THE MILITARY COMPENSATION SYSTEM

COMPLETING THE TRANSITION TO AN ALL-VOLUNTEER FORCE

Report of the Defense Advisory Committee on Military Compensation

April 2006

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ON MILITARY COMPENSATION (DACMC)
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April 28, 2006

Honorable Donald H. Rumsfeld
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Dear Secretary Rumsfeld:

In May of last year, you tasked the Defense Advisory Committee on Military Compensation to provide you "with assistance and advice on matters pertaining to military compensation." Specifically, you asked the committee to "identify approaches to balance military pay and benefits in sustaining recruitment and retention of high-quality people, as well as a cost-effective and ready military force."

After a year of research, study, and public deliberations pertaining to the military compensation system, the members of our committee have reached agreement on a set of recommendations that provides a modernized, responsive approach to compensation—one that can help make an outstanding volunteer force better.

The committee has developed an architecture which updates the current system of compensating America's dedicated military personnel. This modernized architecture allows for broader and more judicious flexibilities for unforeseen circumstances, provides greater opportunity for managing diverse military careers, rewards performance, and simplifies the system where appropriate.

The committee is pleased to submit this report of its findings and recommendations.

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Executive Summary

The Defense Advisory Committee on Military Compensation was chartered on March 14, 2005. Its purpose is to "provide the Secretary of Defense, through the Under Secretary of Defense (Personnel and Readiness), with assistance and advice on matters pertaining to military compensation. More specifically, the Committee shall identify approaches to balance military pay and benefits in sustaining recruitment and retention of high-quality people, as well as a cost-effective and ready military force."[1]

This report summarizes the major findings and recommendations of the Committee. These recommendations are robust in that they provide flexibility to adapt to changing force structure demands and other circumstances that may arise. However, there may be future changes in force structure or other circumstances that cannot be anticipated now. At such a time, these recommendations as well as other aspects of the compensation system should be reexamined.

The men and women who serve in the U.S. military are there through voluntary decisions to enter and remain in military service, not through the coercion of conscription. It is the innate ability, training, experience, and motivation of the men and women who staff this force that are the primary reasons for its superb capabilities. The compensation offered to both active and reserve members, coupled with patriotism and the willingness to serve, is, arguably, the single most important factor affecting our ability to staff the forces with qualified people. Most certainly, it is the most important factor that can be affected by policy.

1. From *Defense Advisory Committee on Military Compensation Charter*, filed March 14, 2005. See Appendix F.

If the military compensation system is not sufficiently competitive to attract new entrants, its other virtues are moot. Beginning in late fiscal year 2004, the active Army, and to a lesser extent the Marine Corps, began experiencing increased difficulties in the active duty recruiting market. This culminated in the Army falling short of its accession goal in February 2005, followed by additional shortfalls through May of that year.

As the Army's recruiting problems grew in the spring of 2005, the Committee undertook a review of the problem. The Army's current recruiting difficulties appear to be the result of a confluence of several factors. Among these, the most important was that the Army had reduced its recruiters in the field in the period prior to increasing its end strength and accession goals. This reduction in recruiters has now been reversed. The Army has successfully met its monthly accession goals through February 2006. While the path ahead remains difficult—as the number of recruits in the Army's delayed entry program remains low—the resources are now in place to allow it to succeed. Nevertheless, because of its importance, recruiting must continue to be monitored closely.

Although there are some acute recruiting problems unrelated to compensation, the current compensation system can be improved. With the inception of the modern all-volunteer force in 1973, first-term military pay was increased to a level that was competitive with the civilian sector for youth coming out of high school.[2] However, the compensation system inherited in 1973 had elements of lack of choice and relative inflexibility. These aspects of the basic structure of military compensation have remained largely unchanged. Improvements to the system as described in this summary, and in more detail in the report, would complete the transition of the compensation system to the volunteer era, and could result in greater flexibility for force managers, providing a yet more effective and efficient force.

2. The pay raise known as the "AVF pay raise" actually occurred in 1972, a year prior to the end of conscription in 1973. Pay was also increased for the career force at this time, but by a smaller percentage amount.

A Framework for Guiding Change

Changes to the military compensation system should focus on increasing the effectiveness and efficiency of the system as a force management tool. Proposals that do not improve staffing, force management, motivation of members, performance, or efficiency should be questioned. The following principles or criteria provide a set of guidelines for use in evaluating changes proposed, both internally by DOD and the services, as well as those that originate elsewhere, to both active and reserve compensation:

1. ***Force management.*** Changes to the compensation system should be linked to force management objectives.
2. ***Flexibility.*** The compensation system should be able to adjust quickly to changes in circumstances affecting the supply and demand for personnel in general and for specific skills.
3. ***Simplification.*** A change that simplifies the compensation system, rather than one that makes it more complex, difficult to manage, or difficult to understand, is preferred.
4. ***Systems approach.*** A change in compensation should consider all the implications for incentives and force staffing in both the active and reserve components.
5. ***Choice, volunteerism, and market-based compensation.*** Where possible, preferences of individual members should be considered in making policy, and compensation should support policies that consider member preferences and provide choice.
6. ***Efficiency.*** Proposed compensation changes should be "efficient" in that, of alternative ways to meet the objectives associated with the proposed change, the least costly way should be chosen.
7. ***Cost transparency and visibility.*** The full costs, over time, of proposed changes to the compensation system should be clear.
8. ***Leverage.*** Where possible, compensation improvements should leverage existing benefits in the civilian or other sectors of the economy, rather than crowd them out.

9. ***Fairness.*** Commitments should be honored and any changes to those commitments should be freely entered into by mutual agreement between the services and the members.

If a particular proposal meets all or most of these criteria, the proposal is likely to be one that moves the compensation system in a coherent direction towards the development of a highly capable, ready, and efficient volunteer force. If a proposed change is inconsistent with most of these criteria, a reasonable observer would conclude that it is unlikely that this change is an improvement to the compensation system. This presumes that the observer has a shared understanding of the purpose of the compensation system: to attract, retain, and motivate the right quantity and quality of service members; to ensure that they are allocated where they are needed most; and to do so efficiently.

A Compensation Architecture

The current compensation system has helped to produce an armed force without peer. However, it contains elements that were better suited to an era of conscription and paternalism. These features impede force management, raise costs, and keep a very good force from becoming even better. The compensation architecture presented below addresses the major elements of the compensation system. In particular, the Committee offers specific recommendations in the following areas:

- substantial changes to the structure of the active component nondisability retirement system
- changes in the basic pay table to better reward performance and to support longer career profiles where desirable
- changes in the system of housing and other allowances to remove variations in pay unrelated to performance or a member's value to the service
- consolidation, simplification, and enhancement of special and incentive pays
- revision of the system of health benefits for pre-age 65 retirees to increase the cost share borne by retired members and their families, correct the incentives in the current system that induce

retirees to choose TRICARE coverage over employer-provided health benefits, and better leverage civilian sector benefits

- periodic evaluation of quality-of-life programs to ensure that these programs are cost effective and focused on alleviating the most onerous aspects of military life for members and their families
- review of the system of reserve component pay and benefits to ensure that reserve members called to active duty receive the same pay and benefits as active component members and that they have an improved opportunity to continue their civilian health benefits while on active duty

Expanded Summary of Recommendations

Active Component Retirement System

The current system provides an immediate lifetime annuity—generous by civilian sector standards—for service members who leave after completing at least 20 years of service. However, those who complete fewer than 20 years of service receive no retirement benefit. The current system provides a powerful incentive to serve for at least 20 years, and a similarly powerful incentive to leave shortly thereafter.

Under the current system, members essentially become locked into a 20-year career after 8–12 years of service. This may happen even if both the member and the service would be better off if the member left prior to completing 20 years. Members are retained until the vesting point because of the powerful incentive provided by the retirement annuity and the services' reluctance to be seen as acting opportunistically by involuntarily separating members who have invested many years of service.

The current system makes a diversity of career lengths across occupations difficult to achieve. Careers in the health professions, law, languages, cryptology, engineering, information technology, and other technical and scientific occupations might usefully extend beyond 20 or even 30 years. But the compensation system, coupled with high-year-of-tenure policies that require members of certain rank to separate by fixed "years-of-service" points, makes careers beyond 20 years unusual and careers beyond 30 years rare.

Paradoxically, the current system also results in career lengths in ground forces and combat arms that may be too short. Enlisted members become vested at much lower rates than officers. The services are reluctant to induce many enlisted members in these "youth and vigor" occupations to stay for additional service beyond the second term, because they may not be able to offer them a 20-year career. The compensation system does not provide a graceful way for large numbers in the combat arms to stay beyond 6 or 8 years of service and exit prior to 20 years of service.

Recommendations

In the near term, the services need ways to improve management flexibility within the current system.

- In the near term, the services should have the authority to "buy out" members with more than 10 years of service who are not yet vested. The members eligible for buy outs would presumably be in occupations where changed circumstances have resulted in an excess supply of qualified members.
    - The buy outs would be voluntary. That is, selected members would be offered the opportunity to accept a cash payment and, in exchange, leave active duty prior to vesting in the current retirement system at 20 years of service. However, the member would be free to reject the opportunity.
    - A plan similar to the Voluntary Separation Pay recently proposed by the Navy would be one way to accomplish this.[3]

This near-term solution, however, does not address the underlying problem: management inflexibility resulting from the current retirement

3. The Voluntary Separation Pay proposal would allow the services to target individuals in specific occupations and year-groups where there is excess supply and offer them a cash incentive to leave prior to vesting in the retirement system. These incentives would be offered only after other management actions, such as retraining members for needed skills, had been exhausted.

system. In the longer term, the military retirement system should be restructured to increase its overall flexibility and efficiency. This vision would include earlier vesting of retirement and incentives to serve beyond a 20- or even 30-year career in some occupations. High-year-of-tenure policies should be reevaluated so that the potential benefits of longer careers can be realized.

The recommended architecture for a new retirement system would include the following features:

- A government contribution to a thrift savings plan or 401(k)-like plan that adds a percentage of basic pay, in the range of 5 percent, to the member's contribution. Government contributions would begin to accumulate immediately upon entrance to active duty and would vest no later than the tenth year of service (but not before the fifth year of service). After vesting, the member who remains on active duty should have the flexibility to receive the government's new contribution in cash, in lieu of the thrift savings plan contribution.

- A retirement annuity that begins at age 60, computed under a formula similar to the current retirement annuity. The annuity would vest at the completion of 10 years of service.

- The annuity formula would be extended through 40 years of service, so that a member serving 40 years would receive 100 percent of the high-three average of basic pay.

- The retirement health benefit would continue to vest at the completion of 20 years of service.

- Additional offsetting compensation, in the form of current rather than deferred compensation, that is sufficient to achieve force-shaping goals. This additional compensation could come in various forms, including one or more of the following:

    - Transition pay of limited duration for those who leave military service after the vesting point, where the amount and duration of the pay is a function of the pay grade and years of service at separation.

- Additional pay or a bonus that is a multiple of basic pay and payable at key years of service such as 10, 15, 20, 25, and 30 years. The member receives this pay, sometimes called "gate pay," upon completing the relevant year of service.

- An increase in basic pay or bonuses.

This retirement system change is intended to accomplish three goals. First, it will increase management flexibility and permit a greater diversity of career lengths by providing earlier vesting and continued incentives for longer careers. Second, it will permit those who provide substantial service, but less than 20 years, to leave with some retirement benefits. Third, it will increase the efficiency of the retention incentive by replacing the portion of the annuity members receive from separation to age 60 with an "up-front" cash payment. This payment could come in the form of a "gate pay" at various years of service, or of higher levels of basic pay or bonuses. The current force, at the time of transition to the new system, should be fully grandfathered. However, members should have the option to choose to participate in the new system, which might, in some cases, entail an additional service obligation.

Pay for Performance

The Basic Pay Table

The current basic pay table—the centerpiece of the compensation system—is a function of pay grade and years of service. Performance is rewarded almost solely through the promotion system. The primary financial incentive for promotion is the increase in basic pay and allowances that comes with a higher pay grade. Those who have performed extraordinarily well may be promoted early. Those who have had lagging, but ultimately adequate, performance may be promoted later.

Because basic pay is a function of longevity, the financial consequences of early or late promotion, compared to an "on-time" promotion, are small. Promotion that is a year early, for example, results in compensation higher than it otherwise would be only for a year. After that year, the member's compensation is the same as it would have been for an "on-time" promotion.

Another consequence of the existing pay table is that, because compensation is a function of tenure in the system, it will be difficult to attract lateral entrants into the system should it become important to do so. Similarly, it will also be difficult to be financially attractive to individuals with prior military service who have been in the civilian sector for more than a short period.

Recommendations

- The pay table should become a function of grade and time in grade, rather than grade and years of service.

- Time-in-grade increases in basic pay should extend beyond the career lengths currently implied by the time-in-service pay table. High-year-of-tenure policies should be reassessed. For those occupations where high-year-of-tenure constraints have been relaxed to encourage longer careers, the time-in-grade increases should provide a financial incentive consistent with longer service. This change will complement retirement system changes that provide incentives to serve beyond 30 years.

The time-in-grade pay table would improve performance both by encouraging greater effort and performance from all, and by being a more attractive system to top performers compared to others. By extending time-in-grade increases for the senior grades to reward service that may extend beyond 30 years, the pay table will provide the financial incentives to encourage longer careers, where appropriate.

Finally, a time-in-grade pay table will be more attractive to individuals with prior service who are considering reentry, as well as to lateral entrants in selected skills, because pay is tied less to tenure.

Differences in Compensation by Dependency Status

The current allowance for housing varies by pay grade and geographic location, as well as by whether or not the member has dependents. This variation by dependency status is a remnant of paternalism carried over from an earlier era. Members with dependents receive housing allowances that are about 25 percent greater (on average) than those at the same grade and year of service who have no dependents.

There is no evidence that this differential is related to differences in the productivity or value of the member to the service. Hence, this distinction in pay weakens the linkage between pay and performance. Moreover, the differential may encourage members to marry or to marry earlier than they otherwise might. Further, because members with dependents are paid more than those without dependents, retention rates for members with dependents may be higher than they might otherwise be compared to those without dependents.

Members receive the basic allowance for housing (BAH) when they do not receive government housing (quarters "in-kind") at a military installation. When a member and family receive government housing, they forfeit the BAH. In principle, the fair market rental value of the government housing is approximately equal to the housing allowance. In practice, this is more likely to be true for midlevel and senior enlisted personnel and for officers than it is for single junior enlisted members who live in barracks.

There are other benefits that distinguish between members with dependents and those without dependents. The Overseas Housing Allowance, for example, provides for a differential based on dependents in a manner similar to the basic allowance for housing. Further, the Family Separation Allowance, by its nature, is not provided to members without dependents.

Recommendations

- The distinction between "with" and "without" dependents in the payment of BAH should be eliminated by paying the allowance to all at the "with dependents" rate. The Overseas Housing Allowance should also eliminate the distinction between those "with" and "without" dependents through a similar change.

- All members should receive BAH. Those in government housing should pay fair market rental rates for the housing they receive.

This may mean that some members, particularly junior enlisted members living in barracks, would receive BAH that is greater than the amount they must pay for government housing.

- The Family Separation Allowance should be consolidated with other special and incentive pays related to deployment or unaccompanied tours. Appropriate compensation for deployment or the nature of the tour should not differ between those with dependents and those without dependents.

Paying BAH at a rate that does not vary by dependent status eliminates a component of compensation variation that is unrelated to performance. Further, it no longer provides a differential financial incentive for those with dependents to remain in service. In the long run, this more neutral policy with regard to dependents will reduce some types of costs. Raising the "without" dependents rate to the "with" rate will increase compensation of single members and improve retention of these members. Moreover, because single members are disproportionately in the first-term enlisted force, the change in BAH should have a positive effect on recruiting.

Special and Incentive Pays

Basic pay and allowances constitute the largest portion of cash compensation—well over 90 percent on average. These compensation elements, however, vary only by pay grade and years of service. Special and incentive (S&I) pays are, in principle, the pays that provide flexibility in the compensation system to respond to differences in supply and demand by occupation, provide compensating differentials for onerous assignments or hazardous duty, or provide incentives to acquire and remain proficient in particular skills. With the flexibility to target these pays to meet specific staffing challenges, S&I pays can be particularly powerful tools for improving staffing and personnel readiness.

While S&I pays are an important part of the compensation package, the current pays have important weaknesses that inhibit their effectiveness and efficiency. The proliferation of pays (there are currently over 60 different S&I pays) makes the system difficult to monitor and manage. Further, payment criteria and payment amounts for many of the

S&I pays are rigidly established in law. Some pays have become entitlements that are paid regardless of any underlying force management or staffing issue. In this sense, some of these pays have impeded flexibility, not increased it. Finally, S&I pays constitute only a very small portion of cash compensation—about 5 percent of cash compensation and about 3 percent of total compensation. Given that these pays are the primary compensation policy tool to directly target specific staffing and incentive problems, the proportion appears to be inefficiently small.

Recommendations

- S&I pays should be consolidated into a smaller number of categories. These categories would be descriptive of the broad function of the pay.

- Within each broad category, the budget should be fungible across areas that are included in the broad category. Within broad parameters specified in legislation, the Secretary of Defense and the secretaries of the military departments should have the authority to determine criteria and to set and change payment amounts.

- Of special importance is increased flexibility in responding to wartime conditions to insure that retention and recruiting remain satisfactory. Within the category of hardship/hazardous duty or imminent danger (or the equivalent), the Secretary of Defense should have the authority and discretion to provide monthly payments to deployed members, up to a maximum ceiling amount to be specified in law.

    - The Secretary would have the discretion to determine if any payments are made; to target those payments by occupation, unit, geography, or other criteria; and to determine the amount of the monthly payment up to the maximum.

    - The legislated maximum should be set reasonably high. This is to provide the Secretary with the flexibility to meet unexpected contingencies.

- Given the proposed changes in the structure of S&I pays, the share of S&I pays in the compensation budget should be increased. Once such an increase has been achieved, the effectiveness of S&I pays in achieving force staffing goals should be evaluated to determine if the increase should be sustained.

The current Selective Reenlistment Bonus program is an example of how the consolidated S&I pay program may operate. There would be authority to raise or lower payments over broad ranges, with force managers making tough trade-off decisions among competing uses within overall budget authority. The consolidation of S&I pays and the increased flexibility in the authority to pay them should result in a more efficient program and in improved staffing and readiness.

Military Health Benefit

TRICARE, the military health benefit, is a valuable component of the military compensation package. The health benefit offered to the active member and the member's family competes favorably with the benefits offered by civilian employers. It serves to increase the attractiveness of military service. Moreover, its comprehensive nature is particularly valuable to the family when the member is deployed, mitigating stress on the family from that source. The health benefit offered to military retirees, however, has shortcomings. The provision of a retiree health benefit, both for pre-65 retirees and for post-65 retirees under TRICARE for Life, is a deferred, "in-kind" benefit that is not likely to be valued highly by junior and midcareer active duty members, but is costly to the Department.

Moreover, in the case of the pre-age 65 benefit, it tends to "crowd out" civilian health benefits for the pre-age 65 retirees. Most pre-age 65 retirees are employed in the civilian sector and are offered a health benefit by their employer. The employee is typically asked to pay a share of the total premium. Because TRICARE premiums for pre-age 65 retirees have not been adjusted since 1995, pre-65 retirees are increasingly switching to TRICARE. There is evidence that some employers provide cash bonuses to employees who are eligible for TRICARE and are willing to shift to TRICARE. The pre-65 retiree who switches to TRICARE from a civilian employer program gains the difference in the premium (and any bonus from the employer). However, the Department pays for the full cost of the insurance, less the nominal premium. The civilian employer's plan saves the difference in premium cost to the employer. The result is a large cost to the Department of Defense for a relatively modest benefit to pre-age 65 retirees and a subsidy to civilian employers. This migration from civilian health programs to TRICARE should be discouraged.

Recommendations

- The premium and cost-sharing provisions for TRICARE Prime beneficiaries under age 65 should be restored to more competitive levels commensurate with premiums and cost sharing in civilian employer plans.

- Once adjusted, the premium and cost-sharing provisions (i.e., deductibles and co-payments) should grow at the same rate as the annual cost-of-living adjustment to the military retirement annuity.

- The TRICARE plan for pre-age 65 retirees should be funded on an accrual basis, similar to retirement pay and the TRICARE for Life programs.

Funding the entire retiree health program on an accrual basis should result in decisions regarding active duty personnel strengths that more fully reflect their long-term cost, potentially resulting in more efficient choices. Further, greater visibility of the costs of the health care program in the budget will help to focus attention on managing those costs. The incentives provided by the budget structure should also be examined to ensure that those who are likely to be most effective in controlling health care costs have the appropriate budgetary incentives to do so.

Quality of Life

Quality of life is an essential element of military readiness due to the unique challenges of military life—such as frequent moves and a high tempo of operations. DOD and service leaders need to make a continued commitment to support military personnel and their families. The focus of this commitment should be to integrate quality-of-life concepts into the core values of military culture.

Quality-of-life programs are an important part of military compensation. They provide members and families with recreational and shopping opportunities in remote areas where they otherwise would be unavailable. They help members and their families adjust to the rigors of military life, including frequent permanent change-of-station moves and deployments. They are particularly important to military families in helping prepare for deployment and adjust to the absence of the deployed military member.

Two particularly difficult areas associated with the quality of life of members and families are spouse employment and dependent schools. Because of frequent moves and assignments to remote areas or areas with underdeveloped community services, spouses may face reduced employment opportunities, and educational opportunities for spouses and children may be less than desired. There are numerous programs in place to mitigate these problems. However, an additional way to attempt to reduce hardships on military members and their families in these areas is by providing greater choice in assignments, subject to the needs of the service. Greater choice in assignments may prevent some problems from arising in the first place.

Quality-of-life programs can be a valuable way to offset some of the hardships that military life imposes on the member and the family. However, it is important to consider that "in-kind" compensation, which includes most quality-of-life programs, is generally less efficient than cash compensation. Moreover, it is also important to leverage programs and services that are available in the civilian sector where possible, rather than crowd out civilian sector services and opportunities through direct government provision.

The benefits of quality-of-life programs are often difficult to discern clearly. Because resources are scarce and quality-of-life programs compete directly with other uses of compensation resources, such as cash compensation, it is important that the benefits and costs of quality-of-life programs be better understood. Finally, commanders of military units should ensure that members understand and know how to take advantage of these quality-of-life programs.

Recommendations

Ultimately, the responsibility for quality of life rests with commanders. Commanders must ensure that quality-of-life programs are adequately funded and must address the particular aspects of quality of life related to operational deployments—aspects that include effective communication with and support to families before and during deployments. A commitment to quality of life is not simply a series of programs, but rather a core value. Leaders should be trained and ready to adjust to the needs of members and their families as missions and demographics change.

- Quality-of-life programs should be subject to periodic, rigorous evaluation to ensure that they represent the best use of resources in meeting both the demands of members and families and the readiness demands of the services.

  - Recognizing that a quantitative assessment of the benefits of such programs is difficult, the Office of the Under Secretary of Defense for Personnel and Readiness should develop a framework and guidelines for determining the efficacy of potential investment in quality-of-life programs.

  - Further, programs that are implemented should be periodically and systematically evaluated, using these guidelines, to insure that the programs continue to represent the best expenditure of resources.

Reserve Compensation

During the Cold War, the role of the reserve components was that of a strategic reserve. Reserve members were expected to remain ready through weekend drills and summer training. They were likely to be called only rarely and within the context of a larger, national mobilization scenario. In the post–Cold War period, the role of the selected reserves has changed from one of a strategic reserve to one of an "operational reserve," with reserve units more highly integrated into deployment operations. Despite the smaller size of today's reserve, annual mobilization days for reserve members have increased significantly relative to the Cold War period, with peaks for Operations Desert Shield and Desert Storm and Operations Enduring Freedom and Iraqi Freedom.

One would anticipate that some reserve members who entered under the older concept of reserve use might find it difficult to continue given the possibility of more frequent mobilization. In particular, deployment to Operations Enduring Freedom and Iraqi Freedom might be expected to reduce retention. However, despite this significant change in the expected use of the reserve, retention has remained at acceptable levels, in the aggregate. Recruiting in the Army National Guard and Army Reserve has fallen short of goals.

Reserve members who are mobilized are frequently faced with the choice of maintaining their civilian employer-provided health insurance for their family or changing to TRICARE. In many instances, changes in health insurance also imply changes in health care providers. Because continuity of care is important, particularly when family members are undergoing treatment, many members attempt to keep their civilian employers' health insurance during periods of mobilization.

Recommendations

- Mobilized reserve members and any reserve member on active duty should receive the same pay and benefits as otherwise equivalent active duty members.

- Reserve members who are called to active duty but who choose not to participate in TRICARE should be offered a stipend or payment, perhaps into the equivalent of a health savings account, to help offset the cost of their alternative insurance.

- The reserve components must have the flexibility to solve recruiting and retention problems as they arise. A "systems" approach is critical to recruiting in that active and reserve components recruit from the same nonprior service market and prior service reserve accessions are active duty losses. The Under Secretary of Defense for Personnel and Readiness should ensure that there is a framework in place that provides for the integration of active and reserve recruiting and retention policies.

- Further, because reserve units rely on a local population for staffing, reserve components need the flexibility to target incentives by unit or geographic location.

In addressing actual staffing problems or anticipating future problems, it may be tempting to increase the attractiveness of reserve service by, for example, increasing retirement or health benefits offered to reserve members. It is important that any changes in the compensation and benefit system for reserve or active duty members be structured to achieve force management and staffing goals efficiently, and be considered in the context of a comprehensive system where both active and reserve staffing are considered.

Introduction

The United States maintains an active duty military force of about 1.4 million members and a reserve force of about 850,000 members. The weapon systems and equipment supporting this force are the finest in the world. But the innate ability, training, experience, and motivation of the men and women in uniform are what make it a superbly capable force.

... compensation ... is, arguably, the most important factor affecting the military services' ability to staff the force with qualified people.

The members of the U.S. armed forces are volunteers. They have joined the military, not through the coercion of conscription, but through voluntary decisions to enter and remain in military service. The compensation offered to both active and reserve members—coupled with patriotism and the willingness to serve—is, arguably, the most important factor affecting the military services' ability to staff the force with qualified people. It is certainly the most important factor that can be affected by policy.

Current compensation levels appear to be adequate to meet force staffing demands. Recruiting challenges faced by the military services in recent years have little to do with compensation matters. Nevertheless, the current compensation system can be improved in a way that will offer greater flexibility for force managers and result in an even more effective and efficient force.

In that light, the Defense Advisory Committee on Military Compensation was chartered on March 14, 2005.[4] Its purpose is to "provide the Secretary of Defense, through the Under Secretary of Defense (Personnel and Readiness), with assistance and advice on matters pertaining to military compensation. More specifically, the Committee shall identify approaches to balance military pay and benefits

4. See the full charter for the Defense Advisory Committee on Military Compensation in Appendix F.

in sustaining recruitment and retention of high-quality people, as well as a cost-effective and ready military force."

The Current Compensation System

When the U.S. military transitioned from conscription to an all-volunteer force (AVF) in 1973, it was recognized that military compensation needed to increase in order to attract volunteers to military service. At that time, first-term military pay was increased to a level that was generally competitive with the civilian sector for youth graduating from high school.[5] However, while the level of military pay increased, no change was made to the structure of the compensation system—a system dominated by paternalism and lack of choice; relative inflexibility; and an inefficient mix of cash, in-kind, and deferred compensation. More than 30 years later, the basic structure of military compensation remains largely unchanged.

When examining the structure of the military compensation system, a number of factors dominate. At the broadest level, **deferred and "in-kind" compensation comprise a much higher proportion of total compensation in the military system** than is generally found in the private sector, and trends in the military system are widening this difference.[6] Much of the deferred and in-kind compensation is accounted for by the military retirement system and the military health benefit.[7] The

5. This pay raise, known as the "AVF pay raise," actually occurred in 1972, a year prior to the ending of conscription in 1973. This pay raise increased E-2 pay, for example, by 87 percent and O-1 pay by 9.9 percent. Pay was also increased for the career force during that period, but by a smaller percentage amount.
6. For active duty members, cash represents only about 50–65 percent of total compensation, depending upon what is included in total compensation. In contrast, cash represents about 80 percent of total compensation in the private sector, according to the U.S. Department of Labor, *Employer Costs for Employee Compensation, 1986–1999*, Bulletin 2526 (Washington, D.C.: Bureau of Labor Statistics, March 2000). The private sector numbers include the employers' portion of the Social Security tax.
7. While exact percentages of total compensation accounted for by the retirement and health benefits vary in the literature, almost all recent analyses conclude that the portion of total compensation from these sources is substantial. See, for example, U.S. Government Accountability Office, *DOD Needs to Improve the Transparency and Reassess the Reasonableness, Appropriateness, Affordability, and Sustainability of its Military Compensation System*, GAO-05-798 (Washington, D.C.: U.S. Government Printing Office, July 19, 2005); and Congressional Budget Office, *Military Compensation: Balancing Cash and Non-Cash Benefits* (Washington D.C., January 16, 2004).

differences in the compensation mix between the military and private sector do not imply that one or the other system is wrong. However, there are factors that suggest that the military system is inefficient because members' perceived value for some in-kind and deferred compensation is likely to be lower than its actual cost to the government.[8]

Another dominant feature of the compensation system, **the retirement benefit, is a remnant of a draft-era force structure** in which very few conscripts or draft-induced volunteers continued beyond an initial term of service. This benefit, which has a major influence on shaping the force, is structured to "take care of" the relatively small portion of the force that devotes a full career—or 20 years—to military service. For those who leave with fewer than 20 years of service, there is no nondisability retirement benefit; for those who complete 20 years of service there is an immediate annuity received by the member, even though most of these retiring members will be able to command earnings in a second career. Furthermore, the retirement benefit has little value to the junior enlisted or officer personnel who discount future benefits heavily and who have only a small likelihood of becoming vested in the system.

More importantly, the retirement system impedes force management in at least three ways. First, it makes force planners reluctant to retain members beyond the first or second reenlistment point unless those retained can remain through vesting at 20 years. Second, those who do stay beyond a second reenlistment, or about 8 years of service, are reluctant to leave prior to vesting at 20 years of service; and the military services are reluctant to encourage them to leave even if requirements change and their skills are no longer needed. Third, the attraction of an immediate retirement annuity makes it difficult to retain personnel with more than 20 years of service.

Finally, in the current compensation system, **there is very little flexibility in the allocation of compensation incentives.** Almost all compensation is a function of grade and years of service and is common

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8. See staff paper *Impact of Cash versus In-Kind Benefits on Recruiting and Retention* in Appendix A and staff paper *The Personal Discount Rate: Implications for Compensation Design* in Appendix B for an analysis of the efficiency of cash versus in-kind compensation and current versus deferred compensation.

to all members regardless of circumstances. Special and incentive pays and bonuses add some flexibility, but these pays constitute less than 3 to 5 percent of total compensation.[9] Moreover, some of these pays take the form of entitlements, providing pay regardless of whether it improves force staffing or performance.

Over the past 30 years, changes have been made to the compensation system inherited at the inception of the all-volunteer force in 1973. But how much improvement these changes have achieved in better force management and in fostering a more efficient, effective military is open to debate. There have been some notable improvements. The development and growth of enlistment bonuses and education benefits have resulted in more flexible and efficient ways to alleviate selective recruiting problems. At the same time, other changes have worked in the opposite direction. Recent changes to the military health benefit, for example, will be quite costly and will likely force reductions in other areas of the defense budget, while offering no force staffing benefits or force management improvements.

To whatever degree the compensation system has improved over time, it still retains elements that were better suited to an era of conscription and paternalism. These features impede force management, raise costs, and keep a very good force from becoming even better. Since personnel costs reflect a significant portion of the Department of Defense (DOD) budget, gains in efficiency and savings in costs offer tremendous benefit over the long run.

Compensation and Recruiting

If the military compensation system is not sufficiently competitive to attract new entrants, its other virtues are moot. As the Committee embarked on its study of the military compensation system, reports of recruiting problems in the military services—in the Army in particular—began to surface. These recruiting challenges in turn led the Committee to

9. U.S. Government Accountability Office, *DOD Needs to Improve the Transparency and Reassess the Reasonableness, Appropriateness, Affordability, and Sustainability of its Military Compensation System.*

raise the question of whether compensation was to blame. So the Committee undertook an intensive review of the problem.

If the military compensation system is not sufficiently competitive to attract new entrants, its other virtues are moot.

Beginning in late fiscal year 2004, the Army, and to a lesser extent the Marine Corps, began experiencing increased difficulties in the active duty recruiting market. These difficulties culminated in the Army falling short of its accession goal in February 2005, followed by additional shortfalls through May of that year. The Army was then able to meet its monthly goals through the remainder of the fiscal year.

The Army's 2005 recruiting problems appear to be the result of a confluence of four factors—the first three of which are illustrated in figure 1.

1. First, beginning in July 2003, **the Army reduced its recruiting resources**—in particular, the number of production recruiters. This reduction came in response to a stable recruiting mission and success in the prior recruiting period.
2. Second, the **Army's new contract objectives rose** sharply in March 2004, increasing the number of new contracts to 8,200 as compared to 6,200 contracts in the prior month (a more than 30 percent increase). This increase was necessary in order for the Army to reach a newly authorized increase in end strength of 30,000 troops—an increase that had not been anticipated. Despite this new goal, the number of recruiters continued to fall through August 2004.
3. Third, **the unemployment rate fell continuously** from its peak of 6.3 percent in June 2003. As is typical during periods of falling unemployment, the recruiting market became increasingly challenging for the Army, at the same time that enlistment demand was increasing and the number of recruiters was falling.
4. Finally, the **publicity surrounding the Iraq war**, and rising numbers of casualties, made military service a far more risky proposition in the perception of potential recruits and those who influence them. Though its impact cannot be ascertained in quantitative terms, the "war factor" has certainly made recruiting more difficult for the Army, the Marine Corps, the Army National Guard, and Army Reserve.

