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Seventh Quadrennial Review of Military Compensation

Compensation Structure

Major Topical Summary (MTS) 1

August 1992

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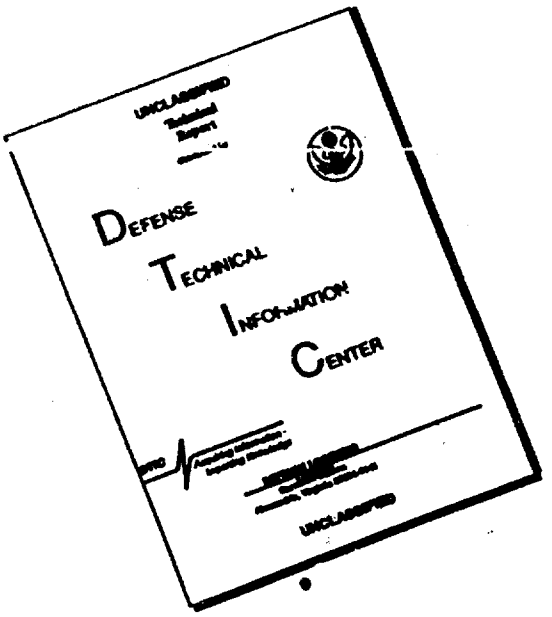

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This MTS of the 7th QRMC addresses the concept of a simplified military pay and allowar structure and the issues involved in moving to such a system from the current system. It identifies the fundamental requirements that any military compensation system must satis critiques the current system, defines the simplified structure, identifies the elements of the current system that would be involved in moving to that structure, explains the issues tha would be confronted and the benefits to be gained, walks through the 7th QRMC's step-by approach and a potential one-step alternative, and draws appropriate conclusions. Releva details from the QRMC's research and analyses are appended.

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7TH QRMC STAFF ANALYSES

The full set of the 7th QRMC study documentation includes this report and the 7th QRMC Staff Analyses, which form a series of stand-alone reports. The reports in the Staff Analyses provide detailed facts and logic of interest to the small audience of staff specialists who may require a more complete understanding of the findings and recommendations in our official report.

There are two types of documents in the Staff Analyses: Major Topical Summaries (MTSs) and Global Subject Papers (GSPs). MTSs cover primary areas of investigation, such as basic pay and allowances, while GSPs cover either theoretical considerations, such as the principles of compensation, or special research subjects, such as foreign military compensation systems. All other QRMC staff documents are internal working papers that do not necessarily represent the official views of the QRMC. The Staff Analyses consist of the following documents:

MAJOR TOPICAL SUMMARIES (MTSs)

GLOBAL SUBJECT PAPERS (GSPs)

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COMPENSATION STRUCTURE

CHAPTER 1—INTRODUCTION

SITUATION

The fundamental question facing the 7th QRMC was whether today's military compensation structure is an adequate framework to support tomorrow's uniformed services. Our answer was "Yes—with reservations!" It's adequate, but it needs improvements. Further, there is nothing sacrosanct about the current pay-and-allowance structure; others could work as long as pay differentials are based on locality, skill, and status. After making these key findings and some assumptions about national defense objectives, force levels, institutional requirements, costs, and economic conditions, we recommended a series of step-by-step improvements leading to a simplified pay and allowances structure. Some early respondents have asked why not skip the steps and go straight to the objective? The answer is not a simple one. Many issues must be weighed before the Department and the Congress can decide if and when to adopt a new military pay structure.

PURPOSE

This MTS is intended as a "smart book" on the concept of a simplified military pay and allowances structure and the issues involved in moving to such a system from the current system. It identifies the fundamental requirements that any military compensation system must satisfy, critiques the current system, defines the simplified structure, identifies the elements of the current system that would be involved in moving to that structure, explains the issues that will be confronted and the benefits to be gained, walks through the 7th QRMC's step-by-step approach and a potential one-step alternative, and makes appropriate conclusions. Relevant details from the QRMC's research and analyses are appended.

SALARY OR PAY AND ALLOWANCES?

Much of the compensation literature is devoted to a debate about the relative merits of a military *salary system* on one hand, and a *pay and allowances system* on the other. Correctly or incorrectly, advocates of a salary system are cast as those whose interests lie primarily in system efficiency—getting the most for the taxpayer's dollars. Advocates of a pay and allowances system are cast as those whose primary interests lie in preserving military institutional values that make for a strong and capable fighting force. We found merit on both sides of the debate.

The system does need to be made more efficient. We especially favor moving away from the paternalistic approach inherent in the existing housing and subsistence allowances. For example, today, rather than giving our members highly prized discretionary dollars in their pay checks, we presume to tell them how much to spend on these basic needs. The result is that we don't buy as much attraction, retention, and motivation as we could get for our allowance dollars, and we pay a heavy price for separate systems of budgeting, accounting, and administration. This same anachronistic system also pays a sailor with no dependents less (in housing allowance) for doing his primary job of sailing warships at sea than it does when his ship is in dry dock or he is otherwise assigned ashore. Other members see themselves as taking a pay cut for the honor of going to war (when they come off separate rations). Clearly, there is room here to improve efficiency.

Likewise, the compensation system must support valid institutional requirements. Foremost among these requirements in the military is the hierarchal system of rank, which is a measure of military productivity and the basis for the system of discipline by which leaders impel subordinates to perform difficult tasks with precision, at the risk of life and limb when necessary. Clearly, if the rank system fails, there will be an immediate negative effect on the benefit side of the cost-benefit equation. Consequently, we have recommended increased emphasis on promotions in the basic pay table and implicitly rejected some successful features of many civilian systems such as primary emphasis on skill or making earnings a private matter between the employer and individual employees. We think our recommendation makes good economic sense.

In fact, economic efficiency and support for institutional requirements are two sides of the same coin. Cutting costs at the expense of valid institutional requirements is false economy, while continuing outmoded or otherwise unnecessary institutional requirements is inefficient. Rather than treating efficiency and institutional requirements as policy alternatives to be traded off, one against the other, policy makers and analysts should seek ways to accommodate both of these critical considerations. The essential institutional requirements to be considered in military compensation system design are locality, skill, and status. All of our recommendations for a simplified pay and allowances system are designed to strengthen and support these three fundamental bases for differentiating among members.

A SIMPLIFIED PAY AND ALLOWANCES SYSTEM

Two points concerning simplification need to be understood at the outset. The first is what we mean by system simplification as a design objective, and the second is our definition of a simplified pay and allowances system.

System Simplification

Simplification will always be a relative term as it is applied to military compensation. The uniformed services are large organizations with complex functions. The personnel

management systems that support these organizations, including the military compensation system, are also complex. However, there is nothing inherently wrong with having complex systems. With the assistance of modern information systems, we are perfectly capable of executing highly complex management programs; and to the extent such programs promote overall objectives efficiently, we should take advantage of them. The logic is the same as in selecting a modern automobile over a Model T—what counts is not the complexity of the vehicle but its overall capability and ease of operation for the driver. In advocating simplification, rather than eliminating complexity per se, we favor making the system easier to understand and eliminating complexity that contributes nothing to efficiency. For example, we asked, "Why have a separate allowance for an element of compensation, such as subsistence, that everyone receives, either in cash or in kind?"

Definition of the 7th QRMC Objective System

Our assumed goal, or objective system, which we call *a simplified pay and allowances system*, is defined as having the following elements:

- Regular military compensation (RMC) equal to basic pay plus locality pay:
  - Basic pay will continue to be denominated by a single pay table for the uniformed services based on military status (grade and longevity); however, rates will be increased to incorporate the combined values of the subsistence allowance, the portion of housing allowances not attributable to regional price differentials, and the Federal tax advantage associated with these allowances. The existing allowances and Federal tax advantage will be thereby eliminated, and the linkages between basic pay and other elements of compensation will be modified so that the value of the elements linked to basic pay will not change when the new system is implemented.
  - Locality pay will be a new taxable pay based on grade and the local prices of housing and other goods and services as established by independent survey.
- A separate but simplified system of special and incentive pays.
- Expense reimbursements.
- Other allowances and so-called fringe benefits, including retired pay and medical care, that are part of the current system.

We chose to call our proposal a simplified system of pay and allowances. Some may call it a salary system because it eliminates separate, nontaxable allowances. We would not object to that label if we could be sure that it would be understood in those terms. However, since

there are some features of civilian salary systems that we reject, we selected a clearly descriptive label that is less likely to be misunderstood.

CHAPTER 2—MILITARY COMPENSATION SYSTEM REQUIREMENTS

PAST AS PROLOGUE

Consider this critique of the military compensation system:

> There has been no general realinement of the military pay structure for over 40 years. In the meantime, there have been numerous piecemeal adjustments within the general framework of the structure, each change having been made in response to a specific situation but without much thought to the general compensation pattern. As a consequence, the laws governing basic pay, special pay, allowances, and retirement pay have gradually developed along separate and divergent lines, to form what is now a literal hodgepodge that is so complicated and so lacking in cohesion that it can be fairly stated that the Federal Government actually has no identifiable plan which governs the career compensation of persons in the uniformed services. When this situation is measured against the huge annual pay roll involved, it becomes obvious that appropriate remedial action is imperative.[1]

Though there is a ring of familiarity, this isn't a criticism of today's system of basic pay, allowances, and special and incentive pays, the general framework of which was put in place by the Career Compensation Act of 1949. It's actually a passage from the legislative history of that act and it's criticizing the previous compensation system—the one in place during World War II. It illustrates that, although it is wise to be conservative in changing a system that influences the lives or careers of millions of people and, in turn, the defense of the Nation, no system of compensation will remain static over long periods of time. The usual pattern is one of relatively small adjustments in reaction to specific new situations interspersed with infrequent fundamental reviews of the system as a whole, usually prompted by such significant epochal changes as the beginning and end of the cold war.

From this perspective, it was logical for the 7th QRMC to conduct an end-of-epoch review of system fundamentals. In doing so, we found that there have been numerous piecemeal adjustments within the general framework of the structure; for example, raises in entry pay and greater use of bonuses after 1973 to accommodate the change from a conscripted to a volunteer junior enlisted force. However, our assessment was that, while there are trends towards complexity and lack of cohesion, it would not be accurate to conclude today that the system has become so complicated and so lacking in cohesion that there is no identifiable plan governing military career compensation. Consequently, our approach was to identify and salvage what works, and to seek evolutionary changes to build a simpler and more cohesive system.

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[1]Legislative History of the Career Compensation Act of 1949; S. Rep. No. 733, 81st Cong., 1st Sess. 1-2 (1949).

We also found that there are few truly new fundamental issues in the field of military compensation. The search for a valid index of comparable civilian wages is not new. Seeking the proper balance between promotion and longevity in the basic pay table is not new. The question of whether a comprehensive salary is better than a system of basic pay and allowances is not new, and so on. Historically, the field of compensation, whether military or civilian, simply doesn't have many Albert Einsteins and Jonas Salks who periodically make major fundamental breakthroughs in theory or application. That is because maintaining an effective compensation system is more a question of balance than it is of invention. Fundamentally, we seek to attract, retain, and motivate; and that overall objective remains constant. Further, even a cursory examination makes it apparent that a great number of compensation management tools are already being employed to this end. The emphasis, therefore, is on using compensation management tools with greatest efficiency to accommodate largely cyclical changes in force levels and the economy, and from a larger perspective, to changes in national defense objectives in response to the world situation and to evolutionary changes in American society.[2]

The historical context and inherent nature of the system imply that overall compensation objectives ought to be well established and quite readily apparent in the record. In fact, this is the case. However, we found two important considerations that complicate matters. The first is that basic principles are not especially instructive in designing a specific system. Since there are usually many ways to achieve an objective, much narrower criteria are required than, for example, that the system must attract sufficient recruits. The second is that system objectives are interrelated; no change can be considered in isolation. Satisfying one objective may detract from satisfying another. For example, a change that increases retention among career members requires an increase end strength or a decrease accessions. Questions of narrowness of definition and balance dominate most discussions about compensation objectives.

With this background, we move next to a discussion of what we found to be the common objectives of any compensation system. Following that, we will narrow the focus first to the broad principles of any military system and then to what we believe to be the fundamental, bottom-line requirements for the uniformed services. From there, we will focus in turn on the current system, an improved alternative system, and transition implications.

[2]The need to respond to changes in American society might seem somewhat ephemeral at first glance. However, changing societal views on dependency, for example, had a very distinct and critical effect on our analysis.

COMMON OBJECTIVES

Pay is the simple, direct word meaning to give money, etc., due for services rendered, goods received, etc.; *compensate* implies a return, whether monetary or not, thought of as equivalent to the service given, the effort expended, or the loss sustained.[3] The two terms are often synonymous, yet there seems to be more stress on the equivalence and extent of the quid pro quo implied by the latter term. Thus follows the general notion that there is more to overall compensation than a periodic paycheck, and often, related notions about equity and comparability.[4] Nevertheless, both terms do imply an exchange—one service or thing for another. The objectives of any pay or compensation system are simply what the organization expects in exchange for the compensation it gives to its members.

The legislative history of the Career Compensation Act of 1949 describes the purpose of the bill as to establish for the uniformed services a compensation pattern which will tend to attract and retain first-class personnel.[5] In 1967, the 1st QRMC recognized this theme when it asserted that its work would assist in attracting, retaining, and motivating into the career force the kinds and numbers of personnel the uniformed services need.[6] In 1986, The General Accounting Office reported that, "The purpose of the military compensation system is to attract, retain, and motivate the number and quality of personnel needed to maintain the desired level of national security."[7] Indeed, we found among military pay authorities no major disagreement on these basic objectives, either now or at any time during the history of the Career Compensation System. The three compensation objectives that they embody; namely, recruiting, retention, and motivation, are, however, nearly universal. They apply to such diverse enterprises as professional sports franchises, fast food restaurants, or a widget factory as well as the uniformed services. The 7th QRMC identified two additional objectives to add to this list: incentives for special skills or talents and reimbursement for expenses occasioned by military assignment. These additions could be considered as implicit in the first three, but we considered them to be of sufficient importance in the military context to be discussed explicitly. A compensation system that fails to meet these five objectives fails at its

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[3]Victoria Neufeldt and David B. Guralink, Eds. *Webster's New World Dictionary of American English*, 3rd College Edition (Cleveland & New York, 1988:Webster's New World) 992.

[4]In simple terms, these are the notions that the system must be fair to the individual and to the taxpayers, and that there should be general equivalence or *comparability* between what a military member makes and what a civilian person of comparable status and ability makes. Widely different views are frequently expressed about them. For example, comparability is seen as a fairness issue by some and as a competitiveness issue by others.

[5]S. Rep. No. 733, 81st Cong., 1st Sess. 1 (1949).

[6]U.S. Department of Defense, *Modernizing Military Pay: Report of the First Quadrennial Review of Military Compensation*, vol 1, Washington, D.C., 1967, xiv.

[7]U.S. General Accounting Office, *Military Compensation: Key Concepts and Issues*, GAO/NSIAD-86-11 (Washington, January 10, 1986), 6.

most basic level. On the other hand, simply doing these things does not make a particular compensation system the best one for a given situation. Effective design requires even more specific criteria.

PRINCIPLES OF MILITARY COMPENSATION

In 1965, a new section, 1008(b), was added to title 37 of the United States Code, *Pay and Allowances of the Uniformed Services*, at the initiative of the House Armed Services Committee. It requires the President to conduct quadrennial reviews of "the principles and concepts of the compensation systems for members of the uniformed services." Up to that time, reviews of military compensation had been essentially ad hoc—they were usually convened in response to problems. The Committee felt that a more proactive approach was in order, especially in view of the rapid changes in military technology and tactics that had become commonplace since World War II and the implications of such changes in maintaining the readiness of our global forces.

However, in 1965, when the QRMC objectives were written into law, the principles and concepts of military compensation had not been explicitly stated. In 1986, the GAO reported that "Neither the DoD nor the Congress has established a framework of principles for setting military compensation."[8] In 1982, the President requested that the 5th QRMC formulate a set of principles, and it did so in its report.[9] Later, in 1987, the Department of Defense published a discussion of the theory, concepts, and principles of military compensation in the Third Edition of the *Military Compensation Background Papers*, but it is not a formal statement of Defense policy.[10] In these papers, the list of principles was modified to accommodate the provisions of the Goldwater-Nichols DoD Reorganization Act of 1986 (Pub. L. No. 99-433), an indication that even such basic principles must be amenable to modification from time to time.

The 7th QRMC has presented six principles, together with their rationales, to serve as guideposts for compensation program development and management.[11] They assert that the military compensation system must be: (1) effective in peace and war, (2) equitable and efficient, (3) flexible and competitive, (4) motivational, (5) predictable, and (6) understandable. We found them to be useful as philosophical or heuristic foundations for evaluating military compensation policy and its effects. However, though important in this

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[8]Ibid, 20.

[9]Department of Defense, Office of the Secretary of Defense, *Report of the Fifth Quadrennial Review of Military Compensation, Executive Summary* (Washington, 1984), I-1 to I-6.

[10]Department of Defense, Office of the Secretary of Defense, *Military Compensation Background Papers*, 4th Ed. (Washington, 1991) 6-10.

[11]Appendix A to the 7th QRMC main report, and in more detail in the 7th QRMC Staff Analyses, GSP F.

role, they do not (and can not) represent a precise formula for developing specific policies or levels of military pay. Furthermore, while they are more specific than the overall objectives of attracting, retaining, and motivating, they are still too general. A further level of specificity is required to express the essential characteristics of a suitable compensation system for today's uniformed services.

COMPENSATION SYSTEM DIFFERENTIALS

After reviewing the compensation literature and examining the various systems that have been tried or proposed in the past, we concluded that what makes a particular system distinctive is the way in which it discriminates among members. In other words, if you can identify the criteria by which one member receives more or less compensation than another, then you will have a meaningful system definition. Conversely, establishing a set of desired or acceptable *military compensation system differentials*, would yield valid criteria for evaluating acceptable system alternatives. Unlike the more general principles and system objectives, these differentials are sufficiently specific to make such value judgements and to assist in system design. In making judgments about differentials, we looked not only at the current system and its antecedents but also at the compensation systems of foreign militaries, large private-sector firms, and public-sector organizations such as civil service, police departments, and fire departments.

Key Military Compensation Differentials

The 7th QRMC found that any military compensation system must embody three specific differentials to successfully support the economic and institutional requirements embodied in the overall system objective and the principles of military compensation. These differentials are: military status, skill, and locality.

Status. Rank and longevity convey a great deal of information about performance and productivity. Rank is the best single available vehicle for stimulating military performance through compensation. Longevity captures experience and the gains in productivity that accompany it.

The military personnel and manpower systems reinforce rank as a compensation determinant in two major ways. First, the personnel system manages the promotion process to make it an excellent measure of past productivity and predictor of future performance. The promotion process very concisely captures previous performance, experience, professional development and a projection of the future needs of the service. Continued success indicates development as a manager with broadening responsibility or technical expertise. Because increased compensation is contingent on promotion, it motivates performance of everyone competing for advancement, whether or not they are ultimately selected. The manpower requirements process also supports rank as a pay determinant by reviewing each position in the military to determine the qualifications needed. The level of

responsibility and breadth and depth of technical knowledge required lead to a grade being assigned for each position. Individuals are then assigned to positions calling for their rank. Thus, while rank resides in the individual, the manpower and personnel systems function together to match qualifications and jobs. For more details on this subject, see Appendix A, Grade as a Pay Determinant.

Taken together, rank and longevity provide important vehicles for economically recruiting and retaining a quality force. Because promotion in the junior grades is fairly predictable, pay based on status can be established that is attractive over the first term to new entrants, yet is efficient in paying trainees modestly until they have demonstrated their ability and willingness to complete their contract. It also allows compensation to be focused on known career decision points, offering the most affordable incentives for continuation.

Skill (or specialty). A system of exceptional pays based on specialty or duty status is an obvious way to motivate and retain people with specific skills or experience, or to motivate individuals to accept onerous duty assignments. While ultimately the test for setting specialty-based pays is whether or not the services are retaining individuals in the right numbers and quality, the real question is how to identify those cases where skill differentials are needed. At first glance, it seems that this sort of pay would most apply to those military members whose skills are in substantial demand in the civilian labor markets. Indeed, this is a primary use of such differentials.

However, incentives also can be beneficial for skills where experience is particularly valuable to the military even though the skills are not directly transferable to the private sector. Indeed, differential compensation may be most warranted when the skills are *not* directly transferable, precisely because the services ask talented individuals to foreclose their options for a civilian career. Finally, in some instances, the high costs of total training suggest offering incentives for high continuation rates because retention is a cost-effective alternative to replacement.

Locality. Significant cost-of-living variations among assignment locations can undermine the effectiveness of an otherwise well-designed compensation structure. On the surface this may appear to be a straightforward cost-of-living issue; however, it is a bit more complicated. Members are apt to compare their earnings against those of their local civilian peers, which suggests local wages are the proximate comparator. Certain areas are also more attractive than others, and many people would take a cut in real income to live there. For example, Minot AFB, North Dakota, has the lowest cost of living identified by the 7th QRMC of any major CONUS installation, while Travis AFB, California (just outside San Francisco), has a cost of living substantially above the norm. Yet the Air Force has trouble filling billets at Minot and turns down volunteers for Travis. What then is the proper guide to setting geographic variations in military pay: local wages or local costs of living?

The arguments for local wages are that they are the immediate referents to civilian peers and that they incorporate not only local labor productivity but also locale attractiveness

because wages tend to be bid down in places where people would like to live. However, unlike most civilians, military members generally do not enter into a contract that specifies the duty station, and the referent is the national market as a whole; assignment attractiveness is in large part a matter of luck. Moreover, the relationship between local wages and local amenities breaks down under fairly common circumstances (e.g., when local amenities enhance productivity and therefore encourage industry to locate there). In short, the 7th QRMC finds that local cost of living is a proper dimension of compensation differentiation, and one of growing concern and importance.

Inappropriate Differentials

While we do not reject in concept the use of differentials in addition to status, skill, and locality, we would advise careful consideration before adopting any others. For example, the fact that the various branches of service have historically had very different levels of recruit volunteers might imply that a differential based on branch of service would improve the efficiency of service pay. However, as explained in Chapter 3 of our main report, we rejected such a differential for our basic pay table because branch of service differences are efficiently handled via special and incentive pays and because such a differential would work against the kind of close cooperation between services embodied in the current defense strategy of *jointness*. There is one differential found in the current system that we believe should be phased out, and that is the dependency differential. The rationale for doing so is explained as part of the assessment of the current system in the next chapter.

CHAPTER 3—THE CURRENT MILITARY COMPENSATION SYSTEM

THE STARTING POINT

Although self-evident, it is of major importance that our task of determining the best compensation system for the uniformed services does not begin with a clean slate. The military compensation system serves one of the largest organizations on earth, whose constituents and benefactors as well are sensitive to change. Since the system supports a critical public function, the national defense, it must be modified with care and wisdom. Its current form represents past responses to specific needs and objectives; much of the logic for those responses remains valid, and most of those needs and objectives remain current. These considerations dictate that transition to any new system must proceed from the old one; it is neither feasible nor desirable to implement a new system from scratch. Given this situation, we began our review with a description and critical analysis of the existing system. We believe this is also the best starting point from which to explain our proposals for change. Proceeding from the known to the unknown, pointing out the positive features we want to keep and the negative features we want to eliminate is the most straightforward way to explain our findings and proposals. Accordingly, as a first step, we will next undertake a brief description of the current system (which you may safely skip over if you are already familiar with it) followed by our assessment and conclusions about that system (which you should not skip).

SYSTEM DESCRIPTION

Evolution

Historically, the United States has maintained a large military only in time of war or when the threat of war looms large. Interwar periods have been marked by small standing armies made up predominantly of young, single males. The compensation system has reflected that situation. Through most of the nineteenth century, officers received *pay proper*, or *base pay*, plus an allowance for quarters based on grade and *rations* (in money), again based on grade.[1] Enlisted members, who were expected to live in the barracks and to eat in the dining halls, received only base pay. This situation continued until World War I with one major exception: between 1871 and 1922, officers were paid on a salary basis. Though prices

[1]Typically, an officer received a multiple of the *standard ration*, varying from 2 rations for the lowest grades to 15 for general officers; the Commander of the Armies drew 40 rations as an emolument.

fluctuated throughout this period, pay rates were updated only occasionally when their inadequacy became obvious. Matters began to change with the massive mobilization—and significant inflation—of the First World War.

That mobilization called up 2.9 million men, and for the first time since the Civil War there were significant numbers of members with dependents, particularly in the officer corps.[2] Consequently, a commutation pay was authorized on a temporary basis in 1918 to ensure support for families of married officers.[3] In 1915, the first statutory provision for an enlisted quarters allowance was passed, covering the top three grades.

Although the demobilization following the war resulted in a return to the traditionally small standing military, compensation provisions instituted during the hostilities lingered on, and in fact took on new life as inflation during and after World War I substantially eroded the value of military pay. The pay table then in force for officers had been established in 1908; by the early 1920s, increased costs of living had cut its value in half. The enlisted force did not fare quite so badly, with small pay increases sporadically granted to the higher grades and a 100-percent increase legislated for privates in 1917.

The solution implemented by Congress through the Pay Readjustment Act of 1922 included variable allowances for officers, with rates depending both on rank and family status, to cover increases in living costs. Congress chose to leave *base pay* virtually unchanged from the levels of 1908, but added money differentially to the subsistence allowance to provide greater income for married officers. The discussion accompanying adoption of these measures made it clear that one of the principal reasons for the dependency differential was to avoid an *unjustifiable burden on the Public Treasury*. Interestingly, that discussion also included examples of how firms in the private sector provided compensation, particularly in kind, that effectively favored married men. Housing allowances for officers continued to be determined based on tables listing the number of rooms authorized for officers by grade. Finally, the 1922 Act introduced explicit consideration of the cost of living in setting allowance rates.[4]

Mobilization for World War II led to the next set of significant changes in military compensation. As was the case for the First World War, the standing military before mobilization consisted mostly of bachelors who were provided quarters and food. The extensive draft, however, again brought many men with families into the services. The Servicemen's Dependents Allowance Act of 1942, a temporary measure to deal with family financial burdens created by mobilization and conscription, established allowances geared to

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[2]The draft for World War I exempted married men, although not all took the exemption.

[3]Act of April 16, 1918, 40 Stat. 530 (quarters or commutation thereof for commissioned officers).

[4]Military Pay Readjustment Act of 1922, §6, 42 Stat. 625, 628.

the number of dependents and was paid directly to those dependents rather than to the individual member.

The onset of the cold war brought with it the first sizeable standing military in U.S. history. It also marked passage of the Career Compensation Act of 1949, which laid the foundation for the current compensation system. The 1949 Act approved Administration policy of not recognizing dependents for pay purposes among junior enlisted grades. This reflected the circumstances of the time: a force that was conscription-based and largely located on post. For all entitled grades, the housing allowance was aimed at providing a cash component to income that matched housing expenditures by civilians of similar income levels.[5] Thus, it was an income and spending pattern-based allowance, referenced to civilian peers. It specified two rates, by grade, based on dependency; the dependency differential was based on civilian spending differences between married and unmarried people. The subsistence allowance was specified at a single rate for all officers, and three separate rates for enlisted members based on availability of messing. Aside from the officer-enlisted difference, rank was removed as a criterion for different subsistence allowances.

With the coming of the Korean conflict, the Dependents Assistance Act of 1950 established enlisted housing allowances based on the number of dependents primarily to provide financial assistance to junior enlisted members. This Act did not fully expire until 1973.

Since 1951, except during buildups to larger levels during the Korean and Vietnam conflicts, active duty military personnel strength has ranged from 2.0 to 2.8 million members. These forces far exceeded any previous peacetime levels. Between 1950 and 1972, the military was largely conscript-driven; compensation policies continued to reflect that fact. When the draft ended in 1973, the force was 2.3 million members strong. It was young (58 percent were under age 25), with about 60 percent of new accessions having high school diplomas.

During the past 19 years, there have been significant changes. The force has become older, better educated, and more diverse. Now, military strength is being reduced to levels not seen since the late 1940s. By the end of 1991, active duty military strength was at 2.0 million with further reductions planned to meet a goal of 1.6 million by 1995.[6] Only about 49 percent of members were under 25, and 98 percent of new accessions had high school diplo-

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[5]The allowance was predicated on corresponding civilian spending, at the 75th percentile. U.S. Department of Defense, Advisory Commission on Service Pay (The Hook Commission), *Career Compensation for the Uniformed Forces: A Report and Recommendation for the Secretary of Defense* (Washington, December 1948), 12.

[6]National Defense Authorization Act for Fiscal Year 1991, § 401, 104 Stat. 1485, 1543 (1990).

mas. Over the past decade, the Armed Forces Qualification Test (AFQT) scores of new entrants have also improved dramatically.[7]

The high quality of the modern force is suggested by its increases in experience and education and verified by its recent performance in the Persian Gulf. While recent world events—the fall of the Berlin Wall, the dissolution of the Warsaw Pact, and the collapse of the Soviet Union—offer the opportunity to reduce the defense burden, the manifest success of the high-quality force now assembled suggests its ultimate economy in terms of the total resources needed to meet national security objectives. Indeed, this point has been made both by members of the Congress and Administration officials.[8] Current force goals, while including 25 percent fewer billets than in recent years, call for recruiting members with first-rate entering credentials and, by implication, attractive alternatives. To maintain experience levels corresponding to the force of the late 1980s, the continuation and reenlistment rates achieved during that decade must be sustained. See Appendix B, The Military Work Force in an Era of Change, for more details.

System Elements

The core of the military compensation system is regular military compensation (RMC). RMC is the compensation provided to each member, directly or indirectly, either in cash or in kind. It is composed of basic pay, the basic allowance for subsistence (BAS), the basic allowance for quarters (BAQ), the variable housing allowance (VHA), the overseas housing allowance (OHA), and the Federal tax advantage that accrues because these allowances are nontaxable. Basic pay, on average, is almost two-thirds of the total;

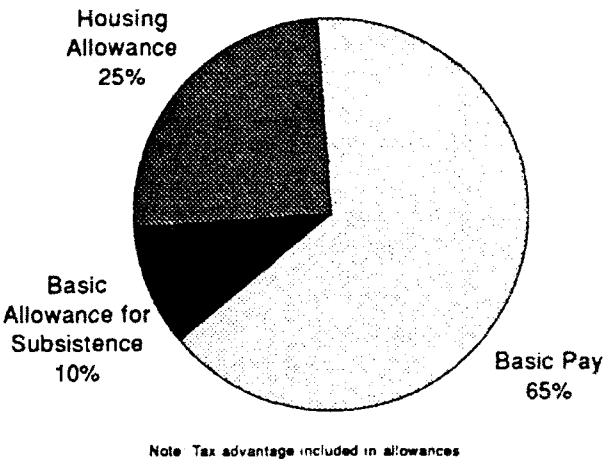

Figure 3-1. Average Regular Military Compensation (RMC)

[7]Descriptive statistics from the Defense Manpower Data Center for 1990 and prior years, and the Office of the Assistant Secretary of Defense (Force Management and Personnel), Officer and Enlisted Personnel Management Directorate for 1991.

[8]See Les Aspin, Chairman, House Armed Services Committee, speech to the Atlantic Council, "National Security in the 1990s: Defining a New Basis for U.S. Military Forces," January 1992; and LTG Donald W. Jones, Deputy Assistant Secretary of Defense for Military Manpower and Personnel Policy, testimony delivered before the U.S. Senate, May 14, 1991. General Jones emphasized the important link between force readiness and experience.

the housing allowances[9] are about 25 percent of RMC; and BAS is about 10 percent of RMC (Figure 3-1). All members receive basic pay when in an active-duty status.[10] They are either provided food and housing in kind, or paid BAS and the housing allowances. For purposes of estimating RMC, in-kind elements are usually attributed a cash value equal to the alternative allowance.

Basic Pay. The largest share of RMC, and the cornerstone of cash compensation, is basic pay. Basic pay is predicated on rank and tenure of service, and is published each year in a table detailing the pay for each of 26 grades and 14 longevity points. Pay steps for longevity are separately structured for each grade and are based on time in service (TIS), the elapsed time since entering service. Typically, basic pay is the only cash income for junior enlisted members who receive quarters and subsistence in kind.

