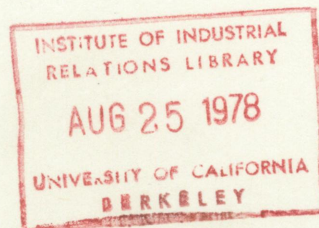


Military personnel - Pensions

The Military Retirement System: Options for Change //

Washington, U.S. Govt. Print. Off.,
JANUARY 1978.

(BUDGET ISSUE PAPER FOR FISCAL YEAR 1979)



**THE MILITARY RETIREMENT SYSTEM:
OPTIONS FOR CHANGE**

**The Congress of the United States
Congressional Budget Office**

PREFACE

Over the last 10 years, numerous proposals to change the military retirement system have been put forth. The President's Commission on Military Compensation is now reviewing these proposals. The commission's recommendations, which are due in March 1978, will become the basis for further debate in the Congress and the Administration. The issue is not only complex and emotional, but it is also one that has important effects on the pattern of future military careers and on the size of the defense budget. The Military Retirement System is intended to provide a framework and basis for debate. In accordance with CBO's mandate to provide nonpartisan and objective analysis, the paper offers no recommendations.

The paper was written by Robert F. Hale of the Congressional Budget Office's National Security and International Affairs Division, under the supervision of John E. Koehler. The author is grateful for the extensive research assistance provided by John H. Green and Shelley F. Lapkoff. The author also wishes to acknowledge the assistance of Johanna Zacharias and Robert L. Faherty, who edited the manuscript, and Nancy J. Swope, Patricia J. Minton, Linda S. Moll, and Connie Leonard, who aided in production of the manuscript.

Alice M. Rivlin
Director

January 1978

CONTENTS

	<u>Page</u>
PREFACE	iii
SUMMARY	ix
CHAPTER I. INTRODUCTION	1
Criteria for Choosing Among Alternative Retirement Systems	2
Scope and Framework of the Study	3
CHAPTER II. CURRENT RETIREMENT SYSTEM: CRITICISMS AND DEFENSES	5
Description of the Current System	6
Costs	7
Retirement After 20 Years of Service	9
Lack of Management Flexibility	13
Inequities of the Current System	15
Comparisons with Other Pay Systems	15
Comparisons with Other Retirement Systems	18
Postretirement Income	22
Erosion of Benefits	24
CHAPTER III. PROPOSED CHANGES	27
Key Benefit Changes	27
Other Benefit Changes	29
Transition Provisions	35
Accounting Changes	37
CHAPTER IV. PACKAGES OF CHANGES	41
Reduced Annuity to 30 Years of Service	41
Reduced Annuity to Age 55 or 60	51
Annuity at Age 55 to 62	56
Annuity at Age 55, Plus Contribution	61
Summary	66
APPENDIX. DETAILED PROVISIONS OF ALTERNATIVE RETIREMENT SYSTEMS	72

TABLES

	<u>Page</u>
TABLE 1. PAST AND PROJECTED MILITARY RETIREMENT OUTLAYS FOR SELECTED FISCAL YEARS	7
TABLE 2. LIFETIME RETIREMENT EARNINGS OF A TYPICAL U.S. ENLISTED MAN UNDER ALTERNATIVE FORMULAS	20
TABLE 3. COMPARISON OF ANNUAL RETIREMENT PAY WITH AND WITHOUT RECOMPUTATION	34
TABLE 4. AVERAGE ANNUAL PAY AND RETIREMENT EARNED BY STAYING FIVE MORE YEARS	45
TABLE 5. ALTERNATIVE CAREER PATTERNS FOR ENLISTED PERSONNEL UNDER THE REDUCED-TO-30 PACKAGE	47
TABLE 6. COSTS OF RETIREMENT OPTIONS UNDER BASE-CASE CAREER BEHAVIOR FOR CURRENT SYSTEM AND THREE PACKAGES OF CHANGES	49
TABLE 7. ALTERNATIVE CAREER PATTERNS FOR ENLISTED PERSONNEL UNDER THE ANNUITY-AT-55 PACKAGE	59
TABLE 8. COSTS AND SAVINGS UNDER CONTRIBUTORY SYSTEMS COUPLED WITH ANNUITY-AT-55 OPTION	63
TABLE 9. SUMMARY OF PACKAGES	68

APPENDIX TABLE

TABLE A. DETAILED PROVISIONS OF ALTERNATIVE RETIREMENT SYSTEMS	72
---	----

SUMMARY

Pay to persons retired from military service is an important part of the package of compensation offered to career personnel in the U.S. military. After 20 years of service, the military careerist can retire and immediately start getting monthly checks equal to half the basic pay he got while on active duty. Furthermore, retirement pay is automatically adjusted for rises in the cost of living.

Retirement pay is also an important part of all U.S. defense costs. Today it amounts to \$9.1 billion. Assuming annual price and wage growth of 5 and 6 percent, retirement costs could grow to more than \$37 billion a year by the end of this century. Even measured in today's dollars, annual retirement costs will exceed \$12 billion by the year 2000.