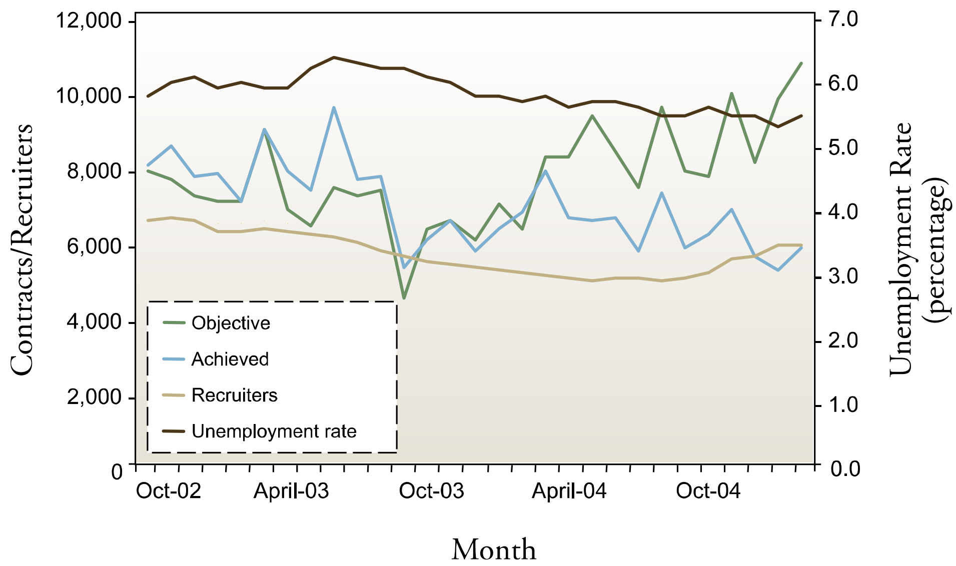


Figure 1. **Army Recruiting Statistics and Unemployment Rate**

Considering the impact of these four factors in total, the key to alleviating the Army's recruiting difficulties centered on increasing the number of experienced recruiters in the field. The Army did eventually take this step, significantly increasing the number of production recruiters. That said, it took some time before the new recruiters affected the number of monthly contracts signed.

The Army's experience during 2005 was not unlike the recruiting difficulties experienced by the services in the late 1990s—with the exception of the impact of the war in Iraq. The late 1990s was one of the most difficult recruiting markets in the history of the modern all-volunteer force. The services' recruiting goals had increased after a period during which the force had been downsized and recruiting requirements had been relatively low; recruiting resources, particularly recruiters and advertising, were at relatively low levels; and the unemployment rate was falling in response to a booming economy. As a result, all of the services, with the exception of the Marine Corps, experienced recruiting shortfalls during fiscal years 1998–1999.[10]

Thus, the Army's recruiting difficulties mirror, in large measure, the recruiting experience of the late 1990s and provide some general lessons for recruiting in the all-volunteer force. Four steps can reduce the risk of significant recruiting shortfalls in the future:

1. maintain competitive levels of first-term pay
2. avoid "fine tuning" recruiting resources in response to the recent recruiting market, particularly those resources which operate with lags such as recruiters and advertising
3. apply recruiting enlistment standards and quality goals flexibly to achieve long-run objectives for force quality
4. adopt, in the short term, first-term retention policies that reduce reliance on the recruiting market to meet total force staffing needs

The acute recruiting problems experienced in 2005 were alleviated by the management decision to increase the number of recruiters.

Improving the Compensation System

The current compensation system has helped to produce an armed force without peer. However, there is room for improvement that can allow the military compensation system to more fully support a volunteer force. Improvements are needed that better support force management objectives, provide adequate flexibility to adapt as the needs of the Department evolve, and enable the system to operate with greater efficiency.

... there is room for improvement that can allow the ... system to more fully support a volunteer force.

The Committee believes that the Secretary of Defense and the services know best how to manage the force. Therefore, the intent of the Committee is not to provide recommendations for specific and precise changes in

10. The Navy did not meet its numerical recruiting goals in fiscal year 1998 and the Army and Air Force failed to meet their numerical targets in fiscal year 1999.

military compensation or force management policies. Rather, the purpose is to provide a framework or architecture for change that will help bring the compensation system into the modern era, and improve the flexibility and options that the Secretary and the services have for cost-effective force management.

The remainder of this report describes a compensation architecture that the Committee believes will better position the Department in the years ahead. The second chapter describes a set of criteria that serves as guidelines for evaluating proposed changes to the compensation system. The next six chapters describe key elements of the new compensation architecture recommended by the Committee. The report concludes with an assessment of how well the recommendations meet the "criteria for change."

A Framework for Guiding Change

Changes to the military compensation system should help move the system to one that more fully supports a volunteer, professional force. The criteria for change proposed in this report are aimed at improving the effectiveness and efficiency of the military compensation system. If a proposed change does not improve force staffing, force management, or motivation or performance of members within the force, or does not do so efficiently, the proposed change itself should be called into question. Proposed changes to the compensation system, both now and in the future, should be evaluated through the lens of the principles or criteria described below.

If a particular proposal meets all or most of these criteria, the proposal is likely to be one that moves the compensation system in a coherent direction, towards a system that supports the development of a highly capable, ready, and efficient volunteer force. If a proposed change is not consistent with most of these criteria, a reasonable observer would conclude that it is unlikely that this change is an improvement to the compensation system. This assessment presumes that the observer has a shared understanding of the often articulated purpose of the compensation system: to attract, retain, and motivate qualified staff; to ensure that they are allocated to where they are needed most; and to do so efficiently.

The criteria for change … are aimed at improving the effectiveness and efficiency of the military compensation system.

The following principles or criteria provide a set of guidelines for use in evaluating changes proposed to active and reserve compensation both internally by DOD and the services, as well as those that originate elsewhere.

1. Force management. Changes to the compensation system should be linked to force management objectives. These objectives will include the traditional focus of recruiting and retention. But they may also include compensation changes that better reward and motivate performance, or allow force managers to shape the force more efficiently and gracefully.

2. Flexibility. The compensation system should be able to adjust quickly to changes in circumstances affecting the supply and demand for personnel in general and for specific problems in selected areas. Any changes made to the compensation system should increase, not reduce, the flexibility of force managers to meet changing demands. As a practical matter, this means that, ideally, compensation can be targeted to the particular problem, that the compensation levels can be adjusted to meet the demand, and that the change does not put constraints on force management in other areas. Within an overall budget authority, the services should be able to allocate compensation resources where they are needed most and, within that authority, reallocate when circumstances change.

3. Simplification. A change that simplifies the compensation system, rather than one that makes it more complex, difficult to manage, or difficult to understand, is preferred.

4. Systems approach. A change in compensation should consider all implications for incentives and force staffing—in particular, the linkage between the active and reserve components. The reserve and the active component recruit in the same nonprior service market, and active losses are the source of prior-service gains for the reserve. Moreover, the active and reserve components share a common pay table and special and incentive pays, and have similar elements in their retirement systems. The effects of any change to the compensation system should be completely analyzed for active and reserve consequences, so that unintended outcomes can be avoided.

5. Choice, volunteerism, and market-based compensation. Where possible, preferences of individual members should be considered in making policy, and compensation should support policies that consider member preferences and provide choice. Consistent with military operational demands, compensation can support voluntary methods as well as choice in assignments, deployment frequencies, and other aspects of staffing and motivation for both the active and reserve components. Compensation incentives are used to support policies that, through voluntary mechanisms, guide qualified military members to the assignments and locations where they are needed most in the organization while minimizing the costs imposed upon members and their families. Where possible, compensation incentives should be "market based." Differentials in compensation should be set at a level to "clear the market" based on supply and demand conditions rather than at arbitrary levels.

6. Efficiency. Proposed compensation changes should be efficient in that, of alternative ways to meet the objectives associated with the proposed change, the least costly way should be chosen. In general, compensation change that is in the direction of current, cash compensation—perhaps targeted to a particular problem—is likely to push the compensation system in an efficient direction. Other things being equal, this approach is likely to be one that results in greater perceived value to the members, relative to its cost to the government. With regard to efficiency, several other issues should be taken into consideration, as described below:

- Compensation in the form of cash generally provides the member greater flexibility than in-kind benefits. For a given cost to DOD, members are likely to value cash compensation more highly than in-kind compensation because cash provides the member with a greater range of choice in the purchase of goods and services. Hence, proposals for improving the compensation system should generally move in the direction of cash rather than in-kind benefits to make efficient use of compensation dollars.
- Members, particularly junior and midlevel members, also prefer current compensation compared to deferred compensation. Hence, changes in the compensation system should generally move in the direction of current rather than deferred compensation and benefits.

Certainly, there may be circumstances where in-kind benefits or deferred compensation are preferred and possibly more efficient. These circumstances, however, are likely to be exceptions. Finally, to solve a particular force management problem, compensation solutions that target the problem area are likely to be more efficient than across-the-board changes in pay.

7. Cost transparency and visibility. The full costs of proposed changes to the compensation system should be clear. If costs are deferred or grow over time, the full pattern of outlays, or an accrual or present value, should be included in the analysis of the proposal. Costs that are borne by other government agencies or are implicitly realized through tax savings should also be identified and quantified. If the actual costs of a program or range of programs depend upon the choices members may make (e.g., cafeteria plans for benefits), the full range of possible outcomes should be analyzed.

8. Leverage. Where possible, compensation improvements should leverage existing benefits in the civilian or other sectors of the economy, rather than crowd them out. In this way, the Department and the member are both likely to obtain a greater return on compensation dollars. This is particularly relevant to the decision to provide various forms of in-kind benefits. For example, solutions designed to provide members and families with housing choice, recreational activities, family services, and so forth should first consider opportunities for making best use of civilian or private sector resources.

9. Fairness. Fairness, as used here, means that commitments made by the Department to its service members should be honored. In a volunteer force, individuals choose to enter and remain in service, and undertake certain obligations, voluntarily. In return for this commitment, pay, benefits, and other conditions of service are offered. Members should be provided full, accurate, and consistent information on current and future pay, benefits, and obligations. Changes to commitments should be by mutual agreement of all relevant parties. This is a "contractarian" concept of fairness, appropriate to a volunteer force in which individuals freely choose to serve.

Table 1. Compensation Proposal Checklist

Criteria	Questions	Yes	No
Force Management	Does the proposal address one or more force management problems?		
	Are they valid problems?		
	Is the proposed solution logically connected to the problem?		
	Is there evidence supporting the linkage?		
Flexibility	Is there flexibility and discretion to tailor the solution?		
	Can the compensation increase be reversed without legislation if the problem disappears?		
Simplification	Does the proposed change simplify the compensation system?		
Systems Approach	Have all potential effects, on both active and reserve force management, been considered?		
Choice, Volunteerism, and Market-Based	Does this increase member choice?		
	Does the proposal support volunteerism in assignments?		
	Is the pay or benefit market-based—i.e., adjusted for supply and demand?		
Efficiency	Is this the least costly way to achieve the objective?		
	Is the solution based on current cash compensation?		
Cost Transparency and Visibility	Are all costs considered, including those that will not occur for many years?		
	Have behavioral factors that affect costs—i.e., choices of the members—been considered in the cost estimates?		
	Have accrual costs or present values been estimated for deferred benefits?		
Leverage	Does the proposal take advantage of or build on existing programs, particularly non-DOD?		
	Does the proposal avoid "crowding out" non-DOD compensation or benefits?		
Fairness	Is the proposed change consistent with previous commitments made to members?		

These criteria, principles, or attributes for developing a coherent compensation system can be summarized in a simple checklist, shown in table 1, which can be applied to compensation proposals.

A proposal that has a significant number of answers in the "no" column is not likely to move the compensation system in a desirable direction. These criteria or principles for guiding change are applied to the Committee's recommendations in the summary section of this report.

Implications

The military compensation system can be improved over time if the major participants in the compensation process agree to and adhere to a set of principles for change similar to those proposed here. Proposals for change to the compensation system would be scrutinized with respect to these nine principles or criteria, which offer a coherent framework for assessing changes to the compensation system, now and in the future. Applying the "checklist" to proposed changes would advance proposals that were consistent with many or most of the principles. Of equal or perhaps greater importance, this approach would impede proposals that were consistent with few or none of the principles, or at least prompt proponents to better explain the rationale for change.

If these principles are applied consistently over time, the compensation system will become more effective in supporting force management objectives, provide greater opportunity and choice to the member, become simpler and easier to understand, and become more efficient. Because of this efficiency, the member will receive greater value for the compensation dollars expended. In addition, the compensation system will more effectively support an all-volunteer force.

If these principles are applied consistently over time, the compensation system will become more effective in supporting force management objectives …

The remaining chapters describe a new compensation architecture for the Department of Defense. Each element of this architecture has been tested against the principles described above and, in the judgment of the Committee, will lead to improvements in the compensation system if implemented.[11] The seven areas of recommendation are as follows:

- Restructure the active component nondisability retirement system.
- Revamp the basic pay table to better reward performance and to support longer career profiles where desirable.
- Change the system of housing and other allowances to remove discrepancies in pay unrelated to performance or a member's value to the service.
- Consolidate, simplify, and enhance special and incentive pays.
- Revise the system of health benefits for pre-age 65 retirees to increase the cost share borne by retired members and their families, correct the incentives in the current system that induce retirees to choose TRICARE coverage over employer-provided health benefits, and better leverage civilian sector benefits.
- Periodically evaluate quality-of-life programs to ensure that they are cost effective and focused on alleviating the most onerous aspects of military life for members and their families.
- Review the system of reserve component pay and benefits to ensure that reserve members called to active duty receive the same pay and benefits as active component members and that they have an improved opportunity to continue their civilian health benefits while on active duty.

11. The recommendations in this report are consistent with many of the ideas and concepts presented in other recent reviews of the military compensation system. See, for example, Cindy Williams, ed., *Filling the Ranks: Transforming the U.S. Military Personnel System* (Cambridge, Mass.: MIT Press, 2004); and Michael L. Hansen and Samuel D. Kleinman, *Military Compensation: When 50 Year Olds Decide What 20 Year Olds Want*, CRM D0012938.A1.Final (Alexandria, Va.: Center for Naval Analyses, September 2005).

Active Component Retirement System

The retirement system is a central element of the military compensation system. The current system, which provides a substantial, inflation-protected annuity that is vested at the 20-year point in a member's career, has had a dominant effect on what a "typical" military career means. However, making a 20-year career the "typical" career may not have been the intention of those who put the system into place over 50 years ago.

> I have noted certain proposals which, in my opinion, would be very detrimental to the best interests of the country as they would...force the retirement of officers at the height of their usefulness.... It may be that some of the restrictions in the bill are justified for combat units, but I feel strongly that they are inadvisable for the technical services...[12]
>
> We don't think that there will be wholesale retirement or that the services will permit it. [Navy]
>
> ...its measurable results may appear to be slight. It is probable that, in the future, the privilege of voluntary retirement after completion of 20 or more years of service will be exercised little. [Marine Corps]
>
> Approvals of voluntary retirements can and have been rigidly controlled, and this Department believes that no undue excesses will ensue. The service has long accepted 30 years of faithful service as being the normal tour of duty. [Air Force][13]

12. Senator Guy Gordon remarks on voluntary 20-year retirements at the Senate Committee on Armed Services Hearings on the Officer Personnel Management Act of 1947, 5–6, as reported in Bernard Rostker and Glenn Gotz, *Officer Personnel Management Systems: The Up-or-Out Promotion and Tenure Policy*, WN9472-PR (Santa Monica, Calif.: RAND Corporation, October, 1976), 36.
13. Service comments regarding the repeal of the Van Zandt Amendment, which limited 20-year voluntary retirements. Remarks at the Senate Committee on Armed Services hearing on the Officer Grade Limitations Act of 1954 (H.R. 7103), April 9, 1954, 10, 26 and 26, respectively as reported in Rostker and Gotz, *Officer Personnel Management Systems: The Up-or-Out Promotion and Tenure Policy*, 37.

The Current System

The current active duty nondisability retirement system provides an inflation-protected lifetime annuity for those who leave military service after completing at least 20 years of service. The annuity is equal to 2.5 percent of the average of the member's three highest years of basic pay, for each year served up to 30 years of service. Service beyond 30 years does not contribute to the amount of retirement annuity that a service member would earn.

This system, established by Congress in 1947, had two primary purposes. The first purpose was to provide income for military members in their old age. The second was to encourage members with between 20 and 30 years of service who did not have further promotion potential to leave the military, preventing the stagnation in the ranks that was believed to have occurred prior to World War II.

Under the current system, a typical enlisted member in pay grade E-7 would retire at 20 years of service with an annuity of about $20,000 per year, while an officer in pay grade O-5 who retires at 20 years of service would receive an annuity of about $40,000. If the member remains for 30 years, the enlisted member who retires as an E-9 receives an inflation-protected annuity of about $47,000 and an officer who retires after 30 years of service as an O-6 receives an annuity of about $77,000. The typical enlisted member will be between 38 and 40 years of age at the completion of 20 years of service, while the typical officer will be between 42 and 44 years of age at the completion of 20 years of service.[14]

Not all, nor even most, members complete the 20 years of service required to receive a retirement annuity. The Department of Defense actuary estimates that less than 15 percent of enlisted members and 47 percent of officers become vested in the nondisability retirement system.[15] Independent analysis of enlisted and officer retention rates suggests that

14. The majority of enlisted members enter military service within about two years of completing high school, while most officers enter after the completion of a baccalaureate degree.
15. U.S. Department of Defense, *Valuation of the Military Retirement System* (Washington, D.C.: Office of the Actuary, September 30, 2003), 12.

the proportions reaching the vesting point may be substantially less.[16] Hence, though the military retirement system provides a generous post-service annuity for those who remain through at least 20 years of service, most members do not receive any benefits, and enlisted members are significantly less likely than officers to receive retirement benefits.

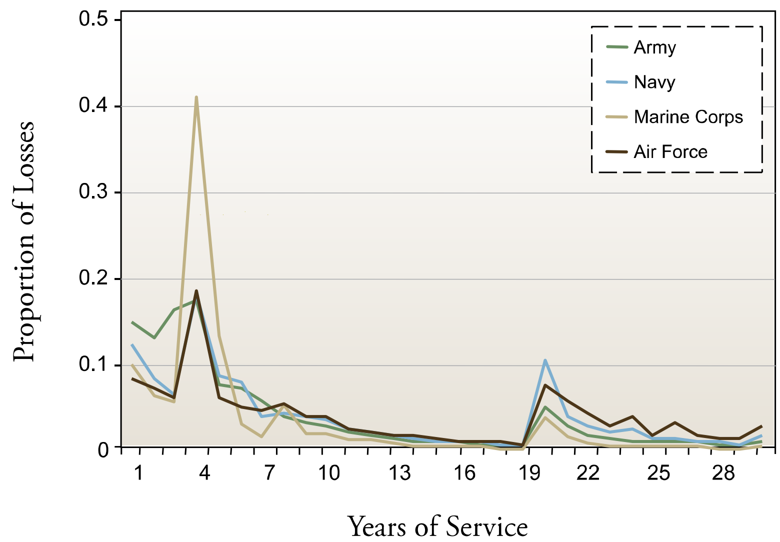
The 20-year retirement point, around which the current system is designed, has a dominant effect on retention patterns in today's force. It provides a powerful incentive for those who complete 8–12 years of service to remain in service until the retirement vesting point at 20 years. Because it offers an immediate, substantial annuity for those who leave after completing 20 years of service, it encourages service members to retire from service at that point, even though it may be in the interest of the service that the member continues to serve on active duty.

Furthermore, since the pull of the retirement system tends to dominate retention beyond 10–12 years of service, force managers in the military services are reluctant to retain members to that point without offering the opportunity to continue to vesting at 20 years of service. Separation of members who reach the 10–12 year point would be considered inequitable and, perhaps, opportunistic. Because of this perception, some members are retained through 20 years of service even though it may be in the best interest of the service and the member to separate earlier.

As the loss distributions in figures 2 and 3 illustrate, the point at which both enlisted members and officers leave military service is heavily influenced by the retirement system.[17]

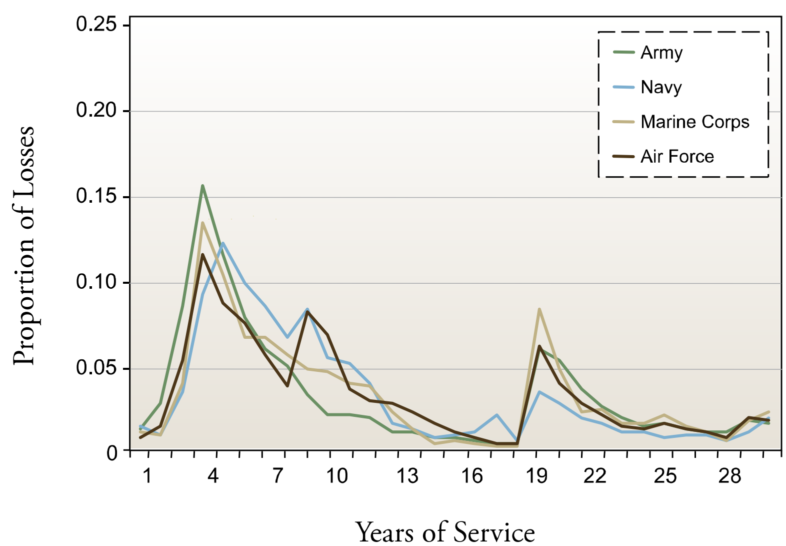
The 20-year retirement point, around which the current system is designed, has a dominant effect on retention patterns in today's force.

16. Staff analyses using continuation rates from the Defense Manpower Data Center (DMDC) suggest that the probability that enlisted members complete 20 years of service is less than 10 percent, on average, and the probability that officers complete 20 years of service is less than 40 percent, on average.
17. These distributions indicate where the losses occur in the enlisted and officer force in steady state. The area under the curves accounts for 100 percent of losses that occur for an entering cohort over a 30-year period, assuming the retention and loss rates generated by the current system.



Note: The diagram illustrates the loss distribution in steady state using fiscal year 2002 actual loss rates.

Figure 2. **Enlisted Loss Distribution**



Note: This diagram illustrates the loss distribution in steady state using fiscal year 1999 actual loss rates.

Figure 3. **Officer Loss Distribution**

Most losses occur at the completion of the initial term of service, with the next most frequent departure point at 20 years, when retirement is vested. Enlisted members tend to leave most frequently after completing their initial term of service, with officers leaving after completing their active duty service obligation—which is at four years of service for both enlisted members and most officers. Pilots, however, incur a longer obligation in return for the service's investment in pilot training.

The cost of the current military retirement system is substantial. The Department of Defense actuary estimates an annual accrual for military retirement that is equal to 27 percent of basic pay.[18] Over the entire force, this annual accrual cost was about $12.8 billion for active duty members in fiscal year 2004. The "accrual charge" of 27 percent of basic pay is an average over all services and over all officer and enlisted members. Officers reach retirement at higher rates than enlisted members. Across services, Air Force members tend to reach retirement at higher rates than Marine Corps members. The average accrual percentage does not capture these variations.

The Case for Change[19]

The current active duty retirement system has been consistently criticized in a number of areas, including:

- ***its inequity***, in that most members do not receive a retirement benefit
- ***its inefficiency***, in that it defers too much compensation
- ***its inflexibility***, in that it inhibits force management

18. The DOD actuary uses the entry-age normal method for estimating annual retirement accrual costs. See U.S. Department of Defense, *Valuation of the Military Retirement System*.
19. Many of the arguments presented in this analysis benefit from the work of Dr. John Warner, summarized in his paper, John T. Warner, *Thinking about Military Retirement*, CRM D00 13583.A1/Final (Alexandria, Va.: Center for Naval Analyses, January, 2006).

Most Members Receive No Retirement Benefits under the Current System

The current retirement system is not designed to contribute to the old-age income needs of most members who serve, but rather to induce voluntary separations from those who complete 20 years of service. Members who fail to complete 20 years of service under the current retirement system receive no retirement benefits. About 85–90 percent of enlisted members and over 50 percent of officers who serve never receive benefits under the current retirement system. Within the enlisted force, those who serve in the Army and the Marine Corps—the ground-force intensive services—are less likely to become vested in the retirement system than those who serve in the Air Force or Navy. These differences are illustrated in figure 4.[20] Hence, for most members who serve, and particularly enlisted members, the time spent on active duty will earn the members nothing toward their old-age income.

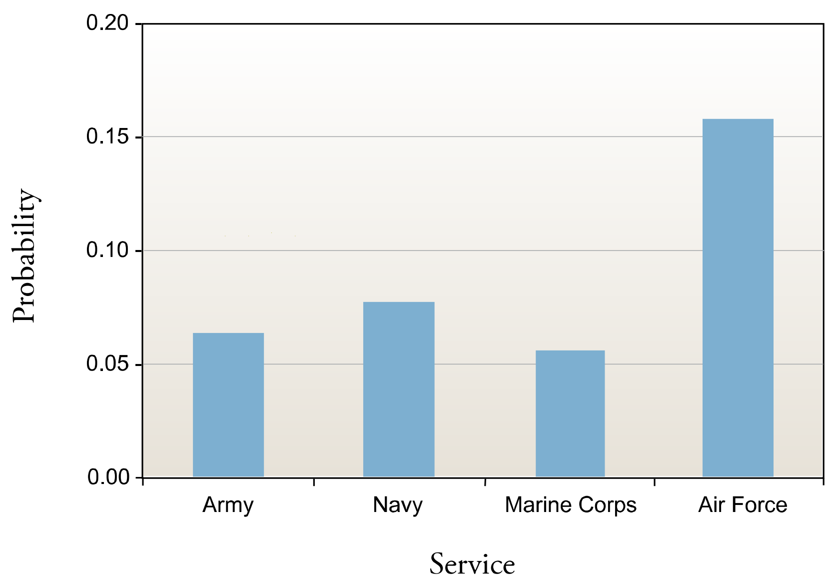


Figure 4. **Estimate of Enlisted Members' Probability of Becoming Vested in the Military Retirement System**

20. These probability estimates are calculated from an average of continuation rate data over the fiscal year period 1987 through 2002 provided by the DMDC.

At one time, the rationale for providing an immediate annuity upon retiring from military service was that military experience is a poor substitute for civilian experience. Those serving for 20 or more years in the military would command earnings in the civilian sector that were significantly below the earnings of comparably educated civilians with a similar number of years of work experience. While there is some evidence of this potential for lower earnings, the most recent evidence suggests that, in today's armed forces, military members may not be at a disadvantage when they enter the civilian labor force after a 20–30 year military career.

… a shortcoming of the current system is that it contributes to the old-age income needs of only a fraction of the active duty members.

Moreover, much of the evidence suggests that it was enlisted members who serve in military-unique skills, such as combat arms, that were at the greatest disadvantage in entering the civilian labor market after retiring from active duty. Officers in general and enlisted members with transferable skills experience smaller income losses or no loss at all.[21]

Hence, a shortcoming of the current system is that it contributes to the old-age income needs of only a fraction of active duty members. Moreover, the immediate annuity offered by the current system to those relatively few who complete 20 or more years of service appears to have been structured for another era, when military skills were less transferable to the civilian sector, and life expectancies were shorter.[22]

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21. The empirical literature on postservice earnings effects is mixed on this issue. Early research is exemplified by Borjas and Welch (1986) who find that retirees do have lower civilian earnings upon retiring from active duty, but the loss is temporary and they catch up. Goldberg and Warner (1986) find that earnings loss depends on the military occupation. Those veterans with military occupations that have close civilian counterparts do not suffer an earnings loss. Cardell, et al. (1997) find that officers who retire do not face an earnings loss compared to civilians of similar age and education. However, enlisted members do face an earnings loss, but catch up within about 10 years of retirement. Military retirees face an earnings gap relative to nonretiree veterans from the Current Population Survey sample. Loughran (2002) finds military retirees' earnings do not catch up to those of their civilian peers. The most recent research, Mackin and Darling (2004), finds no earnings loss for military retirees compared to civilians of similar age and education.
22. Life expectancy at birth for a white male born in 1940 was about 62, while today it is about 75. Life expectancy at age 40 was about 71 in 1940 and is about 77 today. Data are from *National Center for Health Statistics, Health, United States, 2005*, with Chartbook on

The Current System Provides an Inefficiently Large Amount of Deferred Compensation

There is no question that the current military retirement system has a dominant effect on the retention of members after they have completed 10–12 years of service. As figures 2 and 3 indicate, there are few losses for either enlisted members or officers between 12 and 20 years of service. However, although the retirement system is effective in creating high retention rates between 12 and 20 years of service, there are less costly ways that the services could achieve the same results (assuming that they are desirable).

Individuals tend to discount deferred compensation at high rates. This tendency reflects a preference for current rather than deferred income. The government, on the other hand, tends to have a lower discount rate than most individuals.[23] Because deferred compensation is discounted by members at relatively high rates, it is generally more costly to increase retention through deferred compensation as compared to current compensation. The example below illustrates this point.

The value of the retirement annuity to a service member that is vested at 20 years of service is relatively large, as shown in table 2. The value today of the retirement annuity at the 20-year vesting point (discounted to the 20-year-of-service point) is about $187,000 for a typical enlisted member and about $360,000 for a typical officer (using a 10 percent personal discount rate). At the 12th year of service, the present value of the retirement annuity to be received at 20 years of service (discounted to the 12th year of service) is $87,500 for an enlisted member and $168,000 for an officer. Thus, by leaving after 12 years of service, an enlisted member would forfeit the equivalent of about $87,000, while an

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Trends in the Health of Americans, Hyattsville, Maryland. Library of Congress Catalog Number 76-641496 (Washington D.C.: U.S. Government Printing Office, 2005).

23. The discount rate is the rate at which individuals, or the government, compare dollar-valued benefits and costs over time. If an individual's discount rate is 10 percent, it means that receiving a benefit of $100 today is equivalent to receiving a benefit of $110 in one year. Importantly, this individual would prefer to receive $100 now rather than anything less than $110 in one year. As compared to individuals, the government has a lower discount rate in part because the government has low-cost access to credit markets and offers negligible default risk to lenders.

officer would forfeit about $168,000—which at least, in part, explains why retention rates are very high between 12 and 20 years of service.

In contrast, because of the government's lower discount rate—only about 3.0–3.5 percent—the cost of the annuity to the government, at various retirement points, is considerably higher than its value to the service member (table 2).[24] For example, the cost to the government of the retirement annuity for an enlisted member who serves 20 years is about $417,000 (using a 3.25 percent discount rate), while its value to the member is considerably less. Similarly, the 20 year annuity for an officer would cost the government $763,000—more than double its value to the service member.

Through the use of current rather than deferred compensation, an equivalent retention incentive to stay through 20 years could be provided at lower cost. For example, the enlisted member could be offered a lump-sum bonus of $87,500 at year of service 12, conditional on remaining in service for 8 more years—through the completion of 20 years of service. If the member has a 10 percent personal discount rate, this alternative would provide the same financial incentive as the current retirement system for that member to stay through 20 years of service, but at less than half of the cost to the government.

Some amount of deferred compensation provided through the retirement system may be useful for management purposes. It may help motivate performance and may induce members to separate voluntarily at appropriate times. The issue, then, is the right mix of current and deferred compensation, not whether there is any deferred compensation. However, the current system, through its immediate lifetime annuity, provides an inefficiently large amount of deferred compensation.

24. This range of real discount rates is used by the Department of Defense actuary to discount future retirement costs. See U.S. Department of Defense, *Valuation of the Military Retirement System*. Arguably, the rate at which the government should discount costs and benefits for proposed evaluation is higher than this and should reflect the opportunity cost of capital. However, the general point is that the discount rate for the typical individual is higher than the government's rate. See Office of Management and Budget, *Circular A-94: Guidelines and Discount Rates for Benefit-Cost Analyses of Federal Programs*, Revised (Washington D.C.: U.S. Government Printing Office, October 29, 1992).

Table 2. Present Value of Retirement Annuity to Member versus Cost to Government[25]

Year of Service to Which Annuity is Discounted	Present Value to Member (10% discount rate)		Present Value of Cost to Government (3.25% discount rate)	
	Enlisted	Officer	Enlisted	Officer
20	$187,000	$360,000	$417,000	$763,000
12	$87,500	$168,000	$323,000	$590,750

The Current Retirement System Impedes Force Management

The current military retirement system inhibits force management in several ways. The current system offers a powerful incentive to complete 20 years of service, for those who stay beyond 8–10 years of service. But, because an immediate lifetime annuity becomes vested at that point, it also provides a powerful incentive to leave after completing 20 years, or shortly thereafter.

These powerful incentives make diverse career lengths less likely, and produce a tendency toward a one-term career or a 20-year career, as discussed earlier in this chapter. While incentives for retention are the same across all military occupations, training costs, the effect of experience on productivity, and the importance of "youth and vigor" vary across occupations. This "one size fits all" system produces a tendency towards both uniformity in career lengths and career lengths that are generally too short.

25. This table shows two sets of numbers, which can be described using the first row of values as examples. In the first set of columns, the present value of the retirement annuity if the member retires at 20 years of service is shown at the time of retirement for an enlisted member ($187,000) and officer ($360,000) with discount rates of 10 percent. In the next set of columns, the present value of the cost to the government of this annuity, discounted to the same 20 years-of-service point, but with a government discount rate of 3.25 percent is shown for enlisted members ($417,000) and officers ($763,000). The second row of the table shows each of these values when discounted eight more years to the 12th year of service, at the individual and government discount rate, respectively.

