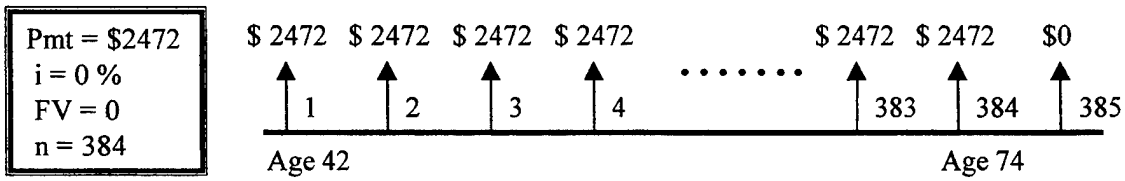

Figure A-1 - Present value of income stream = $949,248

2. Calculate the lump-sum required at age 42, *invested at market rates*, that provides the officer with an *inflation protected* monthly annuity equal to pre-1980 payments.

- He receives benefits for 384 months (32 years x 12 months per year). Therefore, n=384.
- Since he elects to consume the entire retirement (capital utilization), his future value (upon death at age 74) = 0. Therefore, FV = 0.
- Since he provides his own ordinary annuity, he invests it in the market. He also receives no COLA, so he must beat inflation. Therefore, his inflation adjusted interest rate (i) equals {(1+.0785/1+.035)-1}x100 = 4.203 percent annually, or .7679 percent monthly.
- Payments (Pmt) = $2472 per month, the same as under the current pre-1980 system.
- The cash flows are shown graphically in Figure A-2. The present value required at age 42 under this proposal = $304,855. In other words, if an officer receives a lump sum of $304,855 at age 42; invests it at market rates (7.85 percent annually); experiences 3.5 percent inflation; and withdrawals $2472 per month (inflation adjusted) for 384 months -- he will have zero dollars left in his account at expected death at age 74.

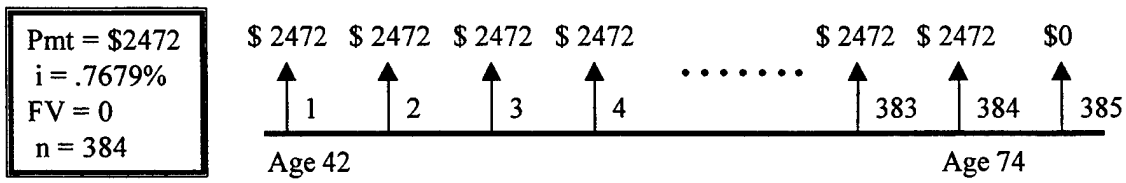

Figure A-2 - Present value of income stream = $304,855

Note the difference between the present value calculated in figure A-1 and A-2. The entire difference is due to investing the retirement lump sum at our inflation adjusted annual rate of return of 4.203 percent -- or 0.7679 percent compounded monthly.

3) Calculate the monthly contributions (as a percent of base pay) required from YOS 0 through YOS 19 to achieve a lump sum of $304,855 at retirement. Assumptions:

- The officer contributes a certain percentage of his base pay for 240 months (20 years x 12 months per year). Therefore, n=240.
- Since he needs $304,855 at retirement, his future value of all contributions must at least equal $304,855.
- He is investing in an ordinary annuity and allocates his funds at 50 percent S&P Stock Fund and a 50 percent Long-Term Government Bond Fund -- achieving the same inflation adjusted return as indicated in step 2 (0.7679 percent monthly)
- He is promoted at DOPMA targets. Therefore, he is promoted to O-2 at the beginning of his 19th month of service; O-3 at the beginning of his fourth year of service; O-4 at the beginning of his tenth year-of-service and O-5 at the beginning of his sixteenth year-of-service.
- COLA pay raises equal inflation.

Under these assumptions, the officer is required to have the equivalent of almost 14.4 percent of his monthly base pay contributed into his individual retirement account in order to achieve a lump sum of at least $304,855 at retirement. His total contributions and the future value of these contributions, by grade, are as indicated below. Interestingly, contributions as a O-1 represent just 3.8 percent of the monetary contributions into the fund, yet, due to compounding interest, constitute 8.8 percent towards his final retirement lump sum payment. Obviously, changes in any underlying assumption can change the results of this analysis.