Although it is important to keep costs to a minimum, costs alone are not an adequate criterion for judging the military retirement system. The judgment should start with a decision about what length and pattern of military career will best enable the military to accomplish its mission. Only after this decision can a retirement system be fashioned that, along with active-duty pay, will lead to the desired career pattern while keeping costs to a minimum. Beyond meeting these criteria, the military retirement system must be deemed fair by military personnel. And it should provide a reasonable retirement income, particularly during older years when the military retiree can no longer hold a job.

Over the past ten years, five major studies—including four in which the Department of Defense participated—have concluded that the current military retirement system does not meet all these criteria. All of the studies, as well as the Department of Defense, have recommended changes in the military retirement system. The purpose of this paper is to review the criticisms of the current system that have led to proposed changes, and then to analyze a range of alternative retirement systems.

The present system has been criticized for its high cost. These costs can be reduced. Packages of changes analyzed in this paper—including several proposed by the major studies and one

recommended by the Department of Defense--would eventually cut defense manpower costs by \$1 billion to \$4 billion a year in today's dollars. Savings would build up slowly, and these full amounts would not be realized until the end of this century. But even so, cumulative savings from now to the end of the century would total between \$11 billion and \$36 billion.

The system has also been criticized for encouraging careers that are too short. Under current law, a military person can retire after 20 years' service and immediately start receiving a pension. Largely because of this, almost three-quarters of all enlisted retirees leave after 20 or 21 years of service, which they usually complete by age 40. After that, most take civilian jobs, which provide incomes beyond their military pensions.

These early retirements may be necessary to maintain a youthful military that can sustain combat operations. Early retirements also stimulate promotions and so maintain career progression. And retirement-at-20 provides a strong lure that may keep junior people in the military. Perhaps for all these reasons, the career patterns advocated by the Department of Defense generally feature large numbers of 20-year retirements.

Not everyone agrees, however, that retirement-at-20 is needed for all military personnel--particularly for careerists in less physically demanding jobs--in order to maintain a military that can fight effectively. Nor is career progression a bar to changing the retirement system; new promotion systems could be designed to accommodate different career patterns. And the military may find it increasingly difficult to maintain such a youthful force as the average age of the U.S. population rises during the rest of this century. Thus, the desirable career pattern for military personnel is not the subject of wide agreement. Yet this judgment is key to deciding whether and how to change the current military retirement system.

The current system has also been criticized for not providing any retirement benefits to those who leave with less service than 20 years. Here there is agreement that change is needed. The lack of benefits before 20 constrains personnel management, since the Department of Defense is hesitant to sever personnel who have completed more than 5 but less than 20 years' service. The lack of benefits before 20 may also be inequitable, since persons completing as many as 19 years of service receive no benefits at all from the nondisability retirement system.

In response to these criticisms, changes have been proposed in bewildering numbers. There are three main types of changes:

- o Annuities could be reduced for those who retire with less than about 30 years of service. This change is important because it would cut costs and lessen the incentives to stay for just 20 years. Any such reductions would be phased in gradually to protect retirement credits already earned.
- o Some benefits might be provided for persons who leave the military with less than 20 years' service in order to improve equity and management flexibility.
- o A contribution toward retirement might be required of military personnel. (Four of the five major studies mentioned earlier recommended against such a contribution, but it has some support in other studies and in the Congress.)

While all the major studies and the Department of Defense have agreed that some combination of these changes is needed, there is less agreement about how much change is desirable. To illustrate the range of alternatives, this paper analyzes four packages of changes. The packages range from modest to far-reaching. (The packages only address changes in the non-disability retirement system for those on active military duty.)

The key to choosing among these packages is a judgment about the desirable career pattern for military personnel. Only after such a judgment is reached can a new system be implemented that would lead to an appropriate career pattern while keeping costs to a minimum. The choice should also take into account the risk of implementing the changes, particularly the uncertainty about their effects on career patterns and the possible problems in changing the military personnel management system to match the new retirement system. Whether military personnel would consider the new system equitable, and whether the system would provide adequate income in later retirement years, may also influence the choice.

REDUCED ANNUITY TO 30 YEARS OF SERVICE

This option has been recommended by the Department of Defense. It would cut costs, but it could still lead to only modest changes in current career patterns. Thus, it would be most consistent with a judgment that the military could best achieve its mission with something close to the current pattern and length of careers.

The reduced-to-30 option would cut annuities for those who retire with less than 30 years of service by creating a two-step annuity. During the first step, the annuity would be cut by as much as 30 percent below its current level. The first step would last until the retiree had completed 30 years' service, which may be regarded as a full military career. Then the annuity would be restored to close to its current level. The changes would be phased in gradually over 20 years to protect retirement credits already earned. In addition to the two-step annuity, this reduced-to-30 option would provide benefits to those who get out of the military with less than 20 years of service. The option would leave the system noncontributory--that is, it would still not require contributions from employees.

These and other changes would mean that, under this option, the typical enlisted man who retired after 20 years of service would receive \$155,000 in retirement pay over his lifetime--as opposed to \$190,000 under the current system. Over half of the reduction would occur during the years right after retirement, when the retiree would probably be employed. (These lifetime retirement earnings are expressed in today's dollars, but they are not discounted.)