Careers in the health professions, law, languages and cryptology, engineering, information technology, and other technical and scientific occupations might usefully extend beyond 20 or even 30 years. But the compensation system, coupled with high-year-of-tenure policies, makes careers beyond 20 years unusual and careers beyond 30 years rare.[26] There is no incentive offered by the current system to stay beyond 30 years of service.

Paradoxically, the current system also may result in career lengths in ground forces and combat arms that are too short. In the past, the current system, and the incentive it provides to induce separation at the 20-year point, has been rationalized by the demand to maintain "youth and vigor" in the combat arms skills. However, the services are reluctant to induce many enlisted members in these "youth and vigor" occupations to stay beyond about the second term of service because they cannot offer them a 20-year career. The compensation system does not provide a graceful way for large numbers of personnel in the combat arms to stay beyond two terms of service but exit prior to 20 years of service. Hence, it may result in careers lengths in the combat arms that are, on average, too short.

In some instances, the current system may produce careers that are inadvertently "too long." Under the current system, members become "locked in" to a 20-year career after 8–12 years of service. This may happen even if, because of changing circumstances, both the member and the service would be better off if the member left prior to completing 20 years of service. Because the incentive to remain until the vesting point is strong, and because the services are reluctant to be seen as acting opportunistically by involuntarily separating members who have invested that many years of service, the member is retained until the vesting point.

26. A "high-year-of-tenure" or an "up-or-out" point is, for a given pay grade, the maximum year of service a member may have and remain in the service. Hence, at that point, the member must either be promoted to the next higher pay grade or leave.

Current compensation incentives and management attention can be applied to overcome the impediments to force management under the current system. For example, bonuses and other special pays can be offered to induce members in certain occupations to remain in service beyond the 20-year point, overcoming the powerful incentive of an immediate retirement annuity to leave. Similarly, when the end of the Cold War lead to an unanticipated decline in the demand for active duty forces, special programs were devised to "buy out" members with between 8–19 years of service.[27] However, these special programs, designed to overcome the inflexibility of the current retirement system, highlight the case for adopting a more flexible system.

... special programs, designed to overcome the inflexibility of the current retirement system, highlight the case for adopting a more flexible system.

Alternatives to the Current System

An alternative to the current system that addresses these shortcomings directly would have the following features:

- earlier vesting of at least some components of the system
- less deferred compensation, particularly in the "second career" period between leaving active duty and full withdrawal from the labor force
- greater flexibility to encourage diverse career lengths

Previous Recommendations for Change

Other committees have examined the current military retirement system and suggested changes to that system. The structure of recommended changes in some cases is similar to the architecture outlined above.

27. The Department of Defense offered buy outs from the retirement system to those not yet vested. Two options were offered: the Variable Separation Incentive and the Special Separation Benefits Program. See, for example, Paul F. Hogan and Steve Mehay, "Downsizing Using Voluntary Separation Incentives: The Case of the U.S. Armed Forces," *Southern Economic Journal* (July 1998).

- The Defense Manpower Commission (1976) recommended a two-tier system. Upon completing 10 years of service, all members would be vested in a pension that began at age 60. Individuals in combat arms occupations could retire with an immediate annuity after 20 years of service, while all others could receive an immediate annuity after completing 30 years of service.
- The President's Commission on Military Compensation (1978), also known as the Zwick Commission, proposed an old-age pension that would vest at 10 years of service. In addition, a cash transition fund, like the Thrift Savings Plan (TSP) fund, with annual government contributions would be established. The fund would be vested at 10 years of service. The member could withdraw funds upon separation.
- Three recent internal DOD panels—the Defense Science Board (2000), the Officer Management Study Group (2000), and the Review of Morale and Quality of Life (2001)—argued that career lengths were too short and that changes in the retirement system were needed to permit longer career lengths. All three of these panels suggested a retirement system that provided for earlier vesting of an old-age pension, and government contributions to a 401(k) or TSP-like account.

Analysis and Impact of a Modernized Retirement System: Selected Examples

The basic structure of a modernized retirement system was outlined above. The prominent features of this system are a defined benefit pension that begins at age 60; a government contribution to a TSP-like account with earlier vesting; and offsetting compensation that could take the form of cash payments at various years or separation pay during the transition to a second career.

How a modernized retirement system might be constructed within this framework can vary somewhat. To illustrate this point, the following analysis evaluates the impact on retention, accessions, and cost of two alternative examples to the current system.[28] The Committee does not necessarily endorse these specific examples; rather they are used to illustrate the issues that have to be considered in developing a modernized system. The analysis was conducted based on an Army enlisted force of 413,000 personnel.[29]

The two examples that are compared to the current system in this analysis are as follows:

- Example 1 consists of a defined benefit annuity that is vested at the 10th year of service; a government contribution to the TSP-like fund of 5 percent of basic pay per year, which is vested at the 10th year of service; and retention bonuses equal to annual basic pay, payable at 10, 15, 20, 25, and 30 years of service.
- Example 2 also consists of a defined benefit annuity that is vested at the 10th year of service and an annual contribution to a TSP-like fund of 5 percent of basic pay (also vested at the 10th year of service). In addition, this example adds a separation or transition pay equal to one month of basic pay for each year of service, vested at 10 years of service; and a targeted retention bonus of 75 percent of annual basic pay at 10, 15, 20, 25, and 30 years of service.[30]

Retention. These example plans generate different incentives for retention, as shown in table 3. Compared to the current system, in both examples there is an increase in the proportion of new entrants remaining in the military until the 10th year of service—3 percentage points for example 1, and 5 percentage points for example 2. Further, the proportion staying for 30 years of service roughly quadruples, increasing

28. In Appendix C, additional examples are presented and analyzed, providing greater variation in the forms of offsetting compensation that could be applied within the basic framework.
29. The example plans were analyzed using a version of the Dynamic Retention Model. See Beth J. Asch and John T. Warner, *A Theory of Military Compensation and Personnel Policy*, MR-439-OSD (Santa Monica, Calif.: RAND Corporation, 1994); and John T. Warner, *A Policy Analysis of Alternative Military Retirement Systems*, MR-465-OSD (Santa Monica, Calif.: RAND Corporation, 1994).
30. The specific features of the examples are illustrative only. In the case of example 2, the transition pay feature—one month of basic pay for each year served—is probably too high. For the retention bonus provision in examples 1 and 2, one might consider requiring an additional period of obligated service if the bonus is accepted.

from 0.3 percent of new entrants under the current system to 1.4 and 1.2 percent for examples 1 and 2, respectively.

Accessions. These higher retention rates also mean that lower accessions are needed to maintain an Army enlisted force of 413,000 soldiers. Under the current system 75,400 accessions are required each year to maintain a steady-state force. Accessions would fall to 69,400 and 68,500 respectively for examples 1 and 2—a 7 to 9 percent reduction in accession demand compared to the current system. Further, new entrants remain on active duty about 9 percent longer under the modernized system—about 6 staff years per accession as compared to 5.5 years under the current system.

Table 3. New Entrants Surviving to Various Years of Service (percentage)

	Retirement Plan		
Years of Service	Current	Example 1	Example 2
5	29	32	33
10	17	20	22
15	11	13	13
20	10	9	9
25	2	3	3
30	0.3	1.4	1.2

Note: The survival rate is the percentage of new entrants that remain in service to a particular point in time. If the survival rate to 10 years of service is 20 percent, then 20 percent of new entrants are expected to remain through at least 10 years of service.

Costs. Not only are the two examples presented here able to provide an Army enlisted force that is better than that of the current system (in terms of longer retention and lower accession requirements), this force can be obtained at lower cost as well. The annual cost of the current retirement system is roughly $5.9 billion for the Army enlisted force; the cost under example 1 is $5.1 billion and under example 2 is $5.6 billion—an annual savings of $0.8 billion and $0.3 billion, respectively. These estimates include an annual accrual cost for the defined benefit and for the government contribution to the TSP, resources for separation pay, and annual outlays for retention bonuses.

How are these cost reductions achieved? By eliminating the immediate annuity at 20 years of service, a significant amount of resources are "freed" to be allocated to the TSP benefit and to retention bonuses and separation pays.[31] In a sense, resources could be reallocated from the deferred compensation of the immediate annuity to current compensation in the form of government TSP contributions, retention bonuses at key years of service, and separation pays. We refer to this reallocation as "offsetting compensation" because it will offset the effect of the loss of the immediate annuity as a retention incentive. Because current compensation is generally valued more highly than deferred compensation, the cost to the government of offering "up-front" offsetting compensation is lower.

The impact of this reallocation on the individual service member is illustrated in table 4. For an enlisted member who reaches 20 years of service, total (undiscounted) payment from receipt of the immediate annuity to age 60 is $381,000; for officers it is $573,600. Total payment over an expected life of 77 years is approximately $700,000 for the enlisted member and about $1.3 million for the officer.

Table 4. Retirement Payments under the Current System (undiscounted)

Enlisted		
Age 40–60	**Age 60–77**	**Total**
$381,229	$324,045	**$705,274**
Officer		
Age 40–60	**Age 60–77**	**Total**
$573,611	$750,107	**$1,323,718**

Note: In this example, the enlisted member retires at age 40 with 20 years of service; the officer retires at age 47 with 23 years of service.

31. Under the current system, members who complete 20 or more years of service receive an "immediate annuity" beginning the year they leave military service until age 60.

Flexibility and Force Management

The modernized retirement system illustrated in the examples above provides the potential for greater flexibility in force management compared to the current retirement system. Because elements of the modernized framework can be applied more flexibly, force managers have greater opportunity to shape the force and to create a diversity of career lengths within the force. The combination of earlier vesting, a financial incentive for longer careers, and reassessment of high-year-of-tenure (up-or-out) policies for appropriate occupations is likely to result in even greater force staffing benefits than those realized in this assessment of alternatives. Furthermore, the alternative framework eliminates the current system's all-of-nothing cliff vesting.

Because elements of the modernized framework can be applied more flexibly, force managers have greater opportunity to shape the force and to create a diversity of career lengths ...

As discussed previously, cliff vesting reduces flexibility in a number of ways. The services are reluctant to separate members who have reached midcareer because they will leave with no retirement at all. This reluctance in some cases results in careers that are too short, because the services will not retain members for second or third terms of enlistment unless they feel they will be needed for a full 20-year career. This set of circumstances in turn places greater demands on recruiting. In other cases, the immediate annuity paid at the 20-year point reduces incentives for longer careers.

In contrast, the modernized military retirement system increases flexibility and equity through earlier vesting. Though there remains a "jump" between the period prior to vesting and the vesting point, this jump is much more modest in the modernized retirement structure. Thereafter, the modernized retirement system provides a financial incentive for longer service, but also provides a reasonable retirement package at separation at all points beyond the earlier vesting point. With this structure, one would expect a greater portion of the force to serve to the initial earlier vesting point, but that many will gracefully exit at that point or at some point before reaching 20 years of service. For those who continue, the modern system will have the incentive structure to support service beyond 20 or 30 years. This requires, of course, selective reassessment of high-year-of-tenure policies.

Finally, the modernized active duty retirement structure provides opportunity for greater integration with reserve component retirement. Beginning the pension at age 60 is consistent with the reserve pension benefit. If the vesting point for the active duty pension is set at 10 years of service, those active duty members who leave prior to completing 10 years of service will have an incentive to affiliate with the reserve and eventually vest the age-60 pension benefit. Since those who leave active duty after 10 years of service will not have an immediate annuity, they will have an incentive to affiliate with the reserve, accumulate additional years of service under the reserve point system, and earn a larger pension benefit.[32] The rules for vesting the reserve pension may be modified to incorporate the early vesting of the active duty age-60 pension.[33] The reserve pension could also be modified to continue to accumulate retirement points up to the equivalent of 40 years of active duty service.

Recommendations

The military services need ways to improve management flexibility within the current retirement system. In the near term, the services should have the authority to buy out members with more than 10 years of service who are not yet vested. This authority would mitigate, to an extent, the "lock-in" effect of the current system that results in retaining

32. The reserve retirement point system is described in a later chapter on reserve compensation.
33. One modification would be to state that if a prior-service affiliate is vested in the active duty pension at the time of affiliation, this full vesting is transferred to vesting in the reserve pension. This means that someone leaving active duty who was not vested in the active duty pension would have to accumulate 20 "good" years of service to become vested in the reserve pension, as under the current structure. A second possible modification is to change the vesting rule for the reserve pension so that one could become vested based on serving 20 "good" years, as it is currently, or accumulating 3,600 points. If the active duty pension vests after completing 10 years of service, an affiliate with 10 years of active service would enter the reserve component with 3,600 points and be immediately vested. If a member left active duty after completing 9 years of service, they would become vested in the reserve pension after accumulating an additional 360 points, which is likely to accumulate much sooner than accumulating an additional 11 years of "good" service. These are simply examples of the potential ways in which the active and reserve pension system could be more fully integrated.

some members through 20 years of service, when it is in the interest of both the service and the member to reach an agreement to separate earlier. Buy outs would be purely voluntary. Plans similar to the Voluntary Separation Pay recently proposed by the Navy, or a variant of the Special Separation Benefits program that was implemented during the force drawdown of the 1990s, could be used to buy out members, if needed.[34]

This near-term solution does not address the underlying problem: management inflexibility resulting from the current retirement system. In the longer term, the military retirement system should be restructured under a vision that increases its overall flexibility and efficiency. This vision would include earlier vesting of retirement and incentives to serve beyond a 20-year or even 30-year career in some occupations. High-year-of-tenure policies, which require members of a certain rank to separate by fixed years-of-service points, should be reassessed so that the potential benefits of longer careers can be realized.

The recommended architecture for a modern military retirement system would include the following three tiers:

1. ***Early vesting of thrift savings plan-like account.*** A government contribution to a thrift savings plan or 401(k)-like plan that adds a percentage of basic pay, in the range of 5 percent, to the member's contribution.[35] Government contributions would begin to accumulate immediately upon entrance to active duty and would vest no later than the 10^{th} year of service (but not before the 5^{th} year of service). The member who remains on active duty should be provided the flexibility to receive the government contribution in cash, in lieu of the TSP contribution, when vested.

34. The Voluntary Separation Pay proposal would allow the services to target individuals in specific occupations and year-groups where there is excess supply and offer them a cash incentive to leave prior to vesting in the retirement system. These incentives would be offered only after other management actions, such as retraining members for needed skills, have been exhausted.
35. One committee member strongly believes that the government contribution should be a strict, dollar-for-dollar match of the member's contribution, up to the ceiling of 5 percent. However, the committee's recommendation is less restrictive in that the full 5 percent government contribution could be made regardless of the size of the member's contribution.

2. ***Defined benefit pension***. A retirement annuity that begins at age 60, computed under a formula similar to the current retirement annuity. The annuity would vest at the completion of 10 years of service. The annuity formula would be extended through 40 years of service, so that a member serving 40 years would receive 100 percent of the high-three average of basic pay. The retirement health benefit would continue to vest at the completion of 20 years of service, with immediate benefits offered to those who separate after completing 20 or more years of service.

3. ***Additional offsetting compensation incentives to produce desired retention.*** Additional offsetting compensation incentives could come in various forms, including one or more of the following:

    - Transition or separation pay of limited duration for those who leave military service after the vesting point, where the amount and duration of the pay is a function of pay grade and years of service at separation.

    - Additional pay in the form of a multiple of basic pay payable at key years-of-service milestones such as 10, 15, 20, 25, and 30 years. The member receives this pay or bonus upon completing the relevant year of service.

    - An increase in basic pay or bonuses that would target a broader range of the career, rather than be concentrated at year-of-service milestones.

The first two tiers of the modern military retirement system will be the same across the services. However, the third tier, the additional offsetting compensation incentives, may vary across services, and within services by occupation or other criteria, to achieve force management and staffing goals. Other policies, in particular high-year-of-tenure policies, should be reassessed so that the system's full benefits for career management can be achieved.

This retirement system change is intended to accomplish three goals. First, it will increase management flexibility and permit a greater diversity of career lengths by providing earlier vesting and continued incentives for longer careers. Second, it will permit those who provide substantial service, but less than 20 years, to leave with some retirement benefits. Third, it will increase the efficiency of the retention incentive by replacing the portion of the annuity members receive from separation to age 60 with an up-front cash payment. This payment could come in the form of a gate pay at various years of service or in the form of higher levels of basic pay or bonuses.

The current force, at the time of transition to a new system, should be fully grandfathered. However, they should have the option to choose to participate in the new system. In some cases this might entail an additional service obligation.

Pay for Performance

Changes to the military compensation system should improve staffing, force management, employee motivation, and performance. Similarly, aspects of existing pays that do not have a basis in any of these objectives must be examined carefully. The two largest elements of total military compensation are basic pay and the housing and subsistence allowances. In fiscal year 2005, basic pay comprised about 47 percent of the military personnel budget for active duty personnel; housing and subsistence allowances accounted for another 18 percent. Basic pay and allowances reward performance primarily through the promotion system: pay levels increase with pay grade. This section addresses recommended changes to basic pay and allowances that will improve their effectiveness as force management tools.

Basic pay and allowances reward performance primarily through the promotion system: pay levels increase with pay grade.

Basic Pay Table

The Current System

The services spent about $42 billion on basic pay in fiscal year 2005—nearly half of the total military personnel budget. As the largest element of military compensation, basic pay rewards performance almost solely through the promotion system. Increases in basic pay accrue when a member is promoted, but also through longevity. Table 5 displays the monthly basic pay table effective from January 1, 2005 through December 31, 2005.

Table 5. January 2005 Monthly Basic Pay Table

Pay Grade	Years of Service														
	<2	2	3	4	6	8	10	12	14	16	18	20	22	24	26
	Commissioned Officers														
O-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12,963.00	13,026.60	13,297.50	13,769.40
O-9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11,337.90	11,501.10	11,737.20	12,149.10
O-8	8,022.30	8,285.10	8,459.40	8,508.30	8,725.50	9,089.40	9,173.70	9,519.00	9,618.00	9,915.30	10,345.50	10,742.40	11,007.60	11,007.60	11,007.60
O-7	6,666.00	6,975.60	7,119.00	7,233.00	7,439.10	7,642.50	7,878.30	8,113.50	8,349.00	9,089.40	9,714.60	9,714.60	9,714.60	9,714.60	9,763.80
O-6	4,940.70	5,427.90	5,784.00	5,784.00	5,805.90	6,054.90	6,087.90	6,087.90	6,433.80	7,045.50	7,404.60	7,763.40	7,967.70	8,174.10	8,575.50
O-5	4,118.70	4,639.80	4,961.10	5,021.40	5,221.50	5,341.80	5,605.50	5,799.00	6,048.60	6,431.10	6,613.20	6,793.20	6,997.50	6,997.50	6,997.50
O-4	3,553.80	4,113.90	4,388.40	4,449.60	4,704.30	4,977.60	5,317.50	5,582.70	5,766.60	5,872.20	5,933.70	5,933.70	5,933.70	5,933.70	5,933.70
O-3	3,124.50	3,542.10	3,823.20	4,168.20	4,367.70	4,586.70	4,728.60	4,962.00	5,083.20	5,083.20	5,083.20	5,083.20	5,083.20	5,083.20	5,083.20
O-2	2,699.40	3,074.70	3,541.20	3,660.90	3,736.20	3,736.20	3,736.20	3,736.20	3,736.20	3,736.20	3,736.20	3,736.20	3,736.20	3,736.20	3,736.20
O-1	2,343.60	2,439.00	2,948.10	2,948.10	2,948.10	2,948.10	2,948.10	2,948.10	2,948.10	2,948.10	2,948.10	2,948.10	2,948.10	2,948.10	2,948.10
	Commissioned Officers with over 4 Years Active Duty Service as an Enlisted Member or Warrant Officer														
O-3E	0.00	0.00	0.00	4,168.20	4,367.70	4,586.70	4,728.60	4,962.00	5,158.50	5,271.00	5,424.60	5,424.60	5,424.60	5,424.60	5,424.60
O-2E	0.00	0.00	0.00	3,660.90	3,736.20	3,855.30	4,055.70	4,211.10	4,326.60	4,326.60	4,326.60	4,326.60	4,326.60	4,326.60	4,326.60
O-1E	0.00	0.00	0.00	2,948.10	3,148.80	3,264.90	3,383.70	3,500.70	3,660.90	3,660.90	3,660.90	3,660.90	3,660.90	3,660.90	3,660.90
	Warrant Officers														
W-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,548.20	5,738.40	5,929.20	6,121.20
W-4	3,228.60	3,473.40	3,573.30	3,671.40	3,840.30	4,007.10	4,176.30	4,341.00	4,511.70	4,779.00	4,950.00	5,117.40	5,290.80	5,461.80	5,636.40
W-3	2,948.40	3,071.70	3,197.40	3,238.80	3,371.10	3,522.30	3,721.80	3,918.90	4,128.30	4,285.50	4,442.10	4,509.30	4,578.90	4,730.10	4,881.30
W-2	2,593.50	2,741.70	2,871.30	2,965.50	3,046.20	3,268.20	3,438.00	3,564.00	3,687.00	3,771.30	3,842.40	3,977.40	4,111.50	4,247.40	4,247.40
W-1	2,290.20	2,477.70	2,603.10	2,684.40	2,900.40	3,030.90	3,146.40	3,275.40	3,360.90	3,438.30	3,564.30	3,659.70	3,659.70	3,659.70	3,659.70
	Enlisted Members														
E-9	0.00	0.00	0.00	0.00	0.00	0.00	3,901.20	3,989.70	4,101.00	4,232.40	4,364.10	4,575.90	4,755.00	4,943.70	5,231.70
E-8	0.00	0.00	0.00	0.00	0.00	3,193.50	3,334.80	3,422.10	3,527.10	3,640.50	3,845.40	3,949.20	4,125.90	4,224.00	4,465.20
E-7	2,220.00	2,423.10	2,515.80	2,638.80	2,734.50	2,899.50	2,992.20	3,084.60	3,249.60	3,332.40	3,410.70	3,458.70	3,620.40	3,725.10	3,990.00
E-6	1,920.30	2,112.60	2,205.90	2,296.50	2,391.00	2,604.30	2,687.10	2,779.20	2,859.90	2,888.70	2,908.20	2,908.20	2,908.20	2,908.20	2,908.20
E-5	1,759.50	1,877.10	1,967.70	2,060.70	2,205.30	2,329.80	2,421.60	2,450.70	2,450.70	2,450.70	2,450.70	2,450.70	2,450.70	2,450.70	2,450.70
E-4	1,612.80	1,695.60	1,787.10	1,877.70	1,957.80	1,957.80	1,957.80	1,957.80	1,957.80	1,957.80	1,957.80	1,957.80	1,957.80	1,957.80	1,957.80
E-3	1,456.20	1,547.70	1,641.00	1,641.00	1,641.00	1,641.00	1,641.00	1,641.00	1,641.00	1,641.00	1,641.00	1,641.00	1,641.00	1,641.00	1,641.00
E-2	1,384.50	1,384.50	1,384.50	1,384.50	1,384.50	1,384.50	1,384.50	1,384.50	1,384.50	1,384.50	1,384.50	1,384.50	1,384.50	1,384.50	1,384.50
E-1 >4	1,235.10	1,235.10	1,235.10	1,235.10	1,235.10	1,235.10	1,235.10	1,235.10	1,235.10	1,235.10	1,235.10	1,235.10	1,235.10	1,235.10	1,235.10
E-1 <4	1,142.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: E-1 <4 is enlisted grade 1 with less than four months of service. E-1 >4 has between four months and one year of service.

The current structure of the basic pay table has existed since the Career Compensation Act of 1949, although there have been some modifications in its details (such as addition of pay grades and modification of the time-in-service [TIS] categories).

The Case for Change

Because basic pay is a function of longevity, the financial consequences of early or late promotion—compared to "on-time" promotion—are small. Promotion that is one year early, for example, results in higher compensation for only one year. After that year, the member's compensation is the same as it would have been for an on-time or due-course promotion. Under a time-in-grade (TIG) pay table, in contrast, members who are promoted early would have a higher level of pay throughout their career, as compared to members promoted more slowly or on time. This is illustrated in the next section.

Another consequence of a pay table that is a function of years of service is that it is difficult to attract lateral entrants into the system should it become important to do so. It is equally difficult to attract prior-service individuals who have been in the civilian sector for more than a short period. Experience in the civilian sector may be reflected in pay grade, but there is no way in the current system to give "longevity" credit for nonmilitary experience.

Other groups, beginning with the Hook Commission in 1948, have examined the issues associated with a time-in-service versus a time-in-grade pay table—with much support for the time-in-grade approach. The Hook Commission pointed out that the system of pay increases tied to longevity—that was in place at that time—lowered incentives to advance in rank. In 1957, the Defense Advisory Committee on Professional and Technical Compensation recommended that longevity increases be eliminated entirely and replaced with a smaller number of merit steps within a pay grade. This committee also recommended that pay at any given grade never exceed pay at the next higher grade.

The Gorham Commission (1962) also advanced the merits of a time-in-grade system, noting that such a system would better link compensation and performance. However, the First Quadrennial Review of Military Compensation (QRMC) in 1967 noted that a time-in-grade system would disadvantage members in services or occupations with lower-than-average promotion speeds. Promotion is often a function of opportunity (staffing requirements) and is thus not perfectly correlated with ability or performance.

In 1978, the President's Commission on Military Compensation again advocated adoption of a time-in-grade pay table, arguing that doing so would more greatly reward performance. The Seventh QRMC (1992) concluded that the disadvantages of a time-in-grade pay system outweighed any potential benefits. Similar to the First QRMC, the Seventh QRMC concluded that promotion timing depends on too many nonmerit-related factors to be relied upon as a pay determinant. Both the Seventh and Eighth (1997) QRMCs recommended changes that shifted more weight toward promotion than longevity in determining pay raises, but kept the time-in-service dimension in the proposed pay table.

The Congressional Budget Office (CBO) examined the relationship between military pay and performance in 1995. Although the CBO did not issue any recommendations in its report, it did offer a summary of the main arguments for and against a time-in-grade table. It noted, for example, that because it had been opposed in the past, a time-in-grade table may be perceived as inequitable. The authors of the CBO report also were concerned about the costs of transition to a time-in-grade table and the length of time over which the transition would have to occur. A final potential problem CBO identified with the time-in-grade table was that it may have little effect on officer behavior, because there is relatively little variation in officer promotion speed.

On the positive side, the CBO noted that a time-in-grade table would increase the promotion differentials among individuals who were promoted early, late, or on time. In addition, a TIG-based table is likely to have effects on retention that would vary across both services and occupations. Services or occupations with fast promotion times would see an improvement in pay and retention would increase; the opposite would be true for groups with slower-than-average promotions. As a result, manning hard-to-fill occupations may become easier; as more personnel would be attracted to those skills because of the increased monetary returns to fast promotions. Though not noted by the CBO, a similar argument applies at the individual level. Top performers would enjoy an increase in compensation, while marginal performers would suffer a decline. Hence, retention would be expected to increase for top performers and decline for poor performers. Finally, the CBO noted that the particular changes in the TIS-based table proposed by the Seventh QRMC would make little difference in performance incentives.

The Defense Science Board Task Force on Human Resources Strategy (2000) recommended that the the Office of the Secretary of Defense (OSD) restructure the pay system to emphasize pay for performance, but did not explicitly recommend changing from a time-in-service to a time-in-grade structure. The task force noted that other recommendations that they made might lead to longer careers and longer time in grade, so that the pay system would need to find other ways to reward performance than through the promotion system.

Examples and Analysis

Transitioning to a time-in-grade basic pay table would increase the rewards of early promotion, motivating greater effort and performance. Under a time-in-grade table, the pay differential would persist past the point at which a member's peers were promoted to the same grade. In addition, other things being equal, top performers would receive an increase in pay relative to average or poor performers—thus, increasing the retention of top performers relative to average and poor performers.

The following examples illustrate the magnitude of such differences using the illustrative time-in-grade pay table shown in table 6.[36] This table

36. The time-in-grade pay table proposed in this report is not intended to suggest the final configuration of such a pay table, but rather offers one example of how such a table might be constructed. Its purpose is to illustrate the effects of a time-in-grade table as compared to the current basic pay table. Using different time-in-grade configurations, the direction of the effects would be the same, but the magnitude would vary with the particular table constructed. The example table used in this report assumes time-in-grade increases occur up to 10 years within grade, but could be extended farther to

was designed to be roughly budget-neutral with the fiscal year 2005 time-in-service pay table (shown in table 5) and assumes current promotion rates. But further analysis and evaluation will be necessary to ensure that any time-in-grade table implemented by the Department offers the proper incentives to encourage performance and retain personnel. In particular, the pay table offers time-in-grade increases through nine years at a particular pay grade. If careers are to extend beyond 30 years, it may be useful to consider an additional pay grade for enlisted members.[37]

Figure 5 compares the basic pay streams, over the course of a career, for an enlisted member who is promoted on time, under both the current pay table (table 5) and the illustrative TIG-based table (table 6). This figure illustrates only that the constructed time-in-grade pay table for a due-course promotion is generally consistent with the time-in-service pay table, but that there are slight differences.

Figures 6 and 7 illustrate the impact of the different pay tables on career earnings for two enlisted members with career paths that, with the exception of promotion speed, are identical. The fast promotee is promoted to E-5 one year earlier than the due course promotee, and remains one year ahead for the remainder of his or her career. Under the time-in-service pay table, the difference in basic pay over a 30-year career is about $22,000 (figure 6).

As expected, the pay differences between early promotion and on-time promotion are persistent and more substantial under the time-in-grade pay table. Figure 7 illustrates this differential, where the total pay difference over a 30-year career increases to about $45,000 (more than double) under the time-in-grade pay table.

allow for longer career pipelines—such as up to 40 years of service. Other constructs of a time-in-grade table could include differences in the slope of the pay increases within a given grade and changes in the magnitude of pay raises upon promotion. Finally, the slope of the pay table could be further increased through targeted pay raises, such as those implemented in fiscal year 2001, which increased the relative pay of senior noncommissioned officers.

37. See Aline O. Quester and Gary Lee, *Senior Enlisted Personnel: Do We Need Another Grade?* CRM D0005072.A2 (Alexandria, Va.: Center for Naval Analyses, December 2001) for a formal presentation of some of the arguments for an additional enlisted pay grade.

Table 6. Example Time-in-Grade Basic Pay Table

Pay	Time in Grade (years)									
	<1	>1	>2	>3	>4	>5	>6	>7	>8	>9
	Commissioned Officers									
O-10	14,623.67	14,940.67	15,257.66	15,574.66	15,891.66	16,208.65	16,525.65	16,842.65	17,159.64	17,476.64
O-9	12,902.97	13,906.74	13,960.52	14,014.29	14,068.06	14,121.84	14,175.61	14,229.38	14,283.16	14,336.93
O-8	11,690.43	12,026.27	12,362.11	12,403.23	12,444.35	12,485.48	12,526.60	12,567.72	12,608.84	12,649.97
O-7	10,369.40	10,624.15	10,878.91	11,133.66	11,188.25	11,242.84	11,297.43	11,352.02	11,406.61	11,461.20
O-6	8,245.06	8,469.18	8,693.30	8,917.42	9,141.54	9,365.65	9,589.77	9,781.87	9,973.98	10,166.08
O-5	6,423.78	6,656.13	6,888.48	7,120.82	7,353.17	7,585.51	7,709.98	7,834.45	7,958.93	8,083.40
O-4	5,286.43	5,404.43	5,522.42	5,640.42	5,758.42	5,876.41	5,994.41	6,095.55	6,196.69	6,297.83
O-3	4,060.37	4,191.32	4,322.27	4,453.21	4,584.16	4,715.11	4,846.05	4,958.29	5,070.53	5,182.78
O-2	2,866.96	3,256.79	3,646.62	3,694.35	3,742.09	3,789.82	3,837.55	3,885.29	3,933.02	3,980.76
O-1	2,488.99	2,714.22	2,726.29	2,738.35	2,750.42	2,762.48	2,774.55	2,786.61	2,798.68	2,810.74
	Commissioned Officers with over 4 Years Active Duty Service as an Enlisted Member or Warrant Officer									
O-3E	4,871.25	5,089.32	5,101.00	5,112.68	5,124.36	5,136.05	5,147.73	5,159.41	5,171.09	5,182.78
O-2E	3,967.99	4,250.70	4,533.41	4,568.03	4,602.65	4,637.27	4,671.88	4,706.50	4,741.12	4,775.74
O-1E	3,131.00	3,662.43	3,690.90	3,719.37	3,747.84	3,776.31	3,804.78	3,833.25	3,861.72	3,890.19
	Warrant Officers									
W-5	7,002.21	7,154.00	7,305.78	7,457.57	7,609.36	7,761.14	7,912.93	8,064.72	8,216.50	8,368.29
W-4	5,270.56	5,456.57	5,642.58	5,828.59	6,014.59	6,200.60	6,386.61	6,546.04	6,705.48	6,864.91
W-3	4,087.53	4,213.49	4,339.46	4,465.42	4,591.38	4,717.35	4,843.31	4,951.28	5,059.25	5,167.22
W-2	3,273.24	3,401.71	3,530.19	3,658.66	3,787.14	3,831.19	3,875.24	3,919.28	3,963.33	4,007.38
W-1	2,890.32	3,113.44	3,125.39	3,137.34	3,149.29	3,161.25	3,173.20	3,185.15	3,197.10	3,209.06
	Enlisted Members									
E-9	4,640.72	4,741.32	4,841.92	4,942.51	5,043.11	5,143.71	5,244.30	5,344.90	5,445.50	5,546.10
E-8	3,899.88	4,051.51	4,203.14	4,354.77	4,387.27	4,419.76	4,452.25	4,484.74	4,517.24	4,549.73
E-7	3,295.64	3,388.00	3,480.36	3,572.72	3,665.08	3,696.74	3,728.41	3,760.07	3,791.74	3,823.41
E-6	2,641.19	2,723.77	2,806.34	2,888.92	2,971.49	3,054.07	3,098.31	3,142.54	3,186.78	3,231.02
E-5	1,995.58	2,064.86	2,134.14	2,203.42	2,272.70	2,341.98	2,411.26	2,470.64	2,530.02	2,589.41
E-4	1,635.65	1,747.93	1,860.21	1,873.96	1,887.70	1,901.45	1,915.20	1,928.95	1,942.70	1,956.45
E-3	1,476.83	1,565.55	1,570.31	1,575.06	1,579.81	1,584.56	1,589.32	1,594.07	1,598.82	1,603.58
E-2	1,404.11	1,408.98	1,413.84	1,418.70	1,423.56	1,428.42	1,433.29	1,438.15	1,443.01	1,447.87
E-1 >4	1,252.60	1,266.37	1,280.15	1,293.93	1,307.70	1,321.48	1,335.25	1,349.03	1,362.81	1,376.58
E-1 <4	1,252.60	1,252.60	1,252.60	1,252.60	1,252.60	1,252.60	1,252.60	1,252.60	1,252.60	1,252.60

Note: E-1<4 is enlisted grade 1 with less than four months of service. E-1 >4 has between 4 months and one year of service.