Rank	Range of Year of Service	Range of Months Until 20 YOS	Range of Monthly Base Pay	Total Contributions by Grade	Percent of Total Contributions	Future Value of Contributions at 20 YOS	Percent of Future Value
O-1	0 - 1.5	239-222	$1774 - $2043	$4,598	3.8%	$26,832	8.8%
O-2	1.6 - 3	221-192	$2232 - $2681	$10,254	8.4%	$49,542	16.3%
O-3	4 - 9	191-120	$3099 - $3363	$33,554	27.4%	$111,086	36.4%
O-4	10 - 15	119-48	$3721 - $4109	$40,638	33.2%	$77,479	25.4%
O-5	16 - 19	47-0	$4677 - $4944	$33,247	27.2%	$39,917	13.1%
			Totals	$122,291	100.0%	$304,855	100.0%

Figure A-3 - Future Value of Contribution of 14.4 percent of Base Pay for 20 years = $304,855

Appendix C - Informal Survey and Results

The following informal survey was commissioned by the authors of this report and given to 299 Air Force Captains at their Squadron Officer School. All officers fall under the REDUX computation of retirement benefits. Responses are provided in parenthesis.

1. Do you understand the 20 year retirement benefit calculation established in the 1986 Military Retirement Reform Act reduced the benefit calculation of your retirement.

    1. Yes (78%) -- correct answer
    2. No (22%)

2. People on active duty today fall under how many different Military Retirement System benefit calculations?

    1. 1 (9%)
    2. 2 (27%)
    3. 3 (57%) -- correct answer
    4. 4 (8%)

3. How much less generous do you believe your lifetime retirement benefit is compared to an officer commissioned in 1978?

    1. 10 (2%)
    2. 20 (31%)
    3. 30 (21%)
    4. More than 30% (25%) -- correct answer under most scenerios

4. Does your retirement benefit keep pace with inflation?

    1. Yes (11%)
    2. No (89%) -- correct answer

5. Do you believe Congress will change the value of your retirement during the course of your lifetime? If so, please characterize the nature of this change.

    1. Increase (4%)
    2. Decrease (86%)
    3. No Change (10%)

6. Do you believe that growing budgetary pressures will force Congress to adopt fiscal compromises to save Social Security, Medicare, and Medicaid?

   1. Yes (84%)
   2. No (7%)
   3. Don't Know (8%)

7. If you answered yes to Question 6, do you believe Congressional cutbacks in major social programs will then force Congress to re-look other federal entitlements such as the Military Retirement System and reduce their benefits further? (251 Responded "Yes" to item six, 299 responded to this item)

   1. Yes -- 87% (40)
   2. No -- 13% (259)

8. Identify the top three characteristics that appeal to you in a military pension plan? (percent should add to 300%)

   1. Choice of Options (78%)
   2. Early vesting (52%)
   3. Annuity Only (5%)
   4. Portability (26%)
   5. Matching Funds (62%)
   6. COLA adjustments (42%)
   7. Survivor Benefits (31%)

9. Which pension system definition appeals to you?

   1. Current System (10%)
   2. 401(k) plus Annuity (35%)
   3. Lump Sum upon retirement (3%)
   4. Hybrid* (52%)

* Hybrid system containing a 401(k) with government matching funds, a lump-sum payment upon retirement equal to 2 1/2 years salary, and an inflation adjusted annuity starting at age 62.

10. Would you like to see Air Force Senior Leaders engage in innovative solutions to retirement planning or would you prefer to stay the course with the post-1986 Military Retirement System?

   1. Embrace innovative solutions for long-term wealth creation. (93%)
   2. Stay the course with our current defined-benefit system. (7%)

