The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

YOUTH AND VIGOR: MODERNIZING RESERVE COMPONENT RETIREMENT

BY

LIEUTENANT COLONEL ROBERT A. HARRIS
United States Army National Guard

DISTRIBUTION STATEMENT A:
Approved for Public Release.
Distribution is Unlimited.

USAWC CLASS OF 2001
U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050
USAWC STRATEGY RESEARCH PROJECT

YOUTH AND VIGOR: MODERNIZING RESERVE COMPONENT RETIREMENT

by

Lieutenant Colonel Robert A. Harris
Army National Guard of the United States

Colonel Richard M. Meinhart
Project Advisor

The views expressed in this academic research paper are those of the author and do not necessarily reflect the official policy or position of the U.S. Government, the Department of Defense, or any of its agencies.

DISTRIBUTION STATEMENT A:
Approved for public release.
Distribution is unlimited.

U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013
ABSTRACT

AUTHOR: Lieutenant Colonel Robert A. Harris

TITLE: YOUTH AND VIGOR: MODERNIZING RESERVE COMPONENT RETIREMENT

FORMAT: Strategy Research Project

DATE: 10 April 2000 PAGES: 28 CLASSIFICATION: Unclassified

As the new century begins, America's military forces continue the arduous task of transforming from Cold War-era forces to capabilities-based forces which are more agile, versatile, and technology-dominant. This transformation includes an ever-increasing dependence on our reserve component forces to accomplish a broad range of missions, from humanitarian assistance to full-scale combat. How then will Congress respond to the requirement of providing a trained and ready reserve, capable of supporting our National Military Strategy (NMS)?

Joint Vision 2020 calls for increasingly agile and responsive organizations made up of people who encompass specific behaviors such as judgment, adaptability, initiative, teamwork, and creativity. Accordingly, the Department of Defense (DoD), in order to acquire the people to transform the military, must transform its military human resources management strategy from a Cold War-era one-size-fits-all strategy to a modern capabilities-based strategy. Critical to the success of this transformation for the reserve component will be modernization of the personnel management system which includes competitive retirement incentives that will achieve two objectives: 1) Sustain and improve the quality of the reserve forces and 2) Provide a good value to the taxpayer.

This paper will examine the current reserve retirement system in terms of its ability to serve as a force management tool to balance retention and manage turnover in accordance with DoD manpower requirements. Analysis will focus on answering two questions. First, is the current system capable of achieving reserve force manpower management objectives? Second, what changes might be needed to the current system to support future needs of the military and still be a good value to the taxpayer? The current system origins are reviewed, followed by an evaluation of the need to have a retirement system for part time service and an evaluation of whether age really matters in the reserves. After this, an evaluation is made of retirement systems in terms of their ability to influence retention and turnover. Finally, alternatives to the current system are proposed and compared to the existing system with an eye on recommending a more modern design.
# TABLE OF CONTENTS

ABSTRACT .................................................................................................................. III

LIST OF TABLES ........................................................................................................... VII

YOUTH AND VIGOR: MODERNIZING RESERVE COMPONENT RETIREMENT ............. 1

ORIGINS OF THE CURRENT SYSTEM ................................................................. 2

A RETIREMENT SYSTEM FOR "PART-TIME" SERVICE ............................................. 4

RESERVE COMPONENT RETIREMENT AS A FORCE MANAGEMENT TOOL ............. 5

DOES AGE REALLY MATTER? .................................................................................. 7

COST OF RETIREMENT UNDER THE CURRENT SYSTEM ...................................... 10

ALTERNATIVES TO THE CURRENT SYSTEM ....................................................... 13

EVALUATION OF ALTERNATIVES ....................................................................... 14

RECOMMENDATION: A NEW ALTERNATIVE ...................................................... 16

CONCLUSION ............................................................................................................ 19

ENDNOTES ............................................................................................................... 21

BIBLIOGRAPHY ........................................................................................................ 25
LIST OF TABLES

TABLE 1 ......................................................................................................................... 6
TABLE 2 ......................................................................................................................... 18
“Gees, Mr. Secretary, I didn't know that the ‘weekend warriors’ did all that!”

—Katie Couric on NBC's Today Show

YOUTH AND VIGOR: MODERNIZING RESERVE COMPONENT RETIREMENT

As the new century begins, America's military forces continue the arduous task of transforming from Cold War-era forces to capabilities-based forces which are more agile, responsive, versatile, and technology-dominant. This transformation encompasses much more than changes to equipment sophistication and size; it involves marketplace competition for high quality soldiers, sailors, airmen and marines who possess the requisite technical skills and stamina necessary for performing full-spectrum military operations from humanitarian relief to full-scale combat. This transformation also includes an ever-increasing dependence on our reserve components. Just 10 years ago, with 300,000 more members in the reserves (National Guard and U.S. Reserve), one million duty days a year were contributed to the active component. For the last four years, members of the reserve forces have contributed 13 million duty days a year; an equivalent of adding 35,000 men and women to the active component, and this trend is expected to continue for the foreseeable future.

How then will Congress respond to the requirement of providing a trained and ready reserve, capable of supporting our National Military Strategy (NMS)? Joint Vision 2020 calls for increasingly agile and responsive organizations made up of people who encompass specific behaviors such as judgment, adaptability, initiative, teamwork, and creativity. Accordingly, the Department of Defense (DoD), in order to acquire the people to transform the military, must transform its military human resources management strategy from a Cold War-era one-size-fits-all strategy to a modern capabilities-based strategy. Critical to the success of this transformation for the reserve component will be modernization of the personnel management system which includes competitive incentives that will achieve two objectives: 1) Sustain and improve the quality of the reserve forces and 2) Provide a good value to the taxpayer.

The key to success of any organization's personnel management system is the compensation package offered to its workforce. Compensation packages include competitive tangible benefits given as a reward for service to the organization; the principal tangible benefit offered by organizations is retirement.