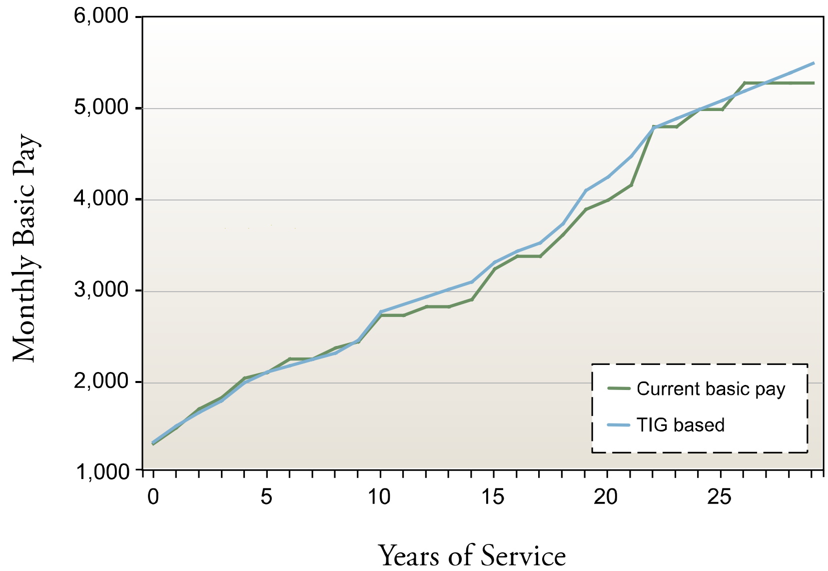


Figure 5. Comparison of Career Pay Streams under Alternative Pay Tables

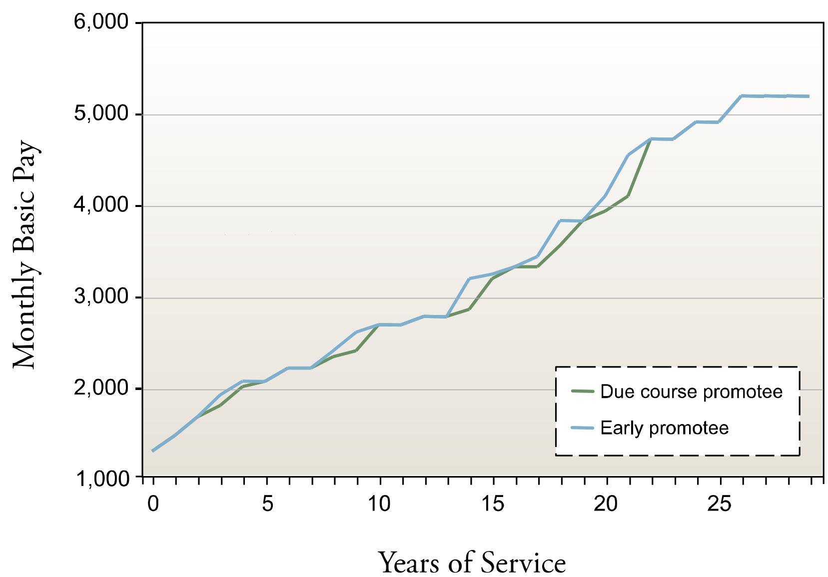


Figure 6. Enlisted Career Pay Streams under a Time-in-Service Pay Table

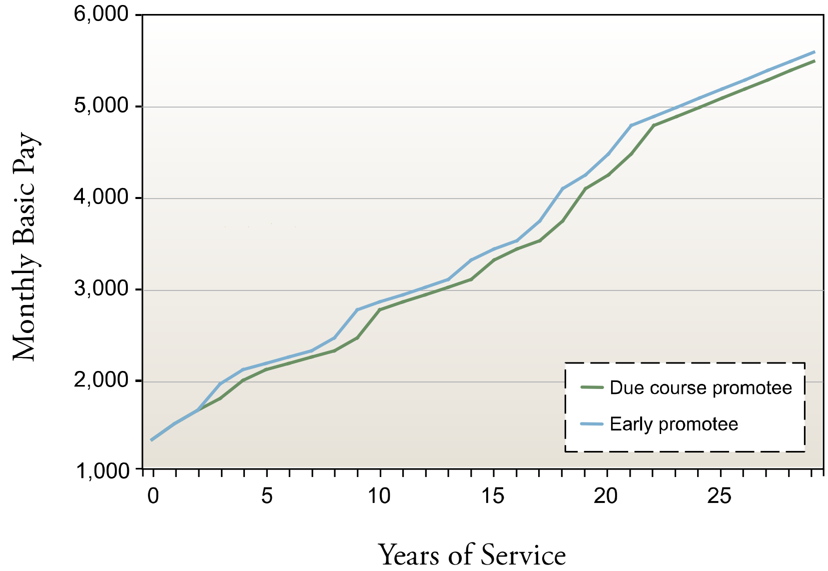
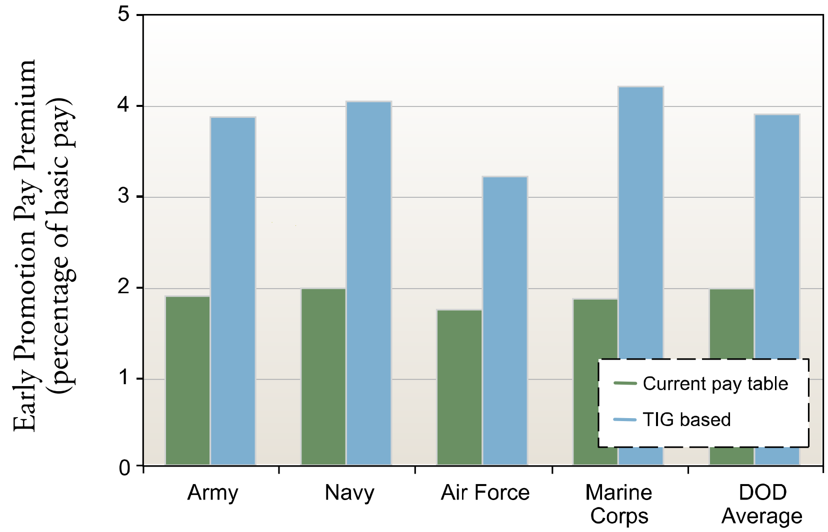


Figure 7. **Enlisted Career Pay Streams under a Time-in-Grade Pay Table**

Under the time-in-grade pay table, the present value of basic pay earnings over a 30-year career would be about 3.9 percent higher for a member receiving early promotion, compared to a differential of only 1.9 percent under the current pay table (figure 8). Further, although promotion timing and speed vary across services, the effects of the time-in-grade table on relative rewards for those who promote more quickly do not vary much by service.

The differences in career earnings under the two pay tables are similar for the officer force as well. An officer promoted to O-4 one year earlier than his or her peers will realize a $20,000 difference in basic pay across a 30-year career under a time-in-service pay table (figure 9), as compared to $64,000 under a time-in-grade table (figure 10). (A different time-in-grade pay table could be constructed that may result in greater or smaller effects from early promotion. However, any well-constructed time-in-grade pay table will reveal a similar qualitative difference in pay streams for early compared to due course promotion.)



Note: The pay premium reflects the present value of basic pay earnings over a 30-year career.

Figure 8. **Relative Rewards for Early Promotion over a 30-Year Career**

A frequent criticism of a time-in-grade pay table is that it would result in inequitable treatment of equally productive individuals across services or occupations based purely on differences in promotion timing that result from service-specific policy or differences in requirements. This criticism is a matter of degree, not kind, in that promotion flow points (and pay) vary across services under the current system.[38]

Table 7 displays total and average pay under both systems. In general, Army and Navy personnel would see a modest increase in pay on average, while personnel in the Marine Corps and Air Force would see modest reductions in pay of less than one percent. Within the officer corps, officers in the Marine Corps and Navy would experience slightly lower pay, while Army and Air Force officers would see average pay increase. However, the magnitude of these differences is sensitive to the design of the table and would likely change under an implemented system.

38. All estimated changes in average pay are less than one percent of total basic pay.

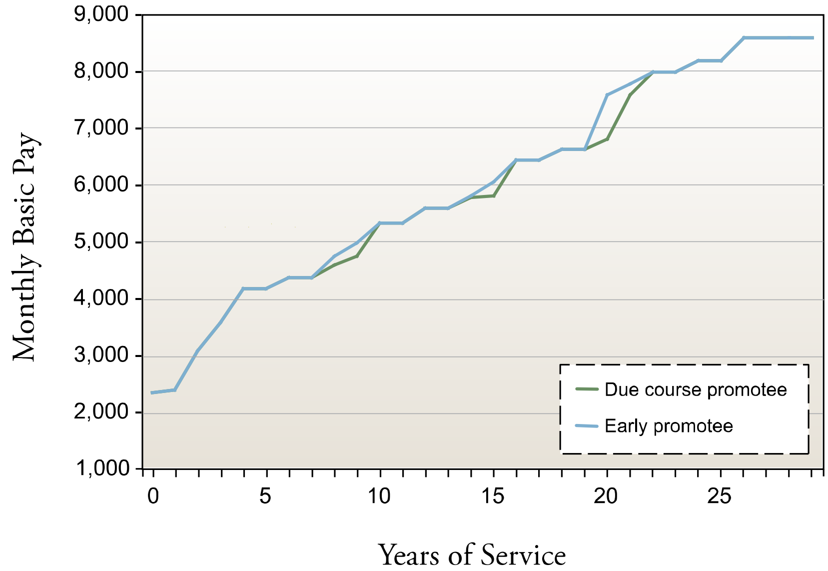


Figure 9. **Officer Career Pay Streams under a Time-in-Service Pay Table**

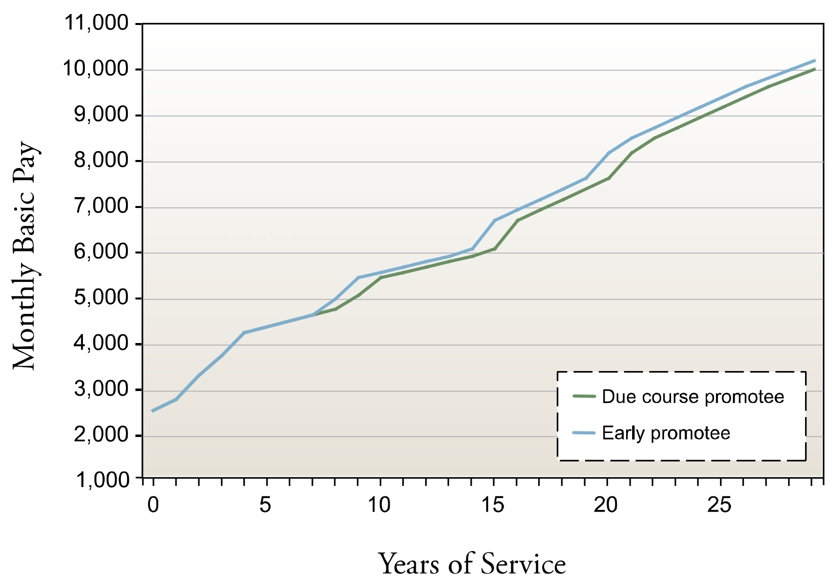


Figure 10. **Officer Career Pay Streams under a Time-in-Grade Pay Table**

Table 7. Changes in Pay by Service

All Personnel					
	Time-in-Service (Current System)		Time-in-Grade		Percent Difference
	Total ($M)	Avg. ($)	Total ($M)	Avg. ($)	
Army	14,942	30,731	15,059	30,972	0.78
Navy	11,049	30,937	11,079	31,022	0.28
Marines	4,750	26,414	4,715	26,218	-0.74
Air Force	11,756	33,651	11,644	33,329	-0.96
Total	42,497	30,962	42,497	30,962	0.00

Two other concerns are worth examining. First, using a time-in-grade table could cause pay inversions when an enlisted member transitions to the warrant officer or commissioned officer ranks. Specifically, an enlisted member at pay grade E-7 or above would face lower monthly basic pay upon promotion to either W-1 or O-1 under the time-in-grade pay table shown in table 6. However, it is possible to develop a time-in-grade table without pay inversions that could provide a workable alternative. Furthermore, if an enlisted member possesses qualifications that warrant higher pay, the services could transition the member at a higher officer pay grade. Finally, basic pay inversions are also possible (albeit not as likely) under the current time-in-service table. In such cases, the member will receive the higher pay and allowances of his or her former pay grade under section 907 of title 37. The same sort of "save-pay" provision could remain in place with a TIG-based pay table.

An additional concern about a TIG-based table is the cost of transitioning from the current table to a new table. For reasons of equity, it would be imprudent to cause any member to see a nominal decrease in basic pay during the transition, but shifting within-grade pay increases will necessarily cause some negative disruption. In the illustrative TIG-based table used here, slightly fewer than half of all personnel would face some immediate decrease in nominal basic pay. This drop could be avoided by implementing a save-pay provision. The first-year cost of a transitional save-pay provision would be about $1.1 billion. Costs would decrease annually as nominal pay increases and personnel promotions eliminated the pay differentials.[39]

Recommendations

The basic pay table should become a function of pay grade and time in grade, rather than pay grade and time in service. Time-in-grade increases in basic pay should extend beyond the career lengths currently implied by the time-in-service pay table. For those occupations where high-year-of-tenure constraints have been relaxed to encourage longer careers, the pay table time-in-grade increases should provide a financial incentive consistent with longer service. This change would complement changes in the retirement system that provide incentives to serve beyond 30 years.

Adopting this recommendation will reward superior performance and provide a strong financial incentive that will retain superior performers.

Adopting this recommendation will reward superior performance and provide a strong financial incentive that will retain superior performers. The time-in-grade pay table will encourage greater effort and performance from all service members. By extending time-in-grade increases to reward service that may extend beyond 30 years, the pay table would provide the financial incentives to encourage longer careers where appropriate. Additional options, including adding an enlisted pay grade, should also be considered.

Finally, a time-in-grade pay table will be more attractive to individuals with prior service who are considering reentry or to lateral entrants with specialized skills, should prior-service reentry or lateral entry for select skills become more important in the future.

39. Estimates based on the pay grade, time in service, and time in grade of all personnel on active duty as of September 30, 2005.

Differences in Compensation by Dependency Status

The current allowance for housing varies by pay grade and geographic location, but it also differs for members with or without dependents. Members with dependents receive housing allowances that are about 30 percent greater on average than those who have no dependents at the same grade and year of service.[40] This variation by dependency status is a remnant of paternalism carried over from the conscription era and a time when most members received housing in-kind rather than as a cash allowance.

... variation by dependency status is a remnant of paternalism carried over from the conscription era ...

The Current System

The services have provided quarters for their members since inception of the armed forces.[41] Regulations dating to the 19th century provided officers with a prescribed value for a number of rooms based on their rank. Over the next one hundred years, various additional regulations were added and modified to produce a more comprehensive system for providing officers and enlisted service members with housing. This culminated in the Career Compensation Act of 1949, which established a basic allowance for quarters (BAQ).

The BAQ was paid at a rate that varied by dependents status—but only for officers and enlisted personnel in pay grades E-5 and above. Initially, in order to discourage junior enlisted members from marrying, their BAQ rate did not vary by dependents status. However, the Dependents Assistance Act of 1950 was established to assist personnel and their families who would face potential hardships due to deployment. This act suspended the provision that prevented junior enlisted soldiers with dependents from collecting the higher "BAQ with dependents" rate.

40. U.S. Department of Defense, *Selected Military Compensation Tables* (Washington, D.C.: Office of the Under Secretary of Defense for Personnel and Readiness, January 2005).
41. Information in this section is drawn from U.S. Department of Defense, *Selected Military Compensation Background Papers* (Washington, D.C.: Office of the Under Secretary of Defense for Personnel and Readiness).

Although the 1950 act was designed as a temporary measure, it was repeatedly extended until 1973. At that time, the provisions of the Dependents Assistance Act were made a permanent part of the Career Compensation Act structure.

The Military Personnel and Compensation Amendments of 1980 established the variable housing allowance (VHA). The VHA was to be combined with BAQ to provide a system that could better manage the fluctuations in housing prices across the continental United States (CONUS). VHA rates also varied according to dependents status. In fiscal year 1988, the basic allowance for housing (BAH) was created, combining BAQ and VHA into a single housing allowance.

Members receive BAH when they do not receive government housing (quarters in-kind) at a military installation. BAH rates vary by pay grade, location, and dependency status.[42] When a member and his or her family receive government housing, they forfeit BAH. In principle, the fair market rental value of the government housing is approximately equal to BAH. In practice, this is more likely to be true for officers and for midlevel and senior enlisted members than it is for single junior enlisted members who live in barracks. Most midlevel and senior personnel live in government housing voluntarily, so it is likely that they value the in-kind housing at least as much as the foregone BAH. By contrast, junior enlisted personnel living in barracks or on a ship do not generally have the opportunity to opt for the cash allowance instead.

There are other benefits that distinguish between members with dependents and those without. The Overseas Housing Allowance, for example, provides for a differential based on dependents in a manner similar to BAH. The Family Separation Allowance (FSA) is provided only to members with dependents. Members also receive cost-of-living allowances in certain duty locations that vary with family size.

42. The differences due to dependency status are based on whether or not the member has any dependents, not on the number of dependents (family size).

The Case for Change

There is no evidence that the differential in allowances is related to differences in productivity or the value of an individual to the service. Members without dependents undertake the same risks and endure the same hardships as those experienced by members with spouses and other dependents.

… there are important differences in member compensation based not on performance or value to the organization, but on whether or not the member has dependents.

The current practice of paying different housing allowances based on dependency status weakens the relationship between pay and performance. The housing allowance is a substantial component of total compensation. Hence, there are important differences in member compensation based not on performance or value to the organization, but on whether or not the member has dependents. Figure 11 shows, for those receiving a cash housing allowance, the differences in the housing allowance by pay grade due to dependency status.

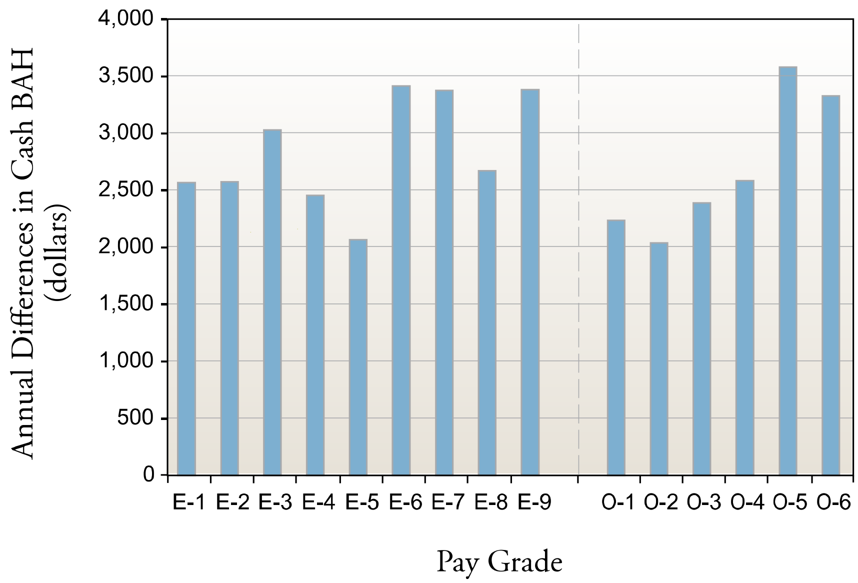


Figure 11. Annual Differences in Cash Basic Allowance for Housing Between "With" and "Without" Dependants Rates

Moreover, the dependent differential may encourage members to marry, or to marry earlier than they otherwise might. Jeffrey Zax and

David Flueck found that the military system encourages earlier marriages and higher rates of divorce than would be expected among otherwise similar civilians. They found that higher allowances for those with dependents, as well as rules that allowed junior enlisted personnel to move out of barracks only if married, both had an impact.[43]

Other research supports the notion that financial incentives affect decisions to marry and have children. Dan Rosenbaum, for example, examined the effects of changes in tax laws and found that a $1,000 per year decrease in the tax costs of marriage would increase the percentage of women who were married by one to four percentage points.[44]

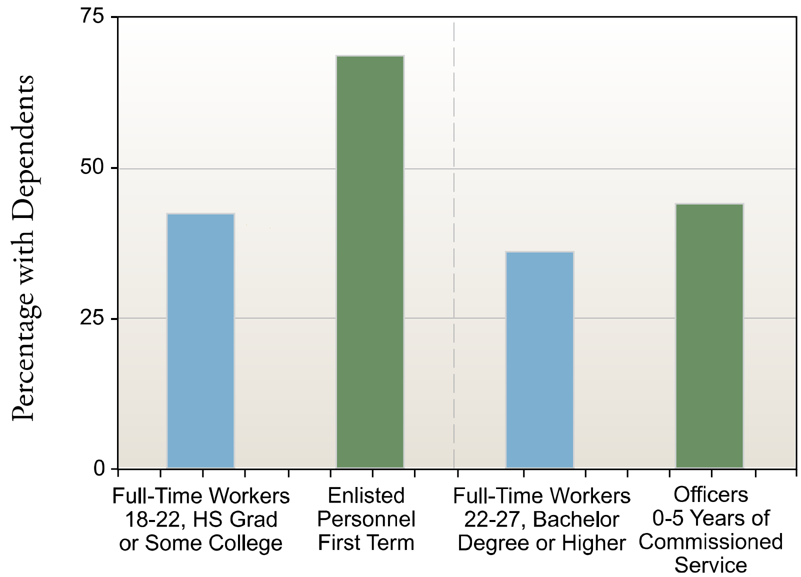
Comparing service members and comparably aged civilians, figure 12 shows that the difference in the percentage of workers with dependents is greater among the youngest workers. While there may be other reasons for this difference, higher pay for members with dependents may contribute to their higher representation in the military forces.

Pay is one possible reason that dependency rates are higher in the military than among comparable civilians. Another may be related to the rules governing housing for junior enlisted personnel. As mentioned earlier, junior enlisted personnel who have no dependents are often required to live in government quarters, usually in barracks or aboard ships. In return, they receive no cash housing allowances and may consider themselves worse off than service members who voluntarily live in government quarters.

Similarly, FSA is designed to partially reimburse members who are involuntarily separated from their dependents for some of the expenses resulting from that separation, or to reimburse members who must maintain a home at their permanent duty stations while paying housing costs elsewhere. FSA policy implicitly assumes that members without dependents do not incur such separation costs. This may be true to a

43. Jeffrey S. Zax and David W. Flueck, *Marriage, Divorce, Income and Marriage Incentives*, working paper (Department of Economics, University of Colorado at Boulder, 2003)
44. Dan T. Rosenbaum, *Instrumental Variable Estimates of the Effect of Taxes on Marriage with Endogenous Labor Supply and Fertility*, working paper (Department of Economics, University of North Carolina at Greensboro, 2003).

certain extent, but it is also true that members without dependents are also likely to incur separation-related expenses. Many members without dependents live in private housing (owned or rented) and the costs of maintaining those residences do not abate (and may, in fact, increase) during a prolonged absence.



Source: OSD Compensation Greenbook (January 2005) and Current Population Survey (March 2005).

Figure 12. Percentage with Dependents, Civilian/Military Comparisons

Alternatives to the Current System

An alternative to the current system would eliminate the differential in cash housing allowances by paying all personnel receiving cash allowances at the with-dependents (higher) rate. While this change in the compensation system would have a substantial annual cost, savings in other areas may partially or wholly offset the additional outlays.

An alternative ... would eliminate the differential in cash housing allowances ...

At fiscal year 2005 pay levels, the annual cost of this change in BAH would be $548 million.[45] This estimate assumes that members without dependents are assigned in the

45. U.S. Department of Defense, *Selected Military Compensation Tables.*

same locations (by pay grade) as members with dependents. Further, it ignores any of the potential changes in force composition discussed below. A similar change in the Overseas Housing Allowance would cost an additional $66 million annually.

In addition to the primary benefit of this alternative—eliminating pay differentials unrelated to productivity—other potential benefits may yield offsetting savings for the services.

First, the higher pay levels for members without dependents will improve recruiting and retention. Regular military compensation would increase for the average member by about 1.8 percent; the average increase for members without dependents would be 5.5 percent. The most dramatic change in pay would be among first-term enlisted personnel, who would see average RMC increase by 2.4 percent overall, and by 8.1 percent for members without dependents. Such increases in first-term pay should have a positive effect on recruiting.[46] An increase in the supply of high-quality recruits could be used to either increase accessions or to reduce expenditures on other recruiting resources like advertising or production recruiters. Likewise, first-term (and overall) retention would improve.[47] Again, these benefits could be recouped either as gains in personnel inventory, where desired, or by reducing the costs of other retention incentives.

Second, offsetting cost savings would result from changes in the composition of the military's active duty force. By eliminating pay

46. Assuming a pay elasticity of 1.0 with respect to enlistment supply, eliminating the dependents differential in this manner would increase the supply of the most desirable recruits (high school diploma graduates scoring in the upper 50 percent on the Armed Services Vocational Aptitude Battery [ASVAB]) by 2.4 percent. This estimate of the responsiveness of the supply of "high-quality" recruits is consistent with recent empirical studies, notably John T. Warner et al., *Enlistment Supply in the 1990s: A Study of the Navy College Fund and Other Enlistment Incentive Programs*, DMDC Report No. 2000-015 (Arlington, Va.: Defense Manpower Data Center, 2001).
47. Assuming a reenlistment pay elasticity of 1.5, average first-term reenlistment rates could increase by between 1.0 and 1.5 percentage points. For the career force, the retention gains would be equivalent to those achieved by a 1.8 percent increase in RMC. Estimates are based on an average first-term reenlistment rate of 35–40 percent. For a summary of recent retention models reporting pay elasticity in this range, see Matthew S. Goldberg, *A Survey of Enlisted Retention: Models and Findings*, CRM D0004085.A2 (Alexandria, Va.: Center for Naval Analyses, November 2001).

differentials related to dependents, part of the incentive for younger members to marry and acquire dependents would be eliminated. The differential financial incentive for members with dependants to remain in service would be eliminated as well. While the magnitude of change is difficult to predict, it seems clear that a policy for paying allowances that does not discriminate based on dependency status would move the dependency rate among active duty members more in line with the rates seen in the civilian sector. Even if the compensation change only closes this gap by half, significant savings are possible.

If the gap shown in figure 12 were reduced by 50 percent, there would be 27,408 fewer members with dependents in the active duty force. A smaller number of dependents would reduce benefit costs, including the costs of DOD schools, health benefits for dependents, moves associated with permanent change of station (PCS), the overseas (OCONUS) cost-of-living allowance, and the dislocation allowance. Annual savings from these programs would total about $107 million, as shown in table 8. Also, if the improvement in recruiting were recouped by reducing the number of recruiters employed by the services, total annual savings would increase to about $160 million, which would partially offset the projected program costs of $548 million.

Table 8. **Annual Program Savings from Reduced Number of Active Duty Members with Dependents**

Program	**Projected Savings (millions)**
DOD schools	53.8
Recruiters	53.5
TRICARE	29.0
Permanent change of station	17.4
OCONUS COLA	4.7
Dislocation allowance	1.8
Total Savings	**$160.3**

An additional change to the current system would be to pay cash allowances to all members, regardless of housing circumstances. Doing so would reduce another incentive for junior members to marry and acquire dependents. Under this proposed change, members living in government quarters would pay a fair market rent for their quarters. Members who are living in barracks or onboard ships are likely to realize an increase in disposable income, because the fair market rent for their quarters would be lower than the cash housing allowance.

Because members in pay grades above E-4 only reside in government housing voluntarily, the change in policy for those members would be revenue-neutral. That is, the fair market rent charged for government quarters would completely offset the increased allowance outlays. It would cost $332 million annually to provide BAH to members in pay grades E-4 and below with no dependents who are currently residing in government quarters. Part of this amount would be recouped as rent on the government quarters.

For example, the Canadian Forces charge members, for shared barracks in good condition, about 50 percent of the rent on a one-bedroom apartment.[48] Assuming the same approximate ratio (the rent on quarters with individual bedrooms would probably be higher), the services would recoup about half ($166 million annually) of the new allowance in rent paid by members. Additionally, the new policy would eliminate the need to pay members partial BAH, which is compensation to members living in inadequate government quarters. The annual cost of the partial BAH programs was $31 million in fiscal year 2005. Taking these offset savings into account, the net budget cost of the proposed policy would be $135 million annually—equivalent to a 0.65 percent increase in RMC for all E-1 to E-4 personnel, which might also have a positive impact on recruiting and retention.

The family separation allowance also contributes to a negative pay differential for members without dependents. An alternative to the current system would consolidate FSA into the category of special and

48. Information provided in an e-mail dated October 31, 2005 from Captain Harriet E. Vanderburg, Executive Services of the Canadian Forces Housing Agency.

incentive pays related to hazardous or arduous duty, as discussed in the following chapter. These pays would no longer vary by dependent status but by differences in assignment conditions.

Recommendations

Pay should be related to performance and the value of the member to the service, not to personal circumstances. The Committee recommends that distinctions in pay that are not related to the value of the individual to the organization be eliminated. The services should eliminate the distinction between "with" and "without" dependents in the payment of BAH by paying the allowance to all members at the "with dependents" rate. The services should make a similar adjustment in the overseas housing allowance.

Pay should be related to performance and the value of the member to the service, not to personal circumstances.

All members should receive BAH. Those in government housing should pay fair market rental rates for the housing they receive. Some members—particularly junior enlisted personnel living in barracks or onboard ships—would receive BAH that is greater than the amount they must pay for government housing.

The FSA should be consolidated with other special and incentive pays related to deployment or unaccompanied tours. Appropriate compensation for deployment or the nature of the tour should not differ between those with dependents and those without dependents. Where appropriate, unaccompanied tours should be filled voluntarily, using variable incentives to ensure adequate and qualified staffing.

Paying BAH at a rate that does not differ by dependent status eliminates a component of compensation variation that is unrelated to performance. Further, it no longer provides a differential financial incentive for members with dependents to remain in service. In the long run, this policy should lower costs through a positive impact on recruiting and retention and a reduction in the costs of some benefits provided to members' dependents.

Special and Incentive Pays

Special and incentive (S&I) pays are the primary way that pay variation by occupation, assignment location, or type of duty enters the compensation system. Unlike basic pay and allowances, which vary only by pay grade and years of service, S&I pays provide the services with flexible and high-powered compensation dollars that can address a wide and changing set of staffing challenges. That is, they are used to adjust for supply and demand conditions that vary by occupation and type of duty, and for differences in conditions of service or assignment.

The Current System

The fiscal year 2004 S&I pay budget for the active forces was approximately $4 billion, which is about 3 percent of total compensation (cash and in-kind) and about 5 percent of cash compensation. S&I pays account for a higher proportion of total compensation for officers (5 percent) than for enlisted members (3 percent). In fiscal year 2004, the average value of S&I pays was about $6,300 for officers and about $2,165 for enlisted members.

Although there are over 60 different S&I pays, four types of pay account for almost 70 percent of total S&I pay resources:

- reenlistment bonuses (18 percent)
- flying duty pays (17 percent)
- sea and foreign duty pays (17 percent)
- medical pays (16 percent)

Special and incentive pays can be categorized in several different ways. The Office of the Secretary of Defense divides the more than 60 S&I pays into two broad categories: recognition pays and incentive pays. Recognition pays are designed to compensate for hazardous or unpleasant duty or for unusual levels of responsibility. Incentive pays are targeted at career retention, accession, skill channeling, assignment, professional certification, or performance.

The Seventh Quadrennial Review of Military Compensation suggested three categories for S&I pays—hazardous duty (the equivalent of recognition pays), career incentive pays (which target retention), and skill incentives (paid to those who have acquired specific skills).

From an analytical perspective, S&I pays can be categorized both in terms of purpose and flexibility. In terms of purpose, pays can be grouped into three categories: (1) recruiting/retention and skill incentives for proficiency and certification; (2) compensating differentials for onerous or hazardous duties or responsibilities; and (3) assignment or location pays. Alternatively, one could classify pays into two categories: 1) those that are used to adjust for differences in supply and demand, such as reenlistment and enlistment bonuses; and 2) recognition/hazardous duty pays, which are not necessarily intended to adjust for differences in supply and demand.