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ENDNOTES

[1] US Air Force Director of Personnel Policy, Talking Paper on Military Retirement, 18 March 1998.
[2] See Newt Gingrich's official web-site under "Goals for a Generation" at www.house.gov.gingrich.
[3] A definition of terms here is warranted. The American Heritage Dictionary defines a purpose as " the object for which something exists; goal; aim". It defines a goal as "the purpose toward which an end is directed: an end; an objective". In comparing the two terms, they are very similar. The only salient difference may be the dimension of time. A purpose connotes *presence* or *existence*; while a goal connotes a *future* objective. Hence, for this paper, we will use the term "purpose" when referring to existing objectives (or the historical development of these objectives) and the term "goal" to indicate development of potential future objectives.
[4] Robert M. Emmerichs, personal interview, November 18, 1997.
[5] Department of Defense, Office of the Actuary, Valuation of the Military Retirement System 1996 (Arlington, Virginia: 1997) B-2.
[6] Department of Defense, Office of the Secretary of Defense, Military Compensation Background Papers -- Compensation Elements and Related Manpower Cost Items, Their Purposes and Legislative Backgrounds, 5th Edition (Washington: Government Printing Office, September 1996) 529.
[7] Military Compensation Background Papers 5th Edition 505.
[8] President's Commission on Military Compensation, *Report of the President's Commission on Military Compensation*, Washington: Government Printing Office, 1978, 2-6.
[9] Mr. Robert M. Emmerichs, personal interview, November 18, 1997. The catalyst for the 1986 change was the need to meet a $2.9B reduction in the personnel accounts. Congress did consider the other stated purposes for retirement. Retention, an old-age annuity to offset second career income, and incentive to stay until 20 years of service, and an incentive to leave after 20 years to enhance promotion, youth, vigor, etc. are consistent characteristics that remained part of REDUX.
[10] Department of Defense, Office of the Actuary, Valuation of the Military Retirement System 1996 16.
[11] Military Compensation Background Papers 505.
[12] This does not imply that a ready pool of manpower with military experience is not desirable. It is. We believe, however, that the retirement system should not be designed with this as a primary characteristic. This "pool of manpower" will exist as a by-produce of *any* system, hence it is inconsequential to any system design.
[13] United States Government, Congressional Record - Senate, May 15, 1986, S5967-S6024.
[14] Mr. Robert M. Emmerichs, personal interview, November 18, 1997.
[15] Military Compensation Background Papers 5th Edition 371.
[16] Military Compensation Background Papers 5th Edition 372.
[17] Department of Defense, Office of the Actuary, Valuation of the Military Retirement System 1996 K-8.
[18] Military Compensation Background Papers 5th Edition 531 and Department of Defense, Office of the Actuary, Valuation of the Military Retirement System 1996 K-10. The future expenditures do not reflect recent changes in calculating COLA adjustments (see footnote 22).
[19] Based on 1998 pay tables, an O-5 with 20 years-of-service draws approximately $850,000 in base pay (assuming DOPMA promotion pin-on points). If the officer retires at 20 years of service and lives to achieve actuarial life expectancies, he will draw almost $950,000 in retirement pay. See Appendix A for more details.
[20] President's Commission on Military Compensation, Report of the President's Commission on Military Compensation 2-6.
[21] Department of Defense, Report of the Fifth Quadrennial Review of Military Compensation: Uniformed Service Retirement System (Vol. I) (Fort McNair, Washington D.C., 1987) iv-29.
[22] Recent developments will limit the COLA benefit. The Bureau of Labor Statistics (BLS) recently announced changing the method of tracking inflation. Overall, starting in January of 1999, COLA adjustments should be reduced by about 0.8 percent from previously reported inflation rates. For further details see The Washington Post, Washington D.C., 17 April 1998, A-1.
[23] Concord Coalition, Alert 4 (July 10, 1995) 4.
[24] Concord Coalition, Alert 4 3.
[25] Congressional Research Service Report for Congress, The Military Retirement Reform Act of 1986: Issues and Implications, (Report 87-702 F, 26 October 1989) 26.