The reduced-to-30 option would eventually cut manpower outlays. By the year 2000, savings would amount to about \$1.2 billion per year in today's dollars. Between 1979 and the turn of the next century, savings would total \$11 billion. These savings take into account changes in costs of retirement, as well as changes in costs of personnel on active duty.

While cost savings eventually would occur, this option would increase outlays by as much as \$100 million a year in the first few years because the added cost of benefits for those leaving with less than 20 years of service would exceed savings from reduced annuities. Under current accounting rules, the increases would appear in both the federal budget and the budget of the Department of Defense. The Administration, however, is likely to

propose new accounting procedures for the department's budget. Under these revised procedures, the department's budget would show the amount that must be set aside to fund future retirement costs of today's employees, rather than the cost of those already retired. This change could improve management by focusing attention on future costs that can be controlled. The change would also make savings from retirement reform more visible. Under these revised accounting procedures, enactment of this reduced-to-30 option could immediately cut the budget of the Department of Defense, perhaps by more than \$1 billion a year.

REDUCED ANNUITY TO AGE 55 OR 60

This option was designed in 1971 by an interagency committee, with the Department of Defense the key member. It is a middle-ground option among those in this paper. It would save more and could lengthen careers more than the reduced-to-30 option. But it would probably not drastically alter current career patterns.

Like the reduced-to-30 option, this one would create a two-step annuity. But the reductions during the first step would be larger and would last until age 55 or 60, rather than ending around age 50 as under the reduced-to-30 option. The reductions would be phased in gradually over 10 years to protect existing retirement credits. Like the reduced-to-30 option, this one would provide some benefits for persons who leave with fewer than 20 years of service. And, like the reduced-to-30 option, this proposal would leave the military retirement system noncontributory.

These and other changes would mean that the lifetime retirement earnings of a typical enlisted man retiring after 20 years of service would be reduced from \$190,000 under the current system to \$110,000 under this option. Most of the reduction would occur during years when a second career is possible.

The reduced-to-55 option would cut costs more than the previous option. By the year 2000, defense manpower costs in today's dollars would be \$2.2 billion a year less than costs under the current system. Cumulative savings between 1979 and the year 2000 would total \$19 billion. While savings would eventually occur, the option would raise outlays in the first years after implementation by as much as \$140 million a year. But in terms of the dollars that would have to be set aside to fund future retirement costs fully, the reduced-to-55 option might yield immediate savings of more than \$2 billion a year. Thus, under the

revised accounting changes discussed above, this option might immediately reduce the defense budget.

ANNUITY AT AGE 55 TO 62

This is a far-reaching change. It would offer the potential for large cost savings by substantially reducing annuities for 20-year retirees. The reduction should lead to a much different military career pattern. Fewer persons would be likely to complete 20 years of service, but more of those who stayed for 20 years would be likely to continue for careers of 30 years or more. Thus, this option would be most consistent with a judgment that the military could accomplish its mission with an older career force.

This option, more than the last two, could be risky and could create turbulence. Longer careers would probably require major changes in personnel policies such as promotion points. And the large reductions in retirement pay would mean an increased risk that the Department of Defense would be unable to attract and retain adequate numbers of personnel.

Instead of a two-step annuity, this option would delay the entire annuity. The changes would be phased in over a 10-year period. After the phase-in period, persons completing 30 or more years of service would get an annuity beginning at age 55. Those completing 20 to 29 years would get an annuity at age 60, while benefits for those completing 5 to 19 years would begin at age 62. These are the ages when federal civil servants receive their annuities. But this option differs from civil service in that it would leave the military system noncontributory. Also, the option differs from civil service in that it would provide--in addition to a deferred annuity--a bonus of about one year's pay for those who are involuntarily separated with less than 30 years' service. Although not proposed in earlier studies, this bonus may be a reasonable way of attracting and retaining combat personnel even if the Department of Defense does not want them for 30 years or more.

These and other changes under this option mean that the lifetime retirement earnings of a typical enlisted man who retires voluntarily with 20 years of service would be \$65,000, versus \$190,000 under the current system. Almost all the reduction would occur before age 60, when the retiree would be likely to have a civilian job.

The annuity-at-55 option may result in substantially larger savings than either of the last two. By the year 2000, defense manpower costs could go down by \$4.5 billion a year in today's dollars; total savings between 1979 and the year 2000 could equal \$36 billion. More than under the last two options, however, savings would depend critically on changes in career behavior and accompanying adjustments in personnel policies. For example, the greater number of senior personnel under this option might be more productive. If so, the military mission could be accomplished with fewer people, which would push up savings. On the other hand, if personnel levels remained constant and the military maintained promotion opportunities similar to those in effect today, then longer careers would mean many more people in senior paygrades. In this case, active-duty costs would go up sharply, and savings in the year 2000 might amount to only \$2.8 billion.