In terms of flexibility, S&I pays can be categorized into three broad groupings based on the degree of discretion available when allocating the pays. Many S&I pays, for example, are statutorily based. Pays in this category are budgeted and paid according to legislative authority, with little consideration given to their current contribution to force staffing and readiness. They have become the equivalent of entitlements. With both the eligibility for and amount of these pays set in statute, the services have no discretion in their distribution.[49] An example of these legislatively-prescribed pays is Parachute Duty Pay.

49. This statement is not meant to imply that some or all of these pays are not justified by staffing and readiness considerations. Rather, it means there is little periodic evaluation of their continued value and effectiveness.

A second category includes pays that afford the services some limited flexibility in applying them to a range of relatively narrowly defined occupations or duty categories. While the level of payment for these pays is subject to a ceiling, the services have some discretion in setting the exact amounts. Nuclear officer incentive pay is an example of this somewhat more flexible type of pay. A third category of pays permits discretionary allocation of the pay across a relatively broad duty or occupation category, and allows the services some discretion in payment amounts. Examples of these more flexible pays include enlistment bonuses, the Selective Reenlistment Bonus (SRB), and Assignment Incentive Pay (AIP).

... S&I pays provide ... the flexibility to meet specific incentive and staffing needs that cannot be met efficiently with across-the-board increases ...

Table 9 offers a categorization of current S&I pays along the various analytical dimensions described above.

The current system of S&I pays has evolved gradually, and it offers several advantages as a supplement to regular military compensation. Most importantly, S&I pays provide the compensation system with the flexibility to meet specific incentive and staffing needs that cannot be met efficiently with across-the-board increases in basic pay and allowances, which would increase pay to all service members. Not only do they provide incentives and compensation for arduous, unpleasant, or hazardous assignments or duty; they also allow the services to respond to supply and demand conditions that vary across occupational specialties, and to encourage members to acquire and maintain particular skills and abilities valued by the services and essential to the military mission.

The Case for Change

While S&I pays have helped to maintain a robust volunteer force, the system has several shortcomings, including a proliferation of pays, limited flexibility, and a lack of incentives to motivate personnel.

Table 9. Categories of Current S&I Pays

	Discretion		
	None (Entitlement)	**Limited**	**Greater**
Recruiting/Retention and Skill/Proficiency	***Section 301a*** – Aviation Career Incentive Pay (ACIP) ***Section 302(a)(4)*** – Medical Officer Additional Special Pay (ASP) ***Section 302(a)(5)*** – Medical Officers Board Certification Pay (BCP) ***Section 302a(a)*** – Optometrists Regular Special Pay ***Section 302b(a)(2) and (3)*** – Dental Officer Variable Special Pay (VSP) ***Section 302b(a)(4)*** – Dental Officer Additional Special Pay (ASP) ***Section 302b(a)(5)*** – Dental Officers Board Certification Pay (BCP) ***Section 302c*** – Nonphysician Health Care Providers Board Certification Pay (BCP) ***Section 303(a)*** – Veterinary Corps Officer Special Pay ***Section 303(b)*** – Veterinary Corps Officer Board Certification Pay (BCP)	***Section 301b*** – Aviation Continuation Pay (ACP) ***Section 301d*** – Multi-year Retention Bonus for Medical Officers ***Section 301e*** – Multi-year Retention Bonus for Dental Officers ***Section 302(a)(2) and (3)*** – Medical Officer Variable Special Pay (VSP) ***Section 302(b)*** – Medical Officer Incentive Special Pay (ISP) ***Section 302a(b)*** – Optometrists Retention Special Pay ***Section 302d*** – Registered Nurse Accession Bonus ***Section 302(e)*** – Certified Registered Nurse Anesthetists (CRNA) Incentive Special Pay ***Section 302h*** – Dental Officer Accession Bonus ***Section 302i*** – Pharmacy Officer Retention Special Pay ***Section 302j*** – Pharmacy Officer Accession Bonus ***Section 312*** – Nuclear Officers Extending Period of Active Duty ***Section 312b*** – Nuclear Officer Accession Bonus ***Section 312c*** – Nuclear Career Annual Incentive Bonus ***Section 316*** – Foreign Language Proficiency Pay (FLPP) ***Section 318*** – Special Warfare Officer Continuation Pay ***Section 319*** – Surface Warfare Officer (SWO) Continuation Pay ***Section 320*** – Career Enlisted Flyer Incentive Pay (CEFIP) ***Section 321*** – Judge Advocate Continuation Pay (JACP)	***Section 308*** – Selective Reenlistment Bonus (SRB) ***Section 309*** – Enlistment Bonus (EB) ***Section 323*** – Critical Skills Retention Bonus (CSRB) ***Section 324*** – Accession Bonus for New Officers in Critical Skills (not yet used) ***Section 326*** – Incentive Bonus for Conversion to Military Occupational Specialty to Ease Personnel Shortage

	Discretion		
	None (Entitlement)	**Limited**	**Greater**
Duty Differential	***Section 301(a)(1)*** – Flying Duty, Crew Members ***Section 301(a)(2)*** – Flying Duty, Non Crew Members ***Section 301(a)(3)*** – Parachute Duty Pay ***Section 301(a)(4)*** – Demolition Duty Pay ***Section 301(a)(5)*** – Pressure Chamber Duty Pay ***Section 301(a)(6)*** – Acceleration and Deceleration Duty Pay ***Section 301(a)(7)*** – Thermal Stress Duty Pay ***Section 301(a)(8)*** – Flight Deck Duty Pay ***Section 301(a)(9)*** – Toxic Pesticides/ Dangerous Organisms Personal Exposure Pay ***Section 301(a)(10)*** – Toxic Fuel/ Propellants and Chemical Munitions Exposure Duty Pay ***Section 301(a)(11)*** – Visit, Board, Search and Seizure (VBSS) – Maritime Interdiction Operations ***Section 301(a)(12)*** – Duty Involving Ski-Equipped Aircraft on Antarctica or the Arctic Icepack (AirNG only) ***Section 304*** – Diving Duty Pay ***Section 305b*** – Service as Member of Weapons for Mass Destruction Civil Support Team ***Section 310*** – Hostile Fire/Imminent Danger Pay		***Section 306*** – Officers Holding Positions of Unusual Responsibility ***Section 307*** – Special Duty Assignment Pay for Enlisted Members
Assignment/ Location	***Section 301c*** – Submarine Duty Incentive Pay (SUBPAY)	***Section 305a*** – Career Sea Pay (CSP)	***Section 305*** – Hardship Duty Pay ***Section 307a*** – Assignment Incentive Pay (AIP) ***Section 314*** – Overseas Tour Extension Incentive Pay (OTEIP)

Proliferation of Pays

The current S&I pay system has over 60 different pays. Such a sprawling and complicated system can be difficult to effectively manage and monitor.

Limited Flexibility

As discussed above, some S&I pays are quite flexible and can be used to solve acute or chronic staffing problems. For example, the services can use budgetary resources allocated for the SRB program to improve retention in any enlisted occupation. The services also have some discretion in the allocation of AIP, which can be used to attract qualified members to particular duty stations, or to compensate them for the hazards or burdens of a particular assignment or deployment.

However, other S&I pays are quite specialized, with little discretion or flexibility in how the pays are allocated. In contrast to enlisted SRB, for example, officer retention is encouraged through a series of occupation-specific pays in specific career fields, and the services have no flexibility to shift these pays among officer occupational specialties. Moreover, in many cases the precise amounts of the pay are fixed in law. Other examples of these narrowly defined pays include Aviation Career Incentive Pay (ACIP), Aviation Continuation Pay, Surface Warfare Officer Continuation Pay, and numerous precisely defined special pays for the retention of medical and other health professionals and for the maintenance of certifications. While these pays make some contribution to force readiness and capability, unlike the SRB, the budget for these pays is subject neither to continuous scrutiny nor analysis of competing staffing needs.

In some instances, these less discretionary pays may offer stability in areas where wages in the civilian labor market are considered to differ permanently from the corresponding military occupation. This includes areas such as medical pays and additional compensation for aviators, which together account for about one third of the total S&I budget. However, external market conditions change even for professions that are traditionally very lucrative—such as physicians and commercial airline pilots.[50]

Lack of Incentives to Motivate Performance

A third weakness in the current S&I pay system is the absence of incentives to motivate productivity or performance. The military compensation system should be designed to attract, retain, and motivate qualified personnel. The system should encourage effort and performance by offering financial compensation to reinforce the intrinsic rewards associated with top performance. While a system without explicit performance rewards will have top performers, individuals are more likely to invest additional effort and sacrifice to perform at the highest levels if there is a financial payoff.

In the current personnel and compensation system, performance is recognized through the promotion system. The financial reward for performance is the higher pay and allowances associated with a higher pay grade. Most S&I pays, in contrast, are paid either as flat amounts or amounts that vary with time in service. (Exceptions include Career Sea Pay, which varies by pay grade.)[51] Because of this, they do not reinforce the financial reward for performance embedded in the promotion system. Moreover, when members enjoy significant amounts of this type of pay, the financial incentive provided by promotion may seem trivial. In some instances, S&I pays may even work against rewarding performance.[52]

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50. In the case of aviation pays, the rationale for ACIP has always been ambiguous. It is designed as an incentive to pursue a full career as a military aviator. This would logically suggest that it is used to induce qualified personnel to pursue pilot and navigator training and as an incentive for aviators to remain in the military rather than pursue lucrative civilian alternatives. There is little evidence, however, that attracting a sufficient number of personnel has ever been an issue for the military. Moreover, while career retention has been an important concern for pilots—particularly those trained by the services to fly multi-engine jets that are directly comparable to commercial aircraft—it is not clear that this rationale has ever applied to navigators or helicopter pilots (who are also eligible for ACIP).
51. The Army also varies SRB by pay grade, but with the intention of targeting specific personnel shortages rather than rewarding performance. Additionally, there is an implicit promotion reward built into the SRB system because the bonus amount is a function of basic pay, which increases with pay grade.
52 Some special pays are discontinued abruptly upon promotion. Officers lose career retention pays such as ACIP, for example, when promoted to flag rank. The problem

Alternatives to the Current System

There are at least five major areas in which the current system of S&I pays might be improved. These areas include the following:

- Consolidate the many existing pays into broad authorities in order to simplify the system and increase flexibility.
- Increase the overall share of S&I pays within the military compensation package.
- Modify pay-setting mechanisms to allow S&I pays to reward performance.
- Establish general principles for setting pay levels.
- Develop general guidelines for adjusting the overall S&I budget.

Consolidate Pays

Rather than maintain an extensive number of narrowly applied S&I pays, an alternative approach would be to establish broad authority for a few distinct types of pay. The relatively new authority for the Critical Skills Retention Bonus is one example of this more flexible pay type; SRB is another.

The benefit of such consolidation, in addition to the advantages of a simpler system, is that the consolidated pays could offer the services greater flexibility to address priority staffing concerns. Statutory entitlements for specified amounts of pay, regardless of staffing needs, would be eliminated, allowing pays to be allocated based on staffing requirements, not on longstanding statutory earmarks that may target funding to lower priority areas. Instead, the services would have authority to allocate retention and hazardous duty pays where and in the amounts needed, within authorized ranges.

with this discontinuation policy is not that special pays should be continued when no longer needed, or that some in higher ranks may receive less compensation than some in lower ranks. Rather, the overall compensation architecture should include the notion that performance and promotion will be rewarded and thereby encouraged through financial incentives.

Appendix D presents three examples of possible S&I pay consolidation schemes.

Increase Relative Share of S&I Pay in Total Compensation

The ability of the military compensation system to effectively and efficiently attract, retain, and motivate qualified individuals might also be improved by increasing the relative share of S&I pays in total compensation.

What is the "appropriate" share of compensation that should be devoted to discretionary pays? S&I pays currently make up about 3 percent of total compensation and 5 percent of cash compensation for the average member, although shares for individuals in certain occupations are substantially higher. In comparison, the average civilian employer in goods-producing industries with 500 or more workers paid about 6.6 percent of total cash compensation in the form of supplemental pay (including shift differentials, overtime, and bonuses) in September 2004. This comparison may be misleading, however, since private employers are not required to use the same wage or salary table for all of their employees. Therefore, one of the most important rationales for S&I pays in the military—adjusting for occupational differentials—is not relevant to the private sector.

Comparability with the private sector is not a sufficient rationale for increasing the share of S&I pays in total compensation. Rather, increasing the relative share of S&I pays would enhance the discretion afforded to the Secretary of Defense and the services in targeting compensation where it is most needed.

… increasing the relative share of S&I pays would enhance the discretion … in targeting compensation where it is most needed.

Increasing the proportion of compensation that could be targeted directly at recruiting, retention, and other staffing problems would increase the efficiency of the overall compensation system. In other words, the services would have the flexibility and opportunity to improve staffing and readiness without increasing the overall compensation budget.

Ensure S&I Pays are Consistent with Rewarding Performance

S&I pays, wherever possible, should support and reward performance. At a minimum, they should not subvert the relationship between performance and financial reward that exists in the pay grade and promotion system. One way to accomplish this goal is to make S&I pays a function of pay grade, when it would not conflict with other goals. This is not to suggest that it is intrinsically wrong for a member in a lower rank to receive greater compensation than a member in a higher rank. Rather, linking S&I pays to pay grades would reinforce the notion that there should be a positive and significant financial return for performance and promotion.

S&I pays, wherever possible, should support and reward performance.

In addition to reinforcing performance through linkages with pay grade, some S&I pays could recognize and reward performance more directly. Special Duty Assignment Pay (SDAP), for example, could be a potential candidate for more directly linking compensation to performance. Members assigned to recruiting duty currently receive SDAP, typically a flat monthly rate unrelated to the recruiter's productivity. Under an alternative payment scheme, the services could set apprentice, journeyman, and master levels of SDAP. Qualification for each level could be based on performance criteria that would include meeting recruiting goals. Other special pays also could be constructed to directly reward either performance or levels of proficiency.

Establish Principles for Setting S&I Pay Levels

There are a number of mechanisms currently used to set or adjust S&I pay levels including:

- ***Legislation*** for those instances in which S&I pay amounts are set in law and must be adjusted by Congress. This method offers the least discretion to the services and the highest level of predictability to members.
- ***Discretion of the Office of the Secretary of Defense*** for S&I pay levels that Congress has authorized OSD to set and adjust.

- ***Discretion of the service*** where individual services are authorized to determine levels as needed.
- ***Market mechanisms*** where a device such as an auction is used to set the pay level at a market-clearing price. This method offers the least amount of predictability to members and is potentially the most volatile.

Determining the best adjustment mechanism will depend on the purpose of a particular S&I pay. Pays with less discretion offer more predictability and may be important incentives for influencing longer-term career decisions. Likewise, pay levels that are relatively fixed may be important for compensating members in situations over which they have little or no control (e.g., deployment to a combat situation). Greater flexibility and discretion, in contrast, are more important features when the pay is designed to react to fairly rapid changes in labor supply and demand.

Develop Guidelines for Adjusting S&I Budgets

A potential drawback of consolidating S&I pays into broad authorities is that the services will have to justify expenditures for consolidated S&I pay budgets. Today, many pay levels and eligibility requirements are written into law, and the services simply identify the number of members eligible and calculate the budget cost for providing these statutorily-mandated pays. S&I budgets that are more discretionary and are consolidated into a smaller number of larger budget categories may be targets for arbitrary budget reductions that are difficult to defend against. Hence, to realize the potential benefits of consolidation, stakeholders in both the executive and legislative branches of government should agree to resist across-the-board budget reductions in this area.

One way to develop guidelines for the general size of the S&I budget might be to fix S&I pays as a set percentage of total cash compensation. Once the mix of RMC and S&I pays is about "right," future increases in the aggregate S&I budget could be tied to increases in basic pay, thereby keeping the mix of RMC and S&I pays consistent over time.

One potential problem with this solution is that the services would not necessarily want to be tied to the same ratio of S&I pays to total compensation over the long term. Changes in external economic conditions or shifting labor markets may make it relatively easier or more difficult to recruit and retain personnel. In those instances, the S&I budget might need to fall or rise in proportion to the size of the total cash compensation budget.

Recommendations

S&I pays should be consolidated into a smaller number of categories. Each category should be broadly descriptive of the functional purpose of the pay.

Within each broad category, the budget should be fungible across areas that are included in that category. Within legislatively established parameters, the Secretary of Defense and (through delegated authority) the secretaries of the military departments should have the authority to determine criteria and payment amounts. The criteria for payment of special and incentive pays would be grounded in force management purposes, and not in the individual circumstances of members, such as dependency status.

Increased flexibility to respond to retention and recruiting concerns in wartime conditions is especially important. Within a broad category that includes hardship, hazardous duty, or imminent danger (or the equivalent), the Secretary of Defense should have the authority and discretion to provide monthly payments to deployed members up to a maximum ceiling specified in law. The Secretary should have the discretion to determine whether any payments are to be made; target those payments by occupation, unit, geography, or other criteria; and determine the amount of the payment. The legislated maximum for such payments should be set reasonably high—at least $10,000 per month. This is not because payments in that amount are likely to be necessary, but rather to provide the Secretary with the flexibility to meet all contingencies.[53]

Finally, given the recommended changes in the structure and application of S&I pays, the share of S&I pays within the total compensation budget should be increased. Once such an increase has been achieved, the services should evaluate the effectiveness of S&I pays in achieving force staffing goals to determine whether the increase should be sustained.

53. As example of how this flexibility could be used during the current war, the Secretary of Defense could determine that combat pay for ground forces serving in Iraq and Afghanistan would be higher than combat pay for those serving in, for example, Qatar and Kuwait. Further, the Secretary could determine that those serving on their second or third deployment in Iraq and Afghanistan would receive higher combat pay than those serving on their first deployment.

The Military Health Benefit

The health benefit is arguably the single most important noncash benefit provided to employees by their employer, including in the Department of Defense. Through TRICARE, DOD provides a comprehensive health benefit to active duty and retired service members and their dependents.[54] TRICARE compares favorably with civilian health plans on many measures and military members consider it an important and valuable part of their compensation package. It serves to increase the attractiveness of military service and reflects support and appreciation for service to the nation. Moreover, its comprehensive nature is particularly valuable to families when service members are deployed, mitigating stress on the family from that source.

... DOD provides a comprehensive health benefit ... [that is] an important and valuable part of [the] compensation package.

In recent years, military health care costs have risen significantly, though generally in line with cost increases experienced in the private sector. Yet, newly added benefits that target retired service members and reservists could substantially expand the number of participants in the military health care system and push the Department's costs to a much higher level—outpacing private sector cost increases and becoming a significant factor in personnel budgeting and management. Also important is the fact that the health benefit offered to military retirees has shortcomings as a compensation incentive—it is a deferred, in-kind

54. Military health care services apply, in somewhat different ways, to four communities. The first is members of the active duty military, who receive all health care without charge, and their families. The second is retirees under the age of 65 and their dependents. The third is retirees over the age of 65 and their dependents. The last group includes members of the reserve components, who have different options to participate in the military health care system depending on whether they are on active or reserve duty. This discussion of the military health care benefit differentiates between these communities in describing the various alternatives available to servicemen and women and their families.

benefit that is not likely to be valued highly by junior and midcareer active duty members, but is costly to the Department. Moreover, for retirees under the age of 65, the military health benefit tends to "crowd out" civilian health benefits. Addressing these factors can help to manage the future costs of the military health care program.

The Current System

The military health benefit grew out of a policy of granting dependents and retirees eligibility for care in military treatment facilities when they had space available after caring for active duty members. With the establishment of an employer-based health system in the United States, DOD created a defined health benefit for beneficiaries under the age of 65 and CHAMPUS was established to finance care provided in the civilian sector.[55] In the mid-1990s, TRICARE replaced CHAMPUS. At the same time, private sector health care reforms were adopted, which included adding a Health Maintenance Organization (HMO) option (Prime) and a Preferred Provider Organization option (Extra) to the TRICARE Standard fee-for-service option, partnering with civilian health care companies, and improving access to care.

… for retirees under the age of 65, the military health benefit tends to "crowd out" civilian health benefits.

Table 10 provides an overview of beneficiary health benefits and contributions in the three TRICARE options. The Extra and Standard options operate as a single option because beneficiaries may obtain services through both and the annual deductibles and out-of-pocket limits apply to costs incurred in both. Beneficiaries pay either nothing or modest co-payments if they enroll in TRICARE Prime, whereas they pay a modest deductible and anywhere from 15–25 percent of allowed charges in Extra and Standard. These out-of-pocket costs are capped at $1,000 per active duty family and $3,000 per retired family. All three TRICARE options cover a comprehensive list of services, generally applying the same (or similar) cost sharing to all services.

55. Military beneficiaries age 65 or older were included in Medicare when the program was established in 1965.

Table 10. TRICARE Benefit Summary for Beneficiaries under Age 65

	TRICARE Prime	TRICARE Extra	TRICARE Standard
Eligible beneficiary groups	Active duty,[a] active duty dependents, <65 retirees/dependents	Active duty dependents, <65 retirees/dependents	Active duty dependents, <65 retirees/dependents, reservists/dependents
Enrollment required	Yes, default option for dependents of junior enlisted active duty Others must enroll	Dependents of junior enlisted must enroll; others are enrolled in Extra and Standard unless they chose to enroll in Prime	
Premium contribution	None for active duty or their dependents $460/yr for retirees' family coverage	None	None for active duty dependents and retiree/dependents 28% of actuarial costs for reservists/ dependents[b]
Cost sharing for military treatment facility care	Same for all plans: No cost other than a per day cost for hospital care		
Cost sharing for civilian care			
Annual family deductible	$0	Combined deductible for Extra and Standard: $300	
Cost sharing for outpatient care	Active duty and their dependents: $0 Others: $12/visit	Active duty dependents: 15% Others: 20%	Active duty dependents: 20% Others: 25%
Cost sharing for inpatient care	Active duty and their dependents: $0 Others: $11/day[c]	Active duty dependents: $14/day[c] Others: 20%[d]	Active duty dependents: $14/day[c] Others: 20%[d]
Out-of-pocket maximum (family)	Active duty: $1,000 Others: $3,000	Active duty: $1,000 Others: $3,000	Active duty: $1,000 Others: $3,000

a. Active duty personnel are automatically enrolled in Prime, through which all their care is provided without charge.
b. The monthly contribution for calendar year 2005 was $73 for single coverage and $233 for family coverage.
c. Higher for mental health care.
d. Cost sharing for hospital services, but not professional services, is capped at $250 per day.

More recently several new programs have been added to the military health benefit. In 2001, TRICARE for Life extended TRICARE as a lifetime benefit for those who make the military a career. In addition, in 2005, TRICARE Reserve Select expanded the opportunity for reservists to participate in the military health care program. Reservists and their dependents have been eligible for TRICARE when the reserve member is called to active duty. Now, those reservists willing to pay a premium contribution can enroll in TRICARE at other times as well, based on their mobilization experience.

Comparison with Civilian Employer Benefits

How TRICARE benefits compare with those of civilian employers has a significant impact on TRICARE participation rates, particularly for retirees under the age of 65. For beneficiaries in this age group who are eligible for civilian employer benefits, the major advantage to TRICARE is its premium contribution relative to the premium contribution required in their employer-provided plans. The average annual premium contribution for family coverage in employer-provided plans in the civilian sector was $2,713 in 2005, and there was little difference between HMO and non-HMO plans.[56] TRICARE, in contrast, requires no premium contribution, unless a retiree elects to enroll in Prime, the HMO option. But even in that case, TRICARE Prime family coverage for retirees costs only $460 in 2005—the same amount as when TRICARE was first implemented in 1995.

Out-of-pocket costs for care from civilian providers are similar in TRICARE and other employer plans. For example, the typical HMO plan charges a $15 visit fee whereas TRICARE Prime has no fee for active duty dependents and a $12 fee for retirees and their dependents. Most non-HMO employer plans also rely on a visit fee—typically $20 for a provider under contract to the plan—which is likely to be just below the 15–20 percent cost sharing fee for beneficiaries in TRICARE Extra. TRICARE only charges for care delivered by civilian providers, care received in military treatment facilities is free of charge.

56. Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits: 2005 Annual Survey* (2005).

Prescription drugs have accounted for a growing share of costs in all health plans. Employer plans often charge more than twice what TRICARE does for prescription drugs. TRICARE charges $3 for a generic drug and $9 for a brand-name drug, whereas employer plans typically charge $10 and $20, respectively. Also, as with other health care entitlements, many military beneficiaries have access to free prescriptions in the military treatment facilities.

> … DOD has experienced unrelenting, significant growth in the costs of its health benefits … [and] new benefits are shifting costs to a higher level.

In recent years, civilian employers have resorted to benefit cuts to control costs, shifting some health care costs to their employees in the hope that higher cost sharing will induce lower spending.[57] In contrast, DOD has expanded its health benefits, eliminating almost all cost sharing for active duty personnel and their family members if they are enrolled in Prime, and adding TRICARE for Life and TRICARE Reserve Select.

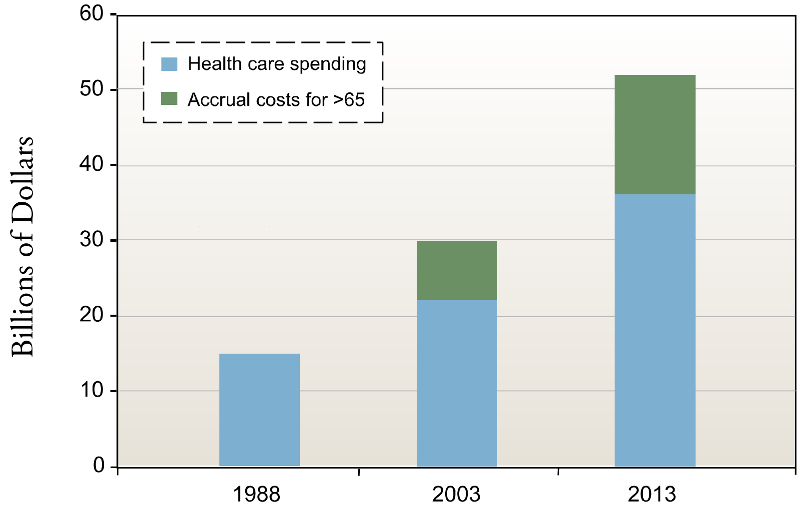
The Case for Change

Like all public and private payers, DOD has experienced unrelenting, significant growth in the costs of its health benefits. As figure 13 illustrates, DOD's inflation-adjusted health care costs increased about 4 percent per year from 1988 to 2003 (excluding costs for TRICARE for Life—the green sections of the bars). This increase is consistent with the real rate of increase experienced in the civilian sector during the same 15-year period—a rate of increase in health care costs that has been sustained for the past five decades.[58]

Therefore, apart from the new benefits for older retirees and reservists, DOD's health system is on the same cost path as the U.S. health care system overall. However, the new benefits are shifting costs to a higher level. By 2013, the Congressional Budget Office estimates that

57. Economic research has consistently shown that increases in health costs are offset by lower wages in the civilian labor market, which suggests that much of the steady increase in employer health costs has shifted to workers.
58. Congressional Budget Office, *Growth in Medical Spending by the Department of Defense* (Washington, D.C.: 2003); and D.M. Cutler, M. McClellan, et al., "What Has Increased Medical-Care Spending Brought?" *American Economic Review* Vol. 88, No. 2 (1998): 132–136.

TRICARE for Life will increase health care costs by 44 percent; the add-on for the new reserve benefit will depend on enrollment levels, which will not be known for a few years.[59]



Source: Congressional Budget Office (2003).

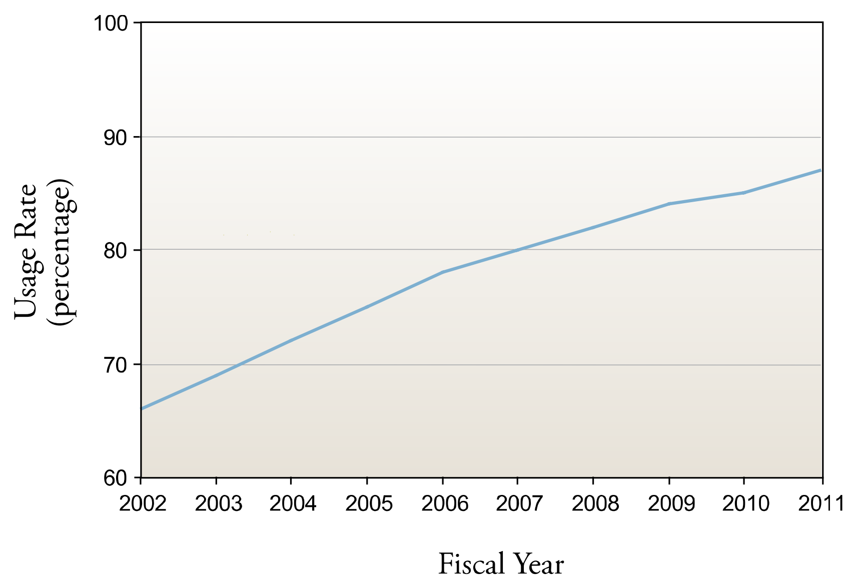
Figure 13. **Military Health Care Costs, 1988, 2003 and 2013 (inflation adjusted)**

Military health care costs were $36 billion in fiscal year 2005. The Office of the Assistant Secretary of Defense for Health Affairs estimates that retirees and their dependents will account for 70 percent of DOD health care costs by 2010. Undoubtedly as a result of the "premium gap" described above, relatively few military retirees employed in the private sector are covered by employer health plans, choosing TRICARE instead. Current DOD surveys do not provide data on estimates of how many beneficiaries are foregoing employer insurance for which they are eligible. But we can infer that this behavior is probably widespread by

59. Typically, enrollment in new health plans increases over time. People tend to stay with a health plan until they are forced to make a change (e.g., by taking a new job) and even those who are dissatisfied with their current plan often hesitate to switch. This was the case for TRICARE Prime when it was first introduced 10 years ago. Similarly, the sizeable premium contribution required for TRICARE Reserve Select can be expected to keep enrollment rates in this program below the participation rates of retirees in the other TRICARE plans.

looking at the trends in health care choices of military retirees who are under age 65 and working full-time.

TRICARE usage by the more than 3 million eligible retirees under age 65 and their dependents grew from 66 percent in 2002 to 75 percent in 2005. In 2002, 72 percent of these retirees worked for employers providing health insurance. If there are no changes in TRICARE premiums or cost sharing for retirees under age 65, usage rates are predicted to rise to almost 90 percent by fiscal year 2011, as shown in figure 14. Among those with access to an employer health plan, 35 percent paid to enroll in TRICARE Prime and 62 percent sought care through some TRICARE option.



Source*:* Office of the Assistant Secretary of Defense for Health Affairs.

Figure 14. Trend in TRICARE Use Rates for Retirees under Age 65

When a retiree with dependents gives up employer insurance and uses TRICARE, the civilian employer saves about $7,000 a year and the employee saves about $2,500 (at current premium rates). DOD assumes both costs. Thus, much of the DOD "benefit" accrues to the employer instead of the retiree. If current trends continue, DOD risks becoming the primary insurer for all of its retirees, picking up an even higher share of costs than would otherwise be covered by employer health plans.

How premium contributions compare to the total cost of health care benefits provides another interesting cost comparison between the military and civilian sector, and offers further support for the trend in rising TRICARE participation. In 1996, the $460 annual TRICARE premium represented 11 percent of the total cost of the health care benefit. By 2005, that $460 premium had dropped to only 4 percent of total costs, as shown in table 11.[60] In comparison, premiums for employer-provided plans in the civilian sector (which averaged $1,464) accounted for 28 percent of the total benefit cost in 1996. By 2005, civilian sector premiums had nearly doubled to $2,713; and premiums as a percentage of total cost had fallen only slightly to 25 percent.

Table 11. Comparison of Premium and Employer Costs Between TRICARE and Private Sector Health Plans, 1996 and 2005

	1996		2005	
Cost for a Family of 3	TRICARE Prime NADD<65	Private Sector	TRICARE Prime NADD<65	Private Sector
Enrollee Premium	$460	$1,464	$460	$2,713
Government/ Employer Cost	$3,727	$3,765	$9,819	$8,167
Total	$4,187	$5,229	$10,279	$10,880
Enrollee Share of Total	11%	28%	4%	25%
Government Share of Total	89%	72%	96%	75%

Note: TRICARE premiums are for retirees under age 65 with family coverage.
Source: Private sector data from Kaiser Family Foundation annual surveys of employer health benefits, 1999 and 2005.

60. Total cost is determined by adding the beneficiary's annual premium to the employer's annual cost to provide the benefit.

The relative cost of health insurance to the retired TRICARE beneficiary has fallen by more than 50 percent since 1996, while the relative cost for a comparable civilian beneficiary has not changed significantly. The cost to the government to provide the TRICARE retiree health benefit has more than doubled since the inception of the TRICARE system, rising from $3,727 in 1996 to $9,819 in 2005. The cost to the civilian employer to provide the same benefit also doubled, rising from $5,229 to $10,880 over the same period. However, if TRICARE premiums are not increased, the premium gap between TRICARE and employer-provided health insurance in the private sector will continue to grow, drawing more and more retirees toward TRICARE.

Alternatives to the Current System

The Department of Defense could take a number of actions that would result in a more cost-effective health benefit. These include introducing cost sharing for military treatment facility services that is equivalent to cost sharing for civilian provider services; increasing premium contributions for retirees under age 65; and financing health care for retirees under age 65 through an accrual fund, as is now done for retirees over age 65.

Cost Sharing

Cost share is the out-of-pocket expense borne by the beneficiary for a covered medical service or product based on the allowable charge. The out-of-pocket expenses for TRICARE Standard or Extra are 25 and 20 percent, respectively, of the TRICARE allowable charge for care from a civilian provider (for nonactive duty beneficiaries and their dependents). There is no cost share for care received at military treatment facilities, which provide about one half of the health care used by TRICARE beneficiaries. Research has shown that cost sharing lowers health care utilization and costs, although the responsiveness of health care demand to changes in cost is less than for many other consumer goods and services.[61] There is no evidence that health is adversely affected by cost sharing, except possibly for poor, less well-educated people.