Retirement systems, whether military or civilian, were originally designed to increase workforce retention, reduce turnover, and in some cases, to encourage workers to separate from active participation at career points considered optimum to meet workforce objectives.
The active component military retirement system -- a 50-year-old system that offers an attractive pension immediately after serving for 20 years -- was intentionally designed by Congress as an incentive to encourage early retirement, thereby keeping the military forces young and vigorous. At the same time, Congress created the reserve component retirement program designed to accomplish exactly the opposite goal: to furnish an incentive to hold members in the reserves for a longer period of time. Thus, the current reserve retirement program, with a point system that rewards time in service but defers the start of an income annuity until age 60, has also achieved its intended purpose by retaining reserve members for long periods. However, the unintended effect of this program is that it has resulted in an aging reserve force that may soon be ill equipped both physically and technically to respond to the frequency and variety of complex missions required of today's full-spectrum force.

The purpose of this research paper is to examine the current reserve retirement system in terms of its ability to serve as a force management tool to balance retention and manage turnover in accordance with DoD manpower requirements. This analysis will focus on answering two questions. First, is the current system an appropriate tool to achieve reserve force management objectives? Second, what changes might be needed to the retirement system to support future needs of the military and still be a good value to the taxpayer? This discussion begins by evaluating the need to have a retirement system for part-time service and then turns to the years-old question, "Does age matter in readiness of the Reserves?" After this, an evaluation is made of retirement systems in terms of their ability to influence retention and turnover. Finally, alternatives to the current system are proposed and compared to the existing system with an eye on recommending a more modern approach. The paper will conclude with a focus on the anticipated benefits of a modern system, highlight recent trends in military personnel compensation, and discuss implications for the future reserve forces.

ORIGINS OF THE CURRENT SYSTEM

In the years following World War II, congressional leaders recognized that an incentive in the form of a deferred income was necessary to maintain a capable and ready reserve. Thus, in 1948, Title III of the Army and Air Force Vitalization and Retirement Equalization Act was signed into law and covered all members of the Selected Reserve, both National Guard and U.S. Reserve. The original intent of the system was, in fact, to provide a monetary inducement to encourage qualified personnel to continue training (in the reserve components) over a long period of time in order to provide a pool of skilled, readily available manpower to augment active forces in times of national emergency.
To qualify for retired pay under this system, a person must complete at least 20 qualifying years of service, the last eight years of which must be in a reserve component. A "qualifying" year is defined as a year in which a member earns 50 or more retirement credit points. Points are earned in two ways: one active duty point is earned for each day of active duty or active duty for training; one inactive duty point is earned for attendance at a unit training assembly of at least four hours in duration. There is no limit, other than the calendar, on the number of active duty points that may be earned in one year. However, no more than 90 inactive duty points may be counted in any one year in computing reserve retired pay. Additionally, 15 inactive duty points are awarded per year just for being a member of the reserve.

Reserve retired pay is calculated by (1) dividing the member's cumulative active and inactive points total by 360 to convert points into years of service, (2) taking the monthly basic pay rate for a member's grade and length of service at the time the member becomes entitled to retired pay at age 60; (3) multiplying the rate by 2.5 percent of the years of service credited through the points conversion process, and (4) subtracting anything over 75 percent.

With the exception of the somewhat complicated point system, the calculus is the same for reserve retirement as for active duty retirement; retired pay is equal to basic pay multiplied by 2.5 percent of years in service. In all other regards, including changes brought about by the 1980 "High-Three Average" amendment, the Military Retirement Reform Act of 1986, and the most recent changes brought about by the 2000 National Defense Reauthorization Act, reserve retired pay calculation is identical. The major differences then become (1) the time in service required for a reserve member to achieve an adequate retirement and (2) the age at which a member may draw the annuity.

Intuitively, one could conclude that this system produces older reserve forces and in some cases much older than the active forces. Analyses conducted in 1987 to support the 6th Quadrennial Review of Military Compensation (QRMC) confirm this. According to the review, the current points system causes promotion stagnation in the force. The lack of benefits prior to age 60 and a corresponding lack of concurrent sacrifice of benefits for continued service tends to cause service members to continue service well beyond twenty years. Stated in terms of a comparable civilian pension plan, there is no pension "penalty" for continued service; service members who invest the necessary 20 years of service to become qualified for retired pay at age 60 tend to hang on in order to maximize the number of active and inactive duty points possible prior to age 60 and thus increase their final retirement compensation.
A RETIREMENT SYSTEM FOR "PART-TIME" SERVICE

Is there a need to have a retirement system for a "part-time" force? In 1948, the 80th Congress believed so. Faced with witnessing the same mass exodus from the reserves of qualified members between World War I and World War II and recognizing the mobilization problems encountered during World War II,12 Congressional leaders decided to try to preserve many trained military service members coming off active duty. The resultant non-disability retirement system incentive remains unique to the United States; no other country offers a pension for its military reserves. On the other hand, no other global power relies on its ability to immediately deploy reserve units to accomplish its military objectives13.

To better understand why a military reserve retirement system was needed, we have to examine the basic differences between military and civilian part-time employment. There are three principal differences between the civilian-sector part-time employment and reserve component military service.

First, the civilian secondary labor market typically needs temporary labor for peak season, surge work, or temporary replacement for full-time employees. On the other hand, the need for reserve military members in peacetime generally has no peaks or surges; the only major changes would come about during unit reorganization. In the military reserves, stability is desired for a longer term.

Second, the nature of the military profession and performing duties required of a military member requires special incentives. Put simply, the military occupation is inherently dangerous and some form of incentive, especially in the absence of conscription, is essential to maintaining a well-trained and disciplined force. The lack of any substantial tangible rewards would likely result in the inability of DoD to obtain desired manning levels during peacetime and extreme uncertainty during times of conflict.14

Third and perhaps most important, civilian-sector work, for the most part, does not involve long-term commitments on the part of employer or employee. Employers will rarely invest in such things as extensive training programs for part-time labor. Additionally, most secondary labor is non-technical in nature and generally does not offer career advancement opportunities. To the contrary, military initial training, follow-on training and leadership development training represents a significant investment by the government and ultimately the taxpayer. This investment should be protected.