Basic pay for active duty personnel is the basis for computing Reserve component drill pay. It is also the basis for establishing the initial levels of retired pay for all components. Finally, the levels of basic pay are linked to other elements of the compensation system, e.g., the terms on which separating or retiring members redeem unused annual leave. Because of the linkage between retired and basic pay, a promotion effectively increases pay for a career member over his entire lifetime, which thus amplifies the effect of rank on compensation.

Housing. About 76 percent of single members and about 35 percent of members with dependents live in government-furnished quarters; all other members receive housing allowances.[11] In most cases, the housing allowances are paid in two elements:[12] the basic allowance for quarters (BAQ) and, in the United States, a regionally variable component, the variable housing allowance (VHA). BAQ varies based on grade and on whether or not the recipient has dependents; therefore it is said to be *needs-based*. It was originally intended to pay housing costs for members not afforded government quarters;[13] it now covers approximately 60 percent of member expenditures on housing, on average. It is typically

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[9]The total housing allowance consists of a basic allowance for quarters (BAQ) and a regionally based variable housing allowance (VHA) in the continental United States, or BAQ plus an overseas housing allowance (OHA) otherwise. The 7th QRMC Staff Analyses, MTS 3—*Allowances*, addresses allowance rates in much greater detail.

[10]Reservists receive drill pay but not housing and subsistence allowances for participating in training assemblies, or drill periods. The rate per drill period is $^{1}/_{30}^{th}$ of the monthly basic pay rate.

[11]Rates for the housing allowances (BAQ and VHA) depend on whether or not a member has dependents but not on how many: the married member with no children receives the allowances at the same rates as the member with a large family. Dependents include spouses and children up to the age of 21. They may also include stepchildren, disabled parents, and minor siblings if the service member supports them.

[12]Some military members (about 9 percent of the force) assigned to low-cost areas receive only BAQ.

[13]The BAQ rates were originally established based on income levels and the 75th percentile of national housing spending patterns. See the Hook Commission Report, page 12, and the Committee Report for the Career Compensation Act of 1949.

adjusted annually at the rate specified for the annual pay raise regardless of the trend in housing prices.

VHA was instituted in 1980 as a supplement to BAQ. It varies based on grade, on whether or not the member has dependents, and on the relationship between local and national housing costs. Legislation subsequently revising the VHA program envisioned that, on average, members would cover 15 percent of their off-base housing costs from income other than the housing allowance.[14]

VHA rates are based on a survey of member housing expenditures.[15] Note that, within the United States, VHA is the only element of cash compensation that varies regionally in recognition of geographical differences in living costs (prices) or wages.[16] A member receiving VHA who does not spend it all on housing must forfeit half of the amount not spent; this is referred to as the *50-percent offset*.

Subsistence. The basic allowance for subsistence (BAS) is paid monthly in cash to all officers and to most members of the career enlisted force. The 1991 rates were $129 for officers and $184.50 for the majority of enlisted members.[17] In law, the justification for BAS differs between officers and enlisted members. All officers receive BAS and are charged for meals provided. In contrast, enlisted members are entitled to food in kind or to the subsistence allowance in lieu of food.[18] In fact, 65 percent of enlisted members receive BAS.[19] Like BAQ, BAS typically increases annually by the amount of the pay raise. A more detailed discussion of the housing and subsistence allowances may be found at Appendix C, Alternative Structures for Allowances.

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[14]This proportionality was established at the time BAQ was set to cover 65 percent of the average national median housing costs, with the member to absorb approximately 15 percent based on the 1985 DoD Authorization Act. A combination of caps on VHA funding and of other circumstances have resulted in member absorption of 22 percent of housing costs.

[15]Detailed descriptions of the survey process and the rate-setting method currently used are given in the 7th QRMC Staff Analyses, MTS 3—*Allowances*.

[16]The Per Diem, Travel, and Transportation Committee in the Office of the Assistant Secretary of Defense (Force Management and Personnel) (OASD(FM&P)) establishes and updates VHA rates. There is also an overseas cost-of-living allowance that addresses international cost variations, including foreign currency requirements and rate fluctuations.

[17]There are actually six rates for enlisted members. Three of these rates are for those in the grades of E-1 with less than four months of service (most of whom are in initial training and therefore receive rations in kind). For most members authorized to *mess separately* (meaning a dining hall is available where they could purchase prepared food, but often there are schedule conflicts or other impediments to using it), the rate is $184.50 monthly. Rates are higher when a mess is not available ($208.20) or under *emergency* conditions ($276). Ninety-three percent of enlisted members receiving BAS do so at the $184.50 rate.

[18]The BAS is authorized in 37 U.S.C. § 402.

[19]Based on information furnished by the services and on 1991 data from the DMDC.

Special and Incentive Pays. There are 55 separately authorized special and incentive (S&I) pays, generally offered as incentives to undertake or continue service in a particular specialty or type of duty assignment. These pays vary from token payments (e.g., $110 per month for hazardous duty) to substantial bonuses (e.g., $36,000 per year for physicians). On average, these highly leveraged pays, going to 43 percent of the force, comprise about 5 percent of current cash compensation outlays.

The terms and rates payable under the S&I program are, in most cases, fixed in law, and the funds for each are appropriated as a separate line item in the budget.[20] The notable and important exceptions to this are the enlistment and reenlistment bonuses. These programs provide flexibility to change rates administratively, based on accession and retention requirements and trends, within program limits.[21]

Other Allowances. In addition to BAS, BAQ, and VHA, there are 31 other allowances.[22] Most of these are reimbursements similar to civilian expense accounts or allowances, such as moving expenses, and are tax-exempt.[23]

Benefits. The retirement program heads the lists of uniformed services benefits. Members are eligible to retire after 20 years of service and, except for flag officers and exceptional cases, must retire on or before 30 years of service. The program is noncontributory.

There are currently three sets of retirement provisions in effect, based on when an individual entered the service. Members entering the service prior to September 8, 1980 are eligible to retire after 20 years of service at 50 percent of their final basic pay, increasing to a maximum of 75 percent of basic pay with 30 years of service. After retirement, the stipend is adjusted annually to offset inflation, based on the Consumer Price Index (CPI).

Members who entered between September 8, 1980 and July 31, 1986 are eligible to retire after 20 years of service, but the amount of their initial retired pay will be equal to 50 percent of the average of their three highest years of basic pay. This change reduces the deferred value of basic pay increases experienced very close to the retirement date.

For members entering after July 31, 1986, the computation base was maintained at the average of the three highest years of basic pay. However, the multiplier for 20 years of service was reduced to 40 percent, with an increase of 3.5 percent per year up to a maximum

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[20]Reprogramming of funds, within limits, is authorized.

[21]The S&I program is discussed at length in the 7th QRMC Staff Analyses, MTS 4—*Special and Incentive Pays.*

[22]A summary of the allowances is found in the 7th QRMC Staff Analyses, MTS 3—*Allowances.*

[23]Some confusion about complexity seems to arise from commingling compensation and reimbursements for exceptional expenses under the same nomenclature. Classification of allowances as compensation or as reimbursement has long been a cloudy issue; for example, *Jones v. U.S.*, 60 Ct. C1 552 (1925) describes military allowances as being "in the nature of compensation and sometimes in the nature of reimbursement.

of 75 percent at 30 years of service. Inflation offset will be capped at one percent below the CPI. This will erode the purchasing power of retirement until the member reaches age 62, when a one-time restoration of the value of the pension occurs.[24] This retirement plan is commonly referred to as REDUX. Because data on member responses are not yet available, the retention and performance incentive effects of the retirement reduction are not fully understood. The need for further study in this area is discussed in Chapter 8 of our main report.

Surveys suggest that medical care is the benefit members value most after the retirement program. Members are afforded nearly full medical treatment. Typically, but not necessarily, medical services are provided in kind. Dependents of active duty members are treated in military facilities on a space-available basis, or otherwise are covered by the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). The CHAMPUS program is, essentially, medical insurance that normally involves copayment and deductible payment. Total annual CHAMPUS cost to any active duty family is limited to $1,000.

In principle, retirees and their dependents are also entitled to space-available treatment in medical facilities. In practice, their priority is below dependents of active duty members, and actual availability of the service becomes problematic. Retirees and their dependents are covered by CHAMPUS, but with greater exposure to copayment, through age 65. After 65, coverage passes from CHAMPUS to the Social Security medical program. The value of the medical benefit to the member varies with age and family status. On average, comparable family insurance coverage costs around $3,600 annually.

There are several other benefits of lesser or occasional value, depending on usage, available to military members. Table 3-1 is a listing of the most commonly cited elements. Appendix D, Elements of Military Compensation, has a more detailed description of the elements of the current compensation system.

Table 3-1. Other Benefits Available to Military Members

Child Care and Services	Unemployment Compensation
Regular Leave	Survivors' Benefits
Holidays	Family Support Centers
Sick and Maternity Leave	Commissary and Exchange Services
Education (GI Bill)	Morale, Welfare, and Recreation Activities
Disability Retirement	Home Loan Insurance
Legal Services	Group Life Insurance (SGLI)
Uniform Issues	Social Security Contribution

[24]See U.S. Department of Defense, *FY 1991 DoD Statistical Report on the Military Retirement System*, RCS No. DD-FM&P(Q) 1375 (Washington, 1992) for a detailed discussion of retirement provisions.

ASSESSMENT

Critics generally contend that the system is excessively complex, causing its value to be generally misunderstood and underestimated.[25] Second, they accuse it of being inefficient in two respects: (1) a single pay system is used to attract many different specialties or *occupations*; and (2) the allowance system differentiates pay on the basis of dependency. In fact, the architects of the current pay and allowances system considered this a temporary expedient:

> In the future, when the Military Establishment becomes stabilized . . . it is to be hoped that compensation for the Uniformed Forces will consist of a single payment without distinction between compensation for responsibility and work performed and reimbursement for subsistence and quarters. Basic compensation will then be on the same footing as compensation in private industry and in civil government.[26]

Complexity

The complexity of the system is attributed to two sources: the operation of the tax advantage and the proliferation of pays and allowances.[27]

Tax Advantage. Subsistence and housing allowances are tax-free. Critics argue that eliminating the Federal income tax advantage for these allowances would have three advantages. First, it would more clearly show decision makers the actual cost of military personnel.[28] Second, the total pay members receive would be clearer to them than it is now. Because the value of the tax advantage depends on an individual's circumstances (i.e., family size, outside or spouse income, and tax deductions), many believe it unrealistic to expect military personnel to make or understand reasonable comparisons with civilian pay under the current system.[29] Third, it would eliminate an inequity in the current system that (dollar

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[25]The General Accounting Office (GAO) found in one study that RMC was underestimated significantly by 40 percent of enlisted personnel and 20 percent of officers. See General Accounting Office Report, *Military Compensation Should Be Changed to Salary System*, FPCD 77-20, (Washington, August 1, 1977). Other researchers have questioned the materiality of this finding. See Winston K. Chow and J. Michael Polich, *Models of the First-Term Reenlistment Decision*, R-2469-MRA&L (Santa Monica, CA: The RAND Corporation, September 1980), 36.

[26]U.S. Department of Defense, Advisory Commission on Service Pay (the Hook Commission), *Career Compensation for the Armed Forces: A Report and Recommendation for the Secretary of Defense* (Washington, December 1948), 10.

[27]See the discussion in the 7th QRMC Staff Analyses, MTS 3—*Allowances* and MTS 4—*Special and Incentive Pays*.

[28]Richard Cooper, *The All-Volunteer Force: Five Years Later*, RAND Paper P-6051 (Santa Monica, CA: The RAND Corporation, December 1977), 41-53.

[29]General Accounting Office, *Military and Federal Civilian Disposable Income Comparisons and Extra Pays Received by Military Personnel*, GAO/NSIAD-84-41 (Washington, May 9, 1984), 6. It has also been argued that some in-kind provisions, such as the medical benefit, are undervalued by beneficiaries. See the 7th QRMC Staff Analyses, GSP D—*Tax Issues*.

for dollar) favors those in higher tax brackets.[30] Those favoring monetizing the tax advantage argue that it would not increase the cost of military manpower, but merely account for it properly.[31]

While there are some benefits to eliminating the tax advantage, there are also some drawbacks. First, increased liability to state income taxes would affect members differently, based on state of residence. The effect would fall heavily on the most junior members since a larger portion of their income is in the allowances. Second, increased liability to Social Security taxes would affect members differently, based on grade. Officers in grade O-6 and above would be affected very little due to their income levels. Middle grade members would arguably give up current for future cash (increased Social Security payments). In contrast, the most junior members— about half of the force—would simply experience a loss because the quarterly earnings credited to their Social Security accounts would, in all likelihood, be replaced later, when their incomes are higher. Finally, while the ultimate fiscal impact is not clear, in the near term this would, in effect, transfer funds from Treasury general revenues into the Social Security Trust Fund. Deliberate policy thought should be given to this outcome.[32]

Proliferation of Elements. There are two points to be made regarding the proliferation of compensation elements and the complicated nature of their workings. First, one should recall the nature of the system and the purpose for compensation differentials. Different members are paid different amounts in order to attract and retain the force as a whole efficiently. Second, compensation rates for the uniformed services are set formally, in rules that are applied to all members and published in advance. The military compensation system allows open scrutiny of the provisions for differentiating among millions of members doing thousands of things, worldwide. All things considered, the number of distinctive pay differentials may not be excessive. Given the number of members, their diverse locations, and different jobs, one would expect a fairly elaborate mechanism for setting individual earnings. Certainly that is true for other military systems.[33]

Efficiency

Two areas of inefficiency have been cited: failure to distinguish among occupations and paying a premium to members with dependents.

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[30]Congressional Budget Office, *The Costs of Defense Manpower: Issues for 1977* (Washington, January 1977), 92; and Department of the Treasury, *Tax Reform for Fairness*, (Washington, 1986), 47.

[31]See, for example, General Accounting Office, *Military Compensation Should Be Changed to Salary System*, FPCD-77-20, (Washington, August 1, 1977), 31-34.

[32]Ibid.

[33]See the 7th QRMC Staff Analyses, GSP A—*Foreign Military Compensation Systems Review.*

Occupation. By paying everyone from a common table, critics argue that the services are forced to overpay many members to attract those few with skills that are readily marketable outside the military or with duties that are particularly onerous.[34] Put simply, the gist of this criticism is that basic pay set at levels sufficiently high to retain members with skills in demand in the private sector (e.g., jet engine mechanics or computer specialists) overpays members without such attractive civilian prospects. Critics have suggested two ways to improve the efficiency of compensation in this regard. First, establish separate pay tables by specialty or occupation.[35] Second, separate rank from pay grade. This scheme, for example, could have a member holding the rank of corporal in pay grade E-6 in one specialty and E-3 in another.[36] The basic issue seems to be how to offer members serving in some specialties additional pay to attract or hold them, without overpaying everyone else.

The existence of a significant number of special and incentive pays suggests that DoD and Congress agree in principle with the notion of specialty-based pay. The real question seems to be one of execution: how to identify the level of pay needed to induce general military service and then the proper differentials to attract and retain those in selected specialty areas. The 7th QRMC agrees that there is a clear requirement for pay differentiation based on specialty or duty conditions. The current S&I system is the preferred vehicle for setting such differentials, especially in the framework of the current DoD budget process. The system of S&I pays can be more responsive to changing circumstances than separate tables, especially when a specified pool of money is appropriated within a rate structure that allows the services to adjust individual bonuses quickly. However, there are improvements that can be made to the current system.[37] Generally, the basis for these pays is to man the force economically, keeping in mind specific requirements for skills, talents, experience pools, and outside alternatives.[38]

Dependency. On the surface, the compensation differential based on having dependents is confined to the housing allowance rate and to other relatively minor elements (e.g., family

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[34]General Accounting Office: *Military Compensation: Key Concepts and Issues*, 15-16. Numerous authors and reports are cited.

[35]President's Commission on Military Compensation, (Zwick Commission), *Report of the President's Commission on Military Compensation* (Washington, 1978), 125-129. Something like this is done for enlisted tables in Australia, Canada, and the United Kingdom (all smaller services).

[36]Binkin and Kyriakopoulos, *Paying the Modern Military*, 56-61.

[37]These are discussed at greater length in Chapter 5 and in the 7th QRMC Staff Analysis, MTS 4—*Special and Incentive Pays*.

[38]On the subject of divisive pay, from two different perspectives, see Charles C. Moskos, Jr., "Compensation and the Military Institution," *Air Force Magazine* (April 1978), 31:35, and Beth Asch and James Hosek, "Designing Military Pay: Contributions and Implications from the Economic Literature," unpublished manuscript (Santa Monica, CA: The RAND Corporation, 1991), 43-44. See also Moskos, "From Institution to Occupation: Trends in Military Organization," *Armed Forces and Society*, vol. 4 (1977).

separation allowances). However, the matter is deeper, involving policy choices between providing allowances or in-kind support and the amount and quality of in-kind provisions.[39] Other observers have argued that this practice increases costs and undermines mission effectiveness.[40] Several interrelated issues are involved.

In terms of cost, critics allege that the military will tend to attract and retain members who have or are inclined to have more dependents, both because pay is greater for members who have dependents and because the cost of supporting dependents while in the military is lower. The budgetary implications are substantial: dependent medical care, PCS moves, DoD schools overseas, separation allowances, family support programs, etc., are costly programs.[41] Moreover, it is conceivable that because of pay discrimination based on dependency, the wage bill is greater than necessary for a force of equivalent quality.[42] Finally, it is argued that in combat skills and for deployments young, single members will be more responsive.[43]

The role of dependency is entwined with the provision of in-kind support. Some of that support is a concomitant of military operations (e.g., maintaining portions of the force close to their duty stations), and some of it is a component of reasonable personnel support.[44] However, that support does not necessarily imply unique compensation arrangements.[45]

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[39]Most notably, family housing is generally preferable to dormitory space, the medical benefit is of substantially greater value to members with dependents, and a variety of family support programs benefit them. It has also been argued that the commissary benefit is of greater value for married members. See, e.g., Cooper and Company, *The Attractiveness of Air Force Non-Monetary Benefits* (Brooks Air Force Base, TX: Air Force Systems Command, Air Force Human Research Laboratory, July 1974); and Research for Management and Hay Associates, *Field Test of the Perceived Value of Military Benefits, Final Report* (Philadelphia, PA: Hay Group, March 1980).

[40]See Patrick C. Mackin and Jeffrey A. Peck, "Economic Impact of Differential Pays by Dependency Status," SAG Issue Paper (Washington, DC, SAG, 1991); and Paul F. Hogan, "Should Military Pay Vary by Dependency Status? Some Issues," unpublished manuscript (Washington: Decision Science Corporation, 1991).

[41]This is an issue much discussed. See, for a general summary, General Accounting Office (GAO), *Military Compensation: Key Concepts and Issues*, GAO/NSIAD-86-11 (Washington, January 10, 1986), 45-49. See also Defense Manpower Commission (DMC), *Defense Manpower: The Keystone of National Security*, Report to the President and the Congress (Washington, April 1976), 330-331; Congressional Budget Office, *The Costs of Defense Manpower: Issues for 1977* (Washington, January 1977).

[42]For DoD to be a cost minimizer, and accept higher unit costs for members with dependents, those members would have to be (generally speaking) more productive. Note that one must be very careful with costs here; they include full life-cycle costs (training, pay and allowances, support costs, etc.).

[43]See Hogan, note 49.

[44]For example, the services recruit large numbers of 17- to 19-year-old members every year. It is reasonable to expect that they will continued to be housed on post until they gain some experience in coping for themselves.

[45]Three other volunteer militaries—those of Australia, Canada, and the United Kingdom—continue traditional personnel support with fewer compensation differentials. See 7th QRMC Staff Analyses GSP A—*Foreign Military Compensation Systems Review.*

The question of dependency also involves the function of the major allowances. The subsistence allowance has lost its relationship to real food costs, is administratively cumbersome, and, as recently evidenced, has become a source of irritation during mobilization. Additionally, problems relating to the housing allowance generate the most member complaints and press coverage. Therefore, the questions become whether family status is a desirable basis for military compensation and, in particular, are there productivity or retention factors that justify, in principle, the existing dependency differential?

The 7th QRMC reviewed the literature dealing with the relationship between productivity and dependency both in the private sector and in military service. The findings from the private sector were that, on a widespread basis, married civilian males have higher incomes than their unmarried peers. The difference builds gradually upon marriage, and decays when a marriage ends. Moreover, fragmentary evidence suggests that the marriage differential is related to productivity. In contrast, married females on average earn less than their single peers.[46]

The survey of military performance showed mixed results. Generally, married members tend to be promoted slightly faster and have significantly higher retention rates. However, the evidence is less clear for combat arms. Retention and performance statistics in Army infantry service and some measures of effectiveness in sea duty favor bachelors. In sum, married males tend to perform somewhat better, but with notable exceptions by career field.[47]

Overall, documentable performance and productivity differences do not warrant an income differential based on dependency. Rather, such differences are better dealt with through promotion and skill differentials. Considerations in eliminating dependency as a pay determinant are discussed in greater detail in Appendix C, Alternative Structures for Allowances.

CONCLUSIONS

Our most significant finding is that the current compensation system is adequate to support the force structure of the twenty-first century; however, it can be improved. It is a structure that works, that has stood the test of time, and that will continue, with careful modifications, to attract and retain the needed number and quality of military personnel.

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[46]QRMC charts from Current Population Survey data are in the 7th QRMC Staff Analyses, MTS 1—*Compensation Structure*. A more general discussion is in Sanders Korenman and David Neumark, "Does Marriage Really Make Men More Productive?," *Journal of Human Resources* 26 (1991): 282-307.

[47]D. Alton Smith, Stephen D. Sylwester, and Christine M. Villa, "Army Reenlistment Models," in Curtis L. Gilroy, David K. Horne and D. Alton Smith, eds. *Military Compensation and Personnel Retention: Models and Evidence* (Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences, 1991).

The current pay and allowances structure works because it provides individual building blocks that can be arranged flexibly, within a framework of centralized policy making and fiscal control. These blocks allow compensation to be related to productivity and to be structured as effective incentives for recruiting, retention, and motivation.

Compensation differentials among members are the key to an effective, affordable system. There are properly three major military pay determinants:

- **Status** (rank and longevity). Status incorporates a great deal of information about performance in the past and potential for the future. Both for officers and for NCOs, maturation as a military leader or as a managing technician is required for advancement. Status is appropriately the predominant pay determinant.

- **Skill** (or specialty). Pays based on military specialties (the special and incentive pays, including bonuses) provide economical means to meet outside competition for high-value skills, hold valuable experience, reduce training costs, and encourage particularly talented members to pursue demanding career fields.

- **Locality** (cost of living). Locality-based allowances cope with geographic variations in the cost of living. A compensation system, no matter how well designed for one location, can be undermined by variations in the prices of housing and other elements of household expenditure.

The QRMC envisions a simplified system in which each of three elements plays a unique role. Basic pay would cover status; special and incentive pays would cover skill or specialty; and by adjusting for differences in cost of living, locality pay would prevent regional price variations from undermining the system. The locality-based allowance could vary according to dependency status. However, in the interests of efficiency, careful consideration should be given to eliminating dependency pays. Chapter 4 describes our concept of this simplified salary system.

CHAPTER 4—A SIMPLIFIED MILITARY PAY AND ALLOWANCES SYSTEM

INTRODUCTION

This chapter describes the simplified pay and allowances system advocated by the *7th* QRMC. It first identifies the distinguishing features of the new system. It then describes the elements of the existing system that would be directly modified. It concludes by identifying the expected benefits of the proposed system, tying them to our critique of the current system in the preceding chapter. This will complete the foundation for a discussion in Chapter 5 of the difficult transition issues that must be resolved to put the new system in operation.

THE SIMPLIFIED SYSTEM IN BRIEF

The simplified system of pay and allowances envisioned by the *7th* QRMC has the following major categories:

- **Regular Military Compensation (RMC)**
  - Basic pay
  - Locality pay
- **Special and Incentive Pays**
- **Expense Reimbursements**
- **Military Benefits**

Since these are the same major categories that are found in the current system (See Appendix D), the new system may not be seen at first to be much of a change from the old one. However, most of the proposed changes fall in the RMC category. These are the highly visible elements of cash compensation that members see each month on their leave and earnings statements. Furthermore, the changes to be made directly involve sensitive policy issues as will be shown later. Therefore, while we are proposing little change to three-quarters of the system and there will be many familiar features even among the elements that do change (the form of the pay table, for example), the new system will ultimately be seen as the most significant modification of the system since it was first put in place in 1949.

Here is a summary of the changes to be made among the elements of RMC:

- The new RMC will have only two elements. Of the five existing elements, only basic pay will be retained; one new element, locality pay, will be added. Elements to be eliminated include the housing and subsistence allowances (BAQ, VHA/OHA, and BAS), and the tax advantage attributed to those nontaxable allowances. In the new system, RMC will be fully taxable.
- Basic pay will be adjusted to include the fixed value of the eliminated housing and subsistence allowances along with the value of the associated Federal tax advantage. As in the current system, a single pay table will be used for all services, based on grade and years of service.
- A new element, locality pay, will provide a comprehensive adjustment to account for regional variations in the prices of housing and other goods and services as measured by external surveys
- There will be no dependency rates.
- The value of housing or subsistence supplied to a member in kind will be recouped from the member's after-tax pay.

This QRMC has made no explicit recommendations in the major categories of special and incentive pays, expense reimbursements, or military benefits that are essential to implementing the new system. However, our recommendations to recategorize and improve the management of special and incentive pays do provide a basis for increased emphasis on skill differentials without adding skill differentials to the basic pay tables. In addition, we assumed that there will be no changes made in the major benefits—retired pay, transition incentives, and health care—as a consequence of implementing our simplified system of pay and allowances.

Our assumption that there will be no change in current levels of compensation elements other than those comprising RMC tends to mask the significant issue of basic pay linkages. Because we propose to increase basic pay to accommodate elimination of allowances, as a minimum, an evaluation of the consequences will be required for all elements that are by law tied to basic pay rates. These elements are enumerated below in the section on basic pay, and the consequences are discussed in Chapter 5.

MODIFICATIONS REQUIRED

There are virtually unlimited possibilities for alternative compensation structure designs. The 7th QRMC used a case-study approach to reduce these possibilities to a manageable number for evaluation. The three cases chosen—elimination of BAS, elimination of BAS and BAQ, and improved allowances—are described in Appendix C. They provided specific scenarios for testing design criteria. Working through these case studies helped convince us that it would be feasible to greatly simplify the current structure, improve its efficiency, and

modernize some anachronistic features—and the changes would make for better use of the essential differentials: skill, status, and locality. For reasons to be explained in Chapter 5, we have recommended moving to the simplified structure in three steps. Our main report contains specific proposals to move to the first step and sketches a general approach for working out the final steps. The intermediate steps contain features that will not be retained in the final structure, a total housing allowance that combines BAQ and VHA for example. With this background, we will next take a more detailed look at the changes to be made in RMC. Recall the term *regular compensation* or *regular military compensation (RMC)* means "the total of the following elements that a member of a uniformed service accrues or receives, directly or indirectly, in cash or in kind every payday: basic pay, basic allowance for quarters (including any variable housing allowance or station housing allowance), basic allowance for subsistence, and Federal tax advantage accruing to the aforementioned allowances because they are not subject to Federal income tax."[1] A description of each existing element may be found in Appendix D.

Basic Pay

There will be no change in the determinants of basic pay. It will continue to be paid from a single set of monthly-rate tables using the familiar current format based on grade and years of service. Two categories of rate changes will be made. The first includes our recommendations to improve the existing table by placing more emphasis on promotion than on longevity raises and to add 24- and 28-year longevity steps. These changes are not essential to the new system; however, they are assumed in this analysis. The second will be to roll into the pay-table rates a combined value representing that portion of the current housing allowance not attributable to regional price variations, the subsistence allowance, and the Federal tax advantage associated with these allowances.[2]

In the law, basic pay is explicitly linked to various other pay elements by one of two legal formulations. The first is generally worded, "Subject to regulations prescribed by [e.g., the President or Secretary concerned] a member of a uniformed service who is entitled to basic pay is also entitled to . . ." This formulation is used to restrict an element of pay (e.g., a hazardous duty pay) to members serving on active duty. Thus, a Reservist could be eligible for one of these pays during annual training (while entitled to basic pay) but not during a weekend drill (because drill pay, while based on basic pay rates, is not basic pay). Since this type of linkage does not involve pay rates, it will not need to be considered in implementing the new system. On the other hand, the second formulation, which has no characteristic wording in the law but includes any provision for linking rates of other compensation elements with the rates of basic pay, will have to be taken into account. The elements in this category include:

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[1]37 U.S.C. § 101(25).

[2]The tax advantage is has no regional component, as traditionally computed, therefore all of the attributed value will be rolled into basic pay rather than rolling a portion into locality pay.

- Nondisability retired and retainer pay for active service (10 U.S.C. § 1401)
- Nondisability retired pay for nonregular service (10 U.S.C. § 1401)
- Disability retired pay (10 U.S.C. § 1401)
- Nondisability separation pay, voluntary and involuntary (10 U.S.C. § 1174, § 1174a, and § 1175)
- Disability separation pay (10 U.S.C. § 1212)
- Drill pay (37 U.S.C. § 206)
- Payments for unused accrued leave (37 U.S.C. § 501)
- Special pay: officers in critical acquisition positions extending period of active duty (37 U.S.C. § 317)
- Survivor Benefit Plan (10 U.S.C. § 1452; indirectly linked through retired pay)
- Supplemental Survivor Benefit Plan (10 U.S.C. § 1460; indirectly linked through retired pay)

Locality Pay

Locality pay would be a new, taxable element of RMC that would adjust for price-based, regional differences in the cost of living. We did not develop a specific formulation for locality pay, but would form it by combining our recommended CONUS COLA with that part of our recommended total housing allowance attributable to regional price variations.[3] The general concept is as follows:

- Locality pay would be based on price differences among housing and other goods and services such as auto insurance, consumer goods, and utilities.
- Rates would be based on external, regional marketplace surveys, (rather than on member-reported costs), and the rate computations would include an offset to account for member use of commissaries, exchanges, and other military post facilities including housing and dining facilities.
- We recommend that careful consideration be given to eliminating all dependency rate differentials from military compensation. However, if such differentials are retained, they could be incorporated in locality pay.
- The potential use of locality pay as an element of inactive duty for training (IADT) compensation would be included in an examination of the basic pay-drill pay linkage.

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[3]See the recommendations on page 89 of our main report.

- By taxing locality pay, we are treating it as earned income rather than as an expense reimbursement.

Housing Allowances

Housing allowances will be eliminated as a separate element of military compensation. The fixed value of the current allowances would be monetized and rolled into basic pay, while the variable portion attributed to regional housing price variations would be monetized and rolled into locality pay. The key considerations, other than taxation, are as follows (for more details, see the 7th QRMC Staff Analyses, MTS 3—Allowances):

- Determining the fixed and variable portions of the housing allowances is not a simple matter of using BAQ as a proxy for the fixed value and VHA and OHA as proxies for the variable value for the following reasons:
  - BAQ does not represent a true baseline (or fixed) value for the cost of housing because part of the actual cost is "absorbed" by the member. Likewise, VHA does not represent the true value of regionally variable housing costs because VHA rates are constrained as a function of prior authorization amounts.[4] Since absorption rates for BAQ and VHA have varied independently, an analysis should be performed to determine whether or not part of VHA should be allocated to the fixed cost of housing.
  - Since 1974, BAQ has been adjusted annually by the annual military pay raise percentage, an amount that has tended to lag increases in housing costs.
  - There has been dissatisfaction with the use of member surveys to establish housing costs. There are at present several proposals to improve this mechanism, including our proposal to establish a single housing allowance with variable rates based on an external survey of regional housing prices. The division of fixed and variable value elements of the housing allowances will depend on how the allowances are structured at the time of transition.
- BAQ rates will be monetized at with-dependents rates for all members.

[4]37 U.S.C. § 4032a.