Cost sharing leads people to decrease their use of both appropriate and inappropriate care.[62] This is significant because approximately one half of the health care delivered in the United States is inappropriate. Medicare and other major payers are exploring new mechanisms for targeting health care dollars on a more appropriate mix of services. These findings with respect to cost sharing have led to widespread reliance on cost sharing to control costs in civilian health plans, including those that also emphasize health care management.

Research has shown that people are also highly responsive to the price they pay for prescriptions.[63] Updating prescription co-payments to make them more comparable to employer-plan co-pays would likely lead to noticeable cost savings in TRICARE, provided that the co-payments applied to prescriptions filled by the military treatment facilities, not just civilian pharmacies.

Co-payments are very cost effective, and should be seriously considered. Premiums and cost-sharing provisions, once adjusted, should grow at the same rate as the annual cost-of-living adjustment to the military retirement annuity.

61. The effects of cost sharing on utilization of health care, costs, and health outcomes were assessed in the RAND Health Insurance Experiment 25 years ago; subsequent research has confirmed the basic findings of this major study.
62. E.A. McGlynn, S.M. Asch et al., "The Quality of Health Care Delivered to Adults in the United States," *New England Journal of Medicine* Vol. 348, No. 26 (2003): 2635–2645. The study evaluated the quality of care for a random sample of adults living in 12 metropolitan areas. It measured performance on 439 indicators of quality of care for 30 acute and chronic conditions as well as preventive care. Overall, participants received 54.9 percent (95 percent confidence interval, 54.3 to 55.5 percent) of recommended care.
63. Increasing the price from $5 to $14 for a generic drug and from $10 to $20 for a brand-name drug reduced spending by 33 percent. The largest decreases were for drugs that have close over-the-counter substitutes; higher prices caused smaller reductions in the use of drugs that do not have substitutes and are important in controlling chronic illness. G.F. Joyce, J.J. Escarce et al., "Employer Drug Benefit Plans and Spending on Prescription Drugs," *Journal of the American Medical Association* Vol. 288, No. 14 (2002) 1733–1739; and D.P. Goldman, G.F. Joyce et al., "Pharmacy Benefits and the Use of Drugs by the Chronically Ill," *Journal of the American Medical Association* Vol. 291, No. 19 (2004): 2344–2350.

Increasing Premium Contributions

Eliminating or reducing the TRICARE premium gap for pre-age 65 retirees and their dependents would induce more retirees to participate in their employer plans and slow the trend toward increasing TRICARE usage rates.[64] If the annual TRICARE premium was raised to a level comparable to the premium that employees pay in typical civilian employer health plans, the premium would increase from its current level of $460 to about $2,500 for TRICARE Prime. If the premium were adjusted to a level comparable to its share of total cost in 1996, the annual Prime premium costs would rise to about $1,100. Such increases could significantly reduce the cost growth of the pre-age 65 TRICARE program for retirees.

Other innovative ways to slow cost growth might also be explored. For example, providing a stipend—perhaps as a contribution to a health savings account—to those who choose not to participate in TRICARE may be one avenue of future exploration.

Accrual Fund

Finally, health care for retirees under age 65 could be financed through an accrual account, as is now done for TRICARE for Life and retirement pay. Retiree health care is an important component of military compensation and of personnel costs. The cost of these deferred benefits should be visible to decision makers so that they can make the appropriate trade-offs when choosing active duty personnel strength levels and the size of the career force. Moreover, programs which may reduce health care costs for retirees under age 65 should be reflected in the budget for the current force, providing an incentive to implement such programs.

Accrual costs associated with the health benefit liability for retirees under age 65 should be explicitly included in the DOD budget. Currently, the DOD budget includes actual health care outlays for the existing pre-age 65 retirees. These outlay costs are largely "sunk" costs, unaffected by

64. See Larry Goldberg and Dennis Kimko, *Demand for Health Insurance by Retired DoD Beneficiaries*. Institute for Defense Analyses (paper presented at the Western Economic Association Meetings, June, 2005).

current force staffing decisions. Instead, these outlay costs should be replaced by the accrual costs associated with providing health care in the future to members of the current active duty force once they retire. In the year when this accounting change is made, however, it is important that an appropriate one-time adjustment be made to the DOD budget "top line" to offset the impact that the accounting change may have. The accounting change should benefit future resource allocation decisions, but it should not have real effects in the year of the change.[65] Currently, health care for pre-age 65 retirees and dependents is the only such cost not captured as an accrual in the DOD budget.

It may be possible to better leverage civilian sector benefits by inducing retirees to take full advantage of employer benefits for which they are eligible …

Recommendations

By most measures, the TRICARE benefit is more attractive than the benefit offered by most civilian employers. As a result, increasing numbers of retirees appear to be relying on TRICARE instead of their employers' plans. It may be possible to better leverage civilian sector benefits by inducing retirees to take full advantage of employer benefits for which they are eligible by making the TRICARE costs to the retiree more comparable to the private sector health care costs to civilian employees. Some modest changes in cost sharing should also be adopted. Specifically, the following changes to the DOD health benefit are recommended by the Committee:

- Increase the premium and cost-sharing provisions for retirees under age 65 who participate in TRICARE to levels that are more

65. To clarify, consider this simple example. If outlay costs for pre-age 65 retirees were $100, but accrual costs would be $120, then changing from outlays to accruals would put immediate pressure on the DOD budget. In particular, with a fixed "top line" budget, DOD would have to find $20 in real reductions—reductions in tanks and aircraft procurement, for example, to pay for the accounting change. Instead, at the time of the accounting change, the "top line" budget should be modified to exactly offset the effect. In this example, the budget would be increased by $20. Future changes in the accrual costs would, of course, have real effects. There is precedent for this approach, which was used when DOD changed from outlays to accruals for other personnel-related costs.

comparable to premiums and cost sharing in civilian employer plans.[66]

- Once TRICARE premium and cost-sharing provisions (i.e., deductibles and co-payments) are adjusted, increase these payments at the same rate as the annual cost-of-living adjustment to the military retirement annuity.

- Finance health care for retirees under age 65 through an accrual fund, as is now done for retirees over age 65. In the first year of this change, adjust the top-line of the DOD budget to offset any effects of the accounting change.

66. Total out-of-pocket expenses for the beneficiary typically refer to the premium the beneficiary must pay, and the cost-sharing provisions of the plan that are in the form of deductibles, co-payments, or co-insurance.

Quality of Life

It is often said that “the military recruits the member but retains the family.” To that end, the services supplement military pay and health benefits with a range of quality-of-life programs designed to help members and their families, as well as single members, adjust to the sacrifices, challenges, and unique circumstances of life in the military. Today, over 60 percent of U.S. servicemen and women have family responsibilities. The quality of military family life can be a critical consideration for members facing reenlistment decisions, and can affect military-wide retention and readiness goals.

The quality of military family life can be a critical consideration for members facing reenlistment decisions

Quality-of-life programs, or installation-based benefits, typically offer nonmonetary incentives to mitigate the hardships sometimes associated with frequent moves, deployments, and the remote locations of many assignments. The services offer a broad array of quality-of-life services, ranging from commissaries and fitness centers that supplement sometimes limited local shopping and recreational options, to assistance with spousal employment and dependent education.

Quality-of-life programs generally provide members and their families with in-kind—rather than cash—benefits. Yet their cost to the military is not insignificant. The Congressional Budget Office estimates that quality-of-life benefits comprise over 12 percent of each service members’ annual compensation costs.[67] However, such in-kind benefits are generally less efficient than cash compensation, and while military families both expect and appreciate quality-of-life services, they often do not perceive those services as part of the military compensation package.

67. Congressional Budget Office, *Military Compensation: Balancing Cash and Non-Cash Benefits* (Washington, D.C., January 16, 2004), 2.

Quality-of-life programs play an important role for members and their families, especially during periods of high operational tempo. However, it is important that investments in quality-of-life programs be made prudently. This means that the Department must choose not only the right level of total compensation, but the right mix of cash and in-kind benefits. Inefficient or wasteful spending on quality-of-life programs comes at the expense of the service member and the member's family, in the sense that they receive less than the maximum benefits for the resources expended.[68]

The Current System

Early quality-of-life programs were created to provide members and their families with necessary services that were not easily accessible at remote military bases or deployment sites located far from civilian communities. The first commissaries and exchanges, for example, which opened in 1775 and 1895, respectively, were established at military facilities which had little or no civilian shopping alternatives available. Recreational facilities were developed to provide locations for leisure activities, as well as places that foster a sense of camaraderie within the local military community.

Over the years other quality-of-life and nonmonetary incentives have been added as a direct response to the needs of military members and their families, with each service providing a range of benefits. To some, these services have become part of the very ethos of military life, transcending the monetary value of the actual benefit. To military leadership, they demonstrate their overall commitment to the quality of life of military families.

The Department reaffirmed its commitment to quality-of-life issues in a 2002 "social compact" that recognized the unique aspects of military life and emphasized the need to help military families lessen the hardships and challenges of the military lifestyle. The compact lays out a strategy for improvements in several areas, including health care, housing, education, and work life stress.

68. See staff paper *Impact of Cash versus In-Kind Benefits on Recruiting and Retention* in Appendix A.

A major justification for programs such as community support remains the remoteness and large size of some military installations. In addition to being a workplace for military personnel, they are communities for military members and their families. Even when installations are not remotely located, they may be so large that the military community's demand for services could potentially overwhelm local community resources. By helping develop a sense of camaraderie, quality-of-life services also contribute to unit cohesion, which is important to readiness and retention.

Quality-of-life services can be divided into two basic categories: (1) community and family support programs and (2) morale, welfare, and recreation (MWR) programs (table 12). Examples of community and family support programs include child care, financial counseling, individual counseling, deployment services, alcohol programs, or housing office assistance. MWR programs include commissaries, fitness centers, libraries, youth activities, animal care clinics, and auto rentals.[69] While most family support programs are primarily financed through federal appropriations, MWR programs are funded through a combination of appropriations, nonappropriated funds, and user fees, with appropriated dollars focused on those activities considered most essential to meeting military objectives.

There are three areas of quality-of-life concerns that are especially important to military families and to the services' recruitment, retention, and readiness goals: spousal employment, dependent education, and assignment location and duration. The third concern, assignments, is important in part because it directly affects the first two. Whether a military family can satisfactorily resolve these issues is critical to the member's decision to continue in the military or to leave. In fact, in 2004 the 1st Quadrennial Quality of Life Review identified spousal employment and dependent education as two top quality-of-life concerns.[70]

69. More detailed information about specific quality-of-life programs and community resources is available at each service's family support website.
70. U.S. Department of Defense, *Report of the 1st Quadrennial Review of Quality of Life* (Washington, D.C.: May 2004).

Table 12. General Personnel Support Programs Available for Military Members and Their Families

Community and Family Support Programs	Morale, Welfare, and Recreation Programs
Alcohol/drug programs	7-Day stores/shopettes
Chaplain services	Animal care clinics
Child care	Arts and crafts centers
Crisis referral services	Auto hobby shops
Family support centers	Auto/truck rentals
Financial counseling	Bowling
Housing office services	Cabins, cottages, and cabanas
Individual counseling	Clubs
Information and referral services	Commissaries
Legal assistance	Fitness centers
Marriage and family counseling	Golf courses
Parent education	Laundry/dry cleaning
Premarital assistance	Libraries
Rape counseling services	Main exchanges
Relocation assistance	Marinas
Services for military separation/deployment	Photo hobby shops
Services for special needs	Recreation gear shops
Single parent programs	Rentals/equipment
Spouse/child abuse services	Stables
Spouse employment services	Temporary lodging facilities
Stress management programs	Tours and tickets
Suicide prevention programs	Youth activities
Transition from military assistance	
Youth/adolescent programs	

Source: Buddin 1998.

Spouse Employment

Like their civilian counterparts, a large portion of military spouses work in the marketplace. And as in the civilian sector, the percentage of military spouses in the labor market has increased. However, military spouses are somewhat less likely to be employed, work fewer weeks per year when employed, and earn lower hourly wages compared to civilian spouses.[71] A significant part of this earnings differential results from the frequent moves necessitated by the military's rotation policies.[72] These regular relocations cause military spouses to seek employment in occupations with easy exit and reentry opportunities.[73] Spousal earnings may also be depressed because of limited employment options in some locations or because of restrictions on the transfer or eligibility of professional credentials (e.g., for teachers or nurses).

Today, more frequent and lengthier deployments further limit spouses' employment options. Spouses of deployed members face increased responsibilities in child rearing, home maintenance, and other areas, reducing flexibility and time available for employment. Even members who are not deployed may experience increased workload pressures if other elements of their units have deployed or if they themselves are training to deploy. These circumstances create the same sort of challenges that can impact their spouses' employment.

DOD and the services offer a range of employment services for military spouses, including many internet resources. DOD and the Department of Labor cosponsor an internet resource to provide employment information and opportunities for military spouses.[74] Troops-to-teachers, a program developed to help former military members become educators, has been expanded to include military spouses, who may now receive financial assistance for the costs of

71. James Hosek, Beth Asch et al., *Married to the Military: The Employment and Earnings of Military Wives Compared with Those of Civilian Wives*, MR-1565-OSD (Santa Monica, Calif.: RAND Corporation, 2002).
72. Deborah Payne, John Warner, and Roger Little, "Tied Migration and Returns to Human Capital: The Case of Military Wives," *Social Science Quarterly* Vol. 73, No. 2 (June 1992).
73. James Hosek, Beth Asch et al., *Married to the Military: The Employment and Earnings of Military Wives Compared with Those of Civilian Wives*.
74. See: http://www.milspouse.org.

examinations required for certification. Partnerships with corporations are designed to give spouses more transportable job skills. In addition, many military installations provide local employment programs for spouses of their own personnel, often offered through regional Chambers of Commerce or local military affairs committees.

Dependent Education

As personnel transfer to new assignments, their families usually move as well, forcing dependent children to transition to new schools. The Department estimates that in 2002 enlisted service members had nearly 1 million children.[75] Ensuring that military children receive a quality education and transition smoothly from school to school is a priority for military parents. Education is also a priority for DOD. Along with advocacy groups such as the Military Child Education Coalition, the Department is focusing considerable resources on programs that provide educational support to military dependents.

For military families overseas, Department of Defense Education Activity (DoDEA) schools provide high-quality educational opportunities. DOD Domestic Dependent Elementary and Secondary Schools (DDESS) serve military families at the few stateside locations with local school systems deemed to be substandard. Both DoDEA and DDESS schools are generally perceived to provide desirable, high-quality schooling to military dependents.

Most children of military personnel stationed in the United States, however, attend local civilian schools. Because control of school policies rests with local school districts, graduation and other educational requirements can vary significantly from one system to the next, making transfers extremely challenging for the military dependent student. Eligibility for special or advanced programs, for example, is often determined in the prior school year, which puts transferring students at a disadvantage. School calendars may vary or conflict. In addition, whether academic credits are accepted from one school system to another is

75. U.S. Department of Defense, *Population Representation in the Military Services, Fiscal Year 2001*, Final Report (March 2003).

neither standardized nor simple and is often complicated by differing course content, or even something as simple as different course names.

Programs that address parental concerns about dependent education are producing promising results. One such initiative is the Joint Venture Education Forum (JVEF) in Hawaii. Surveys have indicated that concern about certain aspects of the local school systems—such as the currency of textbooks and test scores—had prompted some service members to decline assignments in Hawaii, or choose private school or home schooling options for their children while stationed there. The JVEF initiative has resulted in the creation of a permanent military liaison position on local school boards, $10 million in Army Corps of Engineer repair and renovation projects to 28 area schools, and nearly $1 million in new classroom educational materials. JVEF's accomplishments demonstrate how leveraging local resources with DOD assets can effectively meet the quality-of-life needs of military families.

In this difficult and important area, policies and approaches that allow military families maximum opportunity to access quality schools for their children or that help local school systems improve quality are encouraged. Similarly, exploration of innovative policies, even if there are significant impediments to overcome, such as the introduction of school vouchers for families on bases with no base schools or with failing local schools, is encouraged.

Assignment Location and Duration

Transfers are a fact of military life. But moving a family away from home, work, friends, schools, and other support systems is often difficult. And as discussed above, such frequent moves can negatively affect other aspects of military families' lives, such as spousal employment and dependent education. To make these periodic transfers as successful as possible, the services attempt to involve members in decisions about the location and duration of their assignments.

When addressing difficult-to-fill assignments or unexpected personnel requirements, the services, to an extent, use programs that promote voluntary selection to encourage sufficient numbers of fully-qualified individuals to volunteer to fill mission requirements. Successful programs offering financial incentives for voluntary assignments have been pioneered in the Navy. To the extent that voluntary assignment programs have been successful, they help to reduce the demand for other programs that attempt to offset negative aspects of the military lifestyle, especially in difficult areas such as spouse employment and dependent education. For example, members without school-aged children might be more willing to accept assignments in areas with less adequate school systems. Voluntary assignment programs can help to increase the likelihood that qualified members are assigned to locations that are more consistent with their preferences, reducing the overall burdens of military life.

The services provide both financial and nonmonetary incentives for voluntary assignments. Limiting family relocations, providing greater location choice, and increasing the duration of assignments when it is compatible with the needs of the services can improve retention and readiness, and may help address issues such as spouse employment and dependent education.

The Case for Change

Changes in workforce expectations and military family demographics require skillful stewardship of the services' quality-of-life resources. Indeed, DOD's social compact recognizes the impact of such changes and the need for careful evaluation of existing and proposed quality-of-life programs in light of such changes. The services evaluate attitudinal survey data to assess the effectiveness of quality-of-life programs. Typically this data provides some measure of relative satisfaction with various quality-of-life indicators. However, it is difficult to determine how reported satisfaction levels affect the services' recruiting, retention, and readiness goals.

Today, the integration of quality-of-life investments into the overall compensation package ... is not complete.

In 2004, the Department published its 1st Quadrennial Quality of Life Review, which examined departmental, service-specific, and joint combatant command quality-of-life programs. The study identified priority quality-of-life issues and also presented a set of indices to gauge progress, with the intention of better identifying and responding to quality-of-life needs.

Today, the integration of quality-of-life investments into the overall compensation package in a rational way is not complete. In general, it should be presumed that the individual service member will be provided with the resources to make his or her own choices regarding quality of life. Typically, this means that cash compensation and leveraged civilian sector goods and services will provide a flexible and efficient outcome that allows the military family to focus resources on their highest priority concerns. However, there are also clear instances when the best solution involves in-kind benefits and government-sponsored quality-of-life programs. Currently, no generally accepted, rigorous framework exists for making these decisions.

Recommendations

Ultimately, the responsibility for quality of life rests with commanders. Commanders must ensure that quality-of-life programs are adequately funded and must address the particular aspects of quality of life related to operational deployments—aspects that include effective communication with and support to families before and during deployments. A commitment to quality of life is not simply a series of programs, but rather a core value. Military leaders should be trained and ready to adjust to the needs of the members and their families as missions and demographics change.

The benefits of quality-of-life programs are often difficult to discern clearly. Because resources are scarce and quality-of-life programs compete directly with other uses of compensation resources, it is important that the costs and benefits of quality-of-life programs be better understood. Policy effectiveness reviews, such as the Quadrennial Quality of Life Review, should evaluate both the economic effectiveness of quality-of-life programs as well as the overall community impact.

- Quality-of-life programs should be subject to periodic, rigorous evaluation to ensure that they represent the best use of resources, in meeting the demands of members and families, and the readiness goals of the military services.

- Recognizing that a quantitative assessment of the benefits of such programs is difficult, the Office of the Under Secretary of Defense for Personnel and Readiness should develop a framework and guidelines for determining the efficacy of potential investments in quality-of-life programs.

- Further, programs that are implemented should be periodically and systematically evaluated using these guidelines, to insure that the programs continue to represent the best expenditure of resources.

• New programs, initiatives, cooperative efforts, or expenditures designed to improve or address quality of life should include specific and measurable goals, the mechanisms for measurement, and a plan for data collection and reporting at the local level.

Reserve Compensation

During much of the Cold War, the selected reserve operated primarily as a strategic reserve. In the event of a major national emergency or military conflict, the pretrained manpower in the selected reserve would be mobilized to supplement the standing active duty force until additional troops could be mobilized and trained.

Since the end of the Cold War, the roles and contributions of the reserve force have evolved, with reserve units becoming more integrated into military operations both at home and abroad. The shift towards a more operational role for the reserve components accelerated dramatically after the September 11 attacks in 2001.[76] Since then, the United States has been engaged in a global war on terrorism and is prosecuting ground conflicts in Afghanistan and Iraq in addition to its many peacekeeping and stabilization missions around the world. The aggressive and integrated use of reserve units has ensured that the military has the troop strength it needs to pursue and manage these conflicts as well as other ongoing commitments.

The evolution of the use of the reserve components means that the nature of reserve service has changed. Reservists are more frequently mobilized and more fully incorporated into the total force. The reserve compensation system should support this new reserve and its integration into the total force.

76. The United States reserve components comprise about 1.1 million service members—approximately 44 percent of the nation's total military manpower—as of December 31, 2005. There are seven reserve components. Six are part of the three military departments: the Army Reserve, the Army National Guard, the Air Force Reserve, the Air National Guard, the Navy Reserve, and the Marine Corps Reserve. The seventh and smallest reserve component, the Coast Guard Reserve, belongs organizationally to the Department of Homeland Security, but works closely with the Department of Defense.

The Current System

Today, the sustained increase in operational tempo has placed new and often more challenging demands on reservists. Members of the reserves can expect more frequent and lengthier mobilizations and deployments. In fact, despite the smaller size of today's reserve, the number of "days mobilized" has increased twelve-fold relative to the Cold War period.[77] While it is not yet clear how these challenging new expectations will affect reserve recruitment and retention, meeting reserve staffing goals could become more difficult in the future.

Recent recruiting results for the reserve component have been mixed. In fiscal year 2005, for example, only two of the six selected reserve components met or exceeded their fiscal year 2005 accession goals (table 13). Of the remainder, the Army National Guard and the Army Reserve achieved 80 and 84 percent of their goals, respectively, the lowest among the six reserve components.[78] During the six-month period ending in February, 2006, however, Army National Guard and Army Reserve recruiting outcomes improved significantly. From September, 2005 through February, 2006, the Army National Guard achieved 105 percent of its goal of 30,903 accessions, and the Army Reserve achieved 100 percent of its goal of 13,265.

There has also been concern that reserve retention rates might decline as a result of the increased demands now being placed on reservists. However, the most recent data suggest that reserve retention remains stable. Enlisted reserve attrition rates were below target ceilings for fiscal year 2005, and remain at acceptable levels as of February, 2006. There may be lower retention in certain units or skill areas, but we do not have evidence of such shortfalls at this time.

77. Glenn Gotz, "Restructuring Reserve Compensation," in *Filling the Ranks: Transforming the U.S. Military Personnel System*, ed. Cindy Williams (Cambridge, Mass.: MIT Press, 2004).
78. Interestingly, these two components have the largest nonprior-service accession goals among the reserves. That is, they recruit relatively large numbers of individuals with no prior military service, as well as former active duty service members. Since individuals with no prior service are also the candidates targeted by active duty Army recruiters, the reserve's focus on this population potentially puts them in direct competition with active duty recruiting.

Table 13. Reserve Component Enlisted Recruiting, Fiscal Year 2005

	Accessions	Goal	Percent Achieved
Army National Guard	50,219	63,002	80%
Army Reserve	23,899	28,485	84%
Navy Reserve	9,788	11,141	88%
Marine Corps Reserve	8,350	8,180	102%
Air National Guard	8,859	10,272	86%
Air Force Reserve	9,942	8,810	113%

DOD is working on several fronts to ensure that the new total force concept works as seamlessly and effectively as possible and that reserve force strength remains at acceptable levels. The Assistant Secretary of Defense for Reserve Affairs, for example, has introduced the concept of a "continuum of service." This concept allows for variable lengths of participation by reserve members from zero to 365 days per year—a concept that better matches how the reserves are in fact being used today.[79]

Military leaders have also found that many of the policies that effectively governed and supported the reserves during the Cold War are not as well suited to manage the very different roles and responsibilities of today's reserve. The Department plans to address such issues by updating and adapting existing policies and statutory authorities to make reservists more accessible, more readily deployable, and available for longer mobilizations.

Reserve compensation policies should support today's fully integrated reserve force.

Reserve compensation policies should support today's fully integrated reserve force. The following discussion considers current reserve compensation and incentive policies, and how these policies may differ from active duty compensation guidelines.

79. The "typical" reservist or "drilling reservist" is a paid member of the selected reserve who trains a minimum of 38 days per year, either as part of a unit or as an individual augmentee. The selected reserve constitutes roughly 75 percent of reserve manpower; the other 25 percent are members of the individual ready reserve.

Compensation

The current reserve compensation system is similar to the compensation system for active duty service members. Reserve members are subject to the same pay and allowance system as their active duty counterparts, and are eligible for most special and incentive pays and allowances. They also are paid from the same pay table as active duty members. However, payment methodologies vary depending on the status under which reservists are called to duty. The three most common duty statuses for reservists—and their associated payment procedures—are as follows:

Inactive duty training (IDT). When not on active duty, reservists perform "drills," usually one weekend per month. Each drill lasts at least four hours, and reservists may perform up to two drills per day. Hence, a member who performs two four-hour drills each day receives four days of basic pay per weekend, or 4/30 of monthly basic pay. Allowances are not paid, nor are travel expenses to and from the drill duty station. The same rules apply to special or incentive pay while on IDT. If, for example, an Air Force Reserve tanker pilot flies two drills on each day of a two-day drill, the four drill periods would result in payment of 4/30 of monthly Aviation Career Incentive Pay.

Active duty training–active training (ADT-AT). Reservists must perform up to 15 days of active duty training each year, during which time one day of basic pay (1/30 of monthly basic pay) is paid for each day in active training. The member also may be eligible to receive BAH, but the housing allowance provided will be at the BAH II rate, which does not vary geographically with housing prices and can be lower than the geographically-adjustable BAH rate available to active duty members. Further, reservists without dependents (typically unmarried members) who are assigned to government quarters receive only partial BAH.

Active duty (AD). When reservists are called to active duty they receive the same compensation as active duty members, with one exception. If called to active duty for less than 31 days, the member receives BAH II. If called for a specific contingency operation, or for more than 31 days, the member receives the same geographically-adjusted BAH that active duty members receive.

Reserve Retirement System

Although the reserve and active duty retirement systems are similar in many ways, there are also key differences between the two systems. Unlike the active duty retirement system, reserve member accrue "points" each year towards retirement. These include 15 points for participating in one of the reserve components, one point for each IDT drill period (or four for each weekend drill), and one point for each day on active duty training or mobilization. In a typical year, reservists would acquire 78 points under this system.

Each year that the reservist accrues more than 50 points—referred to as a creditable or "good" year—counts towards the 20-year minimum necessary to become eligible for retirement benefits. Reservists begin drawing retirement pay at age 60, which is consistent with the Committee's proposal for modernizing the active duty retirement system. Existing military retirement law, however, provides active duty personnel with a more generous retirement scheme, allowing them to begin drawing their annuity as soon as they complete 20 years of service, regardless of age.

Health Benefits

Reserve and active duty compensation also differ in the area of medical coverage for dependents. When reservists are mobilized for contingency operations their dependents usually remain in their home communities. During the activation period, reservists' dependents are entitled to medical care at either a military treatment facility or through the government-provided TRICARE insurance program where the dependents reside. Under TRICARE Reserve Select, the member has the opportunity to retain health benefits when leaving active duty for a period that is related to the length of active duty service.

Unfortunately, many dependents of mobilized reservists do not live within a reasonable commuting distance to a military treatment facility, and local medical providers are sometimes not willing to accept

TRICARE. To maintain continuity of care for their families, mobilized reserve members frequently choose to retain their civilian employer-provided health insurance, sometimes at considerable out-of-pocket cost to themselves.

Enlistment and Retention Incentives

A primary purpose of the reserve compensation system is to allow the reserve components to efficiently meet their staffing goals. The shift from a strategic to a more operational reserve and the increased use of the reserve component has been a major challenge. The full implication of this change on recruiting and retention for the reserve component is not yet clear. Hence, it is particularly important to have the proper tools and flexibility to adjust to staffing problems should they arise.

Enlistment, affiliation, and retention bonuses provide the system with some flexibility in targeting specific recruiting and retention problems. However, unlike the active duty forces, recruiting and retention issues for the selected reserve have a significant local dimension to them. With some exceptions, the demand for reserve staff is a demand for individuals to serve in specific units. These units are constrained in recruiting and retention to the eligible population in their local geographic areas. It is difficult, in the way most selected reserve units are managed, to allow excess supply in one geographic area to compensate for excess demand in another.

... it is important that active and reserve compensation and force management policies be developed and applied in the context of an integrated analytical framework ...

The ability to target specific recruiting and retention incentives, not only by occupational group, but also by local geographic area or even at the unit level, could improve the flexibility of the current compensation system and its ability to respond to challenges. Greater decentralization of bonus and incentive authorities would necessarily have to be balanced with accountability for the prudent use of compensation resources at the local level. Moreover, some centralized oversight would be necessary to insure active and reserve supply-side interdependencies are considered in the application of unit-specific incentives. More generally, it is important that active and reserve compensation and force management policies be developed and applied in the context of an integrated analytical framework that ensures they work together to improve the total force as a single, overall system.

The Case for Change

There have been dramatic changes in the role of the selected reserve. Members are facing more frequent deployments and are considered full partners in the military's total force. When called to active duty, reserve members should receive the same pay and benefits as active duty members.

Moreover, while overall recruitment and retention are currently stable, the increased demands on reservists may make retention and recruiting more challenging in the future. The compensation system—including recruitment and retention incentives—should be flexible enough to help address these challenges.

Continuity of care is an important aspect of health care. Reserve members who alternate between roles as civilians who train on weekends and full-time active duty military deployed to combat zones should have the opportunity to maintain continuity of health care for their families. The best way to do this is to make it easier for members to maintain their civilian employer health benefit when called to active duty.

The reserve and active forces are linked on the supply side. Active duty losses become reserve gains through affiliation, and active and reserve components compete in the same recruiting market for individuals who have no prior military service. When addressing reserve component staffing issues, the implications for the active forces should also be considered to avoid unintended consequences—and similarly when addressing active component problems. A "systems" approach is essential not only because of the supply-side linkages, but also because both the active and reserve units are necessary to conduct operations. Active and reserve recruiting, retention, and compensation are related. Given this relationship, it is important that active and reserve recruiting, retention, and compensation issues be considered in the context of a comprehensive "system" within the total force.

Recommendations

Under the current compensation system, activated reserve members generally receive the same compensation as active duty members. However, there are a few areas where differences remain. The recommended policy is that mobilized reserve members and reserve members on active duty should receive the same pay and benefits as otherwise equivalent active duty members.

When reserve members are called to active duty, most choose to retain their civilian employer health insurance in order to maintain continuity of care for their families. Reserve members who are called to active duty but who choose not to participate in TRICARE should be offered a stipend or payment to help defer the cost of their alternative insurance—perhaps deposited into the equivalent of a health savings account.

The reserve components should have the flexibility to solve recruiting and retention problems as they arise. However, a "systems" approach, where implications of proposed changes are examined for effects on both the reserve and active forces, is necessary to avoid unintended consequences. The Under Secretary of Defense for Personnel and Readiness should ensure that there is a framework in place that provides for the integration of active and reserve recruiting and retention policies.

Finally, we should guard against hastily enacting, with the best of intentions, costly changes that may not improve force management, or may do so only inefficiently, but which may make it more difficult to fund more efficacious and efficient changes in the future.

Summary of Recommendations

Today, the United States has an armed force without peer. However, the Department of Defense operates, in part, under a compensation system that was best suited for an earlier era. The recommendations suggested in this report would modernize the compensation system and provide greater flexibility for efficient and effective force management.

More specifically, the recommended retirement system architecture increases force management flexibility, provides for a greater diversity in career lengths, and enfranchises members who serve less than 20 years. Changes to the pay table and housing allowance will make compensation more responsive to performance by motivating and encouraging the top performers, while eliminating distinctions in compensation that are not relevant in a volunteer force. Consolidation of special and incentive pays will simplify a complex system and improve its efficiency.

Adjustments to the health benefit will better align benefits and costs, make better use of civilian sector benefits, and ensure that costs are visible to those making force management decisions. More frequent and rigorous evaluation of quality-of-life programs will ensure that resources designed to assist service members and their families with the hardships of military life are being allocated as efficiently and effectively as possible and are targeted toward high-priority concerns. Finally, with greater operational integration of the active and reserve component, it is important to firmly establish the principle that the reserve member enjoys the same compensation as his or her active duty counterpart when called to active duty.

Nine principles or criteria for guiding change to the compensation system were introduced earlier in this report. Table 14 summarizes how we believe the recommendations proposed here fare against those criteria. The table provides an answer to the question: "Which of the nine criteria does each of the proposed recommendations satisfy?"

Table 14. Evaluation of Recommendations

Criteria	Retirement	Pay for Performance	S&I Pays	Health Benefit	Quality of Life	Reserve Compensation
Force Management	Yes	Yes	Yes	Yes	Yes	Yes
Flexibility	Yes	Yes	Yes			Yes
Simplification		Yes	Yes			Yes
Systems Approach	Yes				Yes	Yes
Choice, Volunteerism, and Market-Based	Yes		Yes	Yes	Yes	
Efficiency	Yes	Yes	Yes	Yes	Yes	Yes
Cost Transparency and Visibility				Yes	Yes	
Leverage				Yes	Yes	Yes
Fairness	Yes	Yes	Yes	Yes	Yes	Yes

Appendix A

Impact of Cash versus In-Kind Benefits on Recruiting and Retention

Economic theory suggests that, all other things being equal, individuals prefer cash to a commodity of the same cost. The reason is simple. Cash payments allow an individual to purchase the good or service of greatest value to him or her. In the workplace, those employees who would have freely chosen to purchase an in-kind benefit are equally well off under either compensation scheme, while employees who would not choose the benefit are made better off under a cash payment scheme.