These differences aside, the need to maintain a reserve retirement system could be viewed as largely a matter of Congressional preference, conceived with the intent of offering an incentive to service members for the purpose of retaining a large, well-trained, and ready-to-
fight reserve force. Although the system set up in 1948 helps to maintain the large reserve force envisioned for post-World War II, older reserve forces might not satisfy the modern requirements of a ready-to-fight force.

RESERVE COMPONENT RETIREMENT AS A FORCE MANAGEMENT TOOL

Much like civilian corporations, military retirement has been used as an incentive to increase retention, reduce turnover, and encourage members to separate from active service at career points considered optimum to meet force manpower objectives. Will the current system achieve DoD's objective force profiles, assuming these profiles are, by necessity, consistent with active component profiles? Research reveals that not only is the current system unable to influence modern force profiles desired by DoD, it was not able to support desired force profiles of the reserve components as far back as 1986. The following paragraphs discuss the design's basis and original intent, adequacy as a retention tool, and overall effectiveness as a force management tool.

At the time Title III was enacted, a deferred income incentive coupled with universal military training was considered necessary to maintain a large, well-trained, organized, and equipped reserve force, capable of immediate mobilization and deployment. However, the advent of the Selective Service System, along with the Korean and Vietnam conflicts, provided sufficient incentive for people to choose reserve service; these rendered universal military training unnecessary. Reserve retirement compensation continued to provide the deferred income incentive necessary to cause members to remain in service beyond the minimum statutory obligation. Since 1973, the draft has been replaced with the all-recruited (sometimes called all-volunteer) force with the accompanying increase in pay, but there has been no decrease in the requirement to provide some sort of deferred compensation incentive for continued service.

The current reserve retirement system provides no incentive to discontinue service after 20-25 years. The Reserve Components Surveys, completed in 1986, contains the most recent data that attempts to statistically determine the strength of relationship between the current reserve component retirement system and a member's tendency to continue military service. The surveys found that the current system retains needed manpower to 20 or more years in service and, once qualified for retired pay at age 60, there is virtually no incentive to discontinue active service. And, since continued service will only increase the number of retirement points and thus retired pay at age 60, the reserve retirement system provides a strong incentive (as it was originally designed to do) to remain in the program beyond
completion of the minimum "years of satisfactory service" for retirement eligibility. This system stands in stark contrast to the active component system, with its strong pull to retirement offered at the end of 20 years and a pension "cap" for service beyond 30 years.

A review of continuation rates in the reserves also indicates that reserve retirement is a good incentive to attract members with some active service. This attraction or "pull" is noticed as early as 5-7 years of service and gradually increases through and beyond 20 years of service. There is a slight drop in continuation rates at 20 years, but these rates immediately begin to rise again and stay high well beyond 30 years. By comparison, active duty continuation rates are slightly higher through the first 20 years but much lower than reserve rates beyond 20 years.

Unlike the Reserve Officer Personnel Management Act (ROPMA) that requires officers who are not selected for promotion to be removed from the system, there is no comparable selective promotion system for reserve component enlisted service members. This is significant because of the rapidly changing officer-to-enlisted ratio among reservists who receive retired pay (shown in Table 1).

For example, in 1995, retired officers outnumbered enlisted members by roughly two to one. By 2004, the ratio will be roughly one to one. By 2015, the ratio will be two (enlisted) to one (officer). Even though enlisted members may not be promoted (for a variety of reasons, some of which have no active-duty equivalent), they may remain in service until age 60 as long as they meet minimum health standards and are qualitatively retained.

Clearly, the current system contributes to an aging reserve force and stagnation within the personnel promotion system. According to the 6th QRMC, "in the absence of personnel policies that set maximum tenure points or actively select out some members, the strong incentive to continue in service as long as possible contributes to an aging force."

<table>
<thead>
<tr>
<th>Retired Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Year</td>
</tr>
<tr>
<td>1995</td>
</tr>
<tr>
<td>1997</td>
</tr>
<tr>
<td>1999</td>
</tr>
<tr>
<td>2001</td>
</tr>
<tr>
<td>2003</td>
</tr>
<tr>
<td>2005</td>
</tr>
<tr>
<td>2007</td>
</tr>
<tr>
<td>2009</td>
</tr>
<tr>
<td>2011</td>
</tr>
<tr>
<td>2013</td>
</tr>
<tr>
<td>2015</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Retired Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Year</td>
</tr>
<tr>
<td>1995</td>
</tr>
<tr>
<td>1997</td>
</tr>
<tr>
<td>1999</td>
</tr>
<tr>
<td>2001</td>
</tr>
<tr>
<td>2003</td>
</tr>
<tr>
<td>2005</td>
</tr>
<tr>
<td>2007</td>
</tr>
<tr>
<td>2009</td>
</tr>
<tr>
<td>2011</td>
</tr>
<tr>
<td>2013</td>
</tr>
<tr>
<td>2015</td>
</tr>
</tbody>
</table>

TABLE 1
An associated problem with promotion stagnation is that it invariably leads to retention problems among members with less than 20 years in service. On the one hand, the incentive of a reserve retirement becomes an important consideration to service members with 7-10 years in service, but on the other hand the prospect of slow promotions and rewards tends to degrade their performance and initiative and eventually causes them to give up.

It could be argued that other “fringe” benefits, such as commissary privileges, access to medical and dental care, educational allowances, and space-available travel contribute just as much to a reservist’s decision to stay until retirement. Consequently, improvements on these benefits could provide the necessary incentives to induce members to stay. However, the 1986 Reserve Components Survey listed retirement income as the highest contributor, by far, to a reservist’s decision to stay until retirement. Therefore, changes to the reserve retirement system have been and will continue to have a major impact on force management. Whereas the status quo encourages members to stay for long periods, a more modern system, designed to influence system throughput, could better provide the desired force profiles required by DoD.