- Since there will be no separate housing allowances to forfeit, the value of in-kind housing will be recouped from the member's monthly pay. This new procedure will require establishing an equitable pricing structure for in-kind housing.[5]

Subsistence Allowance

The subsistence allowance, or BAS, will also be eliminated by monetizing it and rolling the value into basic pay. There is no geographical component to this allowance (as VHA is to BAQ), and it is intended to cover the member's food only. Nevertheless, there are complicating factors as reflected in the following considerations (for more details, see the *7th* QRMC Staff Analyses, MTS 3—Allowances):

- The various BAS rates do not equal the cost of food. We have proposed that the allowance be equated to the standard USDA rate now used to price meals in Government messes (the daily sale of meal rate (DSMR)) for all members. Today, enlisted BAS is more than this amount and officer BAS is less.
- Most of the BAS divergence from food costs is attributable to inflating the rates over the years using ad hoc pay-raise percentages rather than an index of food costs. One way of viewing the happenstance result is that part of officer subsistence now lies in basic pay and part of enlisted basic pay is in BAS. Enlisted members who came off separate rations to eat rations in kind during Desert Storm seem to have shared this view because they complained of taking a pay cut to go to war. On the other hand, rolling BAS into basic pay can also be seen as a windfall for enlisted members who receive rations in kind (since a straightforward roll-in would be more than the in-kind value).[6]
- As with Government-supplied housing, Government-supplied subsistence values (at the DSMR rate) will be recouped from the member's monthly pay. The general procedure has been used successfully for officers in both peace and war. We see no conflict with the needs of operational commanders who could still require members to subsist in military dining facilities for training or operational reasons.

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[5]Which might include writing off some housing such as shipboard berths and tents as an employer's cost of doing business to avoid penalizing members when they are performing their most demanding and productive periods of service.

[6]The reverse is not true for officers because officers now and under the new system pay cash for Government-supplied meals, either on the spot or through payroll deduction.

Federal Tax Advantage

The Federal tax advantage will disappear with the elimination of the associated housing and subsistence allowances. However, it is a statutory element of compensation in the current system. Since simply eliminating it would represent an arbitrary pay cut, we propose to add its imputed value to basic pay. These considerations apply (for more details, see the *7th* QRMC Staff Analyses, GSP D—Tax Issues):

- *Federal tax advantage* is the additional income required, if allowances were made taxable, to hold a member's after-tax income constant. We derived a general mathematical definition for the Federal tax advantage:

  $$\textit{Federal tax advantage} = A * (t/1\text{-}t)$$

  where A = Allowances and t = tax rate.

- The value of the Federal tax advantage to an individual member varies according to individual circumstances of family size, outside or spousal income, tax deductions, and other factors.[7] Since it would not be appropriate or feasible to make these circumstances permanent determinants of basic pay, it would make no sense to make them one-time determinants by rolling the individual member's unique tax advantage at the time of transition into basic pay. Instead, we would roll in the formal tax advantage computed by grade using the well-accepted Office of the Secretary of Defense Compensation Model.[8]

- Implementation would not account for additional state and local taxes or Social Security taxes that would be paid by the member. The question of Social Security taxes is complicated by the military service wage credit by which the Department pays employer and employee shares of tax in an amount necessary to provide members a $1200 annual wage credit in recognition of the fact that certain elements of military compensation, including housing and subsistence allowances, are not taxed. The wage credit could be eliminated to help simplify the system.

- The monetized tax advantage will be reflected in the President's Budget as increases in military pay accounts. Conversely, tax receipts by the Federal Treasury will increase by an approximately equal amount.

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[7]There are so many possible alternatives that the value is for practical purposes unique to each member. As an example of "other factors," consider a member who has all or part of basic pay made tax exempt while serving in a combat zone. Depending on whether the exemption 1) reduces taxable income to zero, 2) reduces taxable income to a lower bracket, or 3) does neither of the these, the value of the tax advantage as an element of compensation will be eliminated, reduced, or remain unchanged.

[8]For a description of this model, see Appendix B of the *7th* QRMC Staff Analyses, GSP D—Tax Issues.

RATIONALE FOR CHANGE

In the foregoing discussion, we have attempted to convey the magnitude and complexity of the changes contemplated in moving beyond the specific intermediate changes recommended in our main report to the Congress to our ultimate vision of a simplified system of pay and allowances. In the next Chapter, we will show that some very difficult and inevitably controversial transition issues must be resolved to put the new system successfully in place. But first, let us examine the expected benefits with emphasis on how they resolve reported shortcomings in the current system. In our judgment, these benefits justify the costs of implementing our new system on an evolutionary basis. Study limitations prevented us from making a judgment on whether a one-step transition is either feasible or a better alternative. However, these benefits and the discussion of transition issues that follows will help lay the groundwork for making such judgments.

Criticisms of the Current System

Part of the motivation to move to a new system comes from dissatisfaction with the old one, and part comes from a desire to improve the ability to achieve system objectives in the projected future environment.

Following is a list of the major criticisms of the current system that have been expressed by professional economists and other personnel policy experts. For further details see the assessment presented in Chapter 3 and its references:

- The system is so complex that the value of military compensation is generally misunderstood and underestimated.
- The system is inefficient because it employs a single pay table to attract members in many skill or occupational groups.
- The system is inefficient because the allowance system differentiates on the basis of dependency.[9]

Next is a list of areas in which enhancements are needed to meet future requirements that was developed in coordination with the seven uniformed services and other experts:

- The basic pay tables should be realigned to provide greater incentives for promotion as compared with longevity and to remove anomalies generated by previous ad hoc changes.
- Under the existing system, annual adjustments to military pay are linked to General Schedule pay changes based on the Employment Cost Index (ECI) for

[9]For example, some contend that the trend in recent years towards a higher proportion of members with dependents works against readiness, yet married members are nevertheless paid more than their peers without dependents. Others see dependency discrimination as inequitable.

the purpose of maintaining rough comparability with private-sector wages. This method is variously seen as producing a more-or-less permanent gap by which military pay lags civilian wages and as unwarranted given recent successes in recruiting and retaining military members. Furthermore, we noted that pending changes in Civil Service adjustment methods would soon cause the annual adjustment to be decreased by one-half of one percent relative to the ECI without an offsetting change in other elements as would be the case for the Civil Service, where a new locality pay based on regional variations in wages would be instituted.

- Some mechanism is needed to counteract the adverse effects of regional differences in the cost of living, especially for members of the sea services based in the continental United States.
- Improvements are needed in rate-setting methodology and in the administration of allowances.

While not necessarily supported by the services, the QRMC has identified one more area needing improvement:

- There should be an active search for ways to loosen or break the Gordian knot that binds the various elements of the compensation system (notably current to deferred and active duty to inactive duty for training compensation) so tightly that even clearly desirable changes become prohibitively expensive or otherwise infeasible to make.

How the Proposed System Fares

As we have already pointed out, it is not complexity in itself that is objectionable; what is objectionable is complexity that leads to misunderstanding and underestimation of the value of pay. This has been attributed to the operation of the tax advantage and proliferation of pays and allowances. The proposed system has a realigned pay table with rational relationships, it eliminates the tax advantage, and it retains only two elements in RMC. In addition, we have suggested a basis for objective classification and management of special and incentive pays. The only allowances retained are reimbursements, such as travel and transportation allowances, most of which have counterparts in civilian occupations, and are consequently generally better understood than the nontaxable RMC allowances that will be eliminated. There may be some room among the retained allowances for further simplification, but we expect only marginally. These situational reimbursements are highly targetable and are therefore highly efficient. On the other hand, we did not address compensation benefits such as health care, where there may be room for considerable simplification.

We rejected the alternative of establishing multiple pay tables as an occupation or skill differential mechanism in favor of the traditional, separate mechanism for accommodating skill,

or occupational, considerations, namely special and incentive pays.[10] On one hand, the military does compete in civilian labor markets and is not somehow exempt from economic forces. But, on the other hand, we also believe that the military rank and longevity structure is an essential institutional feature that clearly distinguishes it from civilian organizations in a market economy. The rank and longevity structure is a relatively stable feature, and the differentials that support it ought to be relatively stable. Skill competition, on the other hand is often relatively more volatile, and the differentials that support it must often be relatively more flexible for the system to be most efficient.[11] Finally, we believe that a modular system tied to specific system objectives, as represented by separately identified special and incentive pays, is easier to understand and manage than a single salary covering all objectives. This last consideration is especially important in the military, whose organizations dwarf even the giants of private industry. In sum, we agree with the need for skill differentials, but we don't think a pay table for each skill is the right answer; what we need is better organization and management of special and incentive pays. Our recommendations chart the proper direction in this area, but more work is needed on the details.

We generally agree that the allowance system is inefficient. If members were paid discretionary dollars rather than a directed housing allowance, those dollars would provide greater incentive to join, stay, and do better in a military career. We also favor eliminating dependency rates along with the allowances because they tend to discriminate negatively, against members living in barracks for example, and because we found no documentable benefits in terms of performance and productivity.

We have argued that military status, or the rank and longevity matrix that forms the basic pay tables, has been correctly identified as a key military pay differential. We believe that rank,

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[10]In civilian organizations, it is acceptable for pay to be the principal motivator of all members of an organization, and it is frequently dispensed confidentially to enhance system efficiency. However, society has very different expectations for its public servants in general and its military members in particular. We expect high pay will be a principal motivator for civilian senior executive officers and plant foremen, but we expect high pay to play a lesser role in motivating senior military officers and enlisted members. A longstanding aversion to paying bonuses for success in high military rank or command is one indicator of these expectations. On the other hand, the military more closely mimics civilian organizations in paying premiums to members with technical skills that are in short supply. For example, through a combination of bonuses and long-term incentive pays, we generally pay electronic technicians more than personnel clerks, pilots more than company commanders, and medical doctors more than brigade commanders. Members are aware of these differentials. However, because special and incentive pays are separate pay elements, their existence does not mask the importance of military status as reflected in the basic pay table.

[11]The dynamics of the personnel system do allow for some accommodation of the longer-range aspects of skill competition within the basic pay table structure itself; members in hard-to-find skill fields are simply promoted more quickly than members in excess skill fields. This is also an essential mechanism in a closed personnel system (e.g., the Army will promote a platoon sergeant from within rather than hiring a first sergeant from the Marines using compensation incentives); however, the organizational structure will eventually become ineffective at some degree of promotion acceleration. We also observed that special and incentive pays can be divided on the basis of short and long-range management objectives, and we have recommended more emphasis on doing so to achieve better efficiency.

as a proxy for military productivity and potential, is relatively more important than longevity, which is time-constrained by the learning curve (i.e., its value levels off at some point without subsequent promotion). These differentials are particularly supportive of the military's up-or-out personnel management system by which nearly all members are eliminated if not selected for promotion at certain intervals in their careers[12]. Consequently, the proposed pay tables for our objective system subsume all but the geographically dependent elements of the current RMC allowances and their associated tax advantage. They also remove such anomalies as the relatively large 26-year fogy for senior members and irregular differentials in the early years of the enlisted pay table that are attributable to piecemeal changes in the past to deal with specific manning shortages; and they increase the value of promotion as compared with longevity step increases. The resulting tables are easier to understand than the ones now in effect, and they will be more efficient in promoting system objectives. This represents a significant improvement, and it is the only one of this magnitude since 1949 when the pay tables in their present form were first adopted.

We were unable to find an index that is superior to the ECI; however, we did find that the new DECI methodology being developed by the RAND Corporation in coordination with the OSD Compensation Directorate should continue to be developed as a candidate to replace the ECI. The DECI is not mature enough to depend on at this point, but it does promise to be more accurate and flexible than the ECI. Our work on annual adjustments convinced us that the appropriate comparator with civilian wages, as measured by the ECI, is overall cash compensation, or RMC. Today, this is accomplished by adjusting basic pay and allowances by equal percentages based on the ECI. In our objective system, however, we would adjust locality pay based on external surveys of civilian prices with an offset based on availability of military facilities. Therefore, basic pay would be adjusted, not directly by the index, but by an amount necessary to make the total change in basic pay plus locality pay equal to the change in the index. We also recommend breaking the link with Civil Service pay because both elements, including locality pay in that system, are based on wage-based differentials and not on a combination of wage and price differentials as in the proposed military system.

It is common practice for public and private organizations to compensate members based on competing in local labor markets or as necessary to accommodate varying economic conditions in foreign areas. The military is no exception; its members have less choice in assignment location and, in the case of active duty members, move involuntarily much more frequently than most civilian peers.[13]At the beginning of this review, the services all reported to us that the cost of living in high-cost areas of the continental United States CONUS) was a growing problem among members. Naval forces, stationed in high-cost coastal areas, and Coast

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[12]Service academy permanent professors might be considered exceptions, but other members, from private to general, are managed this way.

[13]As a matter of routine practice, members who refuse reassignment in peacetime are discharged or retired. Depending on the circumstances, they may not even be offered these alternatives.

Guard members in particular, who tend to be assigned away from large military installations with in-kind housing, commissaries, and exchanges seemed to be most disadvantaged. In our examination of the problem, we noted that the VHA was the only regionally variable compensation element in the CONUS whereas members are actually affected by price differences in a range of goods an services such as car insurance, child care, and varying degrees of access to installation facilities. We concluded that the simplest all-inclusive solution would be to compensate for all regionally variable conditions in a single, price-based element.

As a related issue, we also found that there are defects in the allowance rate-setting and administrative procedures. With respect to VHA, one is that the current method of setting rates based on member surveys is skewed by member behavior. Members tend to scale up their housing when assigned to low-cost areas and to scale it down when assigned to high-cost areas. Rates based on this pattern will tend to be too high in low-cost areas and too low in high-cost areas relative to housing occupied by civilian peers. Second, small cell sizes in member surveys can produce statistically invalid results as can the alternative of increasing the geographic area to increase the sample size. We have also mentioned the problems associated with basing housing and subsistence rates on something other than the market value of the goods or services they represent. All of these problems can be resolved by substituting external price surveys as a basis for rate-setting. This will, in turn, allow for significant improvements in administration, including the institution of a value-received recoupment program as the standard way to account for in-kind compensation.

Finally, implementing the new system is predicated on breaking the Gordian knot mentioned earlier that binds the various elements of the compensation system so tightly that making even small improvements becomes a formidable task. The elements of compensation that are linked to basic pay are identified above. The link between current compensation, or basic pay, and deferred compensation, or retired pay, for example, means that every dollar of allowances that is rolled into basic pay will cause retired pay windfalls to individuals and unanticipated costs to the Government unless the linkage between these two elements is modified or broken. The same applies to the link between basic pay and drill pay. Every dollar of allowances that is rolled into basic pay will cause drill pay windfalls to individuals and corresponding losses to the Government unless the linkage is modified or broken. We recognize that establishing these alternatives will be technically difficult and politically explosive, but we are convinced that this must be done as a prerequisite to implementing our proposed system. Since we found that we could move part of the way to our objective system without resolving these formidable issues, and because our part-way solution is in itself a considerable improvement in the status quo, we advocate proceeding in stages to buy time in which to resolve the difficult issues.

Expected Benefits

We believe that our objective system represents a worthy goal. The only real question is what is the best way to achieve it, which is the subject of Chapter 5. We reached this position

after considering the following potential benefits of the objective system for any transition option:

- Pay would be more visible (due to monetization of the tax advantage) so that there would be less ambiguity in the decision processes of members on issues (such as retention) dependent on pay levels.
- Pay would more easily be comparable to civilian pays which generally do not have food and housing allowances appended to them.
- The fact that current food and housing allowances now bear no particular relation to actual food and housing costs would become moot.
- The bone of contention—whether based on efficiency or equity grounds—that members without dependents should be paid the same for housing as members with dependents would be eliminated.
- The pay structure would become more relevant to today's military, where in-kind subsistence and quarters allowances are the exception rather than the rule.

CHAPTER 5—TRANSITION ALTERNATIVES AND ISSUES

INTRODUCTION

Recall that the simplified pay and allowances system we envision consists of basic pay, a locality pay to account for price differences in consumer goods (including housing and food), and the existing special & incentive pays as well as medical, retirement, and other benefits. Accordingly, it is the elements of the current RMC—Basic Pay, BAQ, VHA, BAS, and the Federal tax advantage—which we would modify and combine. In essence, we would simplify the system by reducing the elements of RMC from five to two.

While such a system is itself straightforward in concept, the transition from our current system of pay and allowances would require resolution of some thorny issues. These arise when we consider how and where to put the pay currently attributable to BAS, BAQ, VHA, and the tax advantage, the elements that would cease to exist separately. The role of VHA would logically be assumed by the (new) locality pay, which would also include nonhousing cost variables; the other elements would logically be rolled into basic pay. This last generates the issues: how to deal with the linkages of basic pay to retired pay and drill pay; how to retain or eliminate members' dependency status as a pay determinant; and how to account for the loss of the tax advantage when eliminating nontaxable allowances (BAS, BAQ, and VHA).

In this chapter, we will first walk through the evolutionary approach—the *QRMC approach*—that we advocate and for which we have worked out specific recommendations for initial changes, made cost estimates, and drafted some legislative proposals. Then, we will describe the issues involved in the more demanding approach of moving to a new, simplified system in a single step—the *one-step approach*—for which we have done less supporting analysis and have not worked out specific implementing recommendations. In so doing, we will identify what would have to be done and show the scope and complexity of the problems that would have to be resolved.

TRANSITION—QRMC APPROACH

The 7th QRMC broke the progression from the bottom to the top of the pyramid into a series of discrete steps and began to systematically treat each one in turn—see Figure 5-1. What is the first thing we could do to improve the system and move towards the top? What is the next step?—and so on. Along the way, we attempted to deal with the issues that tend to impede this progression. We concluded that solutions to some of these problems are radical enough to warrant thorough analysis beyond the scope of this review. That is, the current linking of other pay elements to basic pay, the pay discrimination on the basis of dependency,

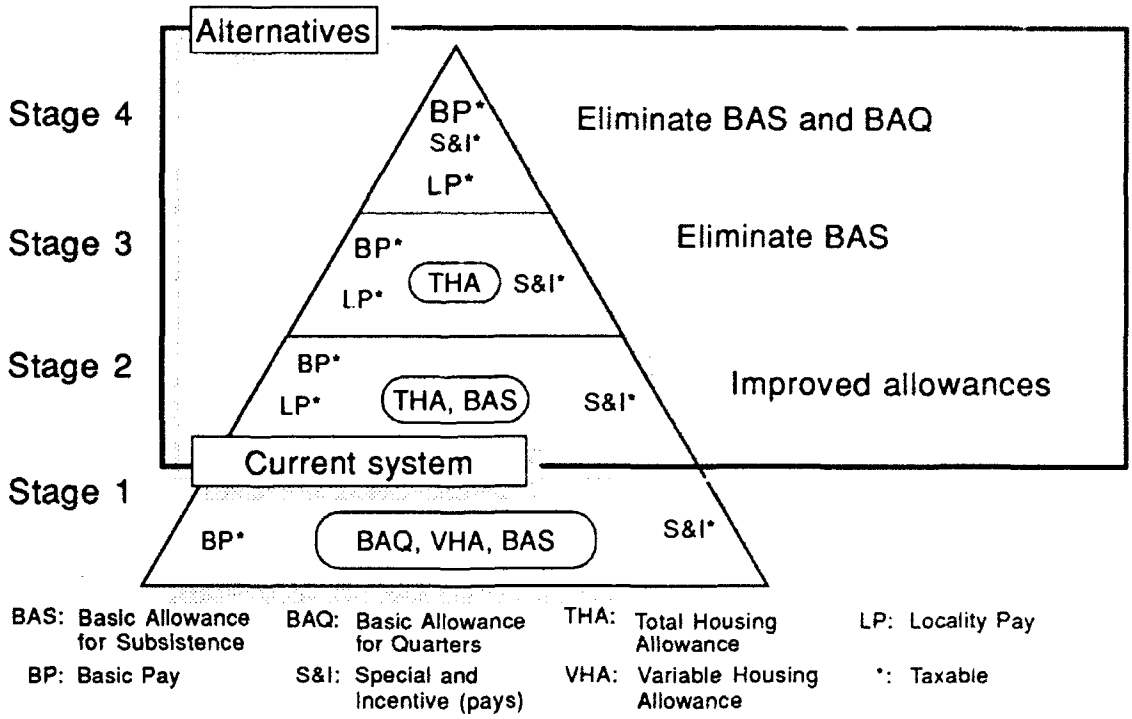

Figure 5-1. Simplification Pyramid for the Military Compensation System

and the non-taxable allowance status are policies in their own right, independent of the structure of RMC. They contribute much to the complexity—and rigidity—of the pay system we seek to simplify. Consequently, the QRMC's proposals address immediate problems and present feasible solutions that can be implemented without further study. Thus, the proposals move the system toward simplification within the current retired pay, drill pay, dependency, etc. structure. Given the overall soundness of the existing pay and allowances structure, further moves toward simplification may proceed at whatever pace is appropriate to the resolution of those other issues.

Transition to Stage 2

In Figure 5-1, the QRMC proposals would move the structure from Stage 1 (the current system) to Stage 2, whose major distinguishing new feature would be improved allowances. In this step, all of the recommendations for immediate change that are outlined in Chapter 1 of our main report would be implemented. Concurrently, the analytic groundwork needed to resolve the more difficult policy issues in later stages would be started. These are the key changes to be made:

- Implement the 7th QRMC's proposed time-in-service pay tables.
- Establish a single BAS rate based on USDA Moderate Food Plan costs for all members and improve administrative accounting procedures for in-kind subsistence.

- Establish a single housing allowance that combines BAQ and VHA with rates based on external regional price surveys rather than on member surveys.
- Establish a new CONUS COLA, a precursor to a comprehensive locality pay, to compensate members assigned in locations where the cost of living not defrayed by other allowances, in-kind provisions, or military support facilities is more than 5 percent above the national average.
- Initiate management improvements for other allowances (those in the expense reimbursement category) and for special and incentive pays.
- Apply full ECI to average total RMC to accomplish annual pay adjustments (not ECI minus one-half percent as will be done under the Federal Employees Pay Comparability Act of 1990 (FEPCA; Public Law 101-159)).[1]
- Implement a one-year transition plan that does not eliminate "winners and losers" but does protect members and tax payers from unjustified and arbitrary gains or losses.[2]

While implementing these recommendations will require significant changes in law and administrative policy, our analyses show that they are feasible, and we are confident that they will work well to improve system efficiency. For example, bringing allowances into alignment with prices ends a long-term policy of applying a single multiplier based on changes in wages equally to all elements of compensation. Thus, the housing allowance will be based on housing prices, and the subsistence allowance will be based on food prices. The rate changes make de facto corrections for the cumulative effects of past annual adjustments that have caused misalignment with prices. On the other hand, mixing price-based allowances with other wage-based elements of RMC requires special provisions that add complexity to the system. We believe it would be preferable to completely subsume housing and subsistence allowances into basic pay. This would simplify the system, eliminate the problems associated with wage- and price-based adjustments, and fix other problems as well. However we found the difficulties in monetizing the tax advantage and in dealing with the current-deferred and active duty-inactive duty compensation links to be so great that near-term solutions were not realistic. We believe that there is significant value in our more-than-half-a-loaf approach. Indeed, by treating RMC as a black box—keeping it as a whole wage-comparable with private sector wages through annual ECI-based adjustments—we achieve practically the same results as would be achieved at the top of the pyramid when the allowances are rolled into basic pay.

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[1]The computation procedure is explained in our main report, pages 116-118.

[2]By definition, changing pay differentials profits some relatively more than it does others and thus may be seen as creating winners and losers. Our plan does this, but it also contains save-pay provisions to protect members against actual pay cuts.

Transition to Stage 3

In Figure 5-1, the distinguishing feature of Stage 3 is that it eliminates BAS, leaving only one nontaxable element of RMC, the total housing allowance. This single change, by itself, would be simple and straightforward. Since BAS would already have been established at a single, price-based rate at Stage 2, it would be a simple matter of eliminating the allowance and concurrently adding an identical amount plus an increment representing the BAS tax advantage to basic pay. Henceforward, a member eating a meal in a military mess would pay, or have as a deduction from monthly basic pay, the value of that meal. However, more work is necessary on the tax advantage and the linkages between basic pay and other elements of compensation because they involve difficult technical and policy issues.

We propose monetizing the Federal income tax advantage (i.e., computing its value in current dollars) and adding it to monthly basic pay. We are satisfied that existing models in the Office of the Secretary of Defense can do the necessary calculations with reasonable accuracy. The Defense budget will have to be changed to reflect the added costs of the tax advantage as well as the employer's share of Social Security taxes. We recommend further study to determine whether the increased member's share of social security taxes should be added to basic pay. On one hand, the existing Social Security tax advantage is not defined as being an element of RMC, and some members will incur off-setting deferred benefits. However, between one-third and one-half of active duty members and an unknown number of Reservists will incur no increased benefits. For them, adding BAS to basic pay would cause a loss in real income of 7.65 percent of the BAS. The study should also address the military service wage credit. Finally, the additions to basic pay will increase state and local taxes for some members, and further work is required to determine whether off-setting compensation adjustments are needed.

Each of the ten compensation elements that are linked to basic pay (See pages 4-3 and 4-4) will have to be examined to determine whether changes in these linkages are warranted. Our intent would be to shift current cash between the elements of RMC without changing its after-tax value to the member. However, unless changed, the linkages will automatically generate increases in other-than-RMC elements. The retired pay (active, reserve, and disability) and drill pay links will present the most significant problems. Retired pay would increase because a member's retired pay base is determined from the basic pay table.[3] Drill pay would increase

[3]After the retired pay base is established, it is modified to account for the member's years of service and the result is the amount of retired pay. Computation procedures are complicated because they accommodate three groups of retirees on a temporal dimension (so-called final pay, high three, and REDUX), two groups on an mode-of-service dimension (regular and nonregular), and two on a physical-status dimension (disability and nondisability). See 10 U.S.C. § 1401 for an entry point to the statutes covering this complex subject.

because its rate is set at one-thirtieth of one month's basic pay for each drill[4]. We have identified two possible approaches for resolving these issues. The first is to change the respective multipliers, and the second is to establish separate base tables (for retired pay and drill pay) that would start as clones of the basic pay table but would be adjusted on a selective basis thereafter (e.g., continue annual pay adjustments in step with basic pay, but ignore nonperiodic adjustments when no change is intended in retired pay or drill pay). Changing the multiplier seems the simpler alternative on the surface, and it also retains the basic identity of the current linkages. However, to maintain current compensation levels, separate multipliers for every cell in the pay table would be required.[5] Furthermore, separate adjustments based on the three categories of retirees (final pay, high three, or REDUX) might be required as well in the case of retired pay. Therefore, adopting separate pay tables actually promises the simplest solution, although this alternative does represent a more fundamental change in the nature of the existing linkage. With respect to drill pay, another possibility is to consider an entirely new relationship between drill pay and the revised RMC. In this solution, drill pay would incorporate pay for food, housing, and regional price differences. These are clearly controversial issues, and all of the details must be explored before a sound policy decision can be made.

Transition to Stage 4

In Figure 5-1, Stage 4 represents our long-term objective system, and its distinguishing feature, as compared with Stage 3, is the elimination of the total housing allowance and its associated tax advantage by combining them with the remaining RMC elements. The amount of the allowance attributable to regional price variations would be combined with the CONUS COLA locality pay established at Stage 2, and the remainder would be combined with basic pay. Our proposal shares the difficulties of the previous stage and has some additional ones that are unique to it. In this objective system, RMC will include only two elements, both taxable: basic pay and locality pay.

Once again, we propose monetizing the tax advantage. The considerations that apply to monetizing the BAS tax advantage, described above, also apply to the THA tax advantage. A modification in computation procedures will be required because, unlike BAS, the THA will vary by region. We propose calculating a single tax advantage amount for each grade and adding the result to basic pay. This will require an additional calculation of an average price-based housing allowance value.

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[4]Although drill pay and basic pay are linked at an apparent daily rate of equivalence, a day's pay for active service and a day's pay for inactive service are not equivalent. On one hand, up to two drills may be performed in a day; on the other, housing and subsistence allowances, the associated tax advantage, and some other pays and benefits of active service are not paid for inactive-duty service.

[5]Because the allowances tend to be a greater proportion of enlisted members' RMC than that of officers, the new multipliers would be lower for enlisted members than for officers. While these new multipliers might appear to reflect a new system bias, they would merely make plain the current relationship between current cash income (RMC) and elements linked to basic pay.

The linkage issues will be essentially the same as those encountered in combining BAS and basic pay. The dollar amounts will be larger, and the potential influence of dependency and locality factors will have to be considered; however, we expect that the approach adopted for BAS will be the general model followed for THA.

The combination of CONUS COLA and the regional price variations in the total housing allowance will produce a single, taxable locality pay to account for all recognized regional price variations.[6] At this point, it would be appropriate to review and validate all of the elements to be considered in computing locality pay rates. The elimination of THA will also require a decision on the continuation of dependency differentials; either eliminate them as we have suggested or find a way to continue them in the remaining two elements of RMC.

TRANSITION—ONE-STEP APPROACH

In the previous section, we have explained the 7th QRMC's step-by-step approach to implementing a simplified pay and allowances system. We took that approach for pragmatic reasons. First, Stage 2 proposals could be implemented immediately and represent a worthwhile improvement in their own right, regardless of the pace of subsequent changes. Second, more analytical work is needed to solve the transition issues associated with Stages 3 and 4.

During final staffing of our report, we were asked what it would take to move directly to our objective system—the top of the pyramid in Figure 5-1. The general answer is that it would require a top-level leadership commitment and the necessary resources to work out the analytical details needed for sound policy decisions. The specific answer, as best we can determine from the work of the 7th QMRC, is the subject of this final section. It assumes that the same objective system used in our step-by-step approach and the key issues to be addressed are the same as those described in the previous section: the linkage between basic pay and retired pay, the linkage between basic pay and drill pay, dependency status as a pay determinant, and monetizing the tax advantage.

Figure 5-2 is a picture of the hypothetical one-step transition. Its most visible aspects are the elimination of the RMC allowances, a larger basic pay element, and introduction of the new locality pay. A comparison of Figures 5-1 and 5-2 shows the elimination of Stages 2 and 3 with their intermediate elements: locality pay (CONUS COLA) and the total housing allowance (THA). Not shown visually are such key changes as the replacement of internal member cost surveys with external price surveys as the basis for locality pay rates, improved classification and management of special and incentive pays, a realigned basic pay table, the elimination of nontaxable RMC allowances, and revised procedures for recouping housing and subsistence

[6]Note that this locality pay has a different basis than its Civil Service counterpart. Civil Service locality pay is based on regional variations in labor costs; military locality pay would be based on regional variations in the prices of goods and services.

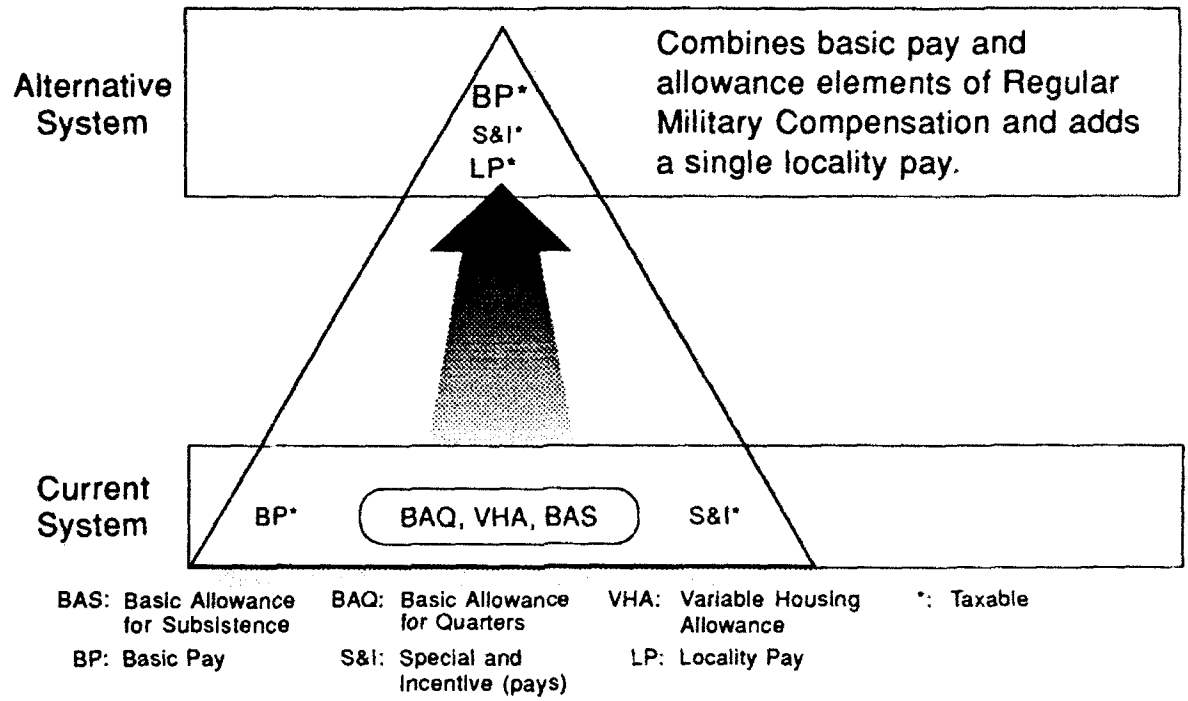

Figure 5-2. Simplification Pyramid for a One-Step Transition

provided in-kind. It is important to remember these unseen changes as well as the time dimension in contemplating the apparent task simplification implied by Figure 5-2. Thus while a one-step transition will eliminate intermediate steps, coordination of a number of complex policy changes will have to be done in parallel rather than sequentially, which leaves less room for error.