ANNUITY AT AGE 55, WITH CONTRIBUTIONS

This package is identical to the preceding one, except that it would require that military personnel on active duty contribute 7 percent of their basic pay toward their retirement. Because it would immediately cut take-home pay, the contribution could save as much as \$4 billion over the next five years. Savings would occur, however, only if the contribution were not offset by a pay raise. If pay were raised to offset the contribution, then costs would go up.

A contributory system for the military would make military retirement more consistent with the civil service retirement system and most public sector pension plans. It might also make the value of retirement more obvious to military employees. But unless there is an offsetting pay raise, the contributory system would immediately cut every soldier's take-home pay. This could make it more difficult to recruit high-quality enlisted personnel. Moreover, if refunds of contributions were given to persons who left before retiring, the refunds would provide an incentive not to reenlist the first time, which may be undesirable since the military generally needs more journeymen personnel. Because of these and other problems, most major studies have recommended that the military retirement system remain noncontributory.

The following table summarizes these four options. All four should improve the equity and management flexibility afforded by the retirement system. But in other ways, the options would

differ widely. There are no easy formulas for choosing among them. The choice should begin, however, with a judgment about the desirable pattern and length of military careers, keeping in mind the potential for cost savings.

OPTIONS FOR CHANGING THE MILITARY RETIREMENT SYSTEM AND THEIR KEY EFFECTS

	Retirement Reduced to 30 Years' Service	Retirement Age 55 or 60	Annuitant Provided at Age 55 to 62, Without Contribution	Annuitant-at-55, With Contribution
<u>KEY CHANGES</u>				
Annuitant for 20-Year Retiree	Annuitant cut 30 percent below current level for 10 years (to about age 50), then restored.	Annuitant cut 34-42 per- cent below current level to age 60, then restored.	Annuitant begins at age 60.	Annuitant begins at age 60.
Benefits After Less than 20 Years' Service?	Yes	Yes	Yes	Yes
Member Contribution?	No	No	No	Yes

<u>SUMMARY OF EFFECTS</u>				
Overall Evaluation	Retains career pattern similar to today's but costs less. Low risk. Proposed by DoD.	Middle-ground option. More savings and longer careers than reduced- to-30 option. But no fundamental change.	Far-reaching change. Longer careers and changed patterns. Many personnel man- agement changes. High risk. High potential savings.	See annuitant-at-55. Savings may be more or less than annuitant- at-55, depending on offsetting raise. Possible recruiting problems.
Savings (billions of constant dollars) FY 2000 Total FY 1979-2000	Saves \$1.2 Saves \$11	Saves \$2.2 Saves \$19	Saves \$2.8 to \$4.5 Saves \$26 to \$36	(Savings vary depend- ing on offsetting raise. See discus- sion in Chapter IV.)
Immediate Savings in DoD Budget Under Revised Accounting Procedures	Saves \$1.6	Saves \$2.4	Saves \$3.8	See above.

Retirement pay is an important element in the total package of compensation offered to U.S. military personnel. After 20 years of military service--which enlisted men usually complete around age 39--the U.S. soldier can retire and get a monthly retirement check equal to half his basic pay. And he can expect the amount of those checks to rise: retirement pay is automatically adjusted upward for increases in consumer prices.

Retirement pay is also an important part of the total cost of U.S. defense manpower. In fiscal year 1978, the U.S. Department of Defense will spend \$9.1 billion on retirement pay alone; these costs represent 15 percent of total defense manpower costs and 8 percent of all outlays for defense.

The nondisability retirement system, which generates most of these costs, dates back to the middle of the nineteenth century. The system was changed many times between about 1860 and 1948, when most of the current law was passed. Since 1948, there has been little change in nondisability benefits. But recent years have seen increases in active-duty pay as the United States moved to an all-volunteer force. There is also a trend toward an older population in the United States.

Changing times, as well as the cost and early retirement provisions of the present system, have led to repeated scrutiny of the retirement system. Most recently, President Carter appointed a Commission on Military Compensation to review the retirement law, along with the rest of the military compensation system. Over the last 10 years, five major studies, including four in which the Department of Defense participated, have addressed retirement. 1/ Altogether, these deliberations covered more than

1/ U.S. Department of Defense (DoD), Report of the First Quadrennial Review of Military Compensation, Summary of the Military Estate Program and Volume IV (January 15, 1969); Report to the President on the Study of Uniformed Services Retirement and Survivor Benefits by the Interagency Committee, Volume I (July 1, 1971) and Volume II (August 1972); DoD,

800 pages. All five studies have concluded that major changes in the retirement system are needed to provide a more desirable set of incentives to career personnel, to improve the flexibility that the Department of Defense has in managing its personnel, and to cut costs. Any new system, however, must still allow the department to attract and retain a military force that can fight effectively. Complicating matters further, opposition to changes in retirement has been voiced by many military personnel on active duty. These people argue that their benefits have already been eroded in recent years and that any further cuts would damage military morale and foster the growth of labor unions.