**DOES AGE REALLY MATTER?**

When it comes to reserve component effectiveness, surveys and studies over the past 20 years have invariably included a concern over the aging of the reserve forces. Particular concern has been shown over the so-called Vietnam era “hump”. To answer the question of whether age matters, this research investigated two areas related to aging and military readiness. First, age groups of active component forces were assumed to be the guidepost and definition of what DoD looks for in terms of force profiles. Accordingly, active component age profiles were compared to reserve component profiles to determine if the differences were statistically significant. Second, available physiological data on military personnel were evaluated to determine if age really matters when it comes to readiness and the resultant force management planning.

The most exhaustive study comparing the active force age profiles to reserve components was completed by Logistics Management Institute (LMI) in late 1987 and was prepared in an attempt to answer the 6th QRMC-specific question about the effects of an aging reserve force. LMI concluded that concerns over reserve component personnel being too old to accomplish their expanded mission were unfounded. Specifically, the study suggested that wherever youth and vigor were prime requisites for military assignments, the military services have managed to achieve reasonable age distributions. Interestingly, the study showed that older personnel were generally filling jobs for which age is not a criterion (jobs requiring specialized
knowledge or technical skills that can only be acquired only through experience). Finally, the study concluded that emphasis on retention of personnel in the reserve components (in other words, maintaining the current personnel management system) was well placed.\textsuperscript{25}

As an example of how the study arrived at its conclusions, those military occupational specialties generally regarded as requiring youth and vigor (Infantry, Gun Crews, and Seamanship Specialists subset of the DoD Enlisted Occupational Groups) were grouped together and compared to their active duty equivalent. Among the findings were that the Army National Guard infantry force, which has the preponderance of combat units, was, on average, only 1.9 years older than their active counterpart.\textsuperscript{26} However, a simple comparison of averages does not describe the picture in detail. Age groups must be compared for a more meaningful picture.

Comparison of age groups paints a vastly different picture. The same study, focusing on the comparison of Army National Guard (ARNG) combat divisions to active component divisions, showed that just 5.4 percent of the active component was over 40 years old in 1987, compared to 14.3% of ARNG. In fact, age differences occurred much earlier. Active components boasted 73 percent of all infantry and gun crews below age 28, whereas the ARNG showed only 65 percent below age 28. These percentages, which represent age gaps between the young and vigorous active component and the first line reserve (National Guard), were significant in 1987 and appear to be growing.

The question then becomes: How old is too old? According to medical experts, individuals age at extremely different rates and even within one's own body, the various organs and organ systems show different rates of decline.\textsuperscript{27} In general, most experts agree that normal human aging, absent any breakdowns in either the endocrine system or the immune system, consists of a progressive loss or deterioration of the following: aerobic capacity, muscle mass, basal metabolic rate, strength, and eyesight. Most of these declines begin as early as age 30. For example, aerobic capacity declines between 30 and 45 percent between the ages of 30 and 65.\textsuperscript{28} Lean-muscle mass declines with age at a rate of about 6.6 pounds per decade beginning at young adulthood.\textsuperscript{29} For the eyes, difficulty in focusing close up begins in the 40's. In males, a gradual decline in the chief male sex hormone, testosterone, begins as early as the third decade of life and this decline is believed to be linked to age-related changes in healthy men, such as decreases in muscle tissue, bone mineral density, rises in cholesterol, and deteriorating heart function.\textsuperscript{30}

Even though there appears to be no definitive break-point in age which can be substantiated with research data, the U.S. military begins cardiovascular screening on all its
members beginning at age 40 and requires routine physicals on increased frequencies thereafter. Thus, it would seem reasonable to assume that the military believes the risk factors increase every year beyond age 40, no matter what the military occupation.

The Army’s Physical Fitness Research Institute in Carlisle, PA has collected data since 1982, primarily on officers who have attended the resident war college. These students, whose average age is 43 and include reserve component officers, are assumed to represent a relatively elite group of service members who, by professional necessity or personal preference, maintain high levels of physical fitness. Therefore, the expected results would indicate a so-called best-case physiological profile. Summary data on such age-related factors as loss of aerobic capacity, bone density, muscle mass, and flexibility confirms the assumption and indicates a population of healthy middle-aged military officers. However, this writer’s experience has been that reserve component members, many of whom do not receive regular preventive medical care and do not train physically as often as their active counterparts, will not achieve the same profile.

Two conclusions can be drawn from these comparisons. First, stamina (vigor), as defined by aerobic capacity, muscle mass, strength, and flexibility does decline with age even in military members who maintain high levels of physical fitness and receive regular, required preventive medical care. Some factors such as loss of strength, deteriorating eyesight, increased cholesterol levels, and decreased testosterone levels are directly related to aging and these factors are more pronounced beyond the age of forty. Second, there are a significant percentage of reserve component forces over the age of forty as compared to the active component, even in those MOSs who traditionally require youth and vigor.

Certainly, there are many reservists whose age and experience are invaluable to the military and who continue to make positive and substantial contributions well beyond 40 years of age. This paper does not mean to imply that reserve members should leave service merely because they have reached a certain chronological age. Additionally, Joint Vision 2020 requirements for people who display adaptability, initiative, teamwork, and creativity mention nothing of age. Is there another variable related to aging besides the physiological effects?

The old adage "you can’t teach an old dog new tricks" may have some applicability in this arena. DoD continues to invest large sums of money on high technology and state-of-the art systems with which to fight the next war. These complex systems will rely heavily on the assimilation and processing of large amounts of data but the ultimate synthesis and integration of this data will still be the domain of humans. Army After Next experiments suggest that one problem of aging could be the adaptation of our cognitive skills to the ever-increasing array of
information available to us. This appears to be confounded by the fact that as humans grow older, they are by their very nature less and less comfortable with the new tools technology makes available. In simple terms, older people have a tendency to distrust new "gadgets" and prefer to lean on their tacit knowledge, or knowledge gained by years of experience, to see them through. Therefore, aging also implies that as people get older and gain experience and tacit knowledge, they may be less likely to adapt to changing technology and use that technology to its maximum benefit, particularly at the execution level.