Except for the differences listed below, most of which have to do with sequence and timing, the analytical tasks required for a one-step transition are essentially the same as those required for the step-by-step approach described in the previous section.

- Roll BAS into basic pay with a cost-reducing provision described later in this chapter, and establish an in-kind recoupment schedule based on USDA rates; roll BAQ into basic pay at the with-dependent rates, and establish an equitable recoupment schedule for military housing; and, since VHA is now based on member housing costs rather than externally measured prices,[7] convert this cost-based allowance into a price-based element of the new locality pay.[8]

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[7]VHA rates are defined in 37 U.S.C § 403a. In simple terms, VHA is the difference between local median housing costs and 80 percent of national median costs, reduced as necessary to meet an overall program cap which is adjusted annually based on the military housing cost index.

[8]One way to convert VHA without changing costs would be to establish desired rates, based on an external survey, and then limit them by the same total-cost ceiling now used for VHA.

- Implement a comprehensive, price-based locality pay directly by combining the 7th QRMC's CONUS COLA proposal amounts with the converted VHA amounts.
- Adjust the 7th QRMC's improved FY 1994 pay table to add monetized allowance and tax advantage amounts and to account for any intervening annual pay adjustments. Then determine what save-pay measures, if any, would be required on implementation.
- Modify the basic pay table linkages to other compensation elements, notably retired pay and drill pay. While the details of the new system could possibly be worked out based on an assumption, for example, that existing relative values would be preserved, we cannot be certain at this point that any such assumption could be translated into feasible procedures. Moreover these issues are complex and highly controversial. Consequently, coordination may be protracted (for example, to perform actuarial analyses) and the physical task of writing implementing legislation will be time consuming because of the fragmented and convoluted nature of the various retired pay statutes.
- Monetize the tax advantage as in the step-by-step transition but consider housing and subsistence effects concurrently. As previously explained, monetization of the tax advantage will increase DOD's budget and be offset by increased tax revenues to the Treasury. Early coordination will be required to obtain Administration and Congressional authority for these budget changes. Although the net cost to the Treasury is small, the DoD Budget amounts are relatively large. (See the next section.)

COSTS

Table 5-1 is a preliminary estimate of the costs associated with moving directly to the top of the pyramid in one step. The replacement of in-kind benefits with cash, the monetization of the tax advantage, and the employer's contribution to the Social Security Trust Fund create an $11.5 billion increase in DoD expenses. However, after accounting for additional housing and mess recoupments, actual DoD outlays would increase by $5.75 billion. Most of this amount, $5.52 billion to be exact, would be returned to the Treasury in the form of taxes and social security. Thus, the net cost to the Treasury of conversion to a simplified pay and allowances system is $230 million.[9] Note that the estimates in this section are based on the 7th QRMC's objective system and its associated assumptions. Since we did not make detailed proposals beyond Stage

[9]The net cost of $230 million is primarily attributable to two factors: (1) paying housing allowances to all members and not recouping the full amount from members living in barracks, and (2) paying housing allowances to all members at the with-dependents rate.

2 in our step-by-step plan, our cost estimates would have to be refined as further details of a one-step transition are worked out and approved.

Table 5-1. Fiscal Year 1994 Compensation System Cost Comparison ($ Billions)

Cost Categories	Current System Costs	Simplified System Costs
Gross Pay	$43.04	53.41
Other Outlays	24.08	25.21
DoD Expenses	67.12	78.62
DoD Recoupments	.42	6.17
DoD Net Outlays	66.70	72.45
Retirement Accrual	14.20	14.20
Federal Income Tax	2.03	5.00
Total SSTF Deposit	5.52	8.07
Funds Returned to Treasury	21.75	27.27
Net Cost to Treasury	44.95	45.18
▲ Current → Simplified		.23

The remainder of this section addresses in turn each of the elements of compensation affected by adopting our simplified pay and allowances system and gives more details about assumptions and other factors that we considered in computing their associated costs. The proposed system was designed to be fair to the member (no breach of faith or lowering of pay levels) and relatively cost-neutral to the Government. Any alternative that combines basic pay with other elements of compensation, or that changes basic pay differentials, will require alteration of the linkage between basic pay and retired pay. Our proposal is no exception. Thus, for the purposes of this analysis we assume that some measure has been taken to maintain retired pay at current levels.[10]

Subsistence

Enlisted and officer BAS are monetized and rolled into the new basic pay. Projected 1994 BAS rates for enlisted and officers respectfully, are $208 and $145. Because the projected USDA rate for 1994 is only $185, enlisted members who are currently receiving BAS in-kind would realize a windfall from a full BAS roll-in. Therefore, as a cost-reducing provision that also serves to preserve current entry-pay levels, we adopted a BAS roll-in schedule that starts at the USDA rate for the most junior enlisted members and is increased incrementally during the first

[10]As described earlier, a stand-alone retired pay table or modified retired pay base multipliers are two potential solutions.

five years of service until the roll-in amount is equal to enlisted BAS.[11] We assumed no change in regulations that require some members to subsist in military dining facilities when required for training or operational necessity. When they do, the recoupment amount would be equal to the monthly USDA rate.[12] Other members who subsist in military dining facilities would do so at the daily sale of meal rate (DSMR), which is also based on the USDA rate.

Housing

The housing increment for all members was assumed to be the current with-dependents housing allowance rates.[13] The portion of the housing entitlement that is common to all geographic regions would be monetized and rolled into the new basic pay. The residual housing entitlement would be incorporated into the locality pay, which is described below. As with subsistence, we assumed no change in policies requiring that some members reside in Government housing, whether it be family housing, barracks, or berthing aboard naval vessels. However, this will require that an equitable recoupment schedule be established for military housing. For costing purposes, we assumed the following schedule:

- E-1 through E-5 in bachelor quarters: 50 percent of the current BAQ rate for members with dependents.[14]
- E-6 and above in bachelor quarters: 100 percent of the current BAQ rate for members without dependents.
- All grades in Family Housing: 100 percent of the current BAQ and VHA rate for members with dependents.

Locality Pay

This taxable pay would incorporate CONUS COLA and the monetized portion of the housing entitlement not included in the new basic pay. There would be no recoupment for the portion of locality pay attributable to housing costs for members residing in Government

[11]Specifically, enlisted members with less than 3 years of service (YOS) would receive (before monetization of the tax advantage) $185 per month; members with 3 YOS, $193; members with 4 YOS, $201; and members with 5 YOS or more, $208.

[12]Similarly, members that are assigned to field and sea duty would be subject to recoupment for meals they are provided. Full messing would be charged according to the USDA standard; separate, lower rates would be established for less than full messing (e.g., Meals Ready to Eat (MREs)).

[13]Note that this eliminates dependency as a pay determinant and is a gain (or the elimination of a loss, depending on your point of view) for members without dependents, who currently receive a lower housing allowance than their peers who have one or more dependents.

[14]Based on an analysis of rents for college dormitory rooms.

quarters. Rather, regional differences would be considered in setting housing recoupment schedules.

CONCLUSION

The net effect of moving directly to a simplified system as outlined above will tend to increase the level of pay for first term members who currently receive in-kind allowances and for members without dependents. It will tend to reduce slightly the level of pay for career members with dependents who will be subject to social security and state taxes on the monetized allowances. The relatively small net changes in individual incomes should cause negligible retention effects. Furthermore, implementing the one-step transition in conjunction with an annual military pay raise would assist in preserving current pay lines.

COMPENSATION STRUCTURE

APPENDIX A—GRADE AS A PAY DETERMINANT

Military organizations pay their members based principally on rank or grade. Embedded in grade is information about an individual member's experience, technical ability, and professional qualities—generally his or her overall competence. Some analysts, however, have argued the volunteer military should rely more heavily on determinants such as *occupation* or *skill* to compete more efficiently for the target force mix.[1] In reality, the private sector generally pays based on several factors (e.g., skill, specific performance, experience, or other professional qualities) often expressed in larger organizations in a pay grade. In the military, rank captures most of these considerations. A review of the military manpower and personnel systems,[2] and the important linkage between them, demonstrates the significance of military grade for compensation design.

THE MANPOWER SYSTEM

The manpower system provides the mechanism by which the services identify the numbers of positions and the specialty and skill level, by position, required for the military mission. Two major functions of the manpower system are of particular significance for the current discussion: determining the number of positions necessary to complete a task (or group of related tasks called a process), and classifying those positions by specialty and skill level.

Basically, the number of positions required to accomplish a task is the product of the time it takes to accomplish the task one time (per accomplishment time) and the frequency of the task per unit of time (workload frequency), divided by an adjusted man-hour availability factor (MAF).[3] Industrial engineering measurement techniques such as work sampling, time

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[1]Martin Binkin and Irene Kyriakopoulos, *Paying the Modern Military* (Washington, DC, The Brookings Institution, 1981).

[2]This analysis is based on the Air Force promotion and manpower systems. Major differences found in other service programs will be noted.

[3]The Air Force MAF is 149.2 hours per month. This allows for normal absences such as leave, medical appointments, fitness testing, professional military education, etc. The MAF is adjusted by an approved overload work factor of 1.077, which allows for expected overtime availability of military members. The product is the adjusted MAF of 160.7, used to establish manning levels. See Department of the Army, *Manpower Requirements Criteria*, AR 570-2, *Manpower Management*, AR 570-4, and *Manpower Staffing Standard System*, AR 570-5. See Department of the Navy, *Manual of Navy Total Force Manpower*, OPNAVINST 1000.16 series.

sampling, or operational audits are the basis for setting time requirements by task. Management reporting, field surveys, and skill workshops are used to establish workload frequency. Typically, the requirement is determined based on the following buildup from survey data: monthly task time requirement = time for each task x number of tasks per day x number of work days in the month.

This calculation is performed for each task, and related tasks are aggregated to determine the effort to complete a process (group of related tasks). The requirement is divided by an adjusted MAF to produce the number of people needed to perform the process. For example, a complete process requirement of 48,210 hours per month, with an adjusted MAF of 160.7, implies 300 positions to accomplish the process. This quotient alone, however, does not define whether the positions should be supervisors or untrained members, or what specialty is required. Another function of the manpower system provides that analysis.

Along with determining accomplishment times and workload frequency, the services also identify additional two factors about the task—the specialty and the experience or judgment required. The specialty identification leads to a career field classification.[4] The experience or judgment required leads to a skill-level determination (5-, 7-, 9-level).[5] An example of the classification and skill-level break out is shown in Table A-1.[6]

Table A-1. Notional Air Force Skill-Level Determination

Positions	Percent of Process	Man-Hours/Process
Tech/7-level	67%	200
Supv/Officer	23%	70
Admin/5-level	10%	30
Total	100%	300

The example shows indicate that 67 percent of the work requires 7-level technicians, 23 percent officer supervision, and 10 percent 5-level administrators. The resulting position breakout indicates the number of positions in each specialty and the appropriate skill level required.

[4]The Air Force specialty classification is called an Air Force Specialty Code (AFSC); the Army and Marine Corps use Military Occupational Specialty (MOS); the Navy uses Ratings and Navy Enlisted Classifications (NEC).

[5]The Air Force uses 1-, 3-, 5-, 7-, 9-levels (AFR 39-1). The Army uses 1-, 2-, 3-, 4-, and 5-levels. The meanings and grade associations are similar (AR 611-201, 10). The Navy uses actual pay grades and occupational descriptions—i.e., storekeeper third class (OPNAVINST 1223.1 and 1210.2 series).

[6]Department of the Air Force, *Air Force Management Engineering Program (MEP) Policies, Responsibilities, and Requirements*, Draft AFR 25-5, Nov 19, 1990, 14-7.

Service classification regulations[7] further detail difference in skill levels within each career field. For example, the description of the duties and responsibilities for a 3- and 5-level avionics guidance and control systems specialist includes items such as "inspects, maintains, and recommends." The duties and responsibilities for the 7-level includes items such as "analyzes, determines, and implements."[8] Similar discriminating terms distinguish company-grade officer positions from field-grade positions. The difference in the tasks identified for each skill level coincide with the experience, maturity, and knowledge required to perform at that level.

After determining the number of positions, the specific career fields, and skill levels required, grades are assigned to the positions. Grades and skill levels are not directly linked but are highly correlated. For example, a 7-level skill may be assigned a grade of E-6 or E-7. For senior enlisted positions and officers, grade is influenced by span of control or scope of responsibility of the position.[9] The services also have flexibility to consider variables such as maintaining career field experience, the effect of promotion opportunity, and mandated grade and end strength restrictions.[10]

THE PROMOTION SYSTEM

The Officer Promotion System

> The way to maintain readiness while reducing the force and treating people with dignity is to hold on to the principle of quality and to remember that the military institution is built on the successful integration of people, equipment, training, doctrine, leadership, and, most of all pride.[11]

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[7]Department of the Air Force, *Airman Classifications*, AFR 39-1, and *Officer Classifications*, AFR 36-1. See also Department of the Army, *Commissioned Officer Classification System*, AR 611-101, *Enlisted Career Management Fields and Military Occupational Specialties*, AR 611-201, and *Military Personnel Management*, AR 600-8. See Department of the Navy, *Navy Enlisted Occupational Classification System*, OPNAVINST 1223.1 series and *Navy Officer Occupational Classification System*, OPNAVINST 1210.2 series.

[8]Department of the Air Force, AFR 39-1, A22-83/84 and 85/86.

[9]Span of control normally refers to the number of people supervised. Scope of responsibility normally refers to the level of influence and involvement of the organization (base versus service-wide impact). In the private sector, Hay Management Consultants use three criteria to classify jobs: know-how (technical knowledge), problem solving (application of know-how—-performance), and accountability (freedom to act, job impact on mission, and magnitude of job). Taken from the Hay Management Consultants report for the 7th QRMC, "Military Pay Comparability Report," January 1992.

[10]AFR 25-5.

[11]General Maxwell Thurman, USA, addressing the Defense Policy Panel and the Military Personnel and Compensation Subcommittee of the House Armed Services Committee, 1 May 1991.

Based on established and classified positions, the purpose of the promotion system is to select enough officers of the quality desired, in the proper grades, to carry out the mission.[12] The system promotes officers based on their capacity to serve successfully in positions of greater responsibility.[13] Therefore, selection for promotion is based upon potential, demonstrated by past performance. Selection boards, composed of experienced officers senior to those being considered, review an officer's record to determine his or her potential. That determination is based on many factors. Air Force Regulation (AFR) 36-89 states:

> Selection for promotion will be based on the whole person concept using evidence of potential to serve in a higher grade. Such evidence may be found by considering job performance, professional qualities, leadership, depth and breadth of experience, job responsibility, academic and professional military education, specific achievements, and any other facet of the officer's record.[14]

Given the qualities and accomplishments considered, it is clear that selection for promotion involves demonstrated technical competence in a specific career field, along with many other important factors.

Promotion boards rely on several documents in an officer's record; however, one that captures the most information about the officer's performance and potential is the performance report. These reports document technical and professional performance as an indicator of potential. The services evaluate officers in two distinct areas—military qualities and job knowledge. Military qualities include traits such as leadership and organizational skills, moral courage, loyalty, discipline, and military bearing. Job knowledge, by contrast, includes such things as specific accomplishments and technical proficiency. Selection boards look for demonstrated competence in both areas when considering promotion potential.[15] The services use performance reports to capture as much information as possible about both areas.

The Defense Officer Personnel Management Act (DOPMA), effective September 1981, established statutory limitations on the number of officers who may serve in field grades and

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[12]Air Force Pamphlet 36-32, "You and Your Promotions—The Air Force Officer Promotion System," 15 June 1990, 2.

[13]Department of the Air Force, Ibid., 9.

[14]Department of the Air Force, *Promotion of Active Duty List Officers*, AFR 36-89, June 1990, 13. See Department of the Army, *Promotion of Officers on Active Duty*, AR 624-100. See Department of the Navy, *Promotion and Selection Early Retirement of Commissioned Officers on the Active-Duty Lists of the Navy and Marine Corps*, SECNAVINST 1420.1 series.

[15]See Department of the Air Force, *Officer Evaluation System*, AFR 36-10; Department of the Army, *Officer Evaluation Reporting System*, AR 623-105; and Department of the Navy, *Navy Officer Fitness Report Manual*, NAVMILPERSCOM 1611/1 series.

specified minimum requirements for promotion eligibility. Also included was an opportunity rate for promotion for each grade. DOPMA provisions are identified in Table A-2.[16]

Table A-2. DOPMA Requirements for Officer Promotions

Criterion	O-2	O-3	O-4	O-5	O-6
Minimum Time-in-Grade	2 yrs	2 yrs	3 yrs	3 yrs	3 yrs
Time-in-Service	2 yrs	4 yrs (+/- 1 yr)	10 yrs (+\- 1 yr)	16 yrs (+\- 1 yr)	22 yrs (+\- 1 yr)
Opportunity Rate	Fully Qual	90%	80%	70%	50%

The DOPMA requirements, along with the overall service end strength—that is, the congressionally mandated limit of the total number of officers by grade each service may have on active duty at the end of the fiscal year—determine the number of officers who may be promoted to each grade.

Based upon these limitations, each service uses a separate manpower system to distribute the officer grades among different mission requirements. Within each career field or mission area, rank is assigned to positions based upon the experience, professional qualities, and technical competence required to perform the job. Considerations such as span of control and scope of responsibility influence the actual rank assigned. For example, a base-level personnel officer position may be assigned either an O-3 or an O-5 grade depending upon such factors as the number of people supervised (span of control) and the number of personnel records managed (scope of responsibility). Senior officer grades may be assigned to positions responsible for hundreds of people and millions of dollars of resources, or to positions responsible for developing policy for a military service. Senior staff officers, on the other hand, are selected more on the breadth and depth of their skills and knowledge.

The Enlisted Promotion System

> The character, quality, and performance of our enlisted force is the best ever. We have worked very hard to ensure that our manpower management plans comply with uniform DoD strength reduction requirements, while still protecting the quality of the force and treating our Marines fairly.[17]

> The enlisted promotion system operates in detail differently from the officer system, but has a similar objective—to advance airmen who clearly have demonstrated the potential for more responsibility.[18]

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[16]Defense Officer Personnel Management Act (DOPMA), P.L. 96-513, 94 Stat. 2835 (1980).

[17]Lieutenant General Matthew T. Cooper, USMC, Deputy Chief of Staff for Manpower and Reserve Affairs, addressing the Defense Subcommittee of the Senate Appropriations Committee, 2 April 1992.

[18]Department of the Air Force, *Promotion of Airmen*, AFR 39-29, 3.

Like the officer system, advancement is based upon potential, demonstrated by past performance.[19] While the officer system uses a board process to identify members for promotion, the enlisted system uses a board only for promotion to the top two grades (E-8 and E-9).[20] Movement through the junior grades (E-2 through E-4), is based on a fully qualified or noncompetitive system. Supervisors and unit commanders determine whether or not the member meets the stated requirements for the next higher grade. Advancement in the mid-level grades (E-5 through E-7), follows a best-qualified or competitive system but does not involve a centralized board process. Instead, the services quantify a number of items in the military record to determine an order of merit for those eligible to be considered for promotion.[21] These include a record of performance and the results of examinations that explicitly test for job knowledge. Regardless of the details, the purpose remains to identify the best available people to serve in a higher grade and to assume greater responsibility.

A review of the Air Force enlisted promotion system is illustrative of the general case. The first step is to determine eligibility for consideration. Eligibility includes minimum time-in-service (TIS) and time-in-grade (TIG) requirements, and meeting minimum skill requirements. For example, an E-5 must have a minimum of 18 months TIG and 5 years TIS to be eligible to compete for promotion to E-6.[22] The E-5 skill proficiency requirement may vary by career field, but in many cases, eligibility for promotion to E-6 requires a 7-level on a 3-, 5-, 7-, 9-scale.[23] Once the Air Force determines the eligible population, it uses the Weighted Airman Promotion System (WAPS) to select among individuals. The items and maximum points for each factor are identified in Table A-3.[24]

The Air Force considers the Specialty Knowledge Test (SKT), Promotion Fitness Exam (PFE), and performance reports the most important factors. The SKT measures knowledge in a specific career field; the PFE measures knowledge of military subjects and management practices at a specific grade level; and performance reports measure past job performance.[25] Entries on the performance report emphasize job performance, technical capabilities, and

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[19]Enlisted Promotion Program Fact Sheet, CBPOL 91-79, September 1991, 2.

[20]The Army and Navy use a board process for E-7, E-8, and E-9; and the Army uses local boards for mid-grade Noncommissioned Officers (NCOs).

[21]Ibid., 1. The Army uses a decentralized board system for E-5 and E-6. The Navy and Air Force use similar processes for grades E-4 through E-6.

[22]HQ USAF/DPXOP, Talking Paper on Enlisted Promotions, February 1991.

[23]Air Force skill levels. Skill level 3 is apprentice; level 5 is journeyman; level 7 is technician; and level 9 is supervisor. AFR 39-1.

[24]Ibid., 3.

[25]Ibid., 6.

professional qualities such as supervision, conduct on and off duty, compliance with standards, and communication skills. For the senior enlisted grades, the factors are similar to those for officers—duty performance job knowledge, leadership, managerial skills, judgment, professional qualities, and communication skills.[26] The WAPS rank-orders eligible individuals; however, the actual number who are promoted depends upon end strength and grade limitations.

Table A-3. Weighted Airman Promotion System Factors

WAPS Factors	Maximum Points
Specialty Knowledge Test (SKT)	100
Promotion Fitness Exam (PFE)	100
Time-in-Service	40
Time-in-Grade	60
Decorations	25
Performance Reports	135
Total	460

Each service uses a slightly different system to identify individuals for promotion. However, several factors are consistent: promotion based on potential, not reward for past performance; performance reports capture the member's effectiveness in professional qualities and technical skills; and eligibility based on minimum TIS, TIG, and skill-level proficiency.

SUMMARY

The manpower system classifies positions by specialty and skill level, and assigns a grade. The promotion system promotes people with demonstrated potential to fill the positions and assume higher grade. Inherent in both systems is the consideration of several factors, including experience, professional qualities, and technical skill. Military grade captures all of these attributes. Because the grade denotes so much about military members, and links the individual to the job and its performance requirements through the manpower and personnel systems, it is appropriately the primary pay determinant for military compensation.

[26]See AF Forms 910, Enlisted Performance Report (AB thru TSgt), January 1989, and 911, Senior Enlisted Performance Report (MSgt thru CMSgt), January 1989, and governing directives for more information. See Department of the Army, *Enlisted Evaluation Reporting system*, AR 623-205 and *NCO Evaluation Report*, DA Form 2166-7. See Department of the Navy, *Enlisted Performance Evaluation System*, NAVMILPERSCOMINST 1616.1 series.

APPENDIX B—THE MILITARY WORK FORCE IN AN ERA OF CHANGE

The current military compensation system evolved to support a predominately single, male, conscripted force. Today's military force differs from that profile in many ways. Recognizing the organization's changing demographics is important for effective evaluation of the supporting compensation system. Moreover, change is in many ways accelerating, not only in terms of the composition of the military force, but also in the general population. It has been argued that policy formulation will best proceed by focusing on understanding these changes themselves. That approach is taken here.[1]

CHANGING SIZE AND COMPOSITION OF THE MILITARY

Military Strength

Figure B-1,[2] shows that the size of the Armed Forces has waxed and waned over the years. In recent history, strength was highest in the late 1960s and early 1970s, during the war in Vietnam.

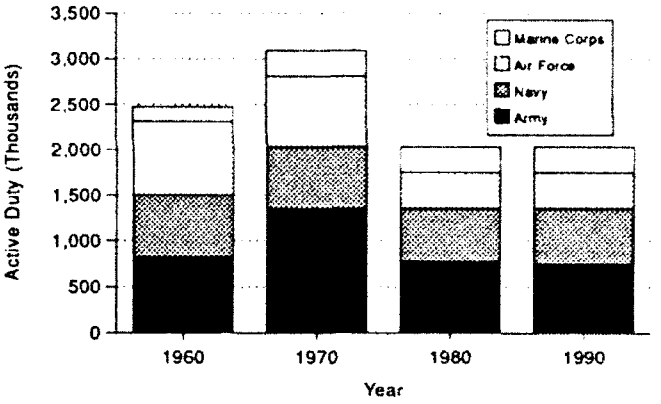

Figure B-1. Active Duty Military Personnel, 1960-1990

More recently, due to social and political changes throughout the former Soviet Union, the Congress directed a strength reduction in the Armed Forces of approximately 25 percent to be accomplished by fiscal year 1995. As a result, active component strength must decrease to 1,613,000 members.[3]

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[1]Ronald C. Pilenzo, "Benefits Priorities in an Era of Change," 271-277 in *Business, Work, and Benefits: Adjusting to Change* (Presented at an EBRI-ERF Policy Forum held in Washington, DC, May 1988), (Washington, DC: Employee Benefit Research Institute, 1989), 271.

[2]Department of Defense, Office of the Secretary of Defense, Washington, Headquarters Services, Directorate for Information Operations and Reports. *Department of Defense Selected Manpower Statistics, Fiscal Year 1990* (DIOR/MO1-90), (Washington, 1991), 68-70.

[3]Public Law 101-510 (104 Stat. 1485), § 401, *The National Defense Authorization Act of 1991*, enacted 5 November 1990.

Average Age of Military Members

As can be seen in Figure B-2,[4] the Armed Forces have generally become older over the past 30 years. With the exception of the late 1960s and early 1970s, when large numbers of young men were drafted into the military to support the war effort in Vietnam, the proportion of members in the youngest age groups has generally declined while the proportion in the older age groups has increased. Seventeen-year-olds accounted for 3 percent of the military in 1960. By 1990, they were less than one-quarter of a percent. Members 18- to 24-years old accounted for 51 percent of the military in 1960. By 1970, they had risen to 62 percent of the force. They have steadily decreased since that time, returning to 51 percent in 1980, and dropping to 41 percent by 1990. On the other hand, members in the age group 25 to 34 years increased from 28 percent to 39 percent during the same period. The percentages in age groups above age 35, however, have varied—first decreasing, then increasing again to just above the 1960 levels.

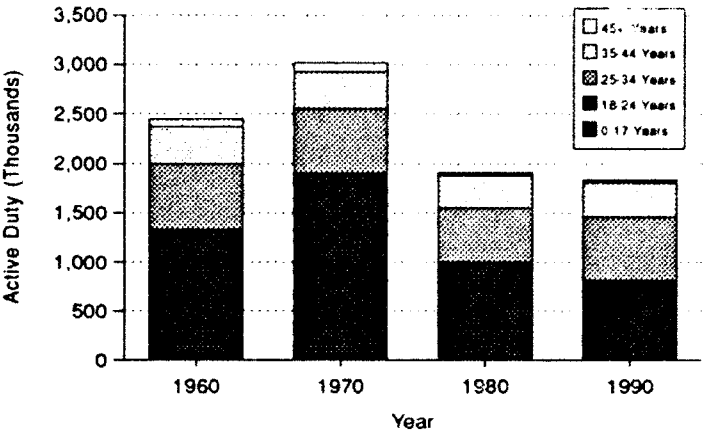

Figure B-2. Distribution of Active Duty Military Personnel, by Age, 1960-1990

The Armed Forces will be recruiting from a general population that has also aged over the past 30 years. As can be seen in Figure B-3,[5] the most dramatic change in the population has been the increase in those age 55 and older—a trend forecasted to continue. In 1960, this group accounted for only 18 percent of the population. By the year 2010, it is predicted to account for almost 27 percent. The proportion of those in age group 45 to 54 is expected to

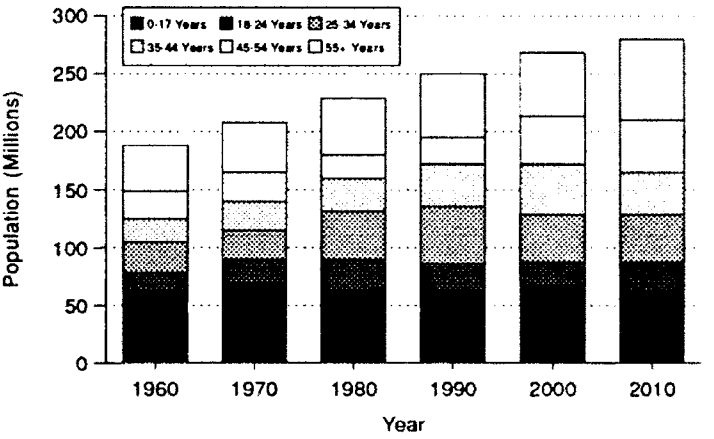

Figure B-3. Population Distribution of the United States, by Age, 1960-2010

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[4]Department of Defense, Office of the Secretary of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports. *Department of Defense Selected Manpower Statistics, Fiscal Year 1980* (DIOR/MO1-80), (Washington, 1981), 102-105. *Department of Defense Selected Manpower Statistics, Fiscal Year 1990* (DIOR/MO1-90), (Washington, 1991), 96-97.

[5]Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States, 1990* (The National Data Book), 110th ed., (Washington, 1990), 13, 16.

grow about half as much—4 percent during this same period. However, those in the younger age group, 0 to 17 years of age, are expected to decline from 36 percent of the population to around 22 percent. The median age of the population was 29.4 years in 1960. By the year 2010, this is projected to increase to 37.5 years, an increase of approximately 28 percent.

As might be expected, these changes are expected to affect labor force participation as well. Figure B-4,[6] shows past and projected labor force participation rates for ages 16 to 24, 25 to 54, and 55 and over. The youngest and oldest age groups are expected to increase in number by about 26 percent and 20 percent, respectively. The middle age group, however, is expected to increase by almost 100 percent.

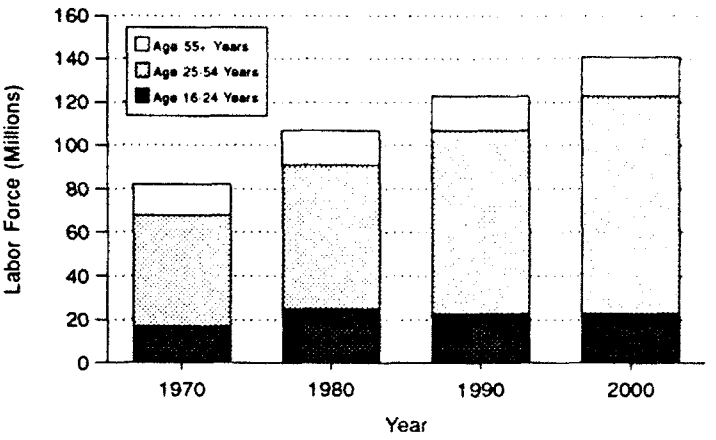

Figure B-4. Labor Force Participation, by Age Group, 1970-2000

Women in the Military

As can be seen in Figure B-5,[7] the number and proportion of women in the Armed Forces have increased significantly over the past 30 years. While they accounted for only one percent of the total force in 1960, they now comprise 11 percent. This seems related to two principal factors. First, women in general have become much more active in the labor force throughout the United States. Second, the Armed Forces have been very proactive to ensure that women have an equal opportunity to serve within the military on an equal footing as their male counterparts. The extent of this effort has been unequaled in the economy at large.