Nevertheless, we observe that employers provide a substantial proportion of total compensation in the form of in-kind benefits. The share of in-kind benefits in total private sector compensation has remained fairly stable at just under 20 percent since 1989 (table A-1).

Why do employers choose to provide a (supposedly) less-efficient form of compensation?

The strongest incentive for providing in-kind benefits is favorable tax treatment. Many such benefits are not subject to federal and state income taxes (nor to Social Security or Medicare withholding). Thus, an employer may be able to provide the in-kind benefit at a cost below its value to the employee. For example, suppose that an employee values health insurance at $3,000 per year and the employer can purchase insurance coverage for $4,000. At first glance it appears that both would be better off if the employer provided no coverage but increased the employee's salary by $3,500 (or any amount between $3,000 and $4,000). However, the employee will have to pay income, Social Security, and Medicare taxes on the increased salary, meaning that $4,000 in gross pay may have a take-home (net) value of something less than $3,000. In this case, the nontaxable in-kind benefit may be more cost effective.

Table A-1. Private Industry Workers: Employer Costs per Hour Worked, 1989–2004 (percent of total compensation by year)

Percent of Total Compensation by Year				
	1989	1994	1999	2004
Total compensation	100.0	100.0	100.0	100.0
Current cash	82.1	80.2	82.2	80.7
Wages and salaries	72.7	71.1	73.0	71.5
Paid leave	7.0	6.5	6.3	6.4
Vacation	3.5	3.2	3.1	3.2
Holiday	2.4	2.2	2.2	2.2
Sick	0.9	0.8	0.7	0.8
Other	0.3	0.3	0.3	0.3
Supplemental pay	2.4	2.6	2.9	2.8
Premium[a]	1.2	1.1	1.2	1.0
Shift differential	0.3	0.3	0.3	0.2
Nonproduction bonuses	0.8	1.2	1.5	1.6
Total in-kind benefits	17.9	19.8	17.8	19.3
Current in-kind benefits	6.0	7.2	5.9	7.1
Life insurance	——	0.3	0.2	0.2
Health insurance	——	6.7	5.4	6.6
Short-term disability Insurance[b]	——	0.3	0.2	0.2
Long-term disability Insurance	——	——	0.1	0.1
Deferred cash	2.9	3.0	3.0	3.4
Pensions	2.4	2.4	——	——
Savings and thrift	0.6	0.6	——	——
Defined benefit	——	——	1.3	1.6
Defined contribution	——	——	1.7	1.8
Deferred in-kind	9.0	9.6	8.9	8.8
Legally required benefits	8.9	9.4	8.7	8.6
Social Security[c]	5.9	5.9	6.1	6.0
OASDI	——	——	4.9	4.8
Medicare	——	——	1.2	1.2
Federal unemployment insurance	0.2	0.2	0.2	0.1
State unemployment insurance	0.8	0.7	0.5	0.6
Workers' compensation	1.9	2.4	1.9	1.9
Other benefits[d]	0.1	0.2	0.2	0.2

a. Includes premium pay for work in addition to the regular work schedule (such as overtime, weekends, and holidays).
b. Short-term disability includes all insured, self-insured, and state-mandated plans that provide benefits for each disability, including unfunded plans.
c. The total employer's cost for Social Security is comprised of an old-age, survivors, and disability insurance portion and a Medicare portion.
d. Includes severance pay and supplemental unemployment benefits.
– Data not available.

Source: Bureau of Labor Statistics 2000 and 2006.

There are other reasons that an employer may find it beneficial to offer some in-kind benefits, including:

- ***Economies in employer provision***. It may be advantageous for an employer to provide a benefit if he or she can provide it at a lower cost than the employee would pay if purchasing the benefit independently. Savings on group purchases due to quantity discounts and lower administrative and screening costs are some of the ways in which employers can enhance their purchasing power relative to individual employees. A prime example is health insurance. Because employees form a natural group that is unrelated to health status, it reduces the chances of adverse selection and enables them to obtain lower rates through group purchase than would be available under an individual plan.
- ***Productive consumption***. It may be in the organization's interest to provide or subsidize benefits that are both valued by the employee and also increase the employee's value to the organization. Examples might include health club memberships that promote employee fitness and reduce losses due to sick leave; or tuition assistance, which may increase the employee's workplace productivity while also allowing the employee to pursue additional educational credentials.[80] In the case of the military, it may make sense to provide convenient access to gymnasiums and other benefits which encourage physical fitness. Similarly, the services may find on-base housing to be a cost-effective investment as it reduces response times to no-notice deployments or emergencies, and can lower the cost of child care and other family support benefits for similar readiness-related reasons.[81]
- ***Attracting and retaining employees***. When employers have little flexibility to offer higher wages, nonmonetary benefits (e.g., health insurance coverage for family members or day care

80. This value is in addition to increased wages the employee may receive from greater productivity.
81. Indeed, because of the structure of the military personnel and compensation system, where career members remain with the service for 20 or more years, the service may internalize the health and welfare of its members more so than other types of employers, taking a naturally more paternalistic approach to compensation and benefits. A question, if true, is whether this paternalistic structure is the best for the military today and in the future.

centers) may be the most effective incentives available to attract high-quality employees.

The preceding discussion has addressed both the cost of in-kind benefits to the employer and their value to the employee. While costs are generally easy to measure, measuring value can be a more subjective and difficult exercise. Even cost measures may be difficult when some costs (e.g., the opportunity cost of land devoted to housing) may be hidden or implicit.

Appendix B

The Personal Discount Rate: Implications for Compensation Design

The rate at which individuals are willing to trade current income or consumption for future income or consumption is known as the *personal discount rate*. The economics literature has examined and attempted to measure the personal discount rate in a variety of settings, including purchases of consumer durable goods. The personal discount rate has a profound impact on the effectiveness of compensation systems, particularly as it pertains to the mix of current and deferred compensation. Moreover, empirical evidence from a series of natural experiments involving the military compensation system reveals some consistent evidence on discount rate levels and how they vary across age, education, years of experience, and other factors. The purpose of this paper is to present the basic economic concepts related to the personal discount rate, review the empirical literature, and discuss implications for military compensation system design.

Economic Theory

The personal discount rate, or *rate of time preference,* is a measure of the trade-off between current cash and future cash. If a worker is indifferent between $100 received today and $110 received in one year, he or she has revealed a discount rate of 10 percent. In other words, the $110 received in one year has a *present value* to the worker of $100. An observed (nominal) personal discount rate consists of a *real personal discount rate* that reflects the pure rate of time preference and an adjustment for inflation. Part of the reason that our worker demands more than $100 one year from now is that $100 will have less purchasing power because of inflation.[82]

Economists have attempted to measure personal discount rates using data from natural and controlled experiments. They have found, generally, that the observed rate of time preference can vary owing to the amount of cash involved and the time delay of the payback of deferred compensation. Also, discount rates appear to be affected by a number of personal characteristics, including age, income level, and education.

Empirical Evidence

Controlled experiments typically involve student subjects who are asked to choose among a hypothetical menu of options for purchases, income streams, financing schemes, or retirement plans. The natural experiments often use data on consumer purchases of durable items like appliances. For example, a consumer may have to choose between two refrigerators that differ only in energy efficiency and up-front purchase price. Consumers with relatively high personal discount rates may be more likely to choose the "cheaper" refrigerator because the out-year stream of lower energy costs is not enough to offset the lower up-front costs.

Matthew Black, Roy Nord and Edward Schmitz, and Brian D. Francis used survey data on service members' hypothetical preferences for alternative retirement systems to estimate personal discount rates. Black found that officers had an average real discount rate of about 10 percent, while enlisted personnel had an average rate of 12.5 percent.[83] Nord and Schmitz attempted to replicate the Black study using data from an Army survey and found generally consistent results, although they did

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82. The real discount rate (r) may be derived from the nominal discount rate (r_n) and the annual inflation rate (i): $r = \dfrac{r_n}{(1+i)}$.

83. Matthew Black, "Personal Discount Rates: Estimates for the Military Population," in *Final Report of the Fifth Quadrennial Review of Military Compensation,* Vol. 1B, Appendix I. U.S. Department of Defense (Washington, D.C.: Office of the Under Secretary of Defense for Personnel and Readiness, 1984).

not compute implied discount rates.[84] Both studies found that personal characteristics like race, sex, and income level had an effect on the discount rate. Francis used later Army survey data that explicitly asked respondents to choose among a set of exit bonus and annuity options. His findings included an implicit real discount rate of 24.4 percent for enlisted personnel and 15.9 percent for officers. He also found that rates were higher for women and blacks and that discount rates declined consistently with age or years of experience.[85]

Harry Gilman conducted an early empirical study related to compensation system design. Gilman used data from four private firms on voluntary choices by employees to contribute to pension plans. In each case, employees could choose to contribute some current compensation to the plan and thereby gain an employer contribution (matching) in the form of deferred compensation. Gilman found that the real discount rate varied inversely with both age and income level. Estimates ranged from a high of nearly 25 percent for a 17-year-old at the lowest income levels to 1.3 percent for a 65-year-old at the highest income levels.[86]

The military compensation system has also afforded the opportunity to examine a series of natural experiments related to the timing of compensation and its effect on personnel behavior. At different times since the inception of the all-volunteer force, the services have offered reenlistment bonuses to enlisted personnel using different combinations of lump-sum and anniversary payments. Steven Cylke et al. used changes in Navy first-term reenlistment behavior resulting from changes in payment timing to deduce the implied discount rates of sailors on the margin of the stay/leave decision. The authors of this study found that bonuses paid under a pure anniversary payment scheme were about 71 percent as effective as bonuses of equal total value paid as a lump sum at

84. Roy D. Nord and Edward J. Schmitz, *Assessing the Personal Discount Rate*, Technical Report 673 (Alexandria, Va.: U.S. Army Research Institute for the Behavioral and Social Sciences, March 1985).
85. Brian D. Francis, *An Analysis of Personal Discount Rates: Evidence from Survey Data*, Research Report 1656 (Alexandria, Va.: U.S. Army Research Institute for the Behavioral and Social Sciences, December 1993).
86. Harry J. Gilman, *Determinants of Implicit Discount Rates: An Empirical Examination of the Pattern of Voluntary Pension Contributions of Employees in Four Firms* (Arlington, Va.: Center for Naval Analyses, September 1976).

the point of reenlistment. From this information, they derived a nominal personal discount rate of nearly 29 percent. The real discount rate after adjusting for inflation was 18.5 percent.[87]

John T. Warner and Saul Pleeter used data from a compensation program implemented during the drawdown of the military forces in the early 1990s to estimate personal discount rates. Members who voluntarily left active duty were able to choose between a lump-sum separation bonus and an annuity. Before taxes, the break-even discount rates for this choice ranged from 17.5 to 19.8 percent. The authors used a two-stage estimation technique (bivariate probit) to control for the fact that the choice outcome was observed only for leavers. Their findings showed that discount rates declined with years of service; officers had substantially lower discount rates than did enlisted personnel; more highly educated members had lower discount rates; blacks had higher rates than whites; female enlisted personnel had lower discount rates than males; and members with dependents had lower discount rates than members without dependents. Warner and Pleeter also found that enlisted members with higher test scores (upper mental groups) had lower discount rates. Average nominal personal discount rates were 18.7 percent for officers and 53.6 percent for enlisted personnel. Warner and Pleeter's enlisted estimate, in particular, is substantially larger than previous estimates in the literature.[88]

Implications for Compensation Design

The empirical evidence reviewed above has direct consequences for the cost-effectiveness of alternative compensation schemes. While personal discount rates vary by age, education, and other factors, they are almost always substantially higher than the government's discount rate (i.e., the rate at which the government could borrow money). The Office of Management and Budget currently stipulates a real discount rate ranging from 1.7 to 3.1 percent, depending on the period of time

87. Steven Cylke, Matthew S. Goldberg et al., *The Personal Discount Rate: Evidence from Military Reenlistment Decisions*, Professional Paper 356 (Alexandria, Va.: Center for Naval Analyses, April 1982).
88. John T. Warner and Saul Pleeter, "The Personal Discount Rate: Evidence from Military Downsizing Programs," *American Economic Review* Vol. 91, No. 1 (March 2001): 33–53.

covered. In general, this means that current compensation will be more cost effective than deferred compensation, other things being equal.

For example, consider an enlisted member who is offered a reenlistment bonus of $20,000. Half is paid at the time of enlistment and the remainder is paid in equal annuity payments over the term of the enlistment contract (assume four years).[89] If the member's nominal personal discount rate is 30 percent, this bonus is worth about $15,400 right now. The present value of this payment scheme from the government (and taxpayer) perspective is about $18,900 (assuming a 5 percent discount rate). Alternatively, the employer could offer a lump-sum bonus of $16,000 that would simultaneously save money from the taxpayer's perspective and increase the value of the bonus to the enlisted member.

There are, of course, other reasons why deferred payments are used as part of a total compensation package. A lump-sum bonus to induce reenlistment does little to encourage performance and productivity during the contracted period. Recouping up-front bonuses in the case of attrition is more difficult than simply ceasing anniversary payments. Retirement plans reward longevity and compensation structures weighted to reward more senior personnel may encourage performance as employees compete in a "tournament" to promote to higher ranks. Budgetary concerns and accounting conventions may also make it difficult to front load payments.

In order to assess alternative compensation schemes, we developed a set of real discount rates based on Gilman (1976), as shown in table B-1. These rates, in conjunction with the government's discount rates as mandated by OMB, can be used to evaluate the cost-effectiveness of proposed changes in the mix of current and deferred compensation.

89. In fact, the Marine Corps and the Army both pay lump-sum bonuses currently, and the Navy and Air Force pay in the manner described in this example.

Table B-1. Implicit Real Personal Discount Rates (percent)

Years of Service	Enlisted	Officer
5	21.5	13.1
6	21.0	12.6
7	20.4	12.1
8	19.9	11.7
9	19.3	11.3
10	18.9	10.9
11	18.4	10.6
12	18.0	10.2
13	17.5	9.9
14	17.1	9.5
15	16.8	9.3
16	16.4	9.0
17	16.1	8.8
18	15.7	8.5
19	15.3	8.3

Source: Gilman 1976.

Appendix C

Illustrative Examples of a Modernized Retirement System

Features of a more flexible retirement system that alleviate some of the shortcomings of the current system include the following:

- earlier vesting of a government contribution to a 401(k) or Thrift Savings Plan-like account
- a defined benefit pension that begins at age 60
- reduction in deferred compensation by eliminating the "second career" annuity from military retirement to age 60
- additional current compensation through one or more of the following: cash payments at various years-of-service milestones (which is sometimes referred to as "gate pay"), a temporary transition payment upon separating from active duty, and additional basic pay or bonuses

Seven examples of variants of this basic structure or architecture are presented in table C-1. The effects of these variants are examined in the case of the Army enlisted force. The effects on retention, accessions, and cost are compared to those same measures under the current retirement system.

The seven options are structured in the same basic manner. They all feature a defined benefit pension that begins at age 60, a government contribution to a Thrift Savings Plan vested at 10 years of service, and additional compensation in the form of cash payments at various years-of-service milestones or a separation pay during the transition to a second career.

Table C-1. Illustrative Examples of Options for Retirement Change

Option	Feature								
	Thrift Savings Plan		Separation Pay		Immediate Annuity		Age 60 Annuity[a]		Retention Bonus (Gate Pay)
	Value	Vest	Value	Vest	Value	Vest	Value	Vest	
Current					2.5%*Hi-3*YOS	20	2.5%* Hi-3*YOS	20	
1. Separa-tion Pay	5% of ABP	10	MBP* YOS	10			2.5%* Hi-3*YOS	20	
2. Enhanced Separation Pay	5% of ABP	10	MBP* (12 +4* (YOS-10))	10			2.5%* Hi-3*YOS	20	
3. Gate Pay	5% of ABP	10					2.5%* Hi-3*YOS	20	ABP at YOS 10, 15, 20, 25, 30
4. Gate Pay + Early Pension Vesting	5% of ABP	10					2.5%* Hi-3*YOS	10	ABP at YOS 10, 15, 20, 25, 30
5. Hybrid	5% of ABP	10	MBP* YOS	10			2.5%* Hi-3*YOS	20	0.75 of ABP at YOS 10, 15, 20, 25, 30
6. FERS 2	5% of ABP	10					2.5%* Hi-3*YOS	10	0.75 of ABP at YOS 10, 15, 20, 25, 30
7. FERS 4	10% of ABP	10					1.5%* Hi-3*YOS	10	0.75 of ABP at YOS 10, 15, 20, 25, 30

a. With the exception of option 7, the defined benefit pension is equal to 2.5 percent of high three annual basic pay for each year of service completed, payable at age 60, and vested after completion of either 10 or 20 years of service. The actual payments could be made based on the members' inflation adjusted high-three basic pay, or on the high-three average computed from the pay table in effect at age 60. In this analysis, the payments are based on the real dollar value of the actual high-three basic pay at the time the member leaves active duty. The two alternatives will be the same if there is no real wage growth in the basic pay table. In option 7, the benefit is equal to 1.5 percent of high-three annual basic pay for each year of service.

Legend: MBP=Monthly basic pay
ABP=Annual basic pay
Hi-3=Average of highest three years of annual basic pay
YOS=Years of Service
FERS=Federal Employees Retirement System

Force Staffing Effects

The effects of the alternatives on the Army enlisted force are compared with the effects of the current system. A steady-state Army enlisted force of 413,000 is used in this comparison. The effects of the examples on the distribution of the force are shown in figure C-1. Compared to the current system, all of the alternatives with the exception of option 1 produce a steady-state force that has a smaller portion of the force at the first term and a larger proportion with 5–10 years of service and 21–30 years of service.

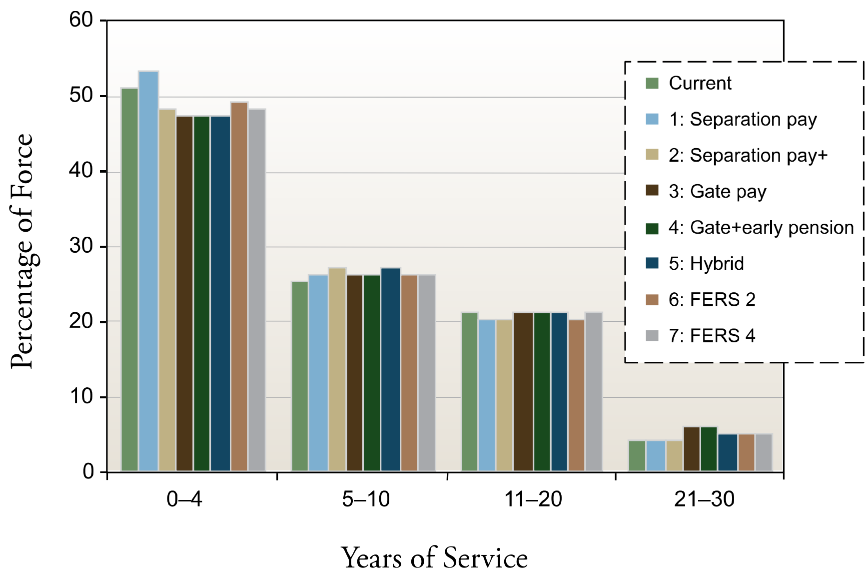

Figure C-1. **Effect of Alternatives on the Army Enlisted Force Distribution**

Furthermore, steady-state accession demand declines, as shown in figure C-2, and the expected career length per accession increases compared to the current system, for all alternatives except option 1. Accession demand declines by between 4 and 9 percent for most of the alternatives, and staff years per accession increase by between 4 and 9 percent.

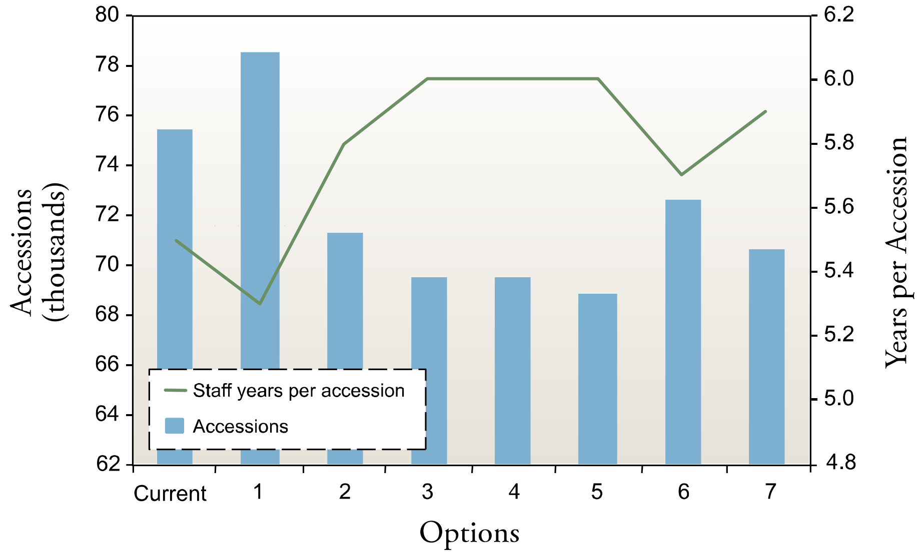

Figure C-2. Accession Demand and Staff Years per Accession: Army Enlisted Force

Costs

Annual retirement costs for the alternatives are compared in figure C-3. The retirement costs are the sum of accrual costs and the steady-state estimate of the annual outlays for retention bonuses, if applicable. The accrual costs include the accrual cost for the defined benefit deferred annuity and, as applicable, an accrual cost estimate for the government's contribution to the TSP and for separation pay.[90]

As the diagram indicates, all alternatives have lower retirement costs relative to the current system. Figure C-4 shows the savings as a difference from the cost of the current system for each alternative. For the example of the Army enlisted force, estimated savings for options 2 through 7, all of which produce a force that, based on retention and accession demand, compares favorably with the force produced under the current system, range from about $0.7 billion to $0.1 billion per year.

90. Basic pay and allowances are not included in this calculation. Because most of the alternatives increase the size of the career force relative to the first-term force, basic pay and allowances are higher under these alternatives for fixed end strength.

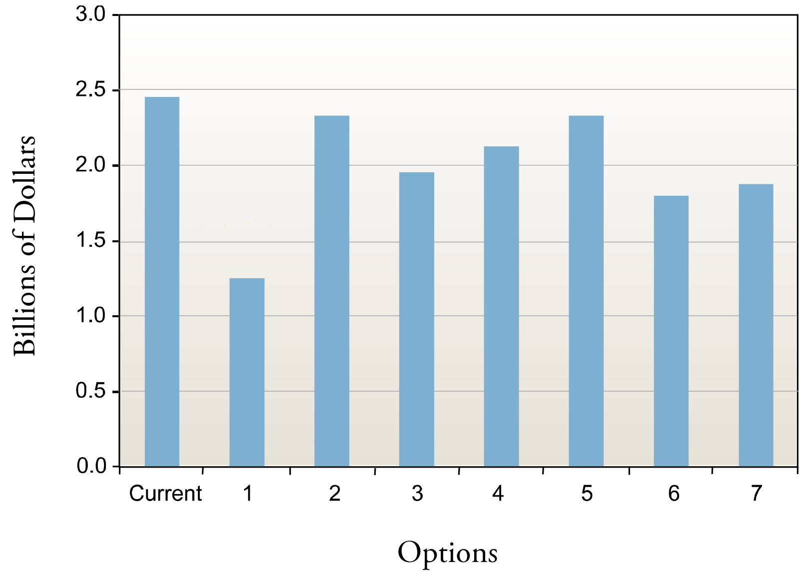

Figure C-3. **Estimated Cost of Retirement: Army Enlisted Force**

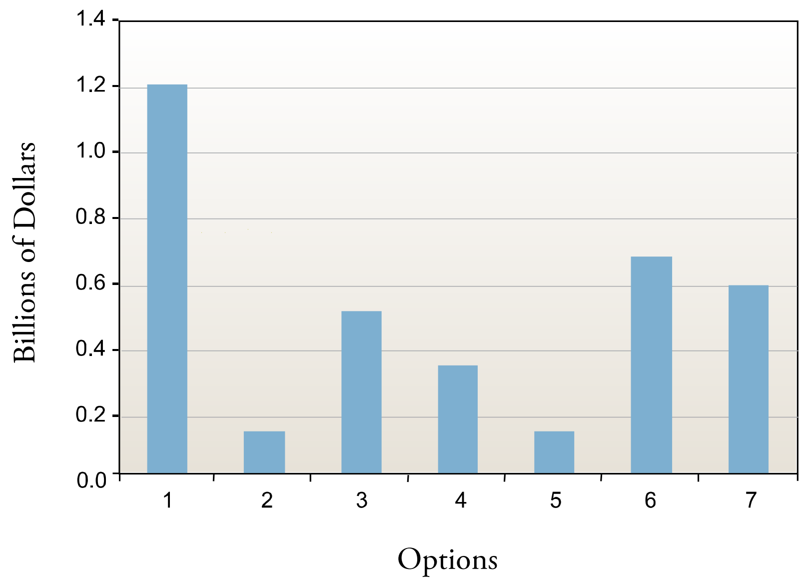

Figure C-4. **Annual Savings Relative to the Current System: Army Enlisted Force**

Comparing the benefits of each option to the current system is complicated because the options provide a mix of current and deferred compensation. The final section in this appendix shows the benefits vested upon completion of various years of service. Figures C-5 and C-6 summarize the present value of the vested benefits offered by each of the examples and the current system in a single estimate, for enlisted and officers, respectively.[91] The comparison illustrates that the benefits for completing 10 years of service are greater under all the alternatives compared to the current retirement system, which offers no benefits at 10 years of service. Moreover, the benefits of completing 30 years of service are also greater under most of the alternatives compared to the current system.

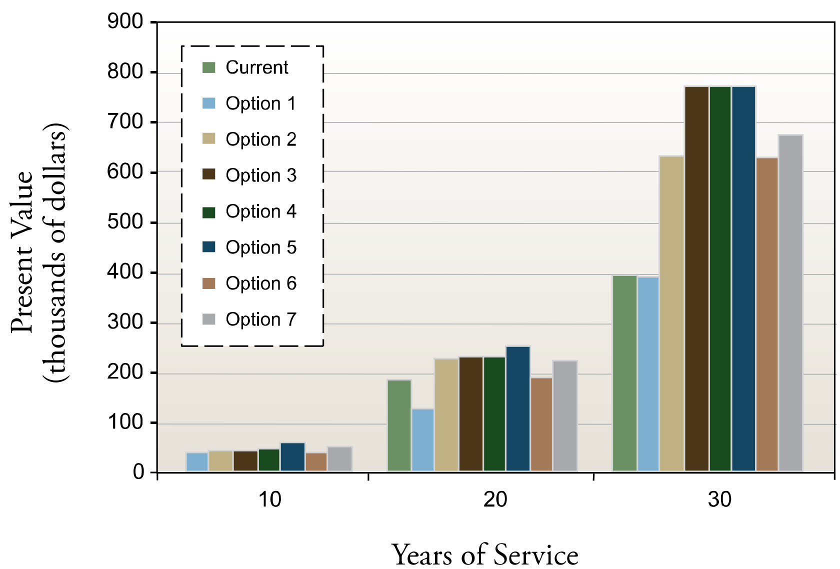

Figure C-5. Present Value of Vested Benefits for Enlisted Members under Illustrative Examples

91. This is an estimate of the present value of all retirement-related benefits that are vested by the specified year of service. This is an estimate of the benefits from a particular example should the member leave at that year of service. It includes the present value of future annuities that are vested; the value of all gate payments received through that year of service; separation pay at that year of service; and the value of the vested, cumulative government contribution to any TSP-like plan. The values are calculated at a discount rate of 10 percent, assumed to be the rate at which the typical member compares future to current benefits for this comparison.

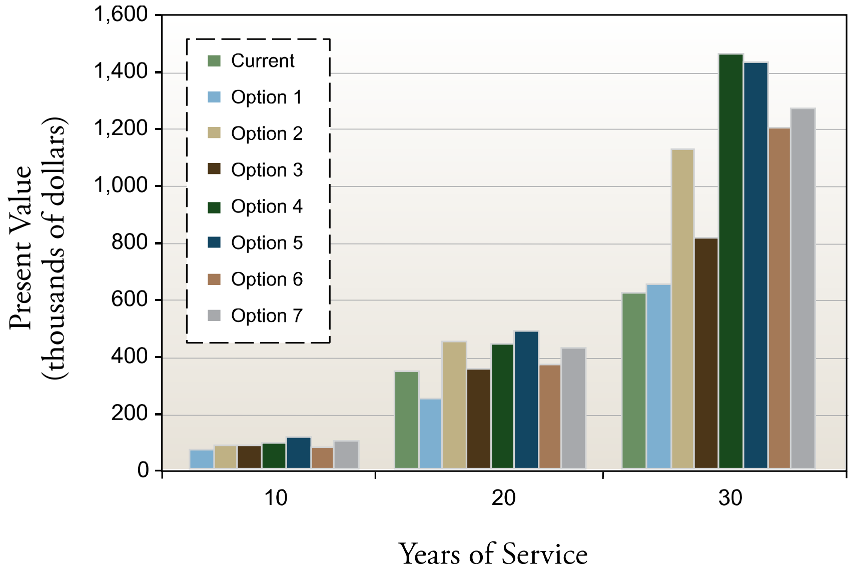

Figure C-6. **Present Value of Vested Benefits for Officers under Illustrative Examples**

Benefits of Illustrative Retirement Structures

The options considered in the above analysis provide several different types of benefits to members. These include a defined benefit annuity that begins at age 60, a government contribution to a Thrift Savings Plan-like account, separation or transition pay, and gate pay. Table C-2 compares the benefits of the various options and the current system to a typical enlisted member at years of service 10, 15, 20, and 30. The table shows only the benefits that are vested at each of the years of service.

The first column lists the alternatives. The next two columns show the immediate defined benefit annuity that is vested at the years of service and the annuity at age 60. The current system, of course, vests no annuity until 20 years of service. The next column shows the separation pay that each alternative offers at a specified year of service. The separation or "transition" pay is received only by those who separate from service at the specified year of service.

The next two columns provide an estimate of the value of the government's contribution to the Thrift Savings Plan. The "immediate" value is the value at that year of service. The "age 60" value is the value of the government contributions at age 60. It is assumed that balances grow at a 4 percent real rate per year. The next two columns show the value of gate pay. The first of the two columns shows the amount of gate pay paid at that year of service. The second column, labeled "Total," shows the (undiscounted) cumulative amount of bonus pay awarded through that year of service. The final column converts the value of the TSP at age 60 into an annuity and adds it to the value of the age-60 defined benefit annuity.

Table C-3 provides the same retirement benefit information for a typical officer.