In summary, since DoD desires a younger reserve force and military retirement, as part of the overall compensation package, is a powerful tool in sustaining and improving the quality of the reserve forces, then any changes or modernization of the compensation system must assure a good value to the taxpayer. Invariably, making this assurance involves managing costs.

COST OF RETIREMENT UNDER THE CURRENT SYSTEM

In 1999, slightly over 233,000 reserve component retirees received just over 2.39 billion dollars in non-disability retirement benefits. Although the number of reserve retirees represents about 14% of the total number of military retirees, the associated costs represent only about 8.0% of total outlays for military retirements. Of equal importance is that fully 75 percent of these outlays were to 130,000 or so officers who, in 1995, outnumbered enlisted retirees by about two to one. These facts suggest that the current reserve retirement system represents a good value to the taxpayer. The following paragraphs discuss the history of funding for military retirement, compare military retirement costs to comparable civilian programs, and establish the basis for examining the costs and structuring improvements to the current program.

Prior to Fiscal Year 1985, military retirement was funded on a pay-as-you-go basis; projected annual costs for all military retirement were covered by a single line-item in the DoD budget and military retirees were paid directly from a DoD appropriation. In 1984, Section 925 of the DoD Reauthorization Act established a military retirement fund in order to finance, on an accrual basis, liabilities of the military retirement and survivor benefits programs. This law established a retirement trust fund in the Treasury that receives annual payments from both DoD (for payments to fund current members) and the Treasury (to pay for unfunded liabilities from members who have already retired). All payments to retirees are made from this fund and all retirees currently receive a defined-benefit annuity. Today, DoD contributes, on average, 30.5% of each individual's basic pay to the retirement fund.
Reserve retirement pay is computed as a percentage of basic pay and this basic pay represents approximately 70 percent of average total military compensation. In an effort to make a comparison between federal outlays for reserve retirement and comparable outlays to civilian pension plans, the Hay/Huggins Company derived the relative value of reserve military retirement compared with private sector pension and capital accumulation plans. Their research found that a normal cost contribution to the Military Retirement Fund, as a percentage of reserve component basic pay is about 18.8 percent. By comparison, the average cost of mid-level private-sector retirement benefits is 13% of private-sector salary. Consequently, if military basic pay, which is used to calculate retired pay, is 70% of total compensation and 18.8 percent is used as the starting basis, the resulting equivalent contribution to the reserve retirement fund would be roughly equal to private-sector pension plan contributions.

Military retirement, since its inception in 1948, has been a defined-benefit type of pension plan, with the federal government bearing the full responsibility and risk of providing sufficient funds to guarantee that benefits promised will be paid when members retire. Military members are not required to contribute to their pension. On the other hand, fully 88 percent of private employers use defined-contribution plans, and only 9 percent use defined-benefit plans. For defined-contribution plans, employers establish individual accounts for each employee and generally agree to make a specified contribution to the account each year; employee contributions are typically not required but encouraged. Besides enjoying lower administrative costs, fewer governmental regulations, and shared risk with their employees, private employers found that employees increasingly prefer defined-contribution type pension benefits they can retain when they change jobs.

Long term, reserve benefits' normal cost contributions should try to remain comparable to private sector benefit costs in order to maintain the perception by Congress and taxpayers that reserve retirement is a good value. However, the current points-based system, which requires a minimum of twenty years to be vested and doesn't pay benefits until age 60, has already been shown to contribute to an aging reserve force. So, what is the fair trade-off? It seems that any change to the reserve retirement system would necessarily want to consider impacts associated with costs to the taxpayer, but these impacts should not be the only consideration. The fair trade-off would appear to be a system that, all things considered, is at least cost-neutral to the taxpayer while at the same time providing a benefit valuable enough to attract and maintain the desired force structure.

The 6th QRMC listed four major assumptions it believed was necessary for examining the costs of reserve retirement.
- Assuming that Total Force structure and missions are the steady-state requirement for accomplishing the objectives of our National Military Strategy, then any forced decrease in active component force structure will necessitate a corresponding increase in reserve component structure and missions. The associated increases in expenditures, including those for reserve retirement, are more than offset by reductions in active duty expenditures.

- The cost of reserve retirement must be compared with the costs of maintaining the appropriate force structure in the absence of a retirement income incentive. During the period between World War I and World War II, retention suffered dramatically in the reserve components. The RAND Corporation projects that elimination of a retirement incentive would dramatically increase accession requirements and associated costs.\(^{41}\)

- The cost of reserve retirement must be compared to the cost of comparable alternatives that accomplish essentially the same results in order to determine which alternative is the most cost effective.

- Finally, the costs of the current system must be compared with alternatives that would be designed to impact differently on retention. These alternatives could not be evaluated as mutually exclusive if their impact creates either cost savings elsewhere or increased expenditures.

The first assumption is instructive. We now know that steady-state Total Force structure has changed significantly since 1988, reducing both active forces as well as reserve forces. Theoretically, since reserve retirement still represents less than 10% of total outlays to the Military Retirement Fund, DoD could provide large increases to reserve retirement incentives and still show significant decreases in federal outlays for pensions.

The second assumption remains valid today. The 1986 Reserve Components Surveys suggested that some reservists might prefer lump-sum retirement to annuities and others prefer to have some sort of immediate annuity at the completion of 20 years.\(^{42}\) In either case, some sort of retirement incentive is still believed to be necessary to maintain force structure balance and keep accession costs stable.