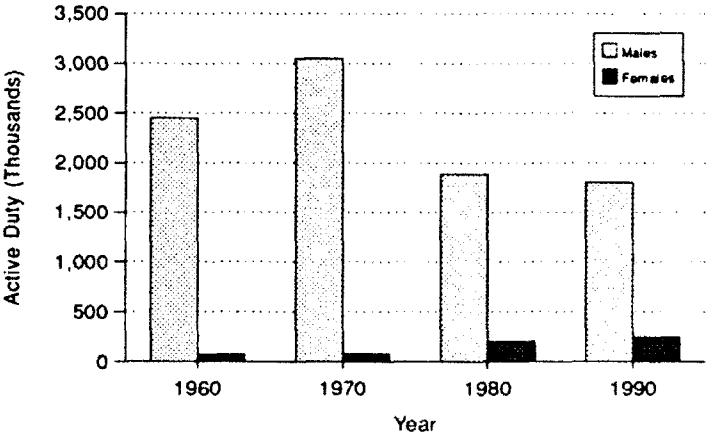

Figure B-5. Distribution of Active Duty Military Personnel, by Sex, 1960-1990

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[6]Howard N. Fullerton, Jr. "New Labor Force Projections, Spanning 1988 to 2000." *Monthly Labor Review* 112, 11, (November 1989) 3-12.

[7]Department of Defense, Office of the Secretary of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, *Department of Defense Selected Manpower Statistics, Fiscal Year 1980* (DIOR/MO1-80), (Washington, 1981), 112-113. *Department of Defense Selected Manpower Statistics, Fiscal Year 1990* (DIOR/MO1-90), (Washington, 1991), 68-70, 104.

Figure B-6,[8] shows that the gender balance in the population as a whole has been, and is expected to continue to be, fairly even. In 1960, males represented 49 percent of the population while women accounted for 55 percent. By the year 2010, this is projected to change only slightly, to about 50 percent for each.

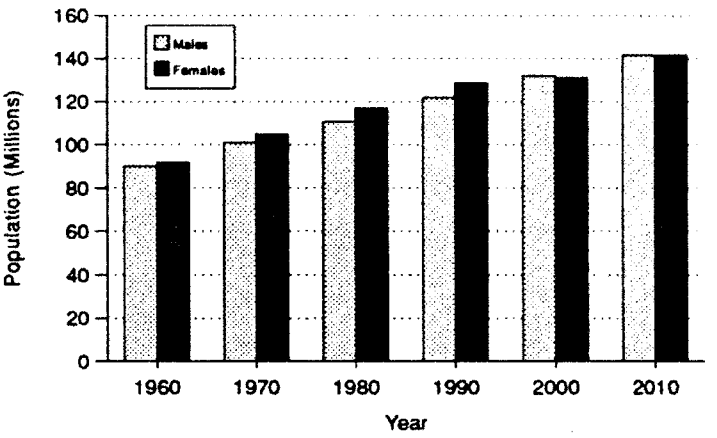

Figure B-6. Population Distribution of the United States, by Sex, 1960-2010

Racial Minorities in the Military

The overall population growth will be evident in all racial and ethnic groups as depicted in Figure B-7.[9] The rate of growth for these groups, however, will differ significantly. In 1960, Whites represented 89 percent of the population, Blacks 11 percent, and other racial groups one percent. By the year 2010, Whites are expected to decrease to 81 percent of the population, while Blacks rise to 14 percent, and other racial and ethnic groups increase to 5 percent. In total numbers, between 1960 and 2010, Whites will have increased a little, while Blacks increased twofold, and other racial and ethnic groups will have increased more than nine times.

Reflecting changes in the general population, the racial and ethnic composition of the work force should change as well. The share of Blacks will have increased because their birth rates have been higher than Whites. It is anticipated that the proportion of other racial and ethnic groups—particularly Asians and Hispanics—will increase as well because of increased immigration as well as high birth rates.[10]

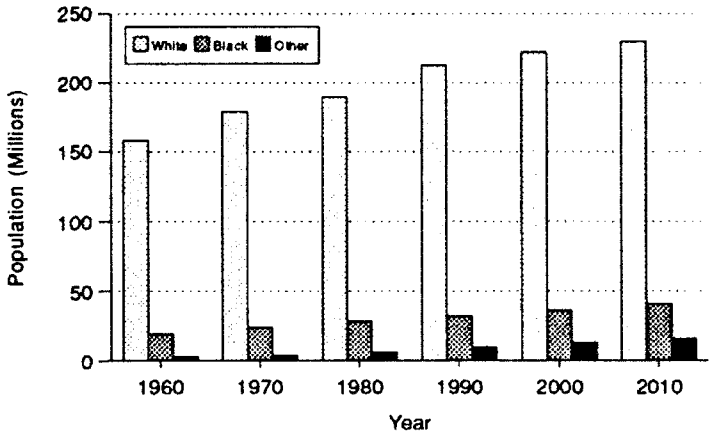

Figure B-7. Population Distribution of the United States, by Race, 1960-2010

[8]Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States, 1990* (The National Data Book), 110th ed., (Washington, 1990), 13, 15.

[9]Ibid., 12, 15.

[10]Janet L. Norwood. "Labor Month in Review: The Changing Work Force." *Monthly Labor Review* 112, 3, (March 1989), 2.

Married Members

The proportion of members of the Armed Forces who are married has generally increased over the past 30 years. This trend can be seen in Figure B-8.[11] In 1960, 51.5 percent of the force was married. By 1990, this had risen to 55.1 percent. The only exception to this general increase was during the late 1960s and early 1970s when large numbers of single, young men were drafted for service in Vietnam. This trend stands in contrast to that seen in the general population.

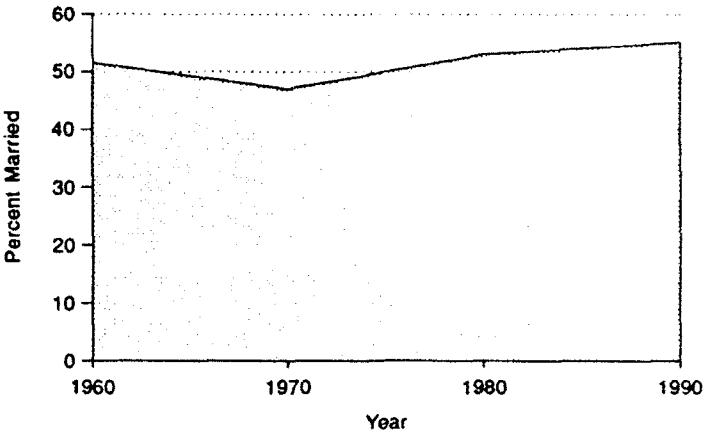

Figure B-8. Proportion of Active Duty Personnel Who Are Married, 1960-1990

Looking only at individuals 18 years old or older, the proportion of single people has increased over the past 30 years, going from 16 percent of the population in 1970, to 22 percent in 1990. Divorced individuals in the population have shown a similar increase, going from 3 percent in 1960, to 8 percent in 1990. On the other hand, the percentages of the population married or widowed have decreased during this same period. Married couples, who accounted for 72 percent of the population in 1960, had declined to 63 percent by 1990. Widowed individuals similarly declined from 9 percent to 7 percent.[12]

One reason cited for this decline in the proportion of the population that is married has been the increased need for education and training to be competitive in the labor market. Individuals are more often delaying marriage until they have completed college, received technical training, and obtained entrance into a chosen occupation.[13]

The Armed Faorces, on the other hand, do not require members to make a choice between career or marriage. Members can and do marry earlier than their civilian counterparts.

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[11]Department of Defense, Office of the Assistant Secretary of Defense (Comptroller), Statistical Services Center, *Selected Manpower Statistics*, (Washington, 1960), 43. Office of the Secretary of Defense, Directorate for Information Operations, *Selected Manpower Statistics*, (Washington, 1970), 37. Washington Headquarters Services, Directorate for Information Operations and Reports, *Department of Defense Selected Manpower Statistics, Fiscal Year 1980*, DIOR/MO1-80, (Washington, 1981), 70. *Department of Defense Selected Manpower Statistics, Fiscal Year 1990*, DIOR/MO1-90, (Washington, 1991), 54.

[12]Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States, 1990*, 43.

[13]Ronald C. Pilenzo. "Benefits Priorities in an Era of Change," in *Business, Work, and Benefits: Adjusting to Change* (Presented at an EBRI-ERF Policy Forum held in Washington, DC, May 1988), (Washington, DC, Employee Benefit Research Institute, 1989), 271-277.

Size of Military Families

As can be seen in Figure B-9,[14] the average number of dependents per active duty member has generally decreased over the past 30 years. In 1960, there was an average of 1.43 dependents per active duty member. By 1990, this had decreased to 1.31. As with marital status, discussed above, the only disruption in the trend was during the late 1960s and early 1970s, when large numbers of single, young men were drafted in support of the war effort in Vietnam.

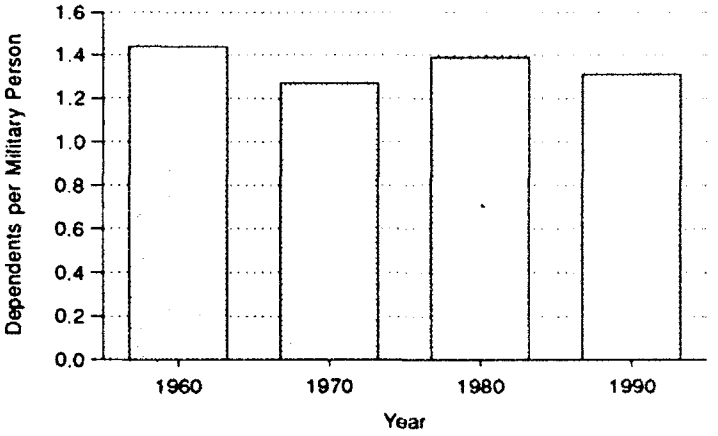

Figure B-9. Number of Dependents per Active Duty Member, 1960-1990

Unlike marriage, however, this trend is fairly consistent with what has occurred in the general population over the same period. Women in the United States have been bearing fewer children during their lives, and they are doing so later in their reproductive years. Consequently, the average size of families today is smaller than it has ever been before. The average family size in 1960 was 3.67. By 1970, this had declined to 3.58; by 1980, it had dropped to 3.29; and by 1990, it had reached a low of 3.14.[15] In fact, the Nation's fertility rate—the number of children the average woman would be expected to bear in her lifetime—has been below the replacement level since 1972.[16]

Figure B-10[17] shows the distribution of dependents from 1960 to 1990. As can be seen, the total numbers have generally decreased over the past 20 years. There is also a notable decrease in the number of "other dependents" during this period.

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[14]Department of Defense, Office of the Assistant Secretary of Defense (Comptroller), Statistical Services Center, *Selected Manpower Statistics*, (Washington, 1960), 43. Office of the Secretary of Defense, Directorate for Information Operations. *Selected Manpower Statistics*, (Washington, 1970), 37. Washington Headquarters Services, Directorate for Information Operations and Reports, *Department of Defense Selected Manpower Statistics, Fiscal Year 1980*, DIOR/MO1-80, (Washington, 1981), 70. *Department of Defense Selected Manpower Statistics, Fiscal Year 1990*, DIOR/MO1-90, (Washington, 1991), 54.

[15]Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States, 1990*, 45.

[16]James R. Wetzel. "American Families: 75 Years of Change." *Monthly Labor Review* 113, 3, (March 1990), 4.

[17]Department of Defense, Office of the Assistant Secretary of Defense (Comptroller), Statistical Services Center, *Selected Manpower Statistics*, (Washington, 1960), 43. Office of the Secretary of Defense, Directorate for Information Operations. *Selected Manpower Statistics*, (Washington, 1970), 37. Washington Headquarters Services, Directorate for Information Operations and Reports, *Department of Defense Selected Manpower Statistics, Fiscal Year 1980*, DIOR/MO1-80, (Washington, 1981), 70. *Department of Defense Selected Manpower Statistics, Fiscal Year 1990*, DIOR/MO1-90, (Washington, 1991), 54.

INCREASED NEED FOR HIGH-QUALITY PERSONNEL

Increasing technology and weapon systems complexity has greatly increased the need for personnel who are easily trained, likely to complete their obligated tours of duty, and are more productive.

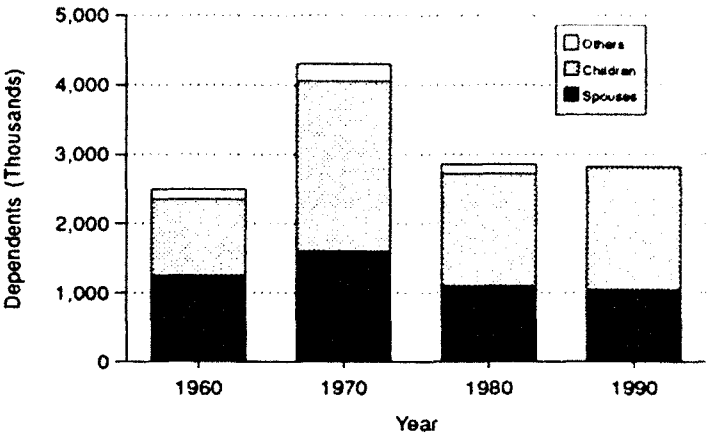

Figure B-10. Distribution of Active Duty Dependents, by Type, 1960-1990

Much of the literature provides contradictory findings on the validity of selection criteria used during the enlistment process. Certain findings, however, seem consistent from study to study. It has been generally accepted that high school graduates as a group are more likely to serve complete tours than nongraduates.[18] The Armed Forces have thus concentrated heavily on accessing high school graduates, particularly since the early 1980s. Figure B-11[19] shows the proportion of nonprior service accessions into the Armed Forces with high school diplomas, or more, for fiscal years 1973-1990. As can be seen, the increase has been dramatic. In 1973, 66.3 percent of all accessions had high school diplomas. By 1990, this had risen to 95.3 percent, an increase of 29 percent.

As can be seen in Figure B-12,[20] the increase in the proportion of high school graduates in the general population has lagged behind that accessed into the Armed Forces, increasing by only 12 percent.

It is also generally accepted that test scores—notably the Armed Forces Qualification Test (AFQT)—correlate with the speed at which recruits

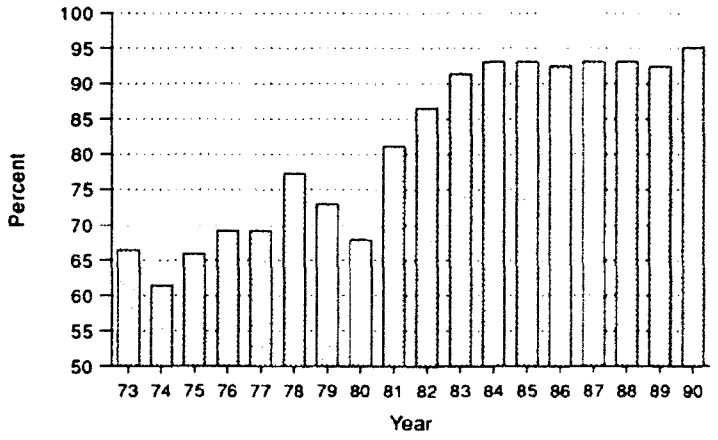

Figure B-11. Nonprior Service Accessions with High School Diplomas, 1973-1990

[18]Robert Pirie, *A Conversation with Robert Pirie: The Manpower Problems of the 1980s*, held on 19 December 1980, at the American Enterprise Institute for Public Policy Research, (Washington, DC: American Enterprise Institute for Public Policy Research, 1981), 12.

[19]Department of Defense, Office of the Assistant Secretary of Defense (Force Management and Personnel), *Population Representation in the Military Services, Fiscal Year 1990*, (Washington, 1991), 16.

[20]Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States, 1990*, 133.

assimilate training.[21] Educational levels and AFQT scores are the primary measures of accession quality used by the Armed Forces.[22] Figure B-13,[23] shows that the proportion of accessions in the highest AFQT categories has waxed and waned over the years. The percentages generally declined throughout the 1970s but have steadily increased throughout the 1980s.

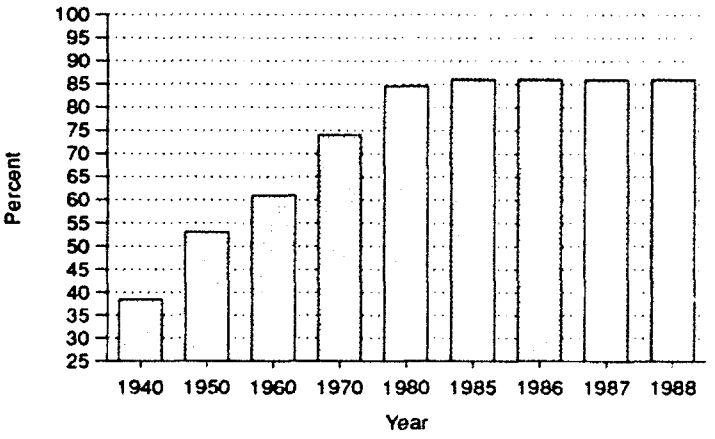

Figure B-12. Population Percentages, Age 25-29 and High School Graduates, 1940-1988

The decline noted during the 1970s, and the subsequent increases noted during the 1980s, were due primarily to three factors. First, compared with civilian labor markets, pay and benefits associated with a military career generally deteriorated. In particular, the elimination of the educational benefits and three pay caps caused a relative pay decline of over 20 percent from 1972 levels to 1980. Second, Congress and the Department of Defense (DoD) implemented programs in fiscal year 1981 to increase the desirability of military service and to set floors on AFQT and education standards. The changes brought immediate and positive results. Third, new versions of the Armed Services Aptitude Battery (ASVAB), from which the AFQT is derived, were introduced in 1976. It was subsequently determined that the new version was misnormed and, by October 1980, the test was renormed.[24] However, during the interim, a number of members were allowed to entere the service based on inflated scores. Figure B-13 reflects corrected data.

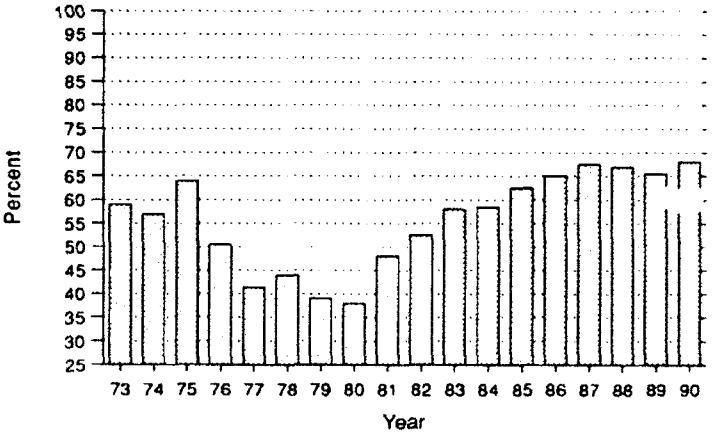

Figure B-13. Non-Prior Service Accessions in AFQT Categories I-IIIA, 1973-1990

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[21]Robert Pirie. *A Conversation with Robert Pirie: The Manpower Problems of the 1980s*, 12.

[22]Department of Defense, Office of the Assistant Secretary of Defense (Force Management and Personnel), *Population Representation in the Military Services, Fiscal Year 1990*, (Washington, 1991), 17.

[23]Ibid., 19.

[24]Ibid., 17.

Manpower planners are also interested in how the general population has scored on similar tests during the same period. Although there is no direct counterpart testing in the civilian sector, some information may be gained from examining Scholastic Aptitude Test (SAT) and American College Testing (ACT) program scores of the general population during this time. The trend in SAT scores, shown in Figure B-14,[25] generally declined from 1967 to 1980. Since 1980, they have generally increased, although they have remained below the pre-1975 levels. Figure B-15[26] shows a similar pattern for ACT program scores.

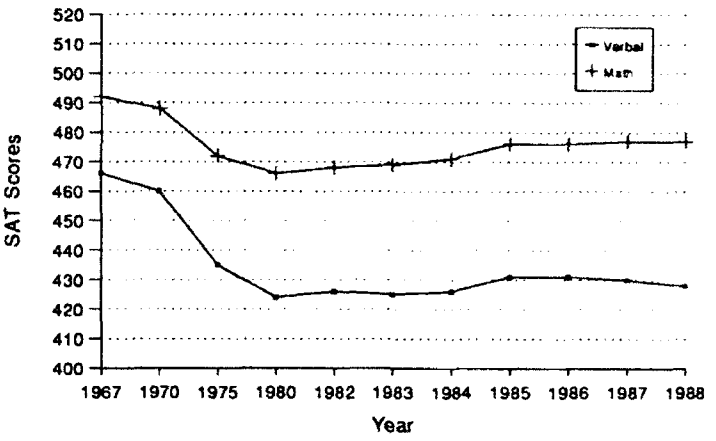

Figure B-14. Scholastic Aptitude Test (SAT) Scores, 1967-1988

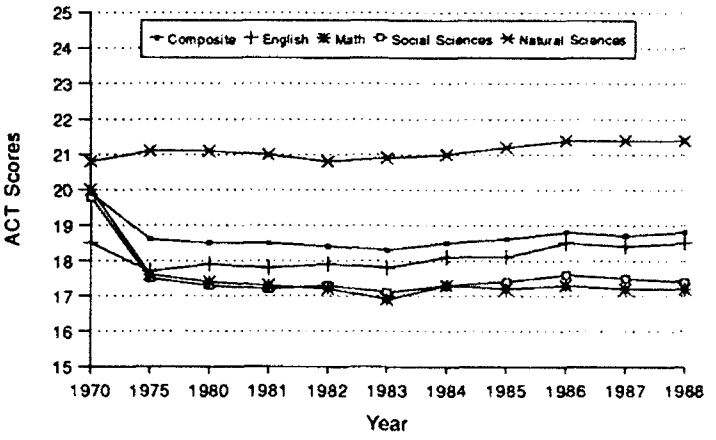

Figure B-15. American College Testing (ACT) Program Scores, 1970-1988

The differences between the trends seen in AFQT scores of accessions and SAT and ACT program scores appears to be largely due to the actions taken by Congress and DoD to limit the number of lower-scoring applicants that could be accessed into the Armed Forces.[27]

MANPOWER COMPETITION

Wages and salaries in the United States have increased significantly over the past 30 years, as indicated in Figure B-16,[28] rising from an average of $10,102 per year in 1960, to

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[25]Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States, 1990* (The National Data Book), 110th ed., (Washington, 1990), 148.

[26]Ibid.

[27]Department of Defense, Office of the Assistant Secretary of Defense (Force Management and Personnel), *Population Representation in the Military Services, Fiscal Year 1990*, 17-18.

[28]Chamber of Commerce, *Fringe Benefits, 1959 [1965, 1969, 1975, 1980, 1985, 1990]*. (Washington, 1960 [1966, 1970, 1976, 1981, 1986, 1990]).

$30,639 in 1990.[29] Even more dramatic has been the growth of employee benefits provided to workers in the civilian labor force. The trend of growth in employee benefits, expressed as employers' costs, is shown in Figure B-17.[30] In 1960, civilian employers in the United States spent an average of $2,516 per year per employee on fringe benefits.[31] By 1990, this had reached $11,527, nearly a fivefold increase.

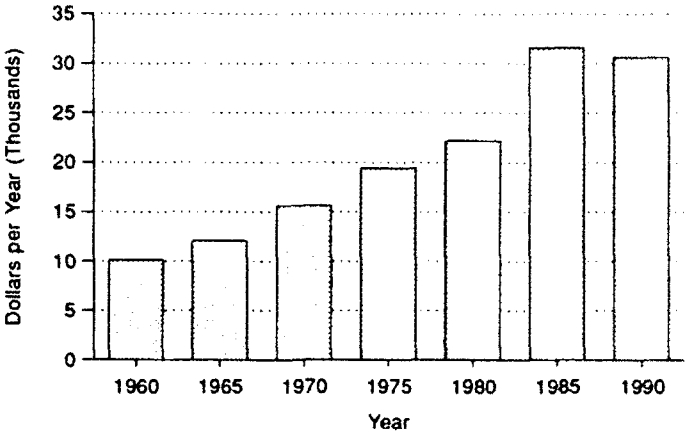

Figure B-16. Wage Growth in the United States, 1960-1990 (1990 Constant Dollars)

THE EFFECT OF CHANGE ON THE MILITARY COMPENSATION SYSTEM

Although the military will be maintaining a smaller total force, its needs for high-quality personnel will continue to increase. As Pilenzo has noted, work in the future, both civilian and military, will increasingly involve rapidly changing technology and increasing complexity at all levels of the organization. Because the Armed Forces allow little lateral entry into its ranks, they are primarily interested in recruiting from the pool of high school graduates. Their task will be complicated by several factors.

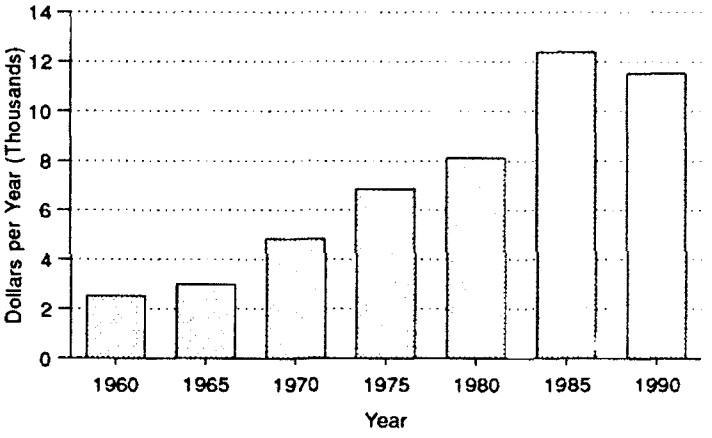

Figure B-17. Growth in Employee Benefits, 1960-1990 (1990 Constant Dollars)

First, while the pool of young people is expected to increase during the next two decades, its relative share within the population will decrease (See Figures B-4 and B-5). This will heighten the competition between military and civilian sectors that actively draw from this

[29]In 1990 constant dollars.

[30]Chamber of Commerce, *Fringe Benefits, 1959*, (Washington, 1960). *Fringe Benefits, 1965*, (Washington, 1966). *Employee Benefits, 1969*, (Washington, 1970). *Employee Benefits, 1975*, (Washington, 1976). *Employee Benefits, 1980*, (Washington, 1981). *Employee Benefits, 1985*, (Washington, 1986). *Employee Benefits, 1990*, (Washington, 1990).

[31]In 1990 constant dollars.

group for entry-level workers. Second, increases in the proportion of women and minorities within the labor pool will force significant manpower and personnel policy changes. Third, the changing demographics of both the general population and the military will further complicate compensation practices for both civilian and military employers. In particular, as more women enter the Armed Forces, there will be more families with both spouses on active duty. In fact, this phenomenon has increased by almost 31 percent over the past 10 years alone.[32] With both members concentrating on service careers, their desire for different forms of compensation will become manifest. For example, if health care benefits are provided to the family because of either's active duty status, the other is likely to desire increased pay rather than a duplication of benefit eligibility. This desire has been met by offering flexible benefit programs within the civilian labor market. However, there have been no such alternatives offered by the Armed Forces.

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APPENDIX C—ALTERNATIVE STRUCTURES FOR ALLOWANCES

INTRODUCTION

For an allowance to warrant the effort (and occasional confusion) of its separate administration, it must serve a useful purpose independent of the dimensions incorporated into basic pay and the S&I pay family. For example, an allowance is nonfunctional if everyone gets it (e.g., BAS for the officer corps), and could be handled much more easily, directly, and sensibly if it were simply added to pay. Similarly, if everyone of the same rank or with the same longevity receives an allowance, there is no loss from simply adding it to the pay table by row or column. Because basic pay and the S&I pays compensate members by status and specialty, the remaining role for functional allowances is to offset the cost of items usually provided in kind and to help members cope with cost-of-living differences, including those due to regional variations in prices, so as to hold constant the real earnings of members in similar circumstances.

The two major allowances, housing and subsistence, emerged at a time when most service people received quarters and rations in kind. That is no longer the case. Currently, most career members receive both of these cash allowances and buy their food and housing on the market, just as their civilian counterparts do. If what was once the exceptional case is becoming the norm, it is reasonable to ask whether new arrangements are called for. Moreover, as spelled out in detail in the 7th QRMC Staff Analyses, MTS 3—*Allowances*, the rates and management policies relating to the allowances have lately come under substantial criticism.

Alternatives to the current allowances should redress weaknesses in the existing system. The most glaring of these weaknesses involves, in essence, mispricing, which causes the allowances in general to differentiate adversely among individuals. Because member food costs do not match the subsistence allowance, BAS has a perverse effect on real income, based in part on whether the member receives food or cash. This effect undermines the compensation differentials relating to status and specialty. Pricing problems also plague the housing allowance, as discussed in the 7th QRMC Staff Analyses, MTS 3—*Allowances*. Aligning their values to the costs of those elements of household expense they are designed to cover would eliminate many of the major shortcomings associated with the allowances, and preserve their intended benefits in personnel support.

Even when pricing problems are resolved, however, the usefulness of the subsistence allowance can be questioned, because everyone would then receive either an equal amount of cash or food of nominally equally value. However, except in very rare cases, this distinction will still tend to have negative effects, because the member generally values cash more than food costing an equal amount. A second step that one might consider is elimination of BAS in its entirety.

Finally, both the subsistence and housing allowances effectively favor members with dependents, relative to single members in the same status and specialty. While this is a perverse differential (unless having dependents makes members more productive), there are some near-term budgetary advantages from continuing this discrimination. A possible alternative would be to eliminate both BAS and BAQ, and equalize VHA rates with respect to dependency.

One may think of the problem as two related pairs of questions. First, what major changes—e.g., elimination of a major allowance—should take place in the system of pay and allowances, and how may warranted changes be successfully implemented? Second, can the existing structure of pay and allowances be significantly improved by superior pay differentials and improved pricing of the allowances; and, if so, how may those improvements be successfully implemented? The 7th QRMC Staff Analyses, MTS 3—*Allowances* and its appendixes address the question of how the rate structure of the current system might be changed to improve its functioning. It includes proposals for a new allowance to extend the system's ability to address variations in local costs of living. This appendix looks at the questions of whether and how to effect major alteration in the structure of pay and allowances.

The remainder of this appendix is organized into three major sections, dealing in turn with the following topics:

- Should the allowances differentiate based on dependency?
- What are the impediments and complicating factors associated with changing the structure of compensation?
- Are major system structural changes desirable, within the current fiscal environment?

The first section addresses the question of dependency from a productivity perspective, based both on civilian and on military evidence. It concludes that while the issues are somewhat murky, any productivity advantages associated with dependency status are more appropriately rewarded directly.

The second section examines the linkages among compensation elements, especially between basic pay and retired pay; evaluates the potential for redistribution between current and future pay and explores the implications of the tax-exempt status of the current major allowances.

The final section consists of an evaluation of alternative compensation structures using the case study method. Against a baseline of the current system, it evaluates options to eliminate BAS, to eliminate both BAS and BAQ, and to improve the subsistence and housing allowances. The method of analysis is simulation programming, using in part an ACOL-based inventory projection model. Conclusions are that the most attractive near-term structure would maintain an improved version of the current system, but with the values of BAS and the housing allowance more closely aligned to food prices and shelter rents. For the longer term, elimination of BAS is potentially attractive; however, compensation policy and cost accounting questions must be resolved before that is set as a policy goal. A policy decision to eliminate both BAS and BAQ would face substantial fiscal impediments. However, the modeling process does identify the most promising pay structure for such a move, in terms of the resulting force composition.

DEPENDENCY ISSUES

The U.S. military compensation system, in contrast to civilian practice and to a greater extent than in similar military systems, overtly favors members with dependents, by paying them more, by providing them with preferred in-kind accommodations, and by offering fringe benefits and services (e.g., health care and commissary privileges) that disproportionately favor members with families. This section outlines that differential and explores its relationship to one of the prime dimensions of compensation differentiation: productivity.

Differentials in Allowances

For all grades and circumstances, a member with dependents receives a higher housing allowance than a peer without dependents.[1] This is not the only way in which the compensation system and service policies favor married members. Generally, because it is fungible, money (a cash allowance) is valued more by recipients than in-kind compensation of equal market value.[2] Compared to peers, junior members with dependents are more likely to receive the cash allowance than in-kind provisions, both for quarters and for subsistence. Finally, married members residing in government quarters generally occupy at least a two-bedroom home, while single contemporaries may share a room and a bath with others.

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[1]Allowance rates depend on grade and on whether or not the member has dependents, not on marital status. The nature of the quarters extended in kind depends on whether the member is alone or accompanied by dependents. The details of these rules are in the Department of Defense *Military Pay and Allowances Entitlements Manual*, Part Three. For ease of exposition hereafter, members with dependents will be referred to as "married," and those without dependents will be referred to as "single;" while this is a simplification for expository reasons, it also happens to describe the two most common cases.