CRITERIA FOR CHOOSING AMONG ALTERNATIVE RETIREMENT SYSTEMS

The complexity and emotion surrounding change in the retirement system point up the need to establish criteria before attempting to choose between the current system and a revised one. The basic criterion is that total military compensation, including retirement, should be only great enough to attract and retain the personnel that the Department of Defense requires to carry out its mission. This criterion, often described as the "competitive" criterion because it is designed to match the sums other employers offer, takes account of the major aspects that must be considered in setting pay scales. The criterion requires that pay be high enough to allow the Department of Defense to compete successfully for personnel in the marketplace, which is essential under the all-volunteer force. On the other hand, the criterion insures that costs to the taxpayer are kept to a minimum. This is desirable because it is hard to argue that, in its role as an employer, the federal government should pay more than necessary to attract and keep qualified people. Because it balances the factors that have to be considered, this report uses competitiveness as the basic criterion in evaluating the current and alternative retirement systems.

Report to the Secretary of Defense by the DoD Retirement Study Group (May 31, 1972); Defense Manpower Commission, Defense Manpower: The Keystone of National Security, Report to the President and the Congress (along with Volume V of the staff studies) (April 1976); DoD, The Third Quadrennial Review of Military Compensation, History and Volume III and Volume IX of staff studies (December 1976).

But other criteria may also be useful in choosing a retirement system. Military personnel must view the system as fair. If not, they may leave the military; if they stay, they may perform less effectively. The system must also offer pay that is adequate for retired employees' later retirement years when the retiree can no longer get or hold a civilian job. These criteria require judgments about equity that the Administration and the Congress must make. But information that may help judge equity is included in this report.

Comparison of the military pay and retirement system with civilian ones may also be helpful--bearing in mind that the military may have special needs. When such comparisons can be made, they are included.

SCOPE AND FRAMEWORK OF THE STUDY

This paper is limited to analyzing alternative retirement systems for military personnel who retire from the Department of Defense after active duty without disability. 2/ Such retirees account for more than 80 percent of all military retirement costs. The other 20 percent pays for categories of retirement costs not analyzed in this paper: disabled retirees, nondisabled retirees from the so-called "weekend" reserves, and the survivors of retirees.

In analyzing nondisability retirement, the paper concentrates on the retirement annuities. Changes in other retirement benefits--including health care, use of commissaries, and other privileges--are not considered. Nor does the paper consider changes in the system of active-duty pays and allowances, except in analyzing a contributory retirement system. 3/ But, in assess-

2/ The Coast Guard, National Oceanic and Atmospheric Administration, and Public Health Service also have uniformed services with retirement systems similar to the one in the Department of Defense. The total retirees in these other agencies, however, equal less than 2 percent of the number in the Department of Defense, and they are not taken into account in this paper.

3/ For a discussion of possible changes in active pays and allowances, see Congressional Budget Office, The Costs of Defense Manpower: Issues for 1977, Budget Issue Paper, January 1977.

ing alternative retirement systems, active-duty pays and allowances at their current levels are considered, along with retirement pay. 4/

The analysis begins in Chapter II with an evaluation of the criticisms and defenses of the current nondisability system. Chapter III provides an array of changes proposed in response to the criticisms. From these choices, Chapter IV selects and analyzes combinations of changes.

4/ Since changes in the system of active-duty pays and allowances are beyond the scope of this paper, it does not consider tradeoffs between retirement and active-duty pay. For modest changes to the retirement system, this is not a major limitation since such changes would probably not require significant modifications in active-duty pays and allowances. For more far-reaching changes to the retirement system, some changes in active-duty pay may be needed, particularly for junior personnel, in order to maintain desired retention. If this paper's analysis suggests these far-reaching changes are desirable, then a more detailed review that considers changes in active-duty pay may be required.

CHAPTER II. CURRENT RETIREMENT SYSTEM: CRITICISMS AND DEFENSES

This discussion of the major criticisms and defenses of the present system will focus on four key points.

First, high costs have been a major target of criticism. Retirement outlays have grown sharply in recent years, and they will continue to do so over the next two decades, though at an increasingly slower rate.

Second, criticism centers on the retirement of personnel who have served only 20 years in the military. Retirement-at-20, and the associated large turnover, may be necessary to maintain a youthful force for combat. Early retirement also sustains promotion opportunities. And the lure of retirement-at-20 may help keep junior people in the military. Probably for all these reasons, the Department of Defense supports retirement-at-20. But critics argue that the department does not need to offer everyone retirement-at-20 in order to maintain an effective fighting force. Furthermore, these early retirements may cause difficulties in maintaining the military force as the average age of the U.S. population gradually increases during the rest of this century.

The third point is that most retirement studies agree that some benefits should be provided to those who leave with fewer than 20 years' service in order to improve equity and management flexibility.

And fourth, the military pay system has been criticized for paying more than systems for U.S. civilians and foreign military personnel. These comparisons must be made with care, because the military may need to attract special kinds of people to do unique kinds of work. But the comparisons suggest general conclusions. A recent study--described further below--suggests that active-duty military personnel earn significantly more than the median pay of persons in the private sector with similar age and education, largely because of their retirement pay. Some or all of this higher pay may be appropriate, particularly at senior grades, in which the military may need superior personnel. The military retirement formula also provides U.S. military personnel--particularly those who retire after 20 years' service--with

higher lifetime retirement earnings than would the formulas offered to most U.S. civilian employees (including policemen and firemen) and to military personnel in several foreign countries.