The third and fourth assumptions essentially highlight the need for change. Specifically, alternative forms of deferred income must not accomplish the same results; they must impact differently on retention as opposed to the current system in order to achieve desired force profiles. Alternatives must also provide a good value for the taxpayer and, as shown in the first assumption, this does not necessarily mean reserve retirement alternatives must cost less to the government. Additionally, the overall guiding principle must be to ensure that active duty and reserve compensation systems remain integrated such that members can transition from one component to the other.
ALTERNATIVES TO THE CURRENT SYSTEM

Ultimately, reserve retirement must be tied to the overall system effects on the readiness of the reserve components and the value of that readiness in supporting our National Military Strategy. Traditionally, readiness indicators have included such factors as individual training qualification percentages, percent of assigned members available for deployment, grade match to job, and physical qualifications. The following discussion provides an understanding of the performance design criteria of alternative systems.

In 1988, the 6th QRMC concluded that the current reserve retirement system contributed to an aging reserve force and did not provide sufficient flexibility to achieve DoD desired force profiles. Based on this conclusion, the review specified several factors that would provide design criteria for the objective system. These factors included (1) compatibility with the active retirement program (2) the ability to support accomplishment of reserve manpower force objectives, (3) providing an incentive for continuous satisfactory service from initial entry through, at a minimum, 20 years of service, (4) providing an early payment plan option, and (5) maintaining cost-neutral or reducing long-term retired pay costs to the federal government.

With these factors in mind, the QRMC developed a defined benefit system that would satisfy all these factors while maintaining alignment with the four major assumptions previously mentioned. Additionally, in 1998, a study by Harvard Senior Service College Fellows addressed issues with active component retirement and developed yet another alternative. This approach, which mirrors a civilian-type pension system, featured a defined contribution system with differentiated vesting periods that would replace the current Military Retirement Fund and purported to reduce the costs of the current retirement system by 50%.

A brief description of these alternatives follows.

Two-Tier, Actuarily Neutral Alternative (preferred alternative recommended by the 6th QRMC) – This alternative provides a reduced annuity immediately at retirement (first tier), based on a fixed percentage of a High-Three average at the time of retirement. The remaining points, minus a point reduction, would be used to calculate the second tier at the normal retirement age of 60. At age 60, the member would then receive the sum of the two tiers for life. In the view of the QRMC in 1988, this alternative appeared to satisfy all factors listed above, especially factor (2).
Defined Contribution Plan with Differentiated Vesting – This alternative provides for a vested retirement after some specified period of service, depending on the appropriate skill/grade/service; the intent is to provide a contribution-based, early vesting alternative to replace the existing defined-benefit, 20-year vesting system. It takes advantage of congressional willingness to exempt the uniformed services from the 1974 Employee Retirement Income Security Act (ERISA) and proposes to eliminate the Survivor Benefit Plan. In its extreme form, the researchers advocate the investment of that portion of a member’s retirement that DoD would ordinarily contribute as a normal cost contribution to the Military Retirement Fund into some form of 401(k) plan without the requirement for the service member to provide matching funds.

EVALUATION OF ALTERNATIVES

Under the QRMC preferred alternative, reserve members with high point total accumulations would still not have a greater incentive to retire.\textsuperscript{43} This alternative would allow members who separate early (before age 60) to replace a portion of their current drill pay, but in almost all cases, the annuity would be less than actual drill pay. Thus, this alternative satisfies the factors specified by the 6\textsuperscript{th} QRMC factors with one significant drawback. Overall, this alternative still favors continuation in service to 30 years and beyond, because present drill pay would in almost all cases exceed the value of the alternative retired pay. The service member would then have to weigh the intangible benefits of not being encumbered by the requirement to attend drills or annual training.

The 6\textsuperscript{th} QRMC based the design of the two-tired system on two factors that would today be considered obsolete assumptions/criteria. The first assumption was that there were very significant differences among the reserve components in terms of desired manpower force structures; thus, the assumption should err in favor of the service component requiring the much higher retention rates from 20-30 years of service. The resulting design criterion was in consideration of an alternative that would provide an economic incentive for continued service through a minimum of 30 years.\textsuperscript{44} Any resulting plan based on this criterion would still directly contribute to an aging force structure and the resulting readiness problems. Further, while this alternative supports the accomplishment of reserve manpower force objectives \textit{in the near term} (in 1988, it would have provided the mechanism to allow the so-called Vietnam era hump members to retire early), it is unclear as to how this alternative would directly result in retention
of mid-career reservists in the long term. In the absence of any so-called pension penalty, older service members would still remain in service and clog the system.

The Differentiated Vesting Plan, at first glance, represents an attractive option. For DoD, it purports to save millions of dollars due to decreases in outlays to cover future retirement. To the individual member, it possesses features of most modern civilian pension programs; portability, provisions for early vesting, an optional medium for retirement savings, hardship provisions, and expanded survivor benefit options. The researchers recommend this alternative as one that provides a powerful force-shaping tool. They suggest that, since the uniformed services are exempted from ERISA provisions (ERSIA requires employers who have retirement programs to vest their employees in one of two ways, not to exceed a seven years maximum vesting period), longer vesting periods could be established for specialties requiring extended training, depth of experience, and so forth. On the other hand, shorter vesting periods would be appropriate for those groups/specialties requiring youth and vigor or those hard to recruit specialties.

The current Military Retirement Fund compares in size to other United States public employee retirement funds that represent large sums of money with considerable economic consequence. In fact, 15 of the top 20 investment funds in total assets in the United States are public employee pension funds (not including the Military Retirement Fund). It stands to reason that prudent management of these funds is essential for taxpayer satisfaction and important to public employees. “Prudent management” for state and local government employee retirement funds has shifted significantly over the last 20 years from credit-market instruments (government securities and bonds) to corporate stocks. For example, in 1977, credit-market instruments accounted for 76% of retirement fund investments while 22% were invested in stocks. By 1996, this trend reversed, with stocks making up over 55% percent of fund investments.