[2]The exception would be for that (unlikely) case where the individual, given the cash, would willingly spend at least the indicated amount on the same item(s) as provided in kind.

Table C-1. 1991 Monthly Housing Allowance by Grade

Grade	Without dependents			With dependents		
	BAQ	VHA	Total	BAQ	VHA	Total
E-9	401.40	164.89	566.29	528.90	174.50	703.40
E-8	368.70	152.02	520.72	487.50	161.58	649.08
E-7	314.70	124.16	438.86	453.00	148.51	601.51
E-6	284.70	112.76	397.46	418.50	138.17	556.67
E-5	262.50	98.21	360.71	376.20	121.51	497.71
E-4	228.60	83.27	311.87	327.30	107.85	435.15
E-3	224.40	92.82	317.22	304.50	105.13	409.63
E-2	182.40	73.16	255.56	289.80	91.55	381.35
E-1	162.00	71.08	233.08	289.80	92.57	382.37

Data Source: U.S. Department of Defense, *Selected Military Compensation Tables, January 1991 Pay Rates*

Housing Allowances. Members are entitled to a housing allowance paid in two parts, with rates differing based on grade, locality, and dependency status, unless suitable government quarters are provided.[3] Average 1991 rates for the CONUS are shown in Table C-1. The relationship between the average rates for single members and those for members with dependents is shown in Figure C-1. Note that for an E-2, the rate for members without dependents is only 67 percent of the rate offered those having dependents, while the dependency differential narrows as grade increases, as shown both for enlisted members and for officers as well.[4]

Service policies regarding in-kind housing also discriminate against single members. Married members are offered either the larger allowance or family quarters (several rooms and privacy), while junior enlisted bachelors are offered a (shared, typically) room in the dorm.[5] Moreover, to the extent that single members are much more likely to be assigned to government quarters, they are less likely to receive BAS—another discriminatory impact.

Basic Allowance for Subsistence. For enlisted members, the difference between the cash BAS and subsistence in kind is qualitatively similar to the differential in housing provisions.[6] Unless stationed in a remote assignment and living in government quarters, or assigned to

[3]37 U.S.C. § 403, § 403a.

[4]This tendency for the difference to narrow is in many cases heightened by the effects of the tax code.

[5]The services argue that there are good reasons for keeping junior enlisted members on post in a structured environment. The point here is not to question the wisdom of that policy, but rather to point out that the *de facto* value of the in-kind quarters is less for singles than for married members living in family quarters.

[6]While enlisted members are entitled to rations in kind, all officers are paid BAS, at the lower monthly rate (in 1991) of $129. For a complete critique of the BAS rate structure and administrative provisions, see 7th QRMC Staff Analyses, MTS 3—*Allowances*.

sea or field duty, married members draw BAS. For most enlisted members, the monthly 1991 BAS rate was $184.50, or $37.50 more than the cost of purchasing a month's meals in the dining hall; this (tax-exempt) differential is an obvious advantage. Moreover, on average, members provided subsistence in kind consume only 56 percent of the total meals to which they are entitled.[7]

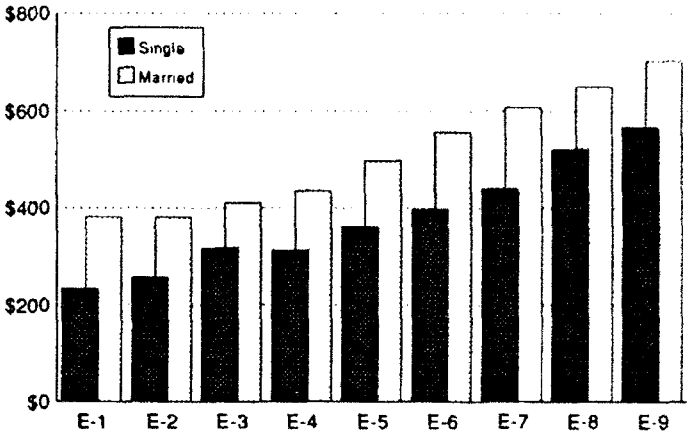

Figure C-1. Enlisted Total CONUS Housing Allowances, 1991 Average Rates

Indirect Consequences of Dependency Differentials. Critics argue that by, in effect, paying members with dependents more than members without dependents, the Department encourages members to acquire dependents, encourages people with dependents to enlist, and differentially encourages retention of members with dependents. The provisions for subsistence and for housing, they contend, therefore are inefficient in two ways. First, by paying different members differing amounts based on factors other than productivity, the Department is not minimizing the direct costs of labor. Second, by encouraging differentially membership of those who have or will have dependents, operating costs associated with dependency are increased (dependent medical care, overseas DoD schools, PCS costs, etc.).[8]

There are two potential rejoinders to these arguments. First, it's not unreasonable to pay a premium to members with dependents, if there is evidence of a connection between family life and higher productivity. Second, people make decisions based on expectations. Members who expect to enter into typical social arrangements (i.e., marriage) will form their expectations of future income based on the greater compensation tendered to married members. Therefore, the reaction to pay discrimination over a planning horizon entailing lifetime earnings streams may be much less than one would expect, based only on the pay differences between married and single junior enlisted members.

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[7]Based on factors used by the services in budgeting for dining operations.

[8]See Paul F. Hogan, "Should Military Pay Vary By Dependency Status? Some Issues," unpublished manuscript (Decision Science Corporation: Washington, DC, 1991); Patrick C. Mackin and Jeffrey A. Peck, "Economic Impact of Differential Pays by Dependency Status" SAG Issue Paper Submitted to the 7th Quadrennial Review of Military Compensation (Washington, DC: SAG, 1991); and John T. Warner, "Issues in Evaluating Military Compensation Alternatives," *Defense Management Journal* 19, pp. 23-29. Note also that the medical benefit may act differentially to recruit or retain individuals who have difficult family health situations.

Dependency and Productivity

There are two ways to compare the productivity of married and single enlisted members, based on the available information. First, one may take the productivity differences between married and unmarried individuals in the general population as a proxy for military productivity relations. Second, one may evaluate directly differences between married and unmarried military members.

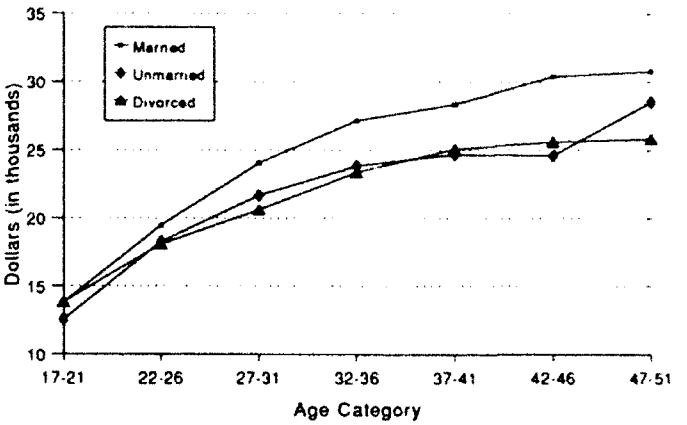

Figure C-2. Annual Income by Marital Status—Male High School Graduates

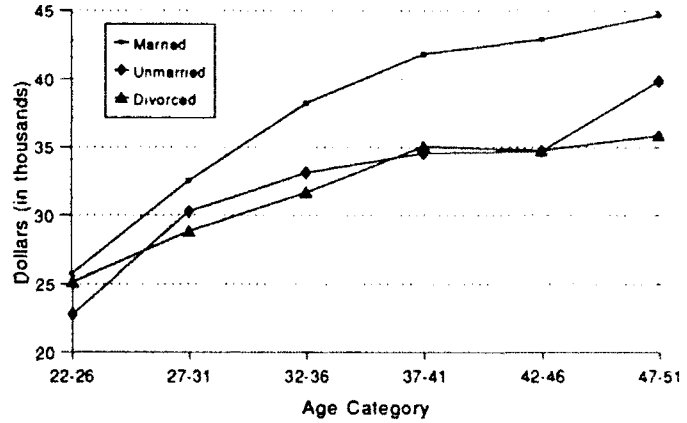

Figure C-3. Annual Income by Marital Status—Male College Graduates

Dependency in the Civilian Market. A number of researchers have noted that married men are paid more than their unmarried counterparts, not only in the United States but in other industrial countries as well.[9] These differences pervade all age groups and education levels, as shown in Figures C-2 through C-4. Typically, these differentials range from 10 to 40 percent, roughly as large as race, firm size, interindustry, or union wage differentials. Several reasons have been advanced to explain this phenomenon: that marriage makes workers more productive, that employers favor married men, or that males are selected into marriage either on the basis of wages or of other characteristics sought by employers.[10]

The major public data bases do not allow a systematic answer to the question of why these differences occur, because they do not present separate measures of individual productivity or of other behavioral variables that help determine the underlying causes. However, fragmentary evidence does provide some insight. Researchers looking at the records of one large U.S. firm report that most of the premium occurs because married men generally are working in higher-paid (i.e., more responsible) jobs (the records were from a

[9]Sanders Korenman and David Neumark, "Does Marriage Really Make Men More Productive?" *Journal of Human Resources* 26 (1991): 282-307.

[10]Ibid., 283.

firm that had established a pay grading system), and married men also received higher performance ratings than unmarried men. Moreover, performance ratings appeared to show improvement from the time of marriage.[11] Summary statistics from the Current Population Survey and cross-sectional analysis suggest, moreover, that men who divorce subsequently experience a relative decline in pay. Conversely, there appears to be a relationship between the time married (or subsequent time spent divorced) and earnings.[12] Overall, marriage premiums seem to arise slowly, rather than as a once-and-for-all shift in pay whereas the premium appears to decay with dissolution of the marriage. Moreover, the premium appears to correlate with improved performance.

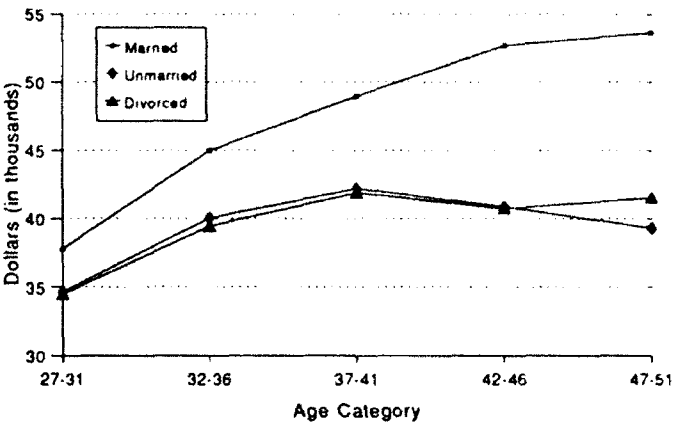

Figure C-4. Annual Income by Marital Status—Males with Post-Graduate Education

Females display the opposite relationship. That is, married women report somewhat lower incomes than single women, as shown in Figure C-5. This relationship holds up across education levels.

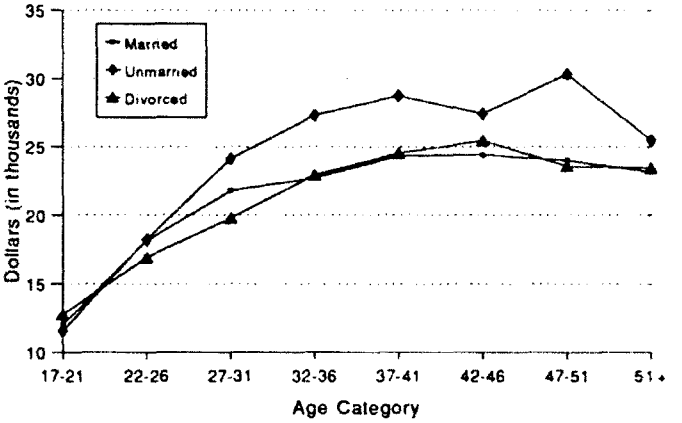

Figure C-5. Annual Income by Marital Status—Females, All Education Levels

Dependency and Military Productivity. The more direct approach is to measure the productivity differences between married and unmarried service members. One may consider two proxy measures: (1) promotion success and (2) several measures of retention, training completion rates, and continuation rates. As Figure C-6 shows for the Army (the other services show similar patterns), the reenlistment rates of members with dependents is greater than those of members without dependents. One would expect this result in part due to the differences in compensation; however, as is the case with the general population, there is

[11]Ibid., 293.

[12]Ibid., 293-294.

apparently a difference in the basal retention rate or, conversely, the "quit rate."[13]

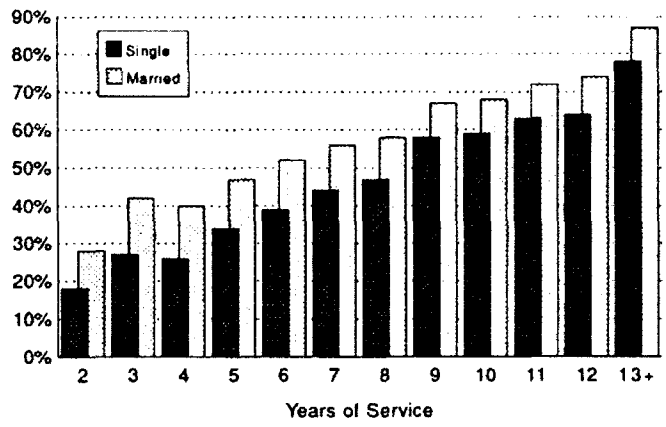

Figure C-6. Army Reenlistment Rates by Dependency Status, 1990

Generally, retention rates are greater among members with dependents; this is true also of success rates in completing the initial service contract. However, some researchers have found higher initial contract completion rates for bachelors in Army combat arms. Baldwin and Daula, and Warner and Solon, found that infantry recruits who were married at accession were more likely to quit than single recruits. A (now dated) study of Navy shipboard crew effectiveness found that, in two of six ratings studied, single men appeared more productive than married men.[14] Conversely, there was no significant relationship between marriage and attrition for recruits in the vehicle operation field, and in fact married recruits were more likely to complete the first term of service in the clerical fields.[15]

Implications for Military Compensation. How do these findings relate to the proper structure of military compensation? First, they suggest that marriage in fact does, to a large extent, correlate with an increase in productivity for males, with the exceptions noted. Second, divorce appears to correlate with a decay in male productivity, although not necessarily with a change in dependency status for military pay purposes.[16] Third, there is no reason to believe that female productivity (and females now make up 11 percent of the force) relates to marriage in the same fashion as male productivity. While marital status

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[13]Generally, single males have higher quit rates than married men, as do single heads of household. In this case, while the income elasticity of retention of bachelors is greater (as one would expect), there is no analysis available to indicate whether or not there are behavioral differences as well. However, the difference in continuation rates is greater than one would expect, given differences in expected future pay.

[14]Stanley A. Horowitz and Allen Sherman, *Crew Characteristics and Ship Condition (Maintenance, Personnel Effectiveness Study)*, CNS 1090,(Arlington, VA: Center for Naval Analyses, March, 1977)

[15]See D. Alton Smith, Stephen D. Sylwester, and Christine M. Villa, "Army Reenlistment Models," in Curtis L. Gilroy, David K. Horne and D. Alton Smith, eds., *Military Compensation and Personnel Retention: Models and Evidence* (Alexandria, VA: U.S. Army Research Institute for the Behavioral Sciences, 1991), 141, for evidence regarding Army promotion. See Robert H. Baldwin and Thomas V. Daula, "Army Recruit Attrition and Force Manning Costs: Methodology and Analysis," in Ronald G. Ehrenberg, ed., *Research in Labor Economics*, vol. 7, 312; and John T. Warner and Gary Solon, "First-Term Attrition and Reenlistment in the U.S. Army," in Gilroy *et al.*, 243-245.

[16]Unmarried military members supporting dependent children (or, for that matter, infirm parents) are compensated at the with-dependents rates and provisions.

correlates with pay (and, apparently for males, with performance), direct recognition seems superior to indirect, in terms of compensation efficiency. In any event, the data suggest that for males, marital status—not dependency status—is the key correlate.

Military Spouse Income

Discussion of pay and dependency would not be complete without noting the relationship between spouse income, military compensation, and military career continuation. Studies of civilian labor markets indicate that marriage and school-aged children reduce workers' willingness to relocate, which suggests that some family losses are entailed.[17] While the benefits from moving (better chances for promotion, for example), whether in the military or in civilian employment, are the same whether the individual is single or married, the costs implied for someone who is married are greater; the pecuniary losses are in a large part attributable to losses in spouse income.

SYSTEM DESIGN FACTORS

Several factors limit or condition the scope of any proposed changes to the current military compensation structure. As a precursor to assessment of alternative dispositions of the major allowances, this section reviews the most significant of these limiting factors. It begins with a sketch of the criteria used to build and evaluate specific alternative schemes, then discusses the linkages among system elements that limit separate changes to them, examines the implications of the tax-exempt status of the allowances, and concludes with a brief discussion of the behavioral and financial issues involved in making even minor changes to basic pay and, hence, to retired pay.

Criteria

The QRMC design criteria follow from the objectives of the military personnel system and its supporting compensation system: to attract and retain the desired number of members, of the desired quality and with the target experience levels. There are two separate goals for compensation design, with a distinction heightened by the closed personnel system: accession quality and retention quality.

The overall force structure, net of the current drawdown, used as a QRMC guide is discussed in this MTS and Appendix D. Generally, given the closed military personnel system, the stated objectives of experience levels at or exceeding those currently prevailing imply continuation rates at or above recent levels. Further, force quality goals imply accession quality targets (in terms of entry talent mix) that meet or exceed recent experience.

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[17]Jacob Mincer, "Family Migration Decisions," *Journal of Political Economy* 86 (October 1978): 749-773.

These objectives constrain the system of compensation levels and differentials that can be chosen to meet those personnel goals economically.[18]

Additional constraints involve major military institutional requirements, such as the support the military provides new entrants, virtually is surrogate family. This class of constraints is built into the scenario structures (e.g., rules on who must eat in the dining halls and how that will affect their overall incomes). The details of the QRMC's approach to modeling force structure alternatives are provided in the 7th QRMC Staff Analyses, GSP C—*Modeling, Logic, and Theory.*

Compensation Linkages

The linkages among the compensation elements form a second major family of design considerations. Most notable in this regard are the connections between basic pay and the retirement system, although other elements (most significantly, Reserve Component drill pay and certain bonuses) are affected. As described in Appendix 4, retired pay is, in all cases, calculated by a formula that involves basic pay and total period of service. That is, basic pay influences retired pay, but no other compensation element—including the other components of RMC—is a factor in retirement calculation. Therefore, if an allowance is eliminated for structural reasons, but to preserve active duty pay levels the money is transferred into basic pay, then retirement income will increase as well. The reverse is also true: money transferred from basic pay into the allowances will decrease the retirement benefit. These consequences, in all cases, affect both an individual's lifetime earnings and the government's total cost. Therefore changes in military compensation involving movements of money between basic pay and the allowances are hampered by the attendant cost to the government (for movements from allowances into basic pay) or by the loss of member lifetime earnings (for movements from basic pay into the allowances).

The connection between basic pay and retired pay leads to an additional issue in lifetime compensation. Basic pay is the source of most financial differentiation among military grades and most differences due to longevity. While the total housing allowance increases with grade, it does so much less sharply than basic pay (just as civilian housing expenditures as a portion of income decline as income increases); and BAS rates are actually higher for enlisted members than for officers. The consequence is that basic pay as a percentage of cash income increases with seniority for all members, and is a greater portion of officer income than of enlisted income. This implies that retired pay is a greater portion of total active duty income for officers than for enlisted members, as implied in Figure C-7.

[18]From a programming perspective, one may view the process as cost minimization, subject to force structure and content constraints. This is not to imply that compensation should be used to make detailed changes to force structure, or to solve every detailed problem. It should, however, be tailored to support general targets of size, experience, and quality.

The implications for structural changes are substantial. Moving BAS, say, into basic pay would increase retirement incomes for enlisted members more than for officers. Moreover, no single, simple revision to the entitlement computation formulas could restore both overall cost to the government and the lifetime earnings (discounted or undiscounted) of all members. Simple cost-neutral retired pay formula adjustments would produce significant windfall gains and losses for different segments of the military population.

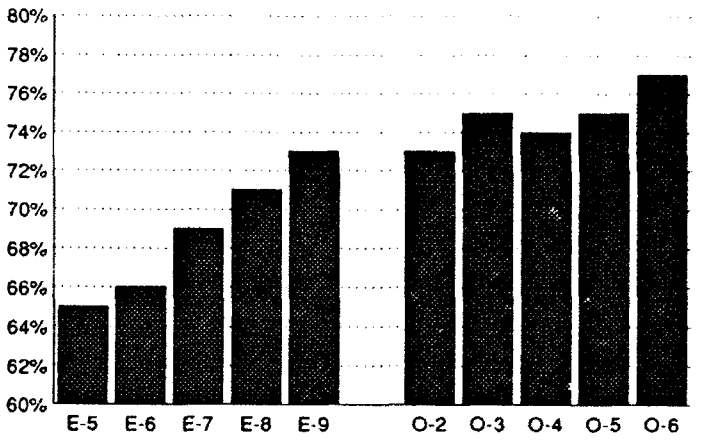

Figure C-7. Basic Pay as a Percentage of RMC, by Grade, 1991

Tax Status

Basic pay is subject to federal and state income taxes and Social Security taxes,[19] while both BAS and the housing allowances are tax-exempt.[20] This fact further impedes structural changes in the compensation system. We consider each element of tax liability separately, beginning with the federal income tax.

Movement of money from the allowances into basic pay increases tax liability by an amount that varies by income level and individual situation (including filing status). The value of the tax advantage will be greater the higher is individual income (or joint income, for married people filing jointly), because tax rates are graduated. It is also greater, the greater is the amount of income that comes in the form of allowances. This means that more senior members, members whose spouses have income, bachelors, and members with significant outside income would suffer relatively greater dollar-for-dollar tax liability due to elimination of an allowance.[21] Generally, one would expect the increase in tax liability to increase with pay grade, for a given (fixed) amount of compensation transferred from an allowance into basic pay. As a matter of policy, there would be on average no net change

[19]Including the now separately calculated Medicare A.

[20]See 7th QRMC Staff Analyses, GSP D—*Tax Issues* for a more complete discussion of tax issues.

[21]A computer model to estimate the average value of the tax advantage, by grade, is maintained in the Office of the Assistant Secretary of Defense (Force Management and Personnel). This model is based on assumptions that the sole family income is from member pay, and that the member (or member and spouse) takes the standard deduction. The 7th QRMC compared the results of this model with an exhaustive review of DOD tax filings for 1989, available (with individual anonymity, of course) through the IRS. The findings, detailed in GSP D, Appendix C, are that the OSD model provides fairly accurate estimates of actual tax rates and aggregate advantage through the grade of O-4—that is, for those grades where most people serve.

(cost or saving) to the Treasury, to increase basic pay by an amount sufficient for recipients, on average, to maintain income net of the tax (i.e., to increase pay by enough to cover the increased tax).[22]

There naturally would be gainers and losers in this procedure. Generally, gainers would be members with lower actual marginal tax rates than the average for their grade and seniority (e.g., married members whose spouses do not work, or those itemizing deductions). Losers, in contrast, would be those whose personal tax rates were above average for grade and seniority (those with well-paid working spouses or bachelors). For single members, to some extent this would amount to exchanging the discrimination imposed by allowance rates and practices for that imposed by the tax code.

Military allowances are also exempt from state income tax liability. However, the policy implications and consequences for individual net incomes differ significantly. Service member state of residence varies based upon accident of birth and other events outside the span of DoD policy. However, state income tax marginal rates vary from a low of zero (10 states have no income tax) to a high of 14.57 percent. This implies that moving funds from an allowance to basic pay would tend to reduce individual members' post-tax income, varying according to their state (or territorial) residence. There is no apparent, firm basis for monetizing this aspect of tax advantage.

The final dimension of tax advantage has to do with the Social Security tax, currently collected at a rate of 7.65 percent from the employee and 7.65 percent from the employer. Income from wages and salaries are taxed at this uniform rate up to the annually established liability ceiling,[23] but not thereafter. Unlike the income tax, Social Security tax is related to specific future benefits. There are two aspects of Social Security that merit separate treatment in this regard.[24]

First, Social Security provides pensions and medical insurance to the elderly. One can think of this aspect of the tax as payment for a deferred benefit. Second, the Social Security system provides catastrophic health and disability benefits for covered individuals and (in some cases) for their dependents. This insurance coverage is a current benefit. Generally, Social Security benefits are based on payments into the system, computed on a quarterly (three-month) basis. The higher an individual's income, the greater the tax paid (within the income limits noted above) and (at least regarding the pension) the greater the benefit. Full

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[22]This is referred to as "monetizing" the tax advantage. If an allowance, A, is to be converted to monetized pay, then the new pay amount P is $P = A/(1-t)$ where t is the marginal tax rate.

[23]The ceiling for 1991 was $53,400 for Social Security (tax rate 6.2 percent) and $125,000 for Medicare A (tax rate 1.45 percent), for an overall 7.65 percent.

[24]More complete discussion of Social Security program is in GSP D, Chapter 3.

insurance coverage comes after 10 quarters; the retirement benefit is calculated on the 40 highest quarters paid in over the retiree's life.

These facts regarding Social Security tax policy and benefits eligibility establish a framework for understanding how Social Security tax liability and the associated benefits affect different groups within the force differently, and define distinct groups that merit separate consideration. First, the most senior members already pay the maximum tax under current law. Increasing the portion of their income that is taxable would, in this case, have no effect, either on their current or on their future annual incomes. Second, many career members can view an increase in the Social Security tax as an increased current cost for increased future benefits. This is strictly true for individuals not paying the maximum tax but in their 10 highest lifetime earning years (and, hence, who are contributing into their 40 highest quarters for benefit calculation).[25] This is most likely to be the case for many career members. Third, many members are junior and, based on their current incomes and likely lifetime earnings profiles, would probably not affect their future benefits by paying more or less current taxes. For these individuals, increasing their Social Security tax liability would be a straight tax. Note that all members now are covered to some extent by the Social Security insurance.[26]

Balancing Current and Future Income

A way of evaluating how people will respond to future benefits is by discounting them to the present (i.e., by putting them in terms of a single lump sum available at one time—in this case, the present). Essentially, the discount rate is the lowest interest rate at which an individual will lend money. Empirical investigations suggest that military members discount the future at 6 percent or more, after inflation.[27] However, the rate at which the DoD retirement fund discounts future liabilities (liabilities of the fund are the future payments owed to retired members) in order to make current provisions to cover them is currently only 2.5 percent. The consequence of this is that increasing retirement benefits would raise the associated cost (expressed through the retirement accrual budget requirement, also discussed in Appendix C) faster than members would perceive their deferred benefit to increase.

The compensation design significance of these relationships is considerable. Consider the proposition of transferring money from the allowances (e.g., BAS) into basic pay. Such a move would tend to increase retirement benefits and cost, as a byproduct. In short, one

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[25]Actuarially, many people contributing to the program may view this as a poor bet.

[26]In part this is funded by a budgetary provision known as the Wage Credit, a roughly $400 million element of the DoD budget.

[27]See 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, 1976), or Makin, *et al.*,. Note that discount rates of 10 to 15 percent are incorporated into the OSD ACOL model. In all events, personal discount rates appear to vary with age, which correlates with rank. See Makin *et al.*

cannot change the balance between pay and allowances, and preserve simultaneously the details of the statutes governing the retirement benefit, the lifetime well-being of the member, and the cost to the Treasury. Some of the compensation relationships must change to accommodate any structural change. Possible changes include revision of the balance between current and future income along with minor modification to the retirement program.

A digression on the retirement program is in order at this point. Given its existing linkage to basic pay, the cost of eliminating BAS would be roughly $3 billion annually, as a consequence of adjustments designed not to change retired pay but rather to simplify compensation. Choosing to change compensation structure as a matter of policy implies choosing between preserving the nominal rules of the retirement system or maintaining its essential flows of funds. The functions of the retirement system are to retain and motivate career members, to facilitate their transition to post-service civilian life, help maintain a mobilization pool of military skills, and, finally, to provide financial security. In each of these cases, it is the actual flows of funds that matter, both in terms of member choices and behavior and in terms of the costs and benefits to the government.

Two guidelines emerge. First, the actual retirement benefit drives both analysis and policy options. Thus, the QRMC's recommendations are keyed to actual flows of retirement funds and their relative costs and benefits. The second stems from the first: minor technical alterations to the existing retirement benefit determinants would be necessary, as described below, to accommodate changes in compensation structure while maintaining lifetime pay attractive to the member and affordable by the government.

ALTERNATIVE STRUCTURES: THREE CASE STUDIES

The issues and questions surrounding military compensation alternatives so proliferate that it is difficult to address them all cohesively. Consequently, the QRMC has chosen to develop three comparative case studies dealing with alternative allowance structures, each compared to a baseline developed from the status quo (FY 1991) structure, unless otherwise noted. These case studies involve the following: complete elimination of the BAS; elimination of both the BAS and BAQ; and an improved, cost-based allowance system (realignment of the administrative and rate-setting methods and mechanisms of BAS and a unified, regionally variable housing allowance).[28]

The QRMC developed these case studies in a process geared to integrate considerations of member benefit and government cost. The objective was to design alternative compensation structures to support target continuation rates, at minimum cost. Within the framework of those basic structures, the QRMC used a programming model to find the

[28]The regionally variable housing allowance is similar in basic concept to that proposed in the 1991 Joint Services Housing Allowance Study; however, the QRMC believes that it should be based on external price measures rather than member expenditures.

balance between active duty and retired pay that would minimize cost to the government. The administrative changes to the retirement system necessary to effect these strategies are sketched in the cases as they are presented.

Case 1: Elimination of BAS

The case for elimination of BAS is that its original value and purpose have been undermined by changing circumstances; it is unnecessarily complex; and because it is poorly priced, it interferes with the functioning of the other compensation elements, to the detriment of the personnel support function. The simplest disposition would be simply to eliminate the allowance entirely, and move the associated compensation into basic pay. Specifically, this would entail monetizing the federal income tax advantage associated with BAS for each grade and combining the resulting sum with basic pay. Members now required to eat in the dining hall would be required to purchase a meal card, at the daily sale of meal rates.[29]

In current cash, this approach would have little effect on the officer corps; however, there would be a substantial impact on current incomes for enlisted members. Compared to the status quo, enlisted members currently utilizing meal cards would experience an increase in income equal to the difference between the current BAS and the dining hall meal charges. This amounts to about $37.50 monthly, net of taxes, or a gross difference of $42.94 at a marginal rate of 15 percent. This would be particularly significant for first-term enlisted members, who as a group would experience a windfall gain.

The most significant impact, however, would be on retired pay. Consider, for example, two fairly typical cases: an E-7 and an O-5, each retiring at 20 years of service. For the E-7, the monetized addition to monthly basic pay would be roughly $226; for members entering the service prior to 1 Oct 1986, this implies an increase of $113 in monthly retired pay windfall. For the 0-5, the monetized basic pay increase would be about $186 monthly, for a retired pay windfall of $93 monthly.[30] So significant an increase in retirement income must come at significant cost to the government; the bill for retirement accrual would be in the vicinity of $1.5 billion annually, for a force of 1.6 million members.

Overall, the cost to the government from a naive transfer of BAS into basic pay, under the assumptions outlined above, would be on the order of $3 billion. Such a figure is fiscally unrealistic. Moreover, the retired pay windfalls—caused by the linkages between basic pay and retired pay—are unwarranted, as are the income gains that would be experienced by most members in the first year of service. However, adjustments to limit the effect on retired

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[29]This analysis assumes that the Social Security tax represents a loss of current income in favor of future income and therefore may overstate the relative value of current cash compensation for junior members.

[30]In 1992 dollars, at a marginal tax rate of 15 percent for the E-7 and 28 percent for the 0-5. For a discussion of tax advantage and average marginal tax rates by grade, see 7th QRMC Staff Analyses, GSP E—*Tax Issues*. Note that the above figures give the approximate increases for enlisted members and officers, respectively, for the twentieth year of service.

pay, to balance current and deferred compensation to accommodate movement of BAS into basic pay, and to prevent unintended increases in current cash to new recruits can, in aggregate, reduce costs significantly, while maintaining a (redefined) linkage between basic pay and retired pay. These moves fall into three categories: minor changes to the retirement statutes, rebalancing current and deferred compensation, and eliminating windfall gains for recruits.