Table C-2. Benefits of Alternatives for Enlisted Members at Selected Years of Service (dollars)

	Defined Benefit Annuity		Separation Pay	TSP Value	TSP Value	Gate Pay	Gate Pay	Total Annuity
	Immediate	Age 60		Immediate	Age 60		Total	Age 60
10 Years of Service								
Current	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Option 1	-	-	24,189.00	13,665.00	47,938.00	-	-	4,311.00
Option 2	-	-	29,027.00	13,665.00	47,938.00	-	-	4,311.00
Option 3	-	-	-	13,665.00	47,938.00	29,027.00	29,027.00	4,311.00
Option 4	-	7,000.00	-	13,665.00	47,938.00	29,027.00	29,027.00	11,309.00
Option 5	-	-	24,189.00	13,665.00	47,938.00	21,770.00	21,770.00	4,311.00
Option 6	-	7,000.00	-	13,655.00	47,938.00	21,770.00	21,770.00	11,309.00
Option 7	-	4,198.00	-	27,330.00	95,876.00	21,770.00	21,770.00	12,822.00
15 Years of Service								
Current	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Option 1	-	-	43,281.00	25,345.00	73,079.00	-	-	6,572.00
Option 2	-	-	92,334.00	25,345.00	73,079.00	-	-	6,572.00
Option 3	-	-	-	25,345.00	73,079.00	34,625.00	63,653.00	6,572.00
Option 4	-	12,491.00	-	25,345.00	73,079.00	34,625.00	63,653.00	19,064.00
Option 5	-	-	43,281.00	25,345.00	73,079.00	25,969.00	47,739.00	6,572.00
Option 6	-	12,491.00	-	25,345.00	73,079.00	25,969.00	47,739.00	19,064.00
Option 7	-	7,495.00	-	50,690.00	146,158.00	25,969.00	47,739.00	20,640.00
20 Years of Service								
Current	$19,061.00	$ 19,061.00	$ -	$ -	$ -	$ -	$ -	$ 19,061.00
Option 1	-	19,061.00	64,950.00	40,888.00	96,901.00	-	-	27,776.00
Option 2	-	19,061.00	168,611.00	40,888.00	96,901.00	-	-	27,776.00
Option 3	-	19,061.00	-	40,888.00	96,901.00	38,910.00	102,563.00	27,776.00
Option 4	-	19,061.00	-	40,888.00	96,901.00	38,910.00	102,563.00	27,776.00
Option 5	-	19,061.00	64,850.00	40,888.00	96,901.00	29,182.00	76,921.00	27,776.00
Option 6	-	19,061.00	-	40,888.00	96,901.00	29,182.00	76,921.00	27,776.00
Option 7	-	11,436.00	-	81,775.00	193,802.00	29,182.00	76,921.00	28,867.00
30 Years of Service								
Current	$42,334.00	$ 42,334.00	$ -	$ -	$ -	$ -	$ -	$ 42,334.00
Option 1	-	42,334.00	142,902.00	89,758.00	143,707.00	-	-	55,260.00
Option 2	-	42,334.00	438,235.00	89,748.00	143,707.00	-	-	55,260.00
Option 3	-	42,334.00	-	89,748.00	143,707.00	57,161.00	207,712.00	55,260.00
Option 4	-	42,334.00	-	89,748.00	143,707.00	57,161.00	207,712.00	55,260.00
Option 5	-	42,334.00	142,902.00	89,748.00	143,707.00	42,870.00	155,784.00	55,260.00
Option 6	-	42,334.00	-	89,758.00	143,707.00	42,870.00	155,784.00	55,260.00
Option 7	-	25,400.00	-	177,517.00	287,413.00	42,870.00	155,784.00	51,251.00

Table C-3. Benefits of Alternatives for Officers at Selected Years of Service (dollars)

	Defined Benefit Annuity		Separation Pay	TSP Value	TSP Value	Gate Pay	Gate Pay	Total Annuity
	Immediate	Age 60		Immediate	Age 60		Total	Age 60
10 Years of Service								
Current	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Option 1	-	-	44,318.00	26,029.00	78,054.00	-	-	7,020.00
Option 2	-	-	53,182.00	26,029.00	78,054.00	-	-	7,020.00
Option 3	-	-	-	26,029.00	78,054.00	53,182.00	53,182.00	7,020.00
Option 4	-	13,135.00	-	26,029.00	78,054.00	53,182.00	53,182.00	20,155.00
Option 5	-	-	44,318.00	26,029.00	78,054.00	39,886.00	39,886.00	7,020.00
Option 6	-	13,135.00	-	26,029.00	78,054.00	39,886.00	39,886.00	20,155.00
Option 7	-	7,888.00	-	52,058.00	156,058.00	39,886.00	39,886.00	21,921.00
15 Years of Service								
Current	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Option 1	-	-	79,868.00	47,893.00	118,042.00	-	-	10,616.00
Option 2	-	-	170,385.00	47,893.00	118,042.00	-	-	10,616.00
Option 3	-	-	-	47,893.00	118,042.00	63,894.00	117,076.00	10,616.00
Option 4	-	23,292.00	-	47,893.00	118,042.00	63,894.00	117,076.00	33,909.00
Option 5	-	-	79,869.00	47,893.00	118,042.00	47,920.00	87,807.00	10,616.00
Option 6	-	23,292.00	-	47,893.00	118,042.00	47,920.00	87,807.00	33,909.00
Option 7	-	13,979.00	-	95,785.00	236,085.00	47,920.00	87,807.00	35,209.00
20 Years of Service								
Current	$ 35,648.00	$ 35,648.00	$ -	$ -	$ -	$ -	$ -	$ 35,648.00
Option 1	-	35,648.00	122,182.00	76,953.00	155,892.00	-	-	49,669.00
Option 2	-	35,648.00	317,674.00	76,953.00	155,892.00	-	-	49,669.00
Option 3	-	35,648.00	-	76,953.00	155,892.00	73,309.00	190,385.00	49,669.00
Option 4	-	35,648.00	-	76,953.00	155,892.00	73,309.00	190,385.00	49,669.00
Option 5	-	35,648.00	122,182.00	76,953.00	155,892.00	54,982.00	142,789.00	49,669.00
Option 6	-	35,648.00	-	76,953.00	155,892.00	54,982.00	142,789.00	49,669.00
Option 7	-	21,389.00	-	153,905.00	311,784.00	54,982.00	142,789.00	49,431.00
30 Years of Service								
Current	$ 68,877.00	$ 68,877.00	$ -	$ -	$ -	$ -	$ -	$ 68,877.00
Option 1	-	68,877.00	232,304.00	164,581.00	225,241.00	-	-	89,138.00
Option 2	-	68,877.00	712,399.00	164,581.00	225,241.00	-	-	89,138.00
Option 3	-	68,877.00	-	164,581.00	225,241.00	92,921.00	368,326.00	89,138.00
Option 4	-	68,877.00	-	164,581.00	225,241.00	92,921.00	368,326.00	89,138.00
Option 5	-	68,877.00	232,304.00	164,581.00	225,241.00	69,691.00	276,244.00	89,138.00
Option 6	-	68,877.00	-	164,581.00	225,241.00	69,691.00	276,244.00	89,138.00
Option 7	-	41,326.00	-	177,517.00	450,481.00	69,691.00	276,244.00	81,843.00

Appendix D

Example Consolidation Schemes for S&I Pays

The services and Office of the Secretary of Defense should review the current system of S&I pays and consolidate them into a smaller number of categories. There are numerous ways to achieve this sort of consolidation, and the issue should be studied carefully before arriving at a final scheme. This appendix presents three possible approaches to illustrate how consolidation might work.

Example 1: Seven Pay Categories

The first alternative consists of seven separate pays: Occupation Differential, Retention, Accession, Conversion/Separation, Skill Retention/Proficiency, Assignment/Duty, and Hardship/Hazardous Duty. Each category of pays is discussed below.

Occupation Differential. The purpose of Occupation Differential Pay is to adjust for long-term differences in civilian and military wages across occupations. This pay could be used to promote entry and retention in careers that have relatively more lucrative opportunities in the civilian sector. Obvious examples include medical officers (physicians and dentists) and pilots.

Because this pay is designed to compensate for more-or-less permanent differences between military and civilian wages, the levels need only be adjusted infrequently. However, there should still be periodic reviews that compare military pay rates to earnings and employment trends in the civilian labor market and ensure that these pays are set at appropriate levels.

Retention. Like Occupation Differential Pay, Retention Pay compensates for fluctuations in market conditions across occupations and career points, but would be targeted to shorter-term fluctuations. The Selective Reenlistment Bonus currently functions in this fashion.

Adjustments would be more frequent for Retention Pay than for Occupation Differential Pay, and would be at the discretion of the services. Some Retention Pay may be amenable to an auction mechanism.

Accession. Accession Pay is designed to help the services address a range of recruiting challenges. The services could adjust Accession Pay at their discretion to encourage enrollment in specific hard-to-fill occupations, increase the aggregate number of high-quality recruits, or encourage recruits to enter active duty during off-peak periods (e.g., February through May).

Conversion/Separation. Conversion/Separation Pay targets occupations which experience unpredicted personnel surpluses. This pay encourages members in an overmanned skill to move to another skill, another component (e.g., the selected reserve), another service, or into the civilian sector.

Conversion Pay is designed to keep experienced military members in the total force, even when their current occupation is overstaffed. If there are other parts of the force that need their skills, conversion pay can provide the incentive for a career change. Note that conversions that cross services or components may raise issues about which service or component pays for the incentive and sets the rates.

Separation Pay allows the service to essentially buy out a member's retirement benefits, under the assumption that the services have implied contracts to allow members who have served for a certain number of years to continue to the retirement vesting point. As such, it would not be a permanent alternative to the current retirement system. Rather, it would be a long-term tool to be used sparingly to resolve short-term staffing imbalances.[92]

Because these pays are designed to react to short-term, unforeseen fluctuations in staffing patterns, they should be adjusted frequently, at the services' discretion. They are especially amenable to market mechanisms

92. Obviously, the need for a separation pay may be obviated by structural changes to the current military retirement system. If changes are proposed that eliminate cliff vesting at 20 years, separation pay may be unnecessary.

such as auctions that efficiently identify those members most willing to convert or separate.

Skill Retention/Proficiency. Skill Retention/Proficiency Pay offers incentives for members to acquire and maintain critical skills and abilities. This pay differs from Occupational Differential and Retention Pays in that the members do not necessarily need to be using the skill in their current job assignment in order to draw the pay. An example of this type of pay is Foreign Language Proficiency Pay (FLPP), which is paid to members who maintain proficiency in a critical foreign language, but who do not work as interpreters or linguists.

Skill Retention/Proficiency Pay can be adjusted by the services to react to changes in market conditions and force needs, but should probably be changed less frequently than Retention Pays. The purpose of this pay is somewhat longer term than Retention Pay and members should anticipate a fairly predictable stream of payments if they are willing to undertake the effort to acquire and maintain skills.

Proficiency Pay can also be used to reward performance. The pay can be graduated to pay higher amounts for higher levels of performance—such as higher special pay rates for recruiters who meet their monthly recruiting goals. FLPP could also be modified to reward proficiency, by tying payment amounts to the member's tested level of expertise.

Assignment/Duty. A variety of factors can make military postings more or less attractive, including typical work hours, the quality of area schools, and the probability of deployment. Assignment/Duty Pays compensate for differences in working conditions, location, and other predictable and undesirable aspects of duty assignments.

Assignment/Duty Pays such as the current Assignment Incentive Pay could use an auction mechanism to encourage qualified members to volunteer for less attractive assignments. An auction mechanism offers a number of advantages in this case. First, those who find the "undesirable" aspects of a particular job or location least onerous would submit lower bids. For example, members without dependents may not be concerned about assignments in locations with poor public schools.

Second, the services would not have to worry about identifying and setting compensation rates for particular job/location characteristics; the assignment pay allows members to identify those characteristics and set a price themselves. Third, the auction bids would reveal the true cost of staffing difficult assignments and may lead the services to explore more efficient approaches to accomplishing missions when that personnel cost is extremely high.

Assignment/Duty Pay would not be designed to include cost-of-living adjustments. Because changes in relative prices (and exchange rates for overseas assignments) can be fairly volatile, the services should continue to provide separate COLA allowances that eliminate uncertainty about the purchasing power of a military salary.

Hardship/Hazardous Duty. The final category encompasses Hardship/Hazardous Duty Pays. This category of pays is closely related to Assignment/Duty Pay in that it rewards members for duty that is unpleasant or undesirable. However, while Assignment/Duty Pay compensates members in anticipation of those conditions, Hardship/Hazardous Duty Pay focuses more on unpredictable occurrences (such as deployment to a combat zone), and only rewards members after the conditions occur. In general, these are unpredictable events for which the services would not want to elicit voluntary behavior (i.e., requesting volunteers to deploy). Accordingly, the pay levels cannot be set using a market-based mechanism. In the longer run, however, the services can adjust pay levels if necessary.

Hardship/Hazardous Duty Pay is a form of insurance for members, in that posted pay levels are known ahead of time, and there are clearly defined rules governing the conditions under which the member becomes eligible for the pay. Because the pay would not be market based, determining how best to set and adjust pay levels would have to be addressed. One general principle is that the level should vary directly with the arduousness of the duty or location. For example, members in a location that is dangerous and unpleasant would receive more than members who are in a location that merely has unpleasant living conditions. Or, similarly, members who are serving in combat would receive higher pay than members who are assigned in the same theater but not in combat.

Another pay-setting issue concerns variation across pay grades and experience level. Should all members receive the same level of Hardship/Hazardous Duty Pay for similar conditions, or should the level vary with seniority? One could argue that hazardous conditions are as hazardous for an E-1 as they are for an O-6 and both should receive the same compensation. Alternatively, the pay could be expressed as a percentage of basic pay so that the relative premium is constant across all members in a similar situation.

Example 2: Four Pay Categories

Other consolidation schemes are also possible. The seven S&I pay categories discussed above could be further consolidated into four broader pay categories. For example:

- ***Recruiting and Retention Pay*** would include Occupation Differential Pay, Retention Pay, and Accession Pays.
- ***Conversion and Separation Pay*** would follow the same definition as used in the seven pay example.
- ***Assignment Pay*** would cover Assignment/Duty Pay and Hardship/Hazardous Duty Pay.
- ***Proficiency Pay*** would follow the same definition as used in the seven pay example.

Example 3: Two Pay Categories

Finally, one could consider a two-category classification scheme. In this structure, the first category would include all of the pays that are used to adjust for supply and demand imbalances. The category would consolidate enlistment and reenlistment bonuses and officer pays that are set based on these imbalances such as Nuclear Officer Incentive Pay (NOIP) and Aviation Continuation Pay (ACP). Within this broad category, and within separate budgets by service for officer and enlisted members, there would be a great degree of flexibility in the application of these pays and they would be fungible across occupations.

The second category would be those pays that remain fixed in legislation or are recognition pays that do not have a direct relationship to short-term supply and demand imbalances. By their nature, they would be less fungible and less flexible pays.

This two-tier consolidation strategy might constitute a useful and important initial step in S&I pay consolidation. The first category would include those pays for which Congress provides greater flexibility. The second category would include those pays which remain more rigid in their application. Moreover, each service would receive two separate budgets. The budget for the "supply/demand" pays would be justified based on staffing problems, and fluctuate with changes in end strength and other factors affecting staffing, particularly in the short run. The second budget would be justified largely on existing legislation.

Appendix E

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Appendix F

DACMC Charter

CHARTER

DEFENSE ADVISORY COMMITTEE ON MILITARY COMPENSATION

A. Official Designation: The Committee shall be known as the Defense Advisory Committee on Military Compensation.

B. Objectives and Scope of Activities: The Committee shall provide the Secretary of Defense, through the Under Secretary of Defense (Personnel and Readiness), with assistance and advice on matters pertaining to military compensation. More specifically, the Committee shall identify approaches to balance military pay and benefits in sustaining recruitment and retention of high-quality people, as well as a cost-effective and ready military force.

C. Committee Membership: The Committee shall be composed of not more than eight civilian members, who are eminent authorities in the fields of compensation. Members shall be appointed by the Secretary of Defense on an annual basis, and serve as Special Government Employees without compensation under the authority of title 5, U.S.C. § 3109.

D. Committee Meetings: The Committee shall meet at the call of the Chairman. The attendance of a majority of the members at a meeting of the Committee shall constitute a quorum. The Committee shall be authorized to establish subcommittees as necessary to fulfill its mission.

E. Agency Support: The Under Secretary of Defense (Personnel & Readiness) will designate an Executive Director who will serve as the Designated Federal Official. The Department of Defense, through the

Washington Headquarters Services and the Under Secretary of Defense (Personnel and Readiness), shall provide administrative and support services as deemed necessary for the performance of the Committee's functions, and shall ensure compliance with reporting requirements of 5 U.S.C. § 6. Additional information and assistance, as required, may be obtained from other agencies of the Department of Defense and from the Department of Homeland Security, in the case of the U.S. Coast Guard.

F. Termination Date: The Committee shall terminate upon completion of its mission or two years from the date this Charter is filed whichever is sooner or unless it is extended by the Secretary of Defense.

G. Operating Costs: It is estimated that the operating costs, to include travel costs, consultant fees, and contract support, for this Committee shall be $3,500,000.00.

H. Charter Filing Date: March 14, 2005.

Appendix G

Resumes of Committee Members

Chairman

Admiral Donald L Pilling, USN, retired in 2000 as the 30th vice chief of naval operations, after a career that included command of a warship, a destroyer squadron, a cruiser destroyer group, a carrier battle group, the U.S. Sixth Fleet, and NATO's Naval Striking and Support Forces Southern Europe. In 2002, he assumed his current position as CEO and president of LMI, a $140 million government consulting firm that specializes in logistics and infrastructure management, information technology, human resources, and financial resources planning. Prior to joining LMI, he served as vice president for strategic planning at Battelle Memorial Institute. Other assignments during his active duty career included serving as a federal executive fellow at the Brookings Institution, 1985–1986, and serving on the National Security Council staff from 1989–1992. The Admiral is a member of the Defense Science Board; the Council on Foreign Relations; and the White House Fellows Commission. He is on the Board of Trustees/Advisors at the Naval War College, the Applied Physics Laboratory of the Johns Hopkins University, and the National Defense Industrial Association. Admiral Pilling is a fellow of the National Academy of Public Administration. He holds a BS in Engineering from the U.S. Naval Academy (1965) as well as a PhD in Mathematics from the University of Cambridge (1970).

Members

Martin Anderson has been the Keith and Jan Hurlbut senior fellow at the Hoover Institution, Stanford University, since 1998. He has a BA, summa cum laude, from Dartmouth College (1957), an MS in Engineering and Business Administration from the Thayer School and Tuck school (1958), and a PhD in Industrial Management from Massachusetts Institute of Technology (MIT, 1962). Dr. Anderson held academic positions at the Thayer School, the Joint Center for Urban Studies at MIT and Harvard, and Columbia's Graduate School of Business. His executive branch posts include special assistant to the President (1969–1970); special consultant to the President for systems analysis (1970–1971); and assistant to the President for policy development (1981–1982). He was also an advisor to several presidential candidates, including Nixon (1968), Reagan (1976 and 1980), Wilson (1995), Dole (1996), and Bush (2000); and was a delegate to three Republican Conventions. He was a second lieutenant in the Army Security Agency (1958–1959), a columnist for Scripps Howard News Service (1993–1994), and a member of the Present's Foreign Intelligence Advisory Board (1982–1985). Dr. Anderson has served on several boards and commissions, including the Defense Manpower Commission, the President's Economic Policy Advisory Board, the Ronald Reagan Presidential Foundation (trustee), the Congressional Policy Advisory Board (chair), and the Defense Policy Board. He is the author or editor of several books on Ronald Reagan, the draft, and other policy issues.

Frederic W. Cook is the founding director of Frederic W. Cook & Co., Inc., a management consulting firm specializing in executive compensation issues. The firm currently has about 40 employees and provides services from offices in New York, Chicago, Los Angeles, and San Francisco. In its 33 years, the firm has served over 1,500 clients. Prior to forming the firm in 1973, he was a principal at Towers, Perrin, Forster & Crosby, a global human resources consulting firm. After completing the NROTC program at Dartmouth College (1962), Mr. Cook served for four years in the U.S. Marine Corps as an infantry officer. He is a fellow of the National Academy of Human Resources, an honorary lifetime member of the American Compensation Association, and a recipient of the Association's Keystone Award. Mr. Cook was appointed by the Secretary of Defense to the Defense Business Board (DBB) at its founding in early 2002. The DBB focuses on business practice transformation within the Department of Defense. Mr. Cook serves as chair of the DBB's human resources task group.

Joseph E. Jannotta retired as founder and chairman of Joseph E. Jannotta & Associates, subsequently Jannotta, Bray & Associates, Inc., a career consulting firm with 13 offices nationwide. He served nearly four years as a director for Right Management Consultants, Inc., following their 1994 purchase of Jannotta, Bray & Associates, Inc. Mr. Jannotta is a graduate of Williams College (1950). He served as a lieutenant in the U.S. Navy from 1951–1955, with a tour in Korea as a carrier pilot. He then went on to receive an MBA from the University of Chicago (1967). Mr. Jannotta worked for Albertsons-owned companies for 25 years, ending at the vice presidential level as senior personnel officer of Osco Drug, Inc. In 1976, he became president of Yoplait Midwest, a start-up company, until its sale to General Mills in 1978. From 1995 to 2000, Mr. Jannotta served as codirector of the not-for-profit Chicago Management Council. He is a founder and member of the Association of Outplacement Consulting Firms International. At Chicago State University, he actively mentors undergraduate students, and has served as both vice chairman of the Foundation Board; and chairman of the Task Force on Mentoring. Until recently, Mr. Jannotta served as director of the Delaware Place Bank, and on the Advisory Board to Follett College Book Stores. He is currently the chairman of the Advisory Board to Chicago-based Shields Meneley Partners, a career transition consulting firm.

General Lester L. Lyles retired from the Air Force in 2003, after serving as commander, Air Force Materiel Command (2000–2003), vice chief of staff, U.S. Air Force (1999–2000), and director, Ballistic Missile Defense Organization (1996–1999). He holds a BS in Mechanical Engineering from Howard University (1968) and an MS in Mechanical (Nuclear) Engineering from the Air Force Institute of Technology at New Mexico State University (1969). A 1985 graduate of the National War College, General Lyles has also attended the National and International Security Program at Harvard University (1991). General Lyles is on the Board of Directors of numerous organizations, including General Dynamics Corporation, Battelle Memorial Institute, United Services Automobile Association, MTC Technologies, and the Air Force Association. He serves as a member of the NASA Advisory Council (NAC), and served on the President's Commission on Implementation of United States Space Exploration Policy (2004). He serves on the Board of Advisors for Johns-Hopkins Applied Physics Laboratory. Awards include 2003 Black Engineer of the Year Lifetime

Achievement Award, Aviation Week and Space Technology Laureate and Hall of Fame Awards, U.S. Black Engineer & Information Technology magazine "Top Technology Entrepreneurs—2004 and 2005" and Ebony Magazine "100 Most Influential African-Americans in America" (2001, 2002, 2003). General Lyles is also a managing partner in Four Seasons Venture Capital. He has been awarded an Honorary Doctorate of Laws from New Mexico State University (2003).

Walter Y. Oi is the Elmer B. Milliman professor of economics at the University of Rochester. He received his PhD from the University of Chicago in 1961 and has been teaching for over 40 years, mostly at the University of Rochester. His principal fields are labor economics and industrial organization. Professor Oi's publications include *Labor as a Quasi-Fixed Factor*; *A Disneyland Dilemma*, *Two-Part Tariffs for a Mickey Mouse Monopoly*; *Costs and Implications of an All-Volunteer Force*; *Work for Americans with Disabilities*; *Productivity in the Distributive Trades*; *Welfare Implications of Invention*; *Firm Size and Wages*; and *Historical Perspectives on the All-Volunteer Force*. He was the director of the economic analysis section of the Military Manpower Policy Study organized by William Gorham (Department of Defense, 1964–1965), and a senior staff economist for the President's Commission on an All-Volunteer Armed Force (the Gates Commission, 1969–1970). He was president of the Western Economics Association International (1992). He is a fellow of the Econometrics Society (1976), fellow of the American Academy of Arts and Sciences (1993), distinguished fellow of the American Economics Association (1995), a distinguished fellow of the Society of Labor Economics, and recipient of the Secretary of Defense Medal for Outstanding Public Service (1999). He is married to Marjorie Robbins Oi.

John P. White is the Robert and Renee Belfer lecturer at the John F. Kennedy School of Government, Harvard University. He is the managing partner of Global Technology Partners, LLC. and director of L-3 Communications. Dr. White served as U.S. deputy secretary of defense from 1995 to 1997; deputy director of the Office of Management and Budget from 1978 to 1981; assistant secretary of defense for manpower, reserve affairs and logistics from 1977 to 1978; and as a lieutenant in the United States Marine Corps from 1959 to 1961. His extensive private sector experience includes service as chairman and CEO of Interactive Systems Corporation from 1981 to 1988 and, following its sale to the Eastman Kodak Company in 1988, as a vice president of Kodak until 1992. In nine years with the RAND Corporation, he was the senior vice president for national security research programs and a member of the Board of Trustees. He serves as a director of IRG International, Inc., the Institute for Defense Analyses, the Concord Coalition, and the Center for Excellence in Government. He is a member of the Director of Central Intelligence's National Security Advisory Panel and the Council on Foreign Relations. Dr. White holds a Bachelor of Science degree from Cornell University and an MA and PhD in Economics from the Maxwell Graduate School, Syracuse University.

Appendix H

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Appendix I

Committee Meetings

DACMC Briefings and Presenters		
DATE	**SUBJECT**	**PRESENTER**
April 6, 2005	DOD Welcome In-Brief	Mr. William J. Carr Acting Deputy Under Secretary of Defense for Military Personnel Policy
	Chairman's Issues Briefing	ADM Donald L. Pilling (Ret) Chairman, Defense Advisory Committee on Military Compensation
	Legal Ethics Briefing	Mr. Robert Stoss Office of General Counsel, Department of Defense
	Federal Advisory Committee Act	Mr. Stewart Aly Office of the Deputy Under Secretary of Defense, Military Personnel Policy
	DOD Compensation Overview	COL Vee Penrod Office of the Deputy Under Secretary of Defense, Military Personnel Policy
	Opening Remarks to the DACMC	Honorable David S.C. Chu Under Secretary of Defense for Personnel and Readiness
May 10, 2005	OSD Balanced Scorecard: Recruiting and Retention	Dr. Curtis L. Gilroy Director, Accession Policy Office of the Deputy Under Secretary of Defense for Military Personnel Policy Mr. Brad Loo Deputy Director, Officer and Enlisted Personnel Management Office of the Deputy Under Secretary of Defense for Military Personnel Policy
	Service status, vision and compensation issues, Army	Mr. Mark R. Lewis Assistant Deputy Chief of Staff, G-1
	Service status, vision and compensation issues, Navy	VADM Gerald R. Hoewing Chief of Naval Personnel
	Service status, vision and compensation issues, Air Force	Lt Gen Roger A. Brady Deputy Chief of Staff, Personnel
	Service status, vision and compensation issues, Marine Corps	LtGen H.P. Osman Deputy Commandant for Manpower and Reserve Affairs

May 11, 2005	Public Meeting	
	Service status, vision and compensation issues, Coast Guard	RADM Kenneth T. Venuto Assistant Commandant for Human Resources, U.S. Coast Guard
	Reserve Strategy and Compensation Issues	Mr. Thomas F. Hall Assistant Secretary of Defense for Reserve Affairs Mr. Thomas L. Bush, Principal Director, ASD (RA)
June 6, 2005	Health Benefit Cost Growth	Dr. Stephen L. Jones Principal Deputy Assistant Secretary of Defense for Health Affairs
	Personnel Surveys, Defense Manpower Data Center (DMDC)	Ms. Anita Lancaster Assistant Director for Program Management Mr. Eric Wetzel, DMDC Ms. Kriston Williams, DMDC
	Military Quality of Life Issues	Ms. Jane Burke Principal Deputy for Military Community and Family Policy
	Nonmonetary Benefits	Ms. Cheryl Daly Logistics Management Institute
	Special and Incentive Pays	Ms. Nina Fountain Assistant Director of Compensation Mr. Chuck Witschonke Office of the Deputy Under Secretary of Defense, Military Personnel Policy Mr. Rich Krimmer Office of the Assistant Secretary of Defense for Reserve Affairs
	Retirement Programs	Dr. John Warner Clemson University
June 7, 2005	Public Meeting	
July 19, 2005	Quadrennial Defense Review Coordination	RADM Gerald L. Talbot, Jr. Director, Military Personnel Plans and Policy Division (N13) Mr. Reginald J. Brown Former Assistant Secretary of the Army for Manpower and Reserve Affairs
	Armed Forces Recruiting	Dr. Curtis L. Gilroy Director, Accession Policy, Office of the Deputy Under Secretary of Defense for Military Personnel Policy
	Health Benefits for Reservists	Dr. Susan Hosek, RAND
	GAO Reserve Affairs Study	Mr. David M. Walker Comptroller General of the United States

July 20, 2005	Public Meeting	
	Army Recruiting	LTG Franklin L. Hagenbeck Deputy Chief of Staff, G-1, U.S. Army
	Retirement Compensation	Dr. John Warner Clemson University
	Health Benefits	Dr. Susan Hosek, RAND
	Special and Incentive Pays	Dr. Patrick Mackin, SAG Corporation
	Quality of Life Issues	Dr. Beth Asch, RAND
	Reserve Compensation	Mr. Paul Hogan, Lewin Group
	Panel Discussion with Active Duty Service Enlisted Advisors	Master Chief Petty Officer of the Navy Terry D. Scott Sergeant Major of the Marine Corps John L. Estrada Chief Master Sergeant of the Air Force Gerald R. Murray Sergeant Major of the Army Kenneth O. Preston Master Chief Petty Officer of the Coast Guard Franklin A. Welch
	Panel Discussion with Reserve and National Guard Service Enlisted Advisors	Command Sergeant Major Bob Haskell, ARNG Command Sergeant Major Michele S. Jones, U.S. Army Reserves Command Sergeant Major Lawrence W. Holland, Senior Enlisted Advisor to the Secretary of Defense for Reserve Affairs Sergeant Major Joseph A. Staudt 3rd Battalion 14th Marine Regiment Master Chief Petty Officer David Pennington, Navy Reserve Force Chief Master Sergeant Jackson A. Winsett, Command Chief Master Sergeant for Air Force Reserve Command, Robins AFB, Georgia Chief Master Sergeant Richard Smith, Command Chief Master Sergeant of the Air National Guard Master Chief Petty Officer Jeffery D. Smith, Coast Guard Reserve Force Master Chief
	Panel Discussion with Assistant Secretaries for Manpower and Reserve Affairs	Mr. Daniel B. Denning Acting Assistant Secretary of the Army (M&RA) Mr. Michael L. Dominguez Acting Secretary of the Air Force Mr. William A. Navas, Jr. Assistant Secretary of the Navy (M&RA)

August 30, 2005	Healthcare for Military Retirees	Mr. James K. Haverman, Jr., Defense Business Board Ms. Kelly S. Van Niman, Defense Business Board
	Health Net: Regional PPO for TRICARE for Life Beneficiaries	Mr. James E. Woys President, Health Net Federal Services, Inc. Ms. Adrienne Morrell Health Net Federal Services, Inc.
	OSD Health Affairs	Dr. Steven Jones Office of the Assistant Secretary of Defense, Health Affairs COL Thomas Kurmel Office of the Assistant Secretary of Defense, Health Affairs
August 31, 2005	Public Meeting	
	Military Coalition Perspective on Military Compensation System	Mr. Ike Puzon Director of Legislation, Naval Reserve Association Mr. Joseph L. Barnes National Executive Secretary, Fleet Reserve Association Mr. Steven P. Strobridge Director, Government Relations, Military Officers Association of America
September 21, 2005	Public Meeting	
November 17, 2005	Quadrennial Defense Review: Best Value Total Force	RADM Gerald L. Talbot, Jr. Director, Military Personnel Plans and Policy Division (N13)
February 28, 2006	Public Meeting	

Appendix J

Glossary

ABP	Annual Basic Pay
ACIP	Aviation Career Incentive Pay
ACP	Aviation Continuation Pay
AD	Active Duty
ADT-AT	Active Duty Training-Active Training
AIP	Assignment Incentive Pay
ASP	Additional Special Pay
ASVAB	Armed Serves Vocational Aptitude Battery
AVF	All-Volunteer Force
BAH	Basic Allowance for Housing
BAQ	Basic Allowance for Quarters
BCP	Board Certified Pay
CBO	Congressional Budget Office
CEFIP	Career Enlisted Flyer Incentive Pay
CHAMPUS	The former name of the military health care program that is now TRICARE
COLA	Cost-of-Living Allowance
CONUS	Continental United States
Co-payment	A per-occurrence payment paid by the beneficiary, as required by various health insurance plans.
CPI	Consumer Price Index
CRNA	Certified Registered Nurse Anesthetists
CSP	Career Sea Pay
CSRB	Critical Skills Retention Bonus
DDESS	Domestic Dependent Elementary and Secondary Schools
Deductible	A set dollar amount which must be satisfied by the beneficiary within a specified time frame before the health plan begins making payments on claims.
DMDC	Defense Manpower Data Center

DOD	Department of Defense
DODEA	Department of Defense Education Activity
EB	Enlistment Bonus
Fee for Service Health Benefit	Health insurance that requires the insurer pay to the health care provider all or a portion of the fee charged by the provider for the health care services received.
FERS	Federal Employees Retirement System
FLPP	Foreign Language Proficiency Pay
FSA	Family Separation Allowance
GAO	U.S. Government Accountability Office
Hi-3	Average of the highest three years of annual basic pay, used in the calculation of the military retirement annuity.
HMO	Health Maintenance Organization. A type of group health insurance in which the beneficiary receives health care from a specified set of providers and typically pays a small co-payment at each visit. Premiums are typically lower under these group plans.
IDT	Inactive Duty Training
Individual Ready Reserve	A manpower pool consisting of individuals who have had some training, have previously served in the active component or in the selected reserve, and have some period of their military service obligation or other contractual obligation remaining. Members may voluntarily participate in training for retirement points and promotion with or without pay.
ISP	Incentive Special Pay
JACP	Judge Advocate Continuation Pay
JVEF	Joint Venture Education Forum
MBP	Monthly Basic Pay
MPA	Man-Years Per Accession
MWR	Morale, Welfare, and Recreation
OCONUS	Outside the Continental United States
OSD	Office of the Secretary of Defense
OTEIP	Overseas Tour Extension Incentive Pay
Out-of-Pocket Expense	The amount patients must pay themselves for health care services. This amount is not paid for by the insurance plan and can include premiums, deductibles, or co-payments.
PCS	Permanent Change of Station

PPO	Preferred Provider Organization. A form of health insurance in which the beneficiary pays lower out-of-pocket expenses when health care is provided by a "preferred" list of providers, and higher out-of-pocket costs if the beneficiary receives care from providers that are not on the preferred list. Beneficiaries typically pay a co-payment when medical services are provided.
QRMC	Quadrennial Review of Military Compensation
RMC	Regular Military Compensation
S&I	Special and Incentive
SDAP	Special Duty Assignment Pay
Selected Reserve	Those units and individuals within the ready reserve designated by their respected services and approved by the Joint Chiefs of Staff as essential to contingency or wartime missions. All selected reservists are in an active status. They are paid reservists, train a minimum of 38 days per year, and can be called for use by the president. The selected reserve also includes persons performing initial active duty for training.
SRB	Selective Reenlistment Bonus
SUBPAY	Submarine Duty Incentive Pay
SWO	Surface Warfare Officer
TSP	Thrift Savings Plan. A federal-government-sponsored retirement savings and investment plan for civilians who are employed by the United States government and for members of the uniformed services.
TIG	Time in Grade
TIS	Time in Service
TRICARE	A Department of Defense regional managed health care program for members of the uniformed services, their families, retirees, and other eligible beneficiaries.
VHA	Variable Housing Allowance
VBSS	Visit, board, search, and seizure
VSP	Variable Special Pay
YOS	Years of Service
Zwick Commission	President's Commission on Military Compensation