So, why shouldn’t the federal government follow suit and invest the Military Retirement Fund into private-sector stocks as suggested by the Differentiated Vesting Plan? The argument against this type of proposal is more political than substantive. First, the Military Retirement Fund invests solely in non-negotiable treasury securities presumably to demonstrate good faith and trust in the government. In other words, if the federal government will not invest in treasury issues, why should anyone else? Second, this option would require the federal government to design and implement a defined-contribution-only program for its members and set up accounts for each individual. A component of this design would include setting up an independent investment fund manager. Certainly, direct government involvement in deciding which
investments to offer each individual could be perceived by the taxpayer as the federal government using its power to an unfair advantage. Recently, the Congressional Budget Office suggested that plowing federal surpluses into private investments could create unfair advantages for some financial institutions\textsuperscript{48}. Even if DoD were to invest the 16.7 percent of normal cost contributions into a private-sector growth fund in order to save millions of dollars, the investments would still entail some risk-taking by the federal government and it is a risk that Congress is thus far unwilling to take.

Finally, even though this option would likely have minimal impact on reserve member retirement, most military members would perceive differentiated vesting as being unfair and targeted against certain military occupational specialties. At best, it would encourage many members to make mid-career switches into more attractive Military Occupational Specialties (MOSs). At worst, it would result in a neutralizing effect and constantly-changing policies in an effort to maintain the desired force; as more and more members switch to the more attractive vesting opportunities, policy will shift in favor of the less attractive opportunities, and so on. Any attempts at stabilizing a human resource management strategy would be thwarted by this option.

**RECOMMENDATION: A NEW ALTERNATIVE**

As mentioned earlier, any alternative to the current system must be compatible with the active retirement program, support accomplishment of reserve manpower force objectives, provide an early payment plan option, and provide an incentive for continuous satisfactory service from initial entry through, at a minimum, 20 years of service. Additionally, alternatives should be a good value to the taxpayer.

This new alternative revisits the idea of the actuarially neutral annuity option and offers modifications in the form of incentives targeted at the first-term member as well as the mid-career member. Highlights of the plan are:

- A Sliding Scale Multiplier that would be used in calculating retired pay. For members with 0 to 7 years of service, the multiplier would be 4.0 (instead of 2.5). From 8-11 years, the multiplier would be 3.5; for 12-15, the multiplier would reduce to 3.0, and for 16-20 would be 2.5. Service beyond 20 years would use a multiplier of 2.0 up to a maximum of 30 years. Beyond 30 years, the multiplier would reduce to 1.5.

- Vesting would occur at 7 years but would not become payable until age 60.

- An actuarially neutral annuity option, equal to the accrued value of retirement at age 60, would be offered immediately upon retirement after a minimum of 20 qualifying years of service.
Under this plan, many of the current point system features remain intact. The mechanics of acquiring and accounting for retirement points, which alone has come under scrutiny by the 6th QRMC and the National Guard Association of the United States (NGAUS) over the years, is beyond the scope of this research, except to say that some form of accounting for inactive duty service is essential for rewarding those with high participation rates. With some exceptions, the current points system seems to fit the bill.

The intent of this plan is simple: To attract and retain first-term members and to provide a mechanism for retirement with an immediate benefit available after 20 years of qualifying service and before reaching age 60. The sliding scale multiplier is used as the force-shaping tool. On the front end, the higher multiplier serves to attract first-term members; on the other end of the scale, the reduced multiplier will most certainly make the early annuity more attractive and thus reduce the undesirable effects of an age based system; namely, reducing the number of members over 45 years of age.

An early annuity has been suggested several times over the years. In fact, included in the most recent Legislative Priorities for 2002, the National Guard Association recommends that Congress “provide for the commencement of payment of retirement benefits to members of the reserve components immediately upon retirement with 20 or more years of creditable service.”\textsuperscript{49} Also, if the results of the Reserve Components Survey of 1986 remain relative today, this option appears to enjoy great popularity among reserve members and their spouses.

The key difference between this option and the QRMC opinion is that this annuity would be considerably higher than the two-tiered option from 20 years of service until age 62 and this higher annuity provides the necessary “pull” on the system to produce a slightly younger force. Beyond age 62, the two-tiered option is more attractive. In essence, the actuarially neutral annuity for an O-5 would become roughly equal to drill pay at around 23 years; the annuity for an E-7 would become equal at approximately 31 years.\textsuperscript{50} This alternative would appear to be more supportive of retaining mid-career reservists by offering an attractive incentive for members with 25-30 years of service and appears to be attractive for members with some active service, given the existing 20-year vesting requirement.

Although this system would provide an economic incentive to retire early, particularly among service members with 25 or more years of service, it would not, on its own, provide significantly greater flexibility to force managers. Early vesting would. It provides the needed flexibility for manpower force managers because it would ensure that some form of retired pay would be available at age 60. At the same time, it supports certain selective retention policies by providing a form of retired pay for those who are selected out.
The other major consideration is the overall value to the taxpayer, spoken not just in terms of reduced federal outlays to pay for future retirees, but also to account for increases to accession costs due to changes in retention. The assumptions for asserting that this system represents a good value to the taxpayer are: (1) the sliding scale annuity represents a slightly higher outlay for those retiring at 20 years but evens out by year 25, therefore it costs no more to implement than the current system and could actually reduce outlays to the Military Retirement Fund over the long haul, (2) the sliding scale multiplier will not become apparent to service members until they have accumulated a sufficient amount of retirement points to consider staying until retirement, (3) very few, if any, will take advantage of the early vesting option; however, early vesting would be a strong incentive to continue in service, and (4) the actuarially neutral annuity achieves the desired retention effects (the 6th QRMC showed that it did in 1988). Table 2 represents a head-to-head-comparison of the three alternatives.