First, consider the question of windfall gains for new recruits. The preponderance (84 percent) of entering enlisted members are young singles. They typically live in dormitories and receive subsistence in kind from the dining halls, as shown in Table C-2. To pay them full monetized BAS—$217.06 at the 1991 rates—and charge them for meals at the daily sale of meal rate—$147 for a 30-day month in 1991—would give each member an annual windfall of almost $450. It would seem more appropriate to add to their pay only the money needed to cover personal meal costs. Most members of the enlisted career force (roughly those in grades E-5 and above) draw BAS, and receive cash in excess of the amount needed to purchase meals.[31] As detailed in 7th QRMC Staff Analyses, MTS 3—*Allowances*, the premium's pervasiveness for the career enlisted force has led to this differential being considered de facto pay.

A solution that preserves, on average, current cash incomes would be to add to basic pay an amount necessary to purchase meals for enlisted members in their first two years of service. For members in their fifth and subsequent years, the full monetized BAS would be added; for members in the third and fourth years, the addition would be monetized meal cost plus one-third and two-thirds of the difference between that and current (monetized) BAS, respectively. This solution would incur some cost associated with career members who now receive subsistence in kind. However, it seems inappropriate for pay, in effect, to depend on the vagaries of messing arrangements. There are also members in the junior grades who receive BAS and who could, conceivably, lose money in the short run. Prior to actual implementation, some save-pay provision, not specified here, would presumably be developed.

Merging BAS into basic pay and retaining a fixed linkage between basic pay and retired pay would require minor adjustments to the formal retired pay rate-setting formulas. Otherwise, it would not be possible to replicate recent continuation rates at recent compensation costs, given the merger of pay elements. These adjustments consist of retired pay multipliers that, when applied to basic pay defined to include the current BAS, would yield roughly the current dollar value of retired pay. However, the difference between officers' and enlisted members' pay compositions (and retired-to-active pay ratios) noted above make it difficult to find a simple solution.

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[31]As demonstrated in Chapter 3 of the 7th QRMC Staff Analyses, MTS 3—*Allowances*, this is also an amount in excess of the amount required for an adult male to purchase food in the general economy.

All grades may currently retire at 50 percent of basic pay on reaching 20 years of service, with the percentage increasing by 2.5 percent each year up to a maximum of 75 percent of basic pay at 30 years of service (prior to 1 Aug 86). If BAS were added to basic pay, an initial multiplier rate of 48 percent would be required, increasing to 73 percent, to preserve (generally) the current retired pay entitlement (and its relationship to RMC) for officers. For the enlisted corps, parity with current retired pay would be maintained with a rate of 45 percent of (redefined) basic pay at 20 years, increasing to 70 percent at 30 years of service.[32] If the multiplier to preserve officer pay balance were applied to the entire force, enlisted members would experience windfall retired pay gains and compensation costs would rise. In contrast, if the ratio that preserves enlisted pay balance were applied to the entire force, officers would experience undeserved retired pay losses. Thus, adjusting the retired pay multiplier would overcome some of the impediments to merging BAS into basic pay but by no means all of them.

Table C-2. Housing Provisions by Grade

Grade	Cash Allowance Percent by Grade		Housing in kind Percent by Grade	
	Married	Single	Married	Single
E-9	72.4	73.8	27.6	26.2
E-8	67.8	70.4	32.2	29.6
E-7	63.0	72.8	37.0	27.2
E-6	60.0	65.9	40.0	34.1
E-5	57.3	45.7	42.7	54.3
E-4	66.5	20.0	33.5	80.0
E-3	91.2	07.9	08.8	92.1
E-2	90.7	02.0	09.2	98.0
E-1	59.6	00.5	40.4	99.5

Source: U.S. Department of Defense, *Selected Military Compensation Tables, January 1991 Pay Rates*

No single multiplier can completely resolve these problems. In order to preserve the practice of all members with the same longevity (years of service) retiring at the same percentage of basic pay, regardless of rank, some rebalancing between current and deferred compensation would be required. That is, either enlisted members must give up some active duty pay in favor of greater retired pay, officers must give up some retired pay in favor of active duty pay, or a combination of the two must occur. As will emerge below, reducing officer retired pay and increasing active duty officer pay is financially the most attractive option for the government, of the alternatives that preserve recent experience levels.[33]

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[32]There are two reasons why the lower rate would be required to preserve enlisted balance. First, enlisted BAS is larger than officer BAS; adding it to basic pay increases the retirement basis more than for officers. Second, officer basic pay is a larger portion of total cash compensation than is the case for enlisted members.

[33]The QRMC did not explore solutions outside the bounds of the prevailing current-to-deferred pay ratios, both because those ratios implicitly are separate policy decisions related more to the retirement system proper and hence outside the QRMC direct focus, and because the motivational aspects of deferred compensation are not fully understood, at least in a quantitative sense.

Officer compensation balance. The discussion above frames the choices: one may choose the multiplier that preserves officer compensation ratios (48 percent) or that which preserves the enlisted ratios (45 percent).[34] If a 48 percent multiplier were applied to basic pay redefined to include BAS, windfall retired pay gains would make enlisted members better off and dramatically increase costs. Individuals are generally willing to sacrifice some current income in order to achieve greater income at a later date. The final step in the analysis, then, is to find reduced levels of (monetized) BAS that, when combined with basic pay, would keep the enlisted member equally well off (as reflected by equal retention rates in an ACOL model), and do so at least cost to the government. This solution explicitly trades enlisted current cash for increased retirement benefits.[35]

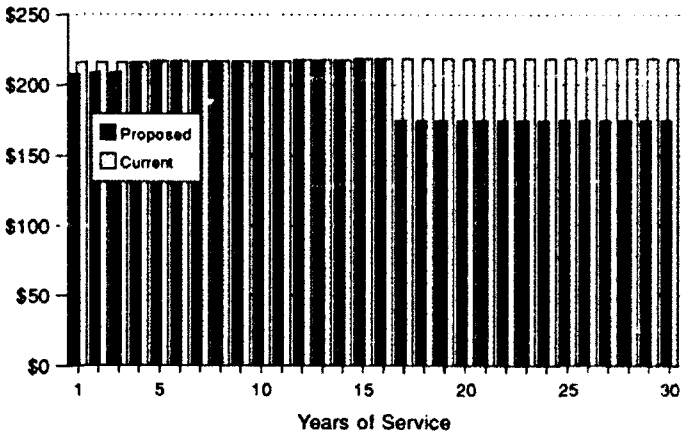

Figure C-8. Current Enlisted BAS vs. Additions to Basic Pay with Increased Retirement.

Figure C-8 shows the comparison between current monetized BAS and its tax advantage and the alternative solution discussed here; the alternative maintains the same retention patterns as now occur.[36] Note that this solution maintains current cash income levels through the 17th year of service. Table C-3 shows the incremental cost associated with this solution. The increased overall cost—approximately $1 billion annually—is derived primarily from three factors. The lion's share of the net change is attributable to increased retirement benefit accrual costs. As pointed out above and in Appendix C, the retirement cost accounting system discounts the future at a lower rate than do most military members. This means that as future benefits are added to compensation, the cost to the government (in contributions to the retirement accrual system) builds faster than the cash-in-hand equivalent value perceived by the member. Note that this solution produces windfall gains for senior enlisted members. Second, FICA costs (the employer's share) increase. To a large extent, this cost can be viewed as a transfer from general revenues (the old "Administrative Budget") to the Social Security Trust Fund, and from the Trust Fund back to general revenues through

[34]Generally, the optimal solution along a linear tradeoff in a problem of this sort is apt to be at one of the extreme points (45 or 48 percent, in this case).

[35]Because officer compensation balance is unaffected, no adjustment (either for cost or for benefit) is required. Note that this reduction in current cash, through the mechanism of the (redefined) retirement linkage, slightly reverses the general trend of increased enlisted corps retirement benefits.

[36]Recall that this was a design constraint, and thus obtains by construction.

Trust Fund purchase of Treasury securities. Finally, on net there would be some increase in compensation to enlisted members not currently receiving BAS, owing to the difference between the current allowance and actual food costs.[37]

Table C-3. Costs to Eliminate BAS, Increase Basic Pay and Enlisted Retirement Costs to Eliminate BAS, Increase Basic Pay and Enlisted Retirement

Element of Expense	Incremental Cost ($ million)
Military Personnel Account—	
Basic Pay	4,696.8
Retirement	875.0
Social Security (FICA) (Employer's Share)	359.3
BAS	(2,793.9)
Total MPA Increment	3,137.1
Mess Forfeitures	1,271.1
Treasury Collections—	
Federal Income Tax	881.4
Total FICA	718.6
Other Costs	61.1
Total Cost to Government	1,045.6

Source: 7th QRMC simulation

Enlisted compensation balance. The above solution is clearly unattractive for fiscal reasons, though a favorable side effect would be to move toward equalization of the balance between active duty and retired pay for officer and enlisted personnel. An alternative would be to combine the monetized BAS and basic pay, as above (including the specific provisions for junior enlisted members), and specify the retired pay multiplier at 45 percent for 20 years of service, increasing to 70 percent at 30 years of service. This would preserve (on average) the balance between active duty and retired pay now experienced by the enlisted corps.

In this variant, officer retired pay would be reduced as a consequence of the differences between officer and enlisted compensation composition. This would make officers economically worse off, and would tend to reduce continuation rates. These losses in continuation rates could be overcome by increasing current cash to the officer corps. The least-cost adjustments to the monetized BAS were determined in the modeling process outlined above, and are shown in Figure C-9 (with reference to monetized current BAS);

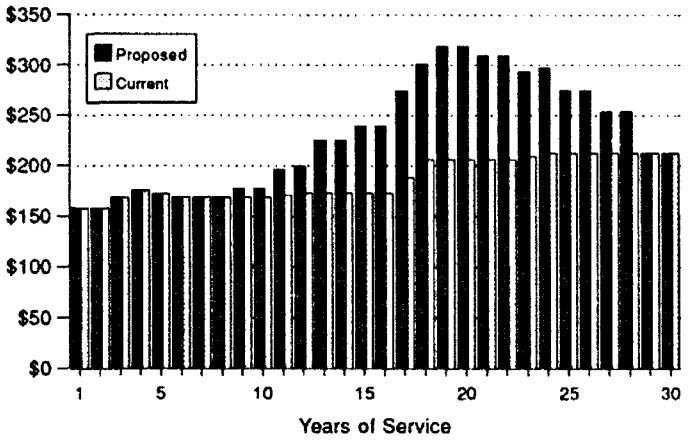

Figure C-9. Eliminate BAS: Current Officer BAS and Additions to Basic Pay with Decreased Retirement

[37]This includes both the daily sale of meal rate pricing issue discussed above and the net cost of payments to members who currently forfeit 44 percent of available mess hall meals.

the costs of this option are given in Table C-4. To balance against officer retired pay losses, the model solution was to increase current cash for years 7 through 28, as Figure C-9 shows. Note again that the algorithm was constrained by design to maintain the current continuation rate, at minimum cost, under the alternative compensation structure.

Table C-4. Costs to Eliminate BAS; Reduced Officer Retirement, Offset with Increased Basic Pay Costs to Eliminate BAS; Reduce Officer Retirement, Increase Basic Pay

Element of Expense	Incremental Cost ($ million)
Military Personnel Account—	
Basic Pay	4,913.3
Retirement	133.5
Social Security (FICA) (Employer's Share)	375.9
BAS	(2,781.8)
Total MPA Increment	2,373.8
Mess Forfeitures	1,271.1
Treasury Collections—	
Federal Income Tax	936.4
Total FICA	751.7
Other Costs	63.9
Total Cost to Government	230.1

Source: 7th QRMC simulation

The apparent increase in system cost bears a closer look. Note that the annual increase in cost—estimated at just over $230 million per year—is less than the increase in the government's increased contribution to Social Security. If one views that as an intra-governmental transfer (questionable in detail, because some future liabilities are probably entailed), then there would be a net savings to the government. In any event, this increase would be less than the annual DoD contribution under the Wage Credit provision.[38] Some of the roughly $400 million budgeted annually through this program could be used both to cover the government contributions and to monetize at least a portion of the FICA increases for junior members.

Altogether, the second option for eliminating BAS is, on the surface, fiscally attractive, and merits further study. Such a study, however, should as a minimum address the following issues. First, as a policy matter, is it desirable to de-emphasize officer retired pay in favor of current cash? As was noted above, the retirement program plays a significant role in the overall motivation structure, particularly as a contingent element of officer compensation. Second, is elimination of Social Security wage credit in favor (principally) of other Social Security payments a desirable policy move? Third, are there attractive transition mechanisms that can solve the problem of undeserved losses to senior officers?[39] And finally, prior to

[38]The intended purpose of the Social Security Wage Credit, established by the Servicemen's and Veterans' Survivor Benefits Act of 1956 and now codified in 26 U.S.C. § 3121, was to ensure that military members would not receive reduced Social Security coverage because a large portion of their compensation is received in kind (or in tax-exempt allowances). See 7th QRMC Staff Analyses, GSP D—*Tax Issues* for further discussion.

[39]See the discussion of the REDUX retirement in *The Report of the Seventh Quadrennial Review of Military Compensation*, August 21, 1992, Chapter 8.

any decision, it is essential to have a clearer notion of the true economic costs associated with retired pay changes, than the current system appears to provide.[40]

Case 2: Elimination of BAS and BAQ

Only BAS and the housing allowances discriminate between members with and without dependents. Moreover, most of the complexity of military compensation (at least as viewed by outside observers) stems from these major allowances. Finally, it can be argued that food and housing are provided to every member, in cash or in-kind, with the goal of standardizing the quality of life (along with basic pay) for members of a given grade and longevity. Efficient compensation would ultimately motivate and reward productivity, and ought not to be determined by the quality of in-kind provisions available; rather, it ought to recognize those differences and offset them with cash. One way to do that would be to pay in cash and then to charge for food and housing, based on the real market value of those items provided. A mechanism for this would be to eliminate both the BAS and BAQ by incorporating them into basic pay,[41] while retaining a locality price based allowance to offset variations in the elements of household expense (principally housing).

To determine the macro effects of such a system, the QRMC constructed a compensation scenario to all differentials based on dependency from the compensation system, with three variants: payments at the with-dependents rates to all members, payments at the without-dependents rates to all members, and payments beginning at the without-dependents rates but rising to the with-dependents rates after the initial term of service. All variants were based on the same baseline: the 1990 pre-Desert Storm inventories and the 1991 compensation rates. Baseline marriage and retention rates came from the 1990 actual. To compare the retention effects of an alternative cash and tariff system, in contrast to the current mixture of cash and in-kind provision, some realistic assumptions regarding the value of current in-kind provisions were necessary, both to establish the baseline and to estimate proper rents for government quarters.

The values assumed for subsistence varied based on rank. For the grades of E-1 through E-5, subsistence in-kind was assumed (which conforms to the majority of cases). Members were assumed, however, to derive benefit from in-kind subsistence at the rate of $82.32 per month.[42] Members in the grade of E-6 and above were assumed to draw the cash allowance

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[40]The accuracy of the synthetic cohort method of accounting for expected future costs of retirement, used in the current uniformed services retirement accrual accounting process, appears open to criticism, at least as a data source for public finance decisions of this sort. See David W. Grissmer, Richard L. Eisenman, James R. Hosek, and William L. Taylor, *Cohort Specific Methods for Calculating Accrual Payments to Fund Military Retirement*, WD-5278-FM&P (draft) (Santa Monica: The RAND Corporation, 1991).

[41]Conceptually, an alternative would be to pay everyone the allowances, at the same rates.

[42]Fifty-six percent of the daily sale of meal rate, because members only draw 56 percent of the meals to which they are entitled when provided rations in kind.

at the rate of $184.50 per month. Government housing was valued at the amount of the total housing allowance, except for single members in the grades of E-1 through E-5, who were assumed to value dorm space at 50 percent of the with-dependents allowance rates.[43]

The model also assumed that service policy would require the same members currently living in government quarters to continue to occupy them. Likewise, it was assumed that the services could require members to purchase a meal card, as assumed in the BAS elimination case discussed above. Because there is generally a waiting list for on-post military family housing, it was assumed that current occupancy rates would continue, and that a rent equal to the current total housing allowance could be charged for these quarters.[44]

The essence of the problem is to determine the cost of DoD's dependency burden. Specifically, if paying people with dependents more than those without dependents stimulates an increase in the dependency burden, would eliminating that discrimination reduce the dependency burden? Some modeling provisions must be made that explicitly incorporate these considerations, both to capture the propensity to acquire dependents and to account for expectations of future pay, which in the baseline case is itself a function of dependency.[45] The model therefore solves differentially for continuation, based on dependency status, for the total number of DoD dependents, and for the cost of dependency.[46]

The resulting retention patterns for the three scenario variants noted above are graphed in Figures C-10 through C-12. As one would expect, increasing the pay of all members to the with-dependents rates would increase overall retention and result in a larger career force containing fewer first-term members. The price tag is considerable, roughly $3 billion annually, mostly as a consequence of increased outlays to members now living in the

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[43]This approximates the price of college dormitory space, which is generally equivalent to military quarters, for members who have completed initial training. Note that a good deal of the variation of housing prices—and thus of allowance rates—is based on location rents. One would expect dorm space prices to vary in a proportional manner, if there were a general market for such a commodity.

[44]With a waiting list for family housing, it would appear that members currently value that housing at a rate at least equal to the implicit rent (forfeiture of the BAQ plus the VHA).

[45]The assumption was that members who are single have "rational" expectations regarding future family status and implied pay. Therefore, the ACOL simulation model estimated on expected future income based on the propensity to marry (acquire dependents), observed from historical data available through the Defense Manpower Data Center. This approach does not recognize a relationship between the propensity to acquire dependents and compensation, though the model is somewhat sensitive to this parameter. The average observed propensity to acquire dependents, incorporated as a uniform rate in the model, is 15 percent annually (i.e., each year the probability a member reporting no dependents in the previous year will acquire them is .15).

[46]Cost estimates are based of average cost factors, and therefore don't react to changes in the composition of dependency). For more complete discussion and documentation of the simulation process, see Appendix C.

barracks, although Social Security costs rise as well.[47] Reduction of all pay to the without-dependents rates, again not surprisingly, would tend to reduce the continuation rates for all grades, and consequently tend to reduce the career force and increase the number of first-term members. Naturally, the costs would also be much lower. Finally, in the case of beginning at the without-dependents rate and increasing pay to the with-dependents rates for the career force, DoD's dependency burden would lighten almost as much as would occur from setting all pay at the without-dependents rates, but with smaller loss of career content. Of the scenarios developed for analysis of dependency elimination, this avenue shows most promise for future development, based on considerations of force structure and cost.

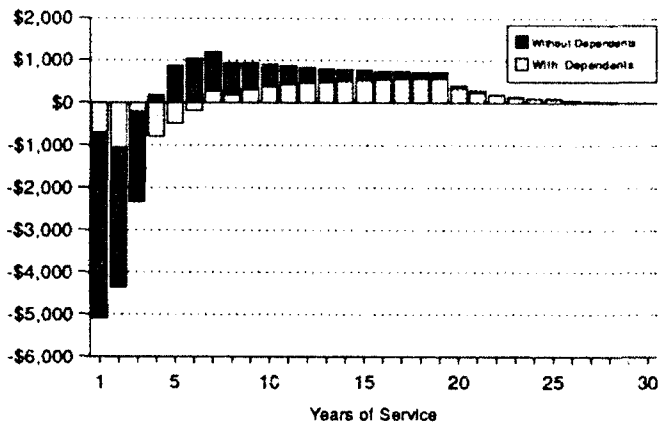

Figure C-10. Enlisted Personnel Impacts: All Cash Compensation at the Without-Dependents Rates

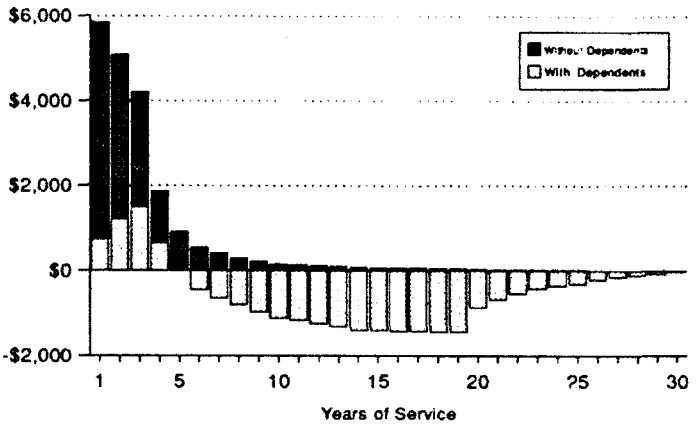

Figure C-11. Enlisted Personnel Impacts: All Cash Compensation at the With-Dependents Rates

Perhaps the most interesting result came from simulation of the total dependency burden, which seemed generally more sensitive to career content than to whether or not the compensation structure favored members with dependents. In part this is a consequence (as are the modest changes in retention rates for bachelors as a result of eliminating dependency discrimination) of modeling the continuation decision as an outcome of expected future pay (i.e., incorporating expectation of future marriage into the equation). But in reality the outcome is probably dominated by the simple demographic considerations: at a certain age, people typically begin to form families. A force that is experience-rich will be a bit older, and its members a bit more likely to have acquired dependents, than a force made up of first-term members, as Appendix A to this MTS suggests has happened in recent history.

[47]The 7th QRMC Staff Analyses, GSP D—*Tax Issues*, provides some cost details, which are not developed for these variants in as much detail as for amendment of BAS. A major reason for this is that while the 7th QRMC developed (through contractor support) a simulation framework to assess enlisted responses to compensation, by dependency status, the available work on the officer corps did not lend itself to similar efforts for that portion of the force.

Case 3: Improved Allowances

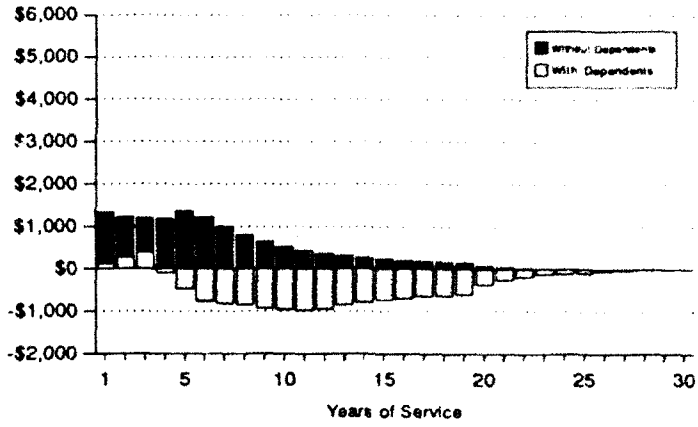

Figure C-12. Enlisted Personnel Impacts: All Cash Compensation at the Without-Dependents Rates Rising to With-Dependents Rates

The final scenario involves continuing the pay and allowances system as currently structured, but aligning the major allowances more closely with the costs (prices) of the elements they are intended to cover. The micro issues (specific pricing of the allowances by locale and item covered) are discussed in 7th QRMC Staff Analyses, MTS 3—*Allowances;* treatment here is limited to the macro issues. These include overall change in costs and force structure apt to result from amending the current allowance rate structures. In particular, it focuses on movement of money between BAS and basic pay to align that allowance to food costs for all grades; it also incorporates a CONUS COLA (see the 7th QRMC Staff Analyses, MTS 3—*Allowances*).[48] Because some of the cash income differential associated with dependency would be eliminated by repricing the BAS, this step would somewhat reduce the overall dependency-based differentiation within the compensation system. However, the principal line of inquiry concerns the costs and benefits of allowance revision, measured in terms of aggregate continuation rates and Treasury flows of funds.

The essence of this variant is simple. In 1991, the BAS rate for officers was $129 per month; and for most enlisted members, $184.50 per month. At the same time, the price charged in military dining halls for three daily meals was $4.90, which comes to a monthly rate of $147, while the cost on the economy to provide food to an adult male for one month was $166.43.[49] A more appropriate allowance structure would be aligned more closely, for all grades, with actual food costs. In this exercise, the allowance is set to $166 per month for all grades, as is the monthly rate for individual meal sales in the dining hall.[50]

To change BAS rates without changing the general level of cash compensation (and this is an exercise in st.. cture, not level of pay) would require a corresponding adjustment in some

[48]Realignment of housing allowance rates would not necessarily affect overall program funding, and therefore is not part of this analysis. While Chapter 4 of the 7th QRMC Staff Analyses MTS 3—*Allowances* also considers a proposal for, in effect, higher housing allowance rates for junior members, that proposal is not incorporated in this analysis, to limit the number of separable propositions considered from a single baseline. Moreover, due to baseline and some difference in details, cost figures will not commute.

[49]U.S. Department of Agriculture, Human Nutrition Information Service, May 1991.

[50]This has the effect of eliminating a significant portion of the income difference related to whether or not an individual enlisted member receives BAS or subsistence in kind.

other cash element—in this case, basic pay. A naive adjustment would be to move $21.26 into basic pay for all enlisted members and $37.43 from officer basic pay into the BAS.[51] Unfortunately, the cost of this approach would be on the order of $300 million annually, owing to three factors: increased cash payments to junior enlisted members who do not now draw the allowance (rather, they receive subsistence in kind); increased present cost of future retirement benefits for enlisted members; and loss of tax revenue from the officer corps. This total cost estimate is net of the reduction in the present cost of future officer retirement benefits, occasioned by reduction in the portion of current cash making up basic pay. Clearly, this is too great a price tag simply to tidy up an allowance.

How, then, should DoD set BAS equal to food costs for all grades, and simultaneously balance current and deferred cash compensation such that members are equally well off (as evidenced by projected continuation rates unchanged from the recent history), the cost to the Treasury is unchanged, and the current stipulations governing the retirement system remain unchanged? Two major issues must be resolved: (1) the windfall gain to junior enlisted members, which can be eliminated (at least in the typical case); and (2) the windfall gain in enlisted retirement benefits, which can be balanced by a reduction in current cash. Note that on net the overriding effect of the officer corps change would be to reduce retired pay accrual cost, so that on balance cost neutrality does not require that enlisted costs be exactly neutral.

The solution is to limit enlisted basic pay increases to a level that balances them against gains in retired pay, and to ensure that officer gains in current cash from their increased BAS offset losses in their retirement benefits due to basic pay reductions (to fund the allowance increases). The upshot is, as shown in Figure C-13, that enlisted members in the first year of service (who typically receive subsistence in kind) would receive no addition to basic pay, members with two years of service, one-third of increase into basic pay, and members with three years of service include two-thirds of increase to basic pay, those in the fourth through seventeenth years of service would receive increases equal to the monetized difference between the current allowance and the food-based allowance, and those in the eighteenth and subsequent years would receive a portion

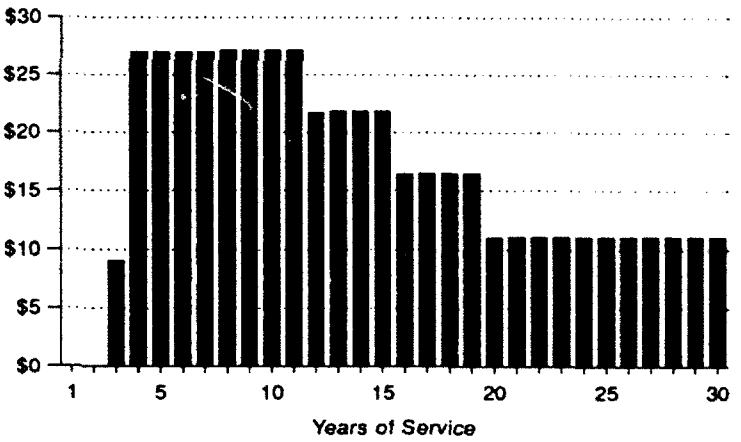

Figure C-13. Enlisted Basic Pay Monthly Increments to Align BAS with Food Costs

[51]The sum of $21.26 is the difference between the current BAS of $184.50 and food costs, $166.43, monetized for federal income tax advantage at the tax rate applied to the preponderance of enlisted members: 15 percent.

of that monetized difference.[52] Officers in the first through seventeenth years of service would give up basic pay equal to the difference between the new food-based BAS and the current allowance as shown in Figure C-14, and give up a portion of the difference (about half) thereafter (limited to ameliorate the retired pay loss).[53] The total cost of this proposal, which is quite manageable, is on the order of $70 million annually; see Table C-5.

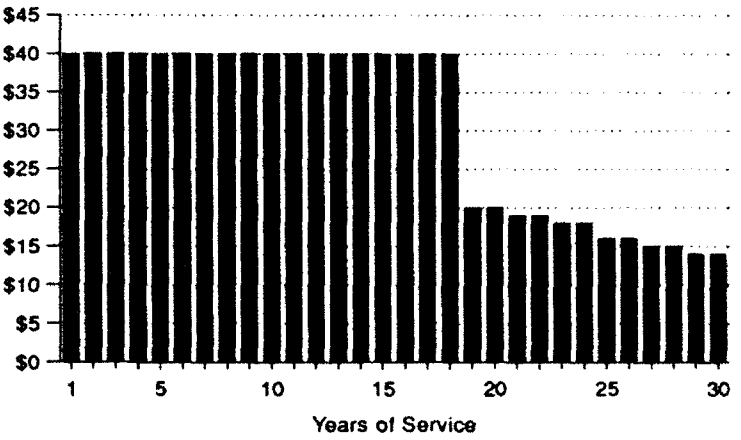

Figure C-14. Officer BAS Increases to Align BAS with Food Costs

This proposal offers several attractive features. First, because it would amend existing allowance structures, it would clearly continue whatever institutional support and transition from peace to war and back that had previously prevailed. Indeed, because it would interfere with family income less than the current structure, it should better support mobilization. Second, alignment with food costs would support rational principles of overall income and compensation management. Third, to some extent it would reduce the effect on overall compensation of granting enlisted members the BAS vice subsistence in kind, and thus promote policy flexibility. Finally, by combining all members under unified administrative procedures and a

Table C-5. Costs of Aligning BAS to Actual Food Costs

Element of Expense	Incremental Cost ($ million)
Military Personnel Account—	
Basic Pay	182.0
Retirement[1]	28.2
Social Security (FICA) (Employer's Share)	13.9
BAS	(141.9)
Other Costs	2.4
Total MPA Increment	84.7
Mess Collections	9.3
Mess Forfeitures	(13.5)
Treasury Collections—	
Federal Income Tax	16.5
Total FICA[2]	27.8
Total Cost to Government	72.4

Source: 7th QRMC simulation
[1]Retirement accrual on FY 1993 President's budget and FY 1994 rate of 34.2 percent, pending OSD Actuary approval.
[2]FICA collections not used to offset total cost to government because funds are held by Social Security Trust Fund.

[52]This reduced sum would allow the gains from retirement and losses from current cash to balance.

[53]One would expect some increase in current cash to offset retirement loss; that turns out, coincidentally, to be about the same as the gain due to the tax advantage over the early career years in the framework of the ACOL model; see 7th QRMC Staff Analyses, GSP C—*Modeling, Logic, and Theory*, for a discussion of its discounting procedures.

single-rate structure, it would ease budgeting and financial management and simplify unit administrative procedures. These issues and the structure of this improved allowance are discussed in detail in the 7th QRMC Staff Analyses, MTS 3—*Allowances*.

APPENDIX D—ELEMENTS OF MILITARY COMPENSATION

This appendix is a summary of the most visible pieces that make up military compensation, with simple descriptions of most. The purpose is to outline current components of the system, not what the 7th QRMC suggests they could be. The individual accounts are not exhaustive; they give the purpose and basic form of each element for the reader unfamiliar with them.

Military compensation is an extensive set of pays, allowances, and valued benefits provided to uniformed members in exchange for their service. A few of these compensation elements are given to all or most uniformed members. Many other compensation elements go only to selected members, and in some cases for only selected periods of service. Many compensation elements are in the form of cash payments, some are noncash provisions of direct and obvious value, and a few are benefits with less clearly quantifiable value.