With these four key points in mind, it is worth reviewing the details of the present military retirement system, as well as some of the arguments for and against its provisions.

DESCRIPTION OF THE CURRENT SYSTEM

The current nondisability retirement system for active-duty military personnel pays nothing to individuals who leave the armed forces with fewer than 20 years of service. For 20 years of service or more, the system pays an annuity that begins immediately and lasts for life. A retiree's annuity is calculated by multiplying his years of military service times 2.5 percent of his basic pay on the day he retires. Hence the annuity after 20 years of service is 50 percent of terminal basic pay, rising to a maximum of 75 percent after 30 years of service or more. (Basic pay is only part of a military employee's salary. Expressed as a percent of regular military compensation, a proxy for military salary, the annuity for a typical enlisted person equals about 35 percent after 20 years of service and goes up to about 57 percent after 30 years of service.) After retirement, annuities automatically increase with increases in the Consumer Price Index. Active-duty personnel make no explicit contributions to this retirement system.

Some simple statistics may make the operation of this retirement system clearer. Under today's system, about three-fourths of all enlisted retirees leave after just 20 or 21 years on active duty; 56 percent leave after 20 years. The typical 20-year retiree is 39 years old when he retires, and he will receive military retirement pay for 33 years. During those 33 years, he will receive a total of \$190,000 in retirement pay (expressed in today's dollars but not discounted). About one-half of all officer retirees leave after 20 or 21 years on active duty; 33 percent leave with just 20 years. Most officers leaving after 20 years of service are required to do so under current tenure laws, though some might leave voluntarily even in the absence of these laws. The typical 20-year retired officer is 43 years old when he leaves and will receive military retirement pay for 33 years. His military retirement earnings will total \$320,000.

COSTS

Outlays

The military retirement system's growing costs have been one major source of criticism. The most commonly used measure of costs is outlays, which equal total payments to those already on the retired rolls. By this measure, military retirement costs have grown sharply in the last 10 to 15 years. Costs will continue to grow through the year 2000, though at a diminishing rate.

Between 1964 and 1978, as Table 1 shows, military retirement costs in current-year dollars grew from \$1.2 to \$9.1 billion. Costs increased as large numbers of personnel from World War II and Korea entered the retired rolls and as growth in prices and wages pushed up the size of annuities. If prices and wages rise at an annual rate of 5 and 6 percent per year respectively, total military retirement costs will exceed \$37 billion by the year 2000. ^{1/} While costs will continue to rise, the rate of growth will slow from about 16 percent a year between fiscal years 1964 and 1978 to about 7 percent a year in the next two decades.

TABLE 1. PAST AND PROJECTED MILITARY RETIREMENT OUTLAYS FOR
SELECTED FISCAL YEARS: IN BILLIONS OF DOLLARS

	1964	1978	1979	1983	1985	2000
Current-Year Dollars	1.2	9.1	9.9	13.8	15.6	37.5
Constant 1978 Dollars	2.4	9.1	9.4	10.4	10.7	12.4

Most of the growth in cost results from increases in prices. If retirement costs are expressed in constant 1978 dollars (that is, divided by increases in the Consumer Price Index), then by

^{1/} Except where noted, all cost projections are by the Congressional Budget Office.

the year 2000 military retirement will cost \$12.4 billion--\$3.3 billion more than the total for 1978. Beyond the year 2000, as the number of retirees from World War II and Korea declines, the constant-dollar cost of military retirement will increase even more slowly. (Projections beyond the year 2000 assume that the active force remains at its current size.)

Of course, outlays are affected by how many people stay until they are eligible to retire and how long they live after retirement. Mortality rates used in these projections are based on the latest estimates, computed separately for officers and enlisted men, by the Department of Defense actuary. Estimates of numbers staying to retirement are based on average behavior in fiscal years 1973 to 1976, the most recent years for which data were available.

Accrual Costs

Outlays are important in that they reflect the actual checks written to retirees. But today's outlays give no indication of the liability that the government is incurring for the future costs of today's active-duty personnel. A reasonable measure of this cost is the amount the government would have to set aside, or "accrue," annually to fund the future retirement costs of today's employees. By this accrual measure, costs of future retirement for today's employees will equal \$7.1 billion in fiscal year 1979. These accrual costs will be the costs that actually appear in the defense budget if accounting changes discussed in the next chapter are implemented.

The accrual charge is estimated using the actuarial method recommended by the recent Third Quadrennial Review of Military Compensation. ^{2/} The estimates assume annual growth in prices and wages of 5 and 6 percent respectively; the estimates also assume that the government can earn 7 percent annual interest on the money it sets aside to pay future retirement costs.

Costs of the current system--either in terms of outlays or accrual costs--are important benchmarks. Yet the fundamental

^{2/} Department of Defense, The Third Quadrennial Review of Military Compensation, Staff Studies, Volume III (December 1976), p. 81.

criterion used in this paper--that retirement pay, along with active-duty pays and allowances, must be only great enough to attract and retain desired personnel--suggests that these total costs are not the most relevant in assessing retirement changes. More to the point are estimates of how much, if any, costs can be reduced while still meeting the personnel needs of the Department of Defense. The discussion of costs in later chapters of this report focuses on possible savings.