[26] Robert M. Emmerichs, personal interview, 18 November 1997. The cuts were made to meet a $2.9B budget shortfall in the manpower accounts. The Defense Department needed to reflect the retirement savings through its normal cost accounting procedures or have $2.9B cut from other sources. Without the reform, the Defense Department would have been forced to release over 320,000 active duty personnel in order to absorb the cut. (see also the Armed Forces Journal International, June 1986, page 17).
[27] Congressional Research Service Issue Brief, Military Retirement: Major Legislative Issues, (report IB85159, 8 August 1997) 7.
[28] Office of the Assistant Secretary of Defense, Force Policy Management Policy, Rewarding, Organizing and Managing People for the 21st Century: Time for a Strategic Approach - Executive Report (Washington, D. C., 30 June 1997) 31-32.
[29] Office of the Assistant Secretary of Defense, Force Policy Management Policy, Rewarding, Organizing and Managing People for the 21st Century: Time for a Strategic Approach - Executive Report 16.
[30] As an example, the Defense Officer Personnel Management Act (DOPMA) constrains selection rates from the rank of O-4 to O-5 at 70 percent, and from O-5 to O-6 at 50 percent.
[31] Measuring items such as "productivity" and "force quality" is problematic. Probably the best visualization of this is to rank and place all service members on a continuous scale from "highly unproductive" to "highly productive", with the vast majority falling in the average range (much like a bell curve). Even if the services were perfect at separating the unproductive, some remaining service members would still be ranked as marginally productive. Evidence is also anecdotal. Every large organization has members who become less productive towards retirement or after being non-selected for promotion.
[32] Probably the biggest reason is grade/skill mismatch.
[33] Beth J. Asch and John T. Warner, A Policy Analysis of Alternative Military Retirement Systems (DDR-651-OSD, Rand Corporation, April 1994) 5. The authors refer to this as an "implied contract" between the services and mid-careerists. This implied contract makes the services "reluctant to separate all but the poorest performers for fear of what the effect of involuntary separations would be on morale."
[34] Department of Defense, Office of the Actuary, Valuation of the Military Retirement System 1996 C-10.
[35] US Army Recruiting Command surveys list service to country, job security, skill training and immediate employment as primary reasons for the employment oriented to enlist. College oriented list service to country, college tuition, independence and hiatus/adventure as primary reasons. Jack E. Faires, Recruiting, Retention, and Quality in Today's Army -- Report to Congress, July 1988, (HQDA, Washington, DC, July 1988) 20.
[36] Asch and Warner, Alternative Military Retirement Systems 10.
[37] Asch and Warner, Alternative Military Retirement Systems 5.
[38] Asch and Warner, Alternative Military Retirement Systems 10.
[39] Frederich Beauchamp, personal interview, 18 May 1998.
[40] Asch and Warner, Alternative Military Retirement Systems 5. The Department of Defense became acutely aware of this problem during the post-Cold War draw down in the early 1990's.
[41] Concord Coalition, Alert 4 3. The average age of an enlisted retiree is 42 and a officer retiree is 46.
[42] In a survey conducted by The Luntz Research Companies for the Third Millennium, 82% of 500 respondents in the 18-34 age group supported the proposition of directing part of their social security contributions to a personal retirement account. The Luntz Research Companies / Mark A. Siegel and Associates, Third Millennium Interview Schedule, (Arlington, Virginia, November 1996).
[43] Stephen Barr, "Small is Beautiful, CFO," The Magazine for Senior Financial Executives April, 1995: 38.
[44] Robert M. Emmerichs, personal interview, 18 November 1997.
[45] Mr. Charles Able, personal interview, 19 November 1997.
[46] The Army Times, Springfield, VA, 27 April 1998, 12. Or see the Air Force or Navy Times of that week. The headline reads "No Deal!" and expounds on the fact that a "40 percent retirement plan just doesn't cut it".
[47] Stephan R. Leimberg and John H. McFadden, The Tools and Techniques of Employee Benefit and Retirement Planning 5th Edition (Cincinnati, Nulaw Services, 1997) 399. In fact, all state, local and federal government or governmental organizations are exempt.
[48] Leimberg and McFadden 140. In fact, they must pass a series of ADP (actual deferral percentage) tests in order to maintain a qualified plan. ADP tests are designed, among other things, to encourage low-income employee participation in qualified programs.
[49] Leimberg and McFadden 7.
[50] Leimberg and McFadden 141.