The form and much of the content of the pay and allowance portion of this appendix are taken directly from Section I of the appendix to the House Armed Services Committee (HASC) print of Title 37 U.S.C., "Explanation and Description of Various Items of Pay, Allowances, and Other Entitlements Authorized Uniformed Service Personnel." For more complete discussion of these and other compensation topics, see the *Handbook for Military Families*, the annual *Uniformed Service Almanac*, and the latest edition of *Military Compensation Background Papers*.

MILITARY COMPENSATION

In its most restrictive definition, military compensation is equated to *regular compensation*, or *regular military compensation (RMC)* as defined in 37 U.S.C. 101(25). For the purposes of the QRMC, compensation goes beyond RMC to include other elements described here and in the full report.

PAY & ALLOWANCES

Regular Military Compensation

In the military pay system RMC is equated to civilian salary or wages. The official definition is found in public law:

> The term "regular compensation" or "regular military compensation (RMC)" means the

> total of the following elements that a member of a uniformed service accrues or receives, directly or indirectly, in cash or in kind every payday: basic pay, basic allowance for quarters (including any variable housing allowance or station housing allowance), basic allowance for subsistence, and Federal tax advantage accruing to the aforementioned allowances because they are not subject to Federal income tax.[1]

When a member receives quarters or subsistence instead of the allowances, RMC is calculated by assuming the value equal to the allowances.

Basic Military Compensation (BMC)

The base level of compensation received by every service member differs from RMC by excluding the locality-dependent variable and station housing allowances and their associated tax advantage. Just as for RMC, in BMC the in-kind provision of food and housing is equated to the cash value of the basic allowance for subsistence (BAS) and basic allowance for quarters (BAQ).

Basic Pay

The principal element of compensation, and the only one paid each month in cash to all service members, is determined for each member by grade and total years of service. The familiar pay chart, showing all levels of monthly basic pay in a table by grade and years of service, is the most visible display of military compensation. Because of the format of the basic pay chart, some readers may relate basic pay to a civilian salary system. However, it is more appropriate to use RMC for such a comparison.

Basic pay is paid to all members on a monthly basis, without regard to the number of duty days or calendar days in the month, or the number of hours of duty actually performed. When a member receives basic pay at a daily rate (e.g., a Reserve member performing two weeks of active duty), that amount is one-thirtieth of the monthly rate.

Housing Allowances

By tradition and practice the uniformed services feed and house all members. By law the services give each member a housing allowance unless they provide actual housing. The size of housing is based on each member's grade and whether there are family members (dependents). When housing is not available, the member receives housing allowances to reimburse most of the cost of equivalent private quarters. There are three housing allowances: BAQ, variable housing allowance (VHA), and station (or overseas) housing allowance (OHA).

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[1]37 U.S.C. § 101(25)

Basic Allowance for Quarters

Cash paid to members when the service does not provide permanent living quarters is intended to compensate for part of the cost of obtaining housing equivalent to that normally provided by the government. The amount varies with grade, but not years of service. Because government-furnished quarters for members with families or other legal dependents are larger than for single members, BAQ is larger for members with families than for single members. For calculating BMC, housing provided is valued as equal to BAQ. Neither the allowance, nor the equivalent value of government housing, is subject to federal income tax or Social Security tax.

Variable Housing Allowance

Members receiving BAQ and assigned to areas of the United States designated high housing cost areas receive VHA. VHA supplements the BAQ when local housing costs are so high that BAQ is not an equitable amount for the member in obtaining housing. The amount for VHA varies by grade, and is set for each housing area based on local costs. Like BAQ, it is larger for members with dependents than for those without. Also like BAQ, it is not subject to federal income tax or Social Security tax. For calculating RMC, government-provided housing is valued equal to the sum of BAQ and VHA.

Station (Overseas) Housing Allowance

This is the equivalent of VHA paid to members assigned to high housing cost locales outside the United States and receiving BAQ. It is sometimes called the OHA. Like VHA, the amount is based on grade, local costs, and whether the member has dependents. It is therefore treated like VHA for calculating RMC and for tax purposes.

Basic Allowance for Subsistence (BAS)

Cash paid to members when they are not provided with prepared meals, either in a dining facility or in the field or at sea, is called BAS. All officers receive BAS. Enlisted members receive BAS only when a government mess is not available or when given permission to mess separately. In general, commanders give permission for separate messing (and thus receipt of BAS) to married members and to senior noncommissioned officers. When government meals are furnished, it is referred to as subsistence-in-kind (SIK). Like BAQ, BAS is a component of both BMC and RMC and is not subject to Federal income tax or Social Security tax.

Federal Tax Advantage

Housing and subsistence allowances are not subject to federal income tax. The tax advantage is not simply the amount of income tax that would be paid on those allowances; rather, it is the amount of additional pay a member would receive, if the allowances were taxed, to ensure the same after-tax net income. For calculating force-wide BMC and RMC, the average tax advantage assumes standard family sizes for each grade and no additional

outside income. Individual service members may have widely varying tax advantages due to differences in exemptions, deductions, outside income, and tax filing status. Note that the formal tax advantage does not include the value of the benefit due to the fact that the allowances are not subject to Social Security or state and local income taxes.

Drill Pay

Reserve component members on active duty, such as annual training, receive basic pay. However, their monthly weekend training sessions are in a status called inactive duty for training (IDT). For these sessions they receive IDT pay, or drill pay. Drill pay is defined as one-thirtieth of the monthly basic pay for the grade and tenure of the Reserve member. It is paid for each IDT period, which can be as short as four hours or as long as a full day. A Reservist can be paid for no more than two drill periods in any one calendar day. Because drill pay is equal in amount to the daily rate of basic pay, some observers describe the Reservist as receiving two days' pay for one day of training. This description is misleading because Reservists in IDT status do not receive any BAQ or BAS, while the full daily pay for active duty members includes basic pay, BAQ, and BAS. Reserve members serving on active duty receive full basic pay, BAQ, and BAS, at the same monthly or daily rate as active component members.

SPECIAL & INCENTIVE PAYS

The compensation system provides a base level of pay in the form of RMC to all members based only on rank and tenure. A set of incentive pay elements are also available to fine-tune the compensation structure. These pays may be disbursed to specific members for short or long periods to encourage entry or continuation in selected duty categories. Some recognize unusual duty conditions, while others recognize higher-than-average value in knowledge, skill, and training.

Hazardous Duty Pays

A collection of monthly pay additives intended as an incentive to specialize voluntarily in certain hazardous duties are normally paid only during periods the member is actually assigned to and carrying out the hazardous duty. The categories include flight duty (as crew member or noncrew member); carrier flight deck duty; parachute jumping; high altitude with a low opening (HALO) parachute jumping; demolition and bomb disposal duty; pressure chamber (high or low) duty; test subject duty for acceleration, deceleration, or thermal stress testing; deck crew duty on other than carriers; and duty involving exposure to a variety of hazardous chemical or biological materials.

Career Incentive Pays

There are also two career incentive pays structured to encourage commitment to a full career of specialized duty. Aviation career incentive pay (ACIP) is available only to commissioned and warrant officers who are rated aircrew members. Submarine duty pay is

available to officers and enlisted members in the submarine force. These career incentive pays differ from the hazardous duty pays described above because eligible members can receive the pay even when not assigned to operational duty flying or in submarines. They must, however, complete specified lengths of duty in their primary career fields at intervals throughout the career to keep receiving the pay while in other assignments.

Special Medical Pays

A variety of special pays are available for officers in medical specialties. These include physicians, dentists, optometrists, veterinarians, psychologists, and nurses. The amounts vary widely, and depend on specialty, credited experience, grade, board certification, and whether the officer has agreed to continued duty.

Special Pay for Nuclear-Qualified Personnel

A variety of special pays are available to induce members to train for or remain in duties supervising, operating, or maintaining nuclear propulsion plants. Used only by the Navy, these pays require written commitments for completion of training or extended service obligations of three to five years. This group also includes annual incentive bonuses for officers and reenlistment bonuses for enlisted members.

Officer Retention Bonuses

Officers in selected specialties with high education or training requirements are eligible for additional bonus payments when they agree to remain on active duty for extended periods. These are officers eligible for ACIP and those with scientific or engineering degrees. To receive the bonuses, the officers must meet certain duty assignment and experience requirements. The scientists and engineers also must serve in specialty areas designated as critical and critically short of personnel.

Other Special Pays

This group includes special monthly pays recognizing duty in certain specified conditions or locations. It includes foreign area pay, officially called certain places pay, available only to enlisted members; diving duty pay; hostile fire or imminent danger pay; responsibility pay for officers in grades O-3 to O-6 in positions of unusual responsibility; and overseas extension pay for enlisted.

Enlisted Personnel Bonuses

This set of pays gives special incentives to enlisted members to enlist or reenlist in the service. From the viewpoint of managing the shape of the enlisted force, it is a particularly important segment of pay. There are categories for active duty and reserve duty. The amounts paid vary widely, ranging up to a maximum of $45,000. The bonuses are paid as an initial partial payment lump sum followed by periodic payments until the full amount is paid. The services have great flexibility in offering these pays based on time of enlistment,

military specialty, and length of commitment. The usefulness of these bonuses derives from that flexibility. On relatively short notice, the services can shift both enlistment and reenlistment bonuses to attract members into career fields facing critical shortages. Specific occupational areas can be added to or eliminated from the eligibility list monthly. The bonuses can also target reenlistments by year group, to retain experience in the force as needed.

As of early 1992, the authority for these bonuses was set to expire after 30 September 1992 [37 USC §§ 308, 308a, 308b, 308c, 308e, 308f, 308g, 308h, 308i].

Special Duty Assignment Pay

This pay is for enlisted members involved in especially demanding duties or duties with an unusual degree of responsibility. The monthly amount varies widely based on the specific approved duty. It replaced an earlier, similar pay called Proficiency Pay.

EXPENSE REIMBURSEMENTS

A broad group of cash payments is listed as special pays or allowances. These allowances really are reimbursements for nonroutine business expenses military members incur. Most are set for standard levels and paid based on the member's duty circumstances instead of actual expense accounting.

Overseas Allowances

These allowances recognize the additional costs involved in moving to or living in overseas areas for permanent duty. They include cost-of-living allowances, interim housing allowance, move-in housing allowance, temporary lodging allowance, and an evacuation allowance for dependents.

Family Separation Allowances

These are paid to members who have families that are not authorized transportation to a new duty station. The purpose is to help defray some costs of maintaining two households.

Separation Payments

When a member leaves active service without retiring, he or she may receive pay for accrued leave and, depending on the circumstances of separation, may also qualify for a single lump-sum disability severance pay or nondisability separation pay. These payments are linked to the member's current basic pay. Accrued leave is paid at the daily rate of basic pay, one day of basic pay for each unused leave day, up to a maximum of 60 days. Separation pay is computed at ten percent of twelve times monthly basic pay times the number of years of service.

Travel and Transportation Allowances

Whenever a service member travels under orders, various allowances help defray the expenses involved. The government either furnishes transportation or reimburses the member according to set rate schedules. Other allowances are also available, but depend on whether the travel is for a permanent station change or temporary duty. For permanent moves these allowances include per diem, for family members as well as the member; movement of household goods; house trailer or mobile home allowance; dislocation allowance; and temporary lodging allowance. For temporary duty the government pays travel costs and per diem.

Uniform or Clothing Allowances

All members receive either an initial issue of uniforms (enlisted) or initial allowance to buy uniforms (officer). There are also recurring maintenance allowances, clothing replacement allowances, plus selected allowances for members who must wear civilian clothes or special uniforms as part of their duties.

Personal Money Allowances

General and flag officers, plus naval officers in some specified positions, face many unusual personal expenses in performing their duties. These allowances, which can range from a few hundred to several thousand dollars per year, are to reimburse those high-ranking officers partially for those expenses.

MILITARY BENEFITS

In the context the compensation structure, benefits refers to a wide array of privileges, goods, and services available to employees beyond their cash pay. In the private sector the most used terms for this group are fringe benefits, employee benefits, and perquisites.

In general, not all employees, or, in the case here, all uniformed service members, are eligible for all benefits. In addition, not all eligible members receive benefits for which they are eligible, or at the same level. Thus, issues of cost and value of benefits become very complex. The cost to the organization of providing a particular benefit (e.g., full medical care) may be quite different from the value of that benefit to individual members, or the aggregate value to the entire force.

For any given specific benefit, there may be a broad range of values applied. One is the cost incurred by the organization in providing the benefit. A second is an objective analysis of what individual members would have to pay on the commercial market to receive the same benefit. A third is based on the perceptions of the individual members and what cash they would accept in place of that benefit.

The concept of multiple values can be illustrated with hypothetical numbers: The cost to the service of offering full health care on military sites could be $3,000 per member per year.

Similar private health insurance coverage might cost a member from $1,500 to $6,000 per year. However, if offered a choice of increased pay or use of the military medical system, a member, might accept, say, $2,000 per year; people tend to prefer cash to in-kind benefits. The discussion of the health care benefit has more information on this subject.

The uniformed services give members some benefits solely for the added value to the members. Most benefits, however, have added value for the mission and organization as well. In these cases the members tend to evaluate the benefit only as the added personal benefit to themselves.

The *Military Compensation Background Papers* list the generally accepted benefits and discusses many of them in detail. Here is an alphabetical list of military benefits, followed by a discussion of several of the more visible ones:

Annual (regular) leave
Child centers
Commissaries
Death benefits
Death gratuity payment
Dental care
Dependency and indemnity compensation (DIC)
Disability retired pay
Disability separation pay
Educational assistance (tuition assistance and veterans' programs)
Exchanges
Family assistance centers and services
Holidays (paid)
Home loan assistance (veterans')
Legal assistance services
Medical care
Morale, welfare, and recreation (MWR) activities and services
Retired and retainer pay (nondisability)
Separation pay (nondisability)
Servicemen's group life insurance (SGLI)
Sick (convalescent) leave, including maternity leave
Social Security
Survivor benefit plan (SBP)
Unemployment compensation eligibility.

Overall military benefits have also been compared to private sector benefits. Hay/Huggins applied a proprietary procedure, the Benefit Value Comparison (BVC) methodology for this comparison.[2] They related equivalent value to RMC and tracked the values over time.

The Hay/Huggins report identified major categories of benefits and related benefit value to RMC or salary for military, typical private sector, and typical large employer in the private sector. Tables D-1 through D-3 from the report show the data for 1990.

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[2]Hay/Huggins Company, Inc., *Comparison of Military and Private Sector Benefits, Final Report*, submitted to the 7th QMRC, (Washington, DC, Hay/Huggins Company, Inc., October 1991).

Table D-1. Total Benefits for Military—1990, Standard BVCs

RMC/Salary	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000	100,000
Executive Perquisites	0	0	0	0	0	0	0	0	0
Death Benefits	2,211	2,260	2,288	2,332	2,376	2,436	2,485	2,524	2,606
Disability Income	971	1,455	1,941	2,426	2,910	3,396	3,881	4,366	4,851
Health Care	6,520	6,520	6,520	6,520	6,520	6,520	6,520	6,520	6,520
Pension Plan	2,790	4,185	5,580	6,975	8,370	9,765	11,160	12,555	13,950
Capital Accumulation Plan	0	0	0	0	0	0	0	0	0
Pension+Cap	2,790	4,185	5,580	6,975	8,370	9,765	11,160	12,555	13,950
Holidays/Vacations	2,381	3,571	4,762	5,952	7,142	8,333	9,523	10,714	11,904
Statutory	1,583	2,149	2,716	3,282	3,723	4,144	4,299	4,299	4,299
Other	1,537	1,881	2,013	2,165	2,260	2,366	2,435	2,520	2,579
Total	17,993	22,021	25,820	29,653	33,301	36,961	40,304	43,499	46,710

Source: Comparison of Military and Private Sector Benefits, Final Report Hay/Huggins Company, Oct 1991, Table H-1

Table D-2. Total Benefits for Typical Private Sector—1990, Standard BVCs

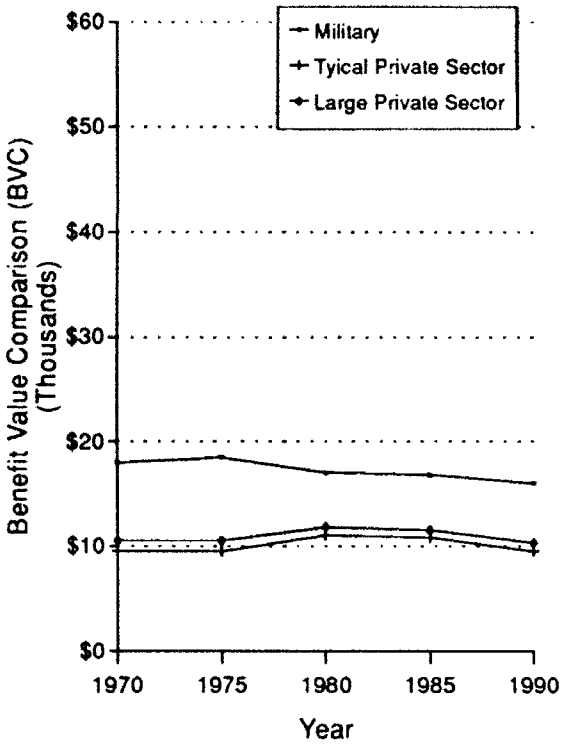
RMC/Salary	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000	100,000
Executive Perquisites	0	0	0	0	0	6,300	6,300	6,300	6,300
Death Benefits	638	902	1,166	1,430	1,694	1,958	2,222	2,486	2,750
Disability Income	779	1,193	1,629	2,068	2,521	2,974	3,427	3,880	4,333
Health Care	4,386	4,386	4,386	4,386	4,596	4,596	4,596	4,596	4,596
Pension Plan	1,238	1,858	2,545	3,473	4,402	5,331	6,259	7,188	8,116
Capital Accumulation Plan	1,740	2,610	3,480	4,350	5,220	6,090	6,960	7,830	8,700
Pension+Cap	2,978	4,468	6,025	7,823	9,622	11,421	13,219	15,018	16,816
Holidays/Vacations	1,997	2,995	3,994	4,992	5,990	6,989	7,987	8,986	9,984
Statutory	1,905	2,670	3,435	4,200	4,299	4,299	4,299	4,299	4,299
Other	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Total	13,683	17,614	21,635	25,899	29,722	39,537	43,050	46,565	50,078

Source: Comparison of Military and Private Sector Benefits, Final Report Hay/Huggins Company, Oct 1991, Table H-2

Table D-3. Total Benefits for Typical Large Employer—1990, Standard BVCs

RMC/Salary	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000	100,000
Executive Perquisites	0	0	0	0	0	0	0	0	13,000
Death Benefits	638	902	1,166	1,430	1,694	1,958	2,222	2,486	2,750
Disability Income	786	1,203	1,642	2,084	2,541	2,997	3,454	3,910	4,366
Health Care	4,443	4,443	4,443	4,443	4,443	4,653	4,653	4,653	4,653
Pension Plan	1,303	2,104	3,037	3,987	5,020	6,060	7,099	8,139	9,179
Capital Accumulation Plan	1,740	2,610	3,480	4,350	5,220	6,090	6,960	7,830	8,700
Pension+Cap	3,043	4,714	6,517	8,337	10,240	12,150	14,059	15,969	17,879
Holidays/Vacations	2,170	3,254	4,339	5,424	6,739	7,862	8,986	10,109	11,232
Statutory	1,905	2,670	3,435	4,200	4,299	4,299	4,299	4,299	4,299
Other	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Total	13,985	18,186	22,542	26,918	30,956	34,919	38,673	42,426	59,179

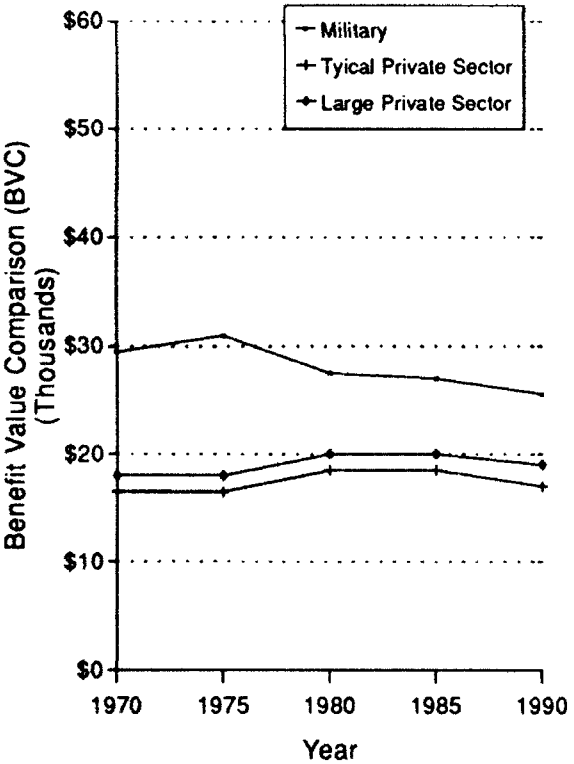
Comparison of Military and Private Sector Benefits, Final Report Hay/Huggins Company, Oct 1991, Table H-3



- Horizontal scale shows years for which benefits were valued; vertical scale measures annual value of employer provided benefits for employees earning annual salary or RMC of $20,000 in 1990 dollars using military BVC method
- Military benefits package had higher value than private sector comparators in each year; large employer plan slightly more valuable than typical employer plan
  - difference between military and private sector plans decreases during period
- Military value increases from 1970-1975 due to implementation of SBP and 1% COLA "kickers" on retired pay; value decreases from 1975-1980 due to elimination of "kickers" and implementation of high-3; value decreases from 1985-1990 due to impact of Military Retirement Reform Act of 1986
- Private sector value increases from 1970-1980 due to liberalization of pension and medical benefits; declines from 1980-1990 due to health care cost shifting to employees and deliberalization of pension benefits

Source: Comparison of Military and Private Sector Benefits, Final Report Hay/Huggins Company, Oct 1991, Figure 4-13

Figure D-1. Total Benefits 1970-1990, Military BVC: $20,000 RMC



- Horizontal scale shows years for which benefits were valued; vertical scale measures annual value of employer provided benefits for employees earning annual salary or RMC of $40,000 in 1990 dollars using military BVC method
- Military value increases from 1970-1975 due to implementation of SBP and 1% COLA "kickers" on retired pay; value decreases from 1975-1980 due to elimination of "kickers" and implementation of high-3; value decreases from 1985-1990 due to impact of Military Retirement Reform Act of 1986
- Private sector value increases from 1970-1980 due to liberalization of pension and medical benefits; declines from 1980-1990 due to health care cost shifting to employees and deliberalization of pension benefits

Source: Comparison of Military and Private Sector Benefits, Final Report Hay/Huggins Company, Oct 1991, Figure 4-14

Figure D-2. Total Benefits 1970-1990, Military BVC: $40,000 RMC

The Hay/Huggins analysis shows that while military benefits have a generally higher value than those offered in the private sector at equivalent pay levels, the value of militarybenefits has, again, relative to private sector benefits, shown a significant decline over the past 20 years Figures D-1 and D-2 demonstrates this decline.

The Retirement Benefit

The military's nondisability retirement system is one of the most well-known benefits. At the detail level it is also one of the least understood by the general population. The military retirement system is a noncontributory program. Retired pay for nondisability retirement is available only to those who complete at least 20 years of active service. For those who retire, the benefits include a monthly payment, the amount linked to active duty pay history and adjusted for inflation; access to the military medical care system; and continued use of a variety of military installation support services, including commissary, exchange stores, and recreation facilities.

The less understood aspects of the retirement system include the negative aspects. Because there is no vesting prior to 20 years of service, not everyone who would like to retire from active duty can. Personnel policies make continued service the option of the service and not the individual. The member cannot control his access to retirement. The Defense Department Actuary estimates that only 17 percent of all new members reach 20 years of service and become eligible for nondisability retirement. This figure represents 65 percent of all new officers, but only 14 percent of new enlistees.[3] For those who entered service prior to 1981, the formula for retired pay is 50 percent of basic pay, graduated to 75 percent of basic pay at 30 years of service. The proper measure of pay is RMC, and basic pay is on average only 73 percent of RMC for the primary retirement grades of E-7 to E-9 and O-4 to O-6. (For the overall military population basic pay is only 66 percent of RMC.) Retired pay is thus 37 percent of pay at 20 years of service, ranging up to 55 percent of pay (RMC) at 30 years of service.

For a discussion of the actual value of the military retirement benefit see the DoD Actuary's annual report.[4] In addition, refer to The Rand Corporation's recent work challenging the Defense Actuary's approach as an actuarial cost estimate.[5]

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[3]Department of Defense, Office of the Actuary, *Valuation of the Military Retirement System,* (Washington, 1990), 11.

[4]Department of Defense, Office of the Actuary, *DoD Statistical Report on the Military Retirement System, FY 1990* (Washington, 1991).

[5]David W. Grissmer, *et al., Cohort Specific Methods for Calculating Accrual Payments to Fund Military Retirement,* Rand working draft WD-5287-FM&P, (Santa Monica, CA: The Rand Corporation, January 1991). David W. Grissmer *et al., Matching Accrual Techniques and Military Retirement Fund Objectives,* Rand working draft WD 5469-FMP (Santa Monica, CA: The Rand Corporation, July 1991).

The Health Care Benefit

The Armed Forces have traditionally provided medical care for active duty personnel as an integral part of their primary mission. The Armed Forces must not only be prepared to care for casualties in the event of conflict, they must also maintain the health of active duty members in peacetime so that affected personnel are ready to respond promptly to whatever military demands may arise.

With medical facilities and staff necessary to meet the primary mission, the armed forces have also provided medical care to dependents of active duty personnel, certain former members and their dependents, and certain other classes of beneficiaries, when it is possible to do so without adversely affecting the ability to provide medical care to active duty personnel.

With the commitment in place to provide medical care to this population of active duty members, dependents, retirees, and others, the network of over 750 military clinics and hospitals is supplemented by purchasing health care services from the private sector. These purchases are necessary whenever required care is not available in the system. For active duty members supplemental care is purchased directly by the services. For dependents and retirees it is financed through payments shared by the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS).

Because actual use of the health care system closely correlates with age and family situation, the remarks earlier about cost versus market value versus individual value of the benefit are especially significant.

Using available statistics on the system-wide costs of outpatient and inpatient care and the actual number of patient outpatient visits and inpatient days for each category of beneficiary, it is possible to calculate an average annual cost per beneficiary for the military health care system. Table D-4 shows the individual average costs used to calculate average per member costs.[6]

Table D-4. Cost of Providing Health Care

Health Care System Beneficiary	Cost per Person per Year
Active Duty Members	$1,241
Dependents of Active Duty	$977
Retirees	$467
Dependents of Retirees	$490
Survivors and Others	$904
All Beneficiaries (Average)	$847

Incorporating average family size (number of dependents) in to the cost of providing health care gives a calculated average annual cost of $2,609 per member: $3,097 for each officer and $2,609 for each enlisted member. This compares with an average of $2,338 per

[6]Department of Defense, Defense Medical Systems Support Center, *Defense Medical Information System FY 1989 Health Data Summary* (Falls Church, VA, 1991), 2-9, 3-6, 4-2. These figures value the benefit and exclude from cost considerations activities that are uniquely a cost of doing business (e.g., hospital ships, field hospitals). However, all other medical costs are attributed to the benefit, as a benefit.

year per insured employee in the private sector.

Turning to the health care value as competitive market cost, it is instructive to examine the cost of commercial health insurance coverage. According to *Consumer Reports* magazine, in 1990, average annual premiums for major medical coverage were $1,535 (ranging from $658 to $3,617) for men, $1,697 (ranging from $716 to $3,617) for women, and $3,614 (ranging from $1,814 to $6,135) for a family.[7]

The final form of benefit value is the personal value: how much cash would the member accept to forego the benefit? Without direct research on military member attitudes it is only possible to estimate this value. It is reasonable to assume that young, healthy, unmarried members would accept lower amounts of cash, choosing to self-insure at low coverage rates. Older members with larger families, however, would look at expanding health care requirements. They could easily insist on cash equivalents at the high end of the insurance market range, well above private-sector averages.

The Military Exchange Benefit

Military exchange stores were originally developed to provide normal consumer goods in out-of-the-way military installations where commercial outlets might not be available. Today these networks of stores provide a wide array of products in large central stores, small quick-shop outlets, and even temporary deployed locations, for active duty members and their dependents. These stores sell clothes, household goods, jewelry, and other items at prices intended to recover basic operating costs of the operation plus a small markup to support other programs, notably a variety of MWR activities. Other than costs for overseas transportation of merchandise, provision of overseas utilities, and the salaries of a limited number of active duty military personnel at overseas locations, the exchange stores receive no subsidy, operating with nonappropriated funds. They pay for new facility construction with these funds, passing title to the buildings to the government when completed.

The value of the exchange system to members is a function of usage and local competitive markets. The 1990 A. C. Nielsen Company Retail Price Comparison Survey indicated an overall savings of 23.2 percent on items purchased from Army and Air Force Exchange Service (AAFES) stores compared to commercial stores in the local economies.[8]

Level of exchange store usage is related to income level. The Hay/Huggins Company examined this issue using the savings factor of 23.2 percent. They estimated that maximum annual value (savings) from using the stores would be $660 for those earning about $12,000 a year; $874 for those earning around $21,000; $1,218 for those earning about $33,000; and

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[7]"The Crisis in Health Insurance." *Consumer Reports* (August 1990), 538.

[8]Aunrey E. Rembold, *1990 Nielson Annual CONUS Retail Price Comparison Survey*, Memorandum for C/WO, (Dallas, TX: AAFES, 1 August 1990). Gregory Bell. *1990 Nielson Survey*, (HQ AAFES Dallas, TX release no. 40-1190 (Dallas, TX: HQ, AAFES, 6 November 1990).

$1,891 for those earning over $66,000.[9]

The Military Commissary Benefit

Military commissaries, as the purchasers and storage point for food, have a closer tie to operational mission needs of the services. The commissary system provides a network of on-post grocery stores for the active duty members and their dependents. They also support the grocery needs of the various messing operations of the services. The operating costs for the store system are substantially covered by nonappropriated funds. Like the exchange stores, new facilities are built with nonappropriated funds, then title passed to the government.

Annual (Regular) Leave

Military members receive 30 days of paid leave each year. This leave is credited at two and one-half days for each month of active duty. The leave can only be used in whole day increments, and must be used for all calendar days of leave status, not just normally scheduled duty days. Thus, members must use leave for any weekends or holidays that occur during continuous leave periods. For example, a member who uses leave for a two-week vacation, leaving the local area of the duty station on Saturday morning and returning home on Saturday evening is charged for leave for the first Sunday, the two middle weekend days, plus the final Saturday, a total of 14 days, even though only ten normal duty days were involved.

Child Centers

Most military installations now have child care centers available for working parents. There are fees for the centers, but the rates are subsidized, usually with lower rates for lower ranking members. Some centers have extended care hours available for shift workers.

Educational Assistance (Tuition Assistance and Veterans' Programs)

New members are eligible for education benefits under the Montgomery G.I. Bill. Earlier similar benefits to which current members may be entitled include the Vietnam Era G.I. Bill and the Veterans' Educational Assistance Program (VEAP). These programs are administered by the Department of Veteran Affairs. Members may use these veteran benefits while still on active duty or after separation.

The services also offer members tuition assistance payments while on active duty when seeking more advanced degrees. Approval for these payments is more restrictive than the veterans programs, and the member incurs an active duty service obligation.

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[9]Hay/Huggins Company, Inc., *Comparison of Military and Private Sector Benefits, Final Report*, submitted to the 7th QRMC, (Washington, DC, Hay/Huggins Company, Inc., October 1991).

Legal Assistance Services

Military legal offices give members basic legal advice and help with simple documents such as wills and power of attorney. When charged with infractions of the Uniform Code of Military Justice (UCMJ), members also receive legal defense services. However, the members must hire private attorneys for civil cases and civil sector criminal charges.

Morale, Welfare, and Recreation Activities and Services

The services maintain a variety of recreation opportunities for members, including craft shops, golf courses, installation swimming pools, and recreation sites such as lakeside facilities and mountain cabins. These services offer low-cost, subsidized opportunities to members. The subsidies do not come from appropriated tax money. Users pay basic fees, and the remaining costs are subsidized from profits of the military exchange system.

Servicemen's Group Life Insurance

All members are offered low-cost term life insurance while on duty, up to $100,000. In 1992 the cost to the member for full coverage is $8 per month.

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