RETIREMENT AFTER 20 YEARS OF SERVICE

In addition to being criticized for its costs, the military retirement system is also often criticized for encouraging careers that are too short by providing an annuity after only 20 years of military service. About one-third of all officer retirees, and over half of all enlisted retirees, leave after 20 years of service.

Why Early Retirement

Simply put, many military personnel leave after just 20 years of service in order to start getting their pensions. "Working for half pay" is an expression military personnel use to describe the decision to stay past 20 years.

The monetary incentive to complete just 20 years of service is strong. For the typical enlisted man who has completed 15 years of service, the retirement benefits he earns by staying five more years are the equivalent of \$18,690 per year in pay. These benefits actually exceed the value of his active-duty pays and allowances, which average \$16,890 during these five years. Thus, the pull to stay to 20 is strong. But once he has completed 20 years, the additional retirement benefits he earns by staying another five years are the equivalent of only \$3,830 per year. ^{3/} This sharp drop causes a push to leave after 20 years of service.

Hence, more than 95 percent of all officers and enlisted men who complete 15 years of service remain to complete 20 years of

^{3/} The notes to Table 4 in Chapter IV define the assumptions underlying these numbers.

service. But of those who stay for 20 years, just one-fourth of all officers and not even one-tenth of all enlisted men complete 25 years of service. 4/

The Pros and Cons of Early Retirement

At least implicitly, the Department of Defense supports these career patterns. The department's personnel management objectives call for losses around 20 years of service similar to those being experienced today. Over the years, the department has showed its support of retirement-at-20 in another way. Current law makes retirement-at-20 a privilege that must be approved by the Service Secretaries, rather than a right that can be exercised by the would-be retiree. Except in time of war, Service Secretaries have generally granted such requests.

One reason for supporting early retirement is that it creates the young military force that may be necessary for combat. Hearings held during the late 1940s on retirement and promotion laws emphasized the need for youth. A Navy witness testified that lieutenant commanders, who were then allowed to complete 26 years of service, "were a great deal too old for their rank, and they could not perform the duties of their grade." 5/ Navy lieutenant commanders now usually leave after 20 years of service. General Eisenhower testified that attrition at the top is needed to avoid stagnation and build a vital Army, though most of Eisenhower's specific complaints were directed at the lack of attrition among senior officers with more than 30 years of service. 6/

But hearings during the 1940s on the retirement law still in force today also produced some reservations about retirement-at-20:

4/ It is possible that the percentage for officers would be higher without the tenure laws requiring that some officers leave after about 20 years of service.

5/ Officer Personnel Act of 1947 (H.R. 2536 and 2537), Hearings before the House Committee on Armed Services, Subcommittee on Personnel, 80:1 (April 22, 1947), p. 2556.

6/ Officer Personnel Act of 1947, Hearings before the Senate Committee on Armed Services, 80:1 (July 16, 1947), pp. 1-12.

Senator Charles Andrews: I think the objection [to officers retiring after 20 years] would be that he would be retiring at the very pinnacle of usefulness. At 45 men are supposed to be at their best mentally, although not physically always, but they are still pretty good physically if they have taken care of themselves. 7/

Senator Allen Ellender: . . . What I am complaining of is the liberality of making it 20 years. I think the services are entirely too short. 8/

More recently, the youth-and-vigor argument for early retirement has been criticized, in particular by Admiral Hyman Rickover, who noted in Congressional testimony this year that "there are today few jobs in the military that cannot be performed by persons up to 55 years of age or even older." 9/

Another criticism of retirement-at-20 arises because many military careerists do not serve in the jobs that demand the most physical stamina. Instead, these jobs are often filled by junior military personnel who leave before retiring. This criticism is supported by a survey recently conducted by the General Accounting Office. 10/ Preliminary results show that only 8 percent of the career of the average enlisted retiree was spent in the most physically demanding jobs. (These jobs include those

7/ Miscellaneous Bills (including S. 1405), Hearings before the Senate Committee on Naval Affairs, 79:1 (November 1, 1945), p. 35.

8/ Ibid., p. 31.

9/ Testimony of Admiral Hyman Rickover on Dual Compensation and Retirement in the Government, before the House Committee on Post Office and Civil Service, reprinted in the Congressional Record, August 5, 1977, p. E5227.

10/ The GAO study has not been released as of the publication of this paper. Preliminary results of the survey were supplied to CBO in a letter to Senator Edmund S. Muskie dated October 31, 1977.

in various categories: infantry; armor and amphibious jobs; artillery, gunnery, rocket, and missile areas; combat engineering; combat air crews; and seamanship specialties.) Of all enlisted retirees, 80 percent never spent any time at all in these jobs. For officers, the survey showed that the average retiree spent 34 percent of his career in a job directly involving tactical operations; 30 percent of all officer retirees spent no time at all in such jobs.