[51] Department of Defense, Office of the Actuary, Valuation of the Military Retirement System 1996 12.
[52] Those who argue against inequity here typically do so for one of two reasons. The first argues on a traditional basis and asserts the Defense Department should only reward those who remain until 20 years-of-service. The other argument is that, due to the long vesting requirement, the Department actually pays a higher premium for junior personnel. They argue that earlier vesting may be accomplished with relatively lower pay scales in the junior ranks.
[53] This is especially true for working families whose modified adjusted gross income exceeds limitations.
[54] Mark D. Pyle, Reinventing Military Retirement (Naval Postgraduate School, 1995) 41.
[55] As a point of reference, we consider the Federal Government Employees Retirement system to be much too restrictive since it offers only three investment vehicles.
[56] At least that is the perception based on the author's almost 100 cumulative years of military experience.
[57] Leimberg and McFadden 14.
[58] LTC C.W. Crutchfield, Proposed Thrift Savings Plan for Active Duty Members, (ODCSPER, US Army Information Paper, 9 October 1997) 4.
[59] Department of Defense, Office of the Actuary, Valuation of the Military Retirement System 1996 24.
[60] Conceptually, this is the same proposal being recommended by some Social Security reformists.
[61] Department of Defense, Office of the Actuary, Valuation of the Military Retirement System 1996 16. The Military Retirement Fund actually grew by $4.3B in 1996. Therefore, arrows C, D and E do not add to $28.8B.
[62] Beth J. Asch, Richard Johnson, and John T. Warner, Reforming the Military Retirement System (Document MR-748-OSD, Rand Corporation, 1997) 71-77.
[63] Herbert B. Mayo, Investments, An Introduction 5th Edition (Fort Worth: The Dryden Press, 1997) 282.
[64] Department of Defense, Office of the Actuary, Valuation of the Military Retirement System 1996 D-3. This is the assumed nominal interest rate accruing from investments in US Government obligations in the Military Retirement Fund. Since the Department of Defense Actuaries also assume a 3.5 percent rate of inflation, the real interest rate is 3.0 percent. For a more detailed discussion, see source.
[65] Investors Business Daily, Los Angles, 18 November 1997, B-1.
[66] Department of Defense, Office of the Actuary, Valuation of the Military Retirement System 1996 16. This figure is expected to decrease to approximately 26.3 percent by the year 2011 when virtually all pre-REDUX members depart the system.
[67] Although we are using "base pay" for our calculations, the same argument can be made for Regular Military Compensation (RMC). Corporate "payroll" (the 12.2 percent figure cited) is most closely associated with RMC. In 1996, military retirement cost 24.0 percent of RMC.
[68] Mark D. Pyle, Reinventing Military Retirement (Naval Postgraduate School, 1995) 63. Pyle postulates that a service member must contribute approximately 10 percent per month to assimilate funds sufficient to achieve an ordinary annuity similar to current retirement (*REDUX*) level of benefits. Our example in Appendix B indicates a requirement of approximately 14.4 percent is required to achieve *pre-1980 program* levels of benefits.
[69] Further analysis lies beyond the scope of this report. Analysis is provided primarily for exemplary purposes. It assumes steady state (with no transition costs or conversion costs to a new retirement system).
[70] The first three monthly percent base pay numbers in Figure 16 are rounded. Actual numbers are 13.35025 percent, 14.39855 percent, and 16.59695 percent respectively. This is the exact percentage contribution required to achieve the desired $2472 monthly payment under the three different investment options.
[71] McGinty, Lt Gen., Letter to the authors. 15 April 1998. Low participation and contribution rates are also the underlying reason for the Saver's Act of 1997.
[72] Our discussion here is of budgeted costs. Due to quirks in governmental accounting, our proposal raises one potential obstacle. The obstacle is that investing in market securities requires *real* money. Under today's system, the government passes what amounts to IOU's into and out of the Military Retirement Fund. These IOU's (normal cost payments, non-negotiable treasury securities, etc.) in effect become future liabilities against tax receipts. Although our analysis is sound, the execution of such a concept could become problematic in that actual money, not government IOU's, would be required to make the concept work.
[73] Certainly there are exceptions to these general categorizations. There undoubtedly exists some hard to recruit specialties that require longer training periods. The point to remember is that differentiated vesting becomes yet another tool for the services -- in conjunction with other tools such as bonuses, special pay, etc.
[74] College for Financial Planning, Study Guide for Retirement Planning and Employee Benefits (College for Financial Planning, September, 1997) 3-15.

[75] Asch, Johnson, and Warner, Reforming the Military Retirement System, (MR-748-OSD, Rand Corporation, 1997) 2.
[76] William M. Hix and William W. Taylor, A Policymaker's Guide to Accrual Funding of Military Retirement, (Rand Corporation, Arroyo Rand, 1997) xiii. Although this reference does not address our proposal for differentiated vesting, it does provide a thorough discussion on cost accounting alternatives at the service versus Defense Department level.
[77] Office of the Assistant Secretary of Defense, Force Policy Management Policy, Rewarding, Organizing and Managing People for the 21st Century: Time for a Strategic Approach - Executive Report, 53.
[78] John M. Bird,CDR, personal interview, 14 November 1997.
[79] Interestingly, ERISA laws do allow for some tightly-controlled employer discrimination in enrolling employees for qualified retirement plans. Congressional exemptions granted to the military suggest some Congressional leeway for the Defense Department to determine their own vesting points at whatever level is most efficient for force management.
[80] The Luntz Research Companies / Mark A. Siegel and Associates, Third Millennium Interview Schedule, (Arlington, Virginia, November 1996).