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Compatible with Active Component?</th>
<th>Accomplishes Force Management Objectives?</th>
<th>Incentive to Continue Service for 20 Years?</th>
<th>Early Payment Plan Option?</th>
<th>Costs Favorable to Federal Government</th>
<th>Recommended Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-Tiered Actuarially Neutral Annuity</td>
<td>✓</td>
<td>**</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>✓</td>
</tr>
<tr>
<td>Defined Contribution-Differentiated Vesting</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>✓</td>
</tr>
<tr>
<td>Sliding Scale Actuarially Neutral Annuity</td>
<td>✓</td>
<td>***</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>✓</td>
</tr>
</tbody>
</table>

**TABLE 2**

** - Meets force objective requirements based on retention of members to 30 years of service.

*** - Meets force objective requirement based on retention of members to 25 years of service and tends to cause early retirement of select members who have high participation rates. This was viewed by 6th QRMC in 1988 as undesirable.
CONCLUSION

The reserve retirement system served its purpose well when our reserve components were resourced to be (and originally established as) strategic reserve forces of the United States to be used only during national emergencies. Now, the mission of the reserve has changed. When Secretary of Defense James Schlesinger promulgated the Total Force policy in 1973, his intent was to have fully integrated and mutually interdependent forces. Now, with the vision of a Total Force becoming more and more a reality, and a heavier reliance being placed on reserve component forces to perform more types of missions along the full spectrum, DoD must take a closer look at aligning objective force profiles of reserve components with military compensation systems. A significant aspect of military compensation is non-disability retirement.

It is clear from this study that reserve component retirement systems have changed little in 50 years. The reserve component system was set up to reward long service and appears to have achieved its desired effect. However, many of the circumstances of yesteryear that led to the design of this system are no longer applicable today. The obvious case in point is the fact that reserve forces of today are used much more in peacetime and for a variety of missions. Isn’t it time to modernize that part of the military compensation system which most affects the "youth and vigor" of our reserve forces?

Several references have been made to studies that are 15-years old or older. In view of this, an up-to-date study of the retirement system is recommended. The just-released Reserve Component Employment Study 00-05 only focuses on the impacts to employers and individuals due to increased operations tempo (OPTEMPO) of the reserve forces; it does not address any changed perceptions about how OPTEMPO affects an individual’s propensity to continue in reserve service. A follow-on study, similar to the 1986 Reserve Components Survey, should be planned and conducted to reassess how these changes affect members’ continuation rates and perceived value of retirement, given the increased instability of their civilian work status. In addition, the study should try to elicit opinions about how a loss of civilian job seniority and the resultant impacts to pension plans would affect retention in the reserves. Knowing these factors would help validate earlier studies and validate proposed designs of modern compensations systems.

There have been many improvements in benefits for reserve force members just in the past five years. These small but significant victories include increases to the maximum yearly inactive duty points which can be counted for retirement, access to medical and dental care, improving commissary and PX privileges, and better educational benefits. Reserve members
will soon be able to participate in the new Thrift Savings Plan. Chalk these victories up to the hard work of NGAUS lobbying efforts rather than an awakening of Congress to changing roles of the Guard and Reserve. Although there doesn't appear to be any strong desire by reserve component representatives to recommend a total revamp of the retirement system, NGAUS resolutions over the years have continued to ask for improvements to the existing system and continue to push for immediate retirement benefits upon completion of twenty qualifying years of service.

In conclusion, the Department of Defense (DoD) must soon recognize the need to transform its human resources management strategy from a Cold War-era one-size-fits-all strategy to a modern capabilities-based strategy that begins with a formal human resources management process. Critical to the success of this transformation will be modernization of the reserve component personnel management system which includes a retirement system designed to acquire and maintain a quality military; a military reserve force capable of performing full spectrum operations for extended periods; a military that is just as young and vigorous as its missions require. The DoD should use the model proposed in this paper as a guide in the final design of a modern system capable of transforming the military in the 21st century.

WORD COUNT = 8,174
ENDNOTES

1 Charles L. Cragin, Principal Deputy Assistant Secretary of Defense for Reserve Affairs, "Department of Defense News Briefing", November 2, 2000, speaking to Employers Support of the Guard and Reserve; available from http://www.defenselink.mil/news/Nov2000/t11022000_t102irwi.html; Internet; accessed January 5, 2001. Secretary Cragin was recounting his Today show interview with Ms. Couric about the status of reserve component forces. Afterward, his wife indicated that he flinched when Ms. Couric made the observation about weekend warriors.

2 Ibid


5 Department of Defense, Military Compensation Background Papers, 537

6 Department of Defense, 6th Quadrennial Review of Military Compensation, 1-1.


8 Inactive duty points may also be accumulated by attending military education schools or completing correspondence courses

9 Department of Defense, Military Compensation Background Papers, 538. These papers show 60 points as the maximum. However, the two most recent National Defense Reauthorization Acts raised the limit from 60 to 75 points, then from 75 to 90 points.

10 Department of Defense, 6th Quadrennial Review of Military Compensation, executive summary pages xxvi and xxvii and again on page 5-2 discuss the tendency of reserve members to remain in service well beyond 20 years because of a lack of incentive to retire.

11 Ibid., 5-24.


13 Department of Defense, 6th Quadrennial Review of Military Compensation, 1-1.


24 Ibid., 2.


26 Ibid., 14.


34 Department of Defense, Military Compensation Background Papers, 544.


36 Department of Defense, Office of the Actuary, Valuation of the Military Retirement System, 16. This normal cost contribution percentage was expected to decrease to about 26.3 percent by the year 2011 before the recent changes to the REDUX system were passed by the 2001 National Defense Reauthorization Act.

37 6th QRMC, 3-5.


39 Ibid., 4.

40 6th QRMC, 3-11 and 3-12.

41 Ibid.


43 Ibid., 6-21.

44 Ibid., 6-41.


47 Ibid., 609.


50 Ibid., 6-15 and 6-16.
BIBLIOGRAPHY


Tennessee Valley Authority Retirement System.