These results suggest that many personnel who retired in fiscal year 1975 served in the technical, less physically demanding jobs that may not justify retirement-at-20. But the results should be interpreted with care. They cover only one year's retirees; since most of those who retired in fiscal year 1975 entered during peacetime around 1955, the results may be atypical. More important, the many careerists who do not routinely serve in the most physically demanding jobs must nonetheless be prepared to carry out those jobs in combat.

Another problem with early retirement is that, with military service now on a voluntary basis and the average national age rising, maintaining the size of the armed forces may become increasingly difficult. Between now and the end of this century, projections by the U.S. Bureau of the Census show that the number of U.S. males aged 18 to 39--the current age range for most enlisted personnel--will grow more slowly than the total male population. Thus, the proportion of all males in the 18-to-39 age range will decline from 35 percent to about 30 percent. Unless private employers hire a smaller share of males in this age group, or unless the military cuts its demand for males, this shift may make it more difficult to maintain the military's current size and age range.

An argument in favor of the early retirement provisions of the current system is that they thin out the ranks and make room for promotion. Indeed, any lengthening of the average career will result in fewer promotions to higher paygrades, given current promotion policies and limits on numbers in grade. Thus, slowing of promotions could prevent adequate career progression. But promotion policies could be changed. In the case of officers, the Congress is now debating the law that controls promotion policies; for enlisted men, the changes could be made by the separate services and by the Department of Defense. Also, any retirement changes would be phased in gradually, offering an opportunity to adapt the promotion system rather than altering it abruptly. Thus, while retirement changes should be considered with an eye on promotions, promotion policy should not prohibit change.

Retirement after 20 years may also be a necessary lure to keep people from leaving the military after only a few years of service. While it is important to retain these people, there may be other ways to keep them--perhaps by providing some retirement benefits for those who leave after completing fewer than 20 years of service.

After considering the various arguments discussed above, all five of the major retirement studies mentioned earlier have concluded that annuities for most persons retiring with fewer than 30 years of service should be reduced. 11/ This will increase incentives to stay beyond 20 years of service and may lengthen careers.

Although observers generally agree that incentives should be changed, there is less agreement about the amount of change. The desirable amount of change depends in part on the career pattern that the Administration and the Congress feel is necessary to accomplish the military's mission. The shape of this desired career pattern varies widely depending on who makes the estimates. The Department of Defense and the services establish objectives for the enlisted and officer force. These objectives suggest that only modest changes are needed in the current career pattern. On the other hand, a recent Rand Corporation study argued that there should be a significant increase (from 40 to about 50 percent) in the number of careerists (that is, those persons with more than four years' experience). 12/ Such a shift would imply a sharp increase in numbers of senior people.

LACK OF MANAGEMENT FLEXIBILITY

The pattern of monetary incentives discussed above--which makes it very desirable from a financial standpoint for a military person to complete a 20-year career--has sometimes made military managers unwilling to run the force in such a way as to achieve the most effective force. Management of mid-careerists (that is,

11/ See Chapter I, footnote 1.

12/ Richard V. L. Cooper, Military Manpower and the All-Volunteer Force, R-1450-ARPA (Rand Corporation, September 1977), pp. 312-313.

those with 10 to 20 years of service) is a good example. The lure of 20-year retirement has tended to create an excess of persons with 10 to 20 years of service. Under current law, this imbalance could be righted by cutting back on mid-careerists through "involuntary separation," as such severance is called in the military. But managers have been hesitant to sever personnel, particularly enlisted personnel, because those who are dismissed receive no retirement benefits at all. 13/

The current retirement system may also lead to inflexibility in the management of first-term reenlistments. Some military managers have tended to control the number of persons reenlisting for the first time, which usually occurs after three or four years of service, even though these first reenlistees are entering their fully trained, journeyman years. This control has been justified in part because encouraging retention at the first reenlistment point, without a willingness to cut back the number of persons later, would create a large number of costly retirees. 14/

The solution to both these management problems may well be a new retirement system that provides some benefits before 20 years in order to give defense managers more flexibility in managing the force.

Yet another problem is that the relatively small incentive to stay past 20 years means management cannot always choose the best persons for key, senior jobs. In fact, the best performers probably encounter better civilian job opportunities, and so have the most financial incentive to leave. The solution may be a reduction in annuities for those retiring after 20 years' service, which should prompt more to stay and so provide more candidates for key jobs.

13/ There has been more willingness to separate officers, who do receive some severance payments outside the retirement system.

14/ For an example of this argument, see Military Posture and H.R. 5068, Department of Defense Authorization for Appropriations for Fiscal Year 1978, Hearings before the House Committee on Armed Services, 95:1 (February and March 1977), p. 132.

INEQUITIES OF THE CURRENT SYSTEM

The current retirement system is sometimes deemed unfair because benefits differ widely. Those who leave with less than 20 years of service--which include more than 90 percent of all enlisted entrants into the military and more than 70 percent of all officer entrants--get no benefits at all. Those who complete 20 or more years of service get substantial benefits.

Another inequity can occur because the current retirement system calculates retirement pay based on basic pay at the day of retirement. This provision gives a financial advantage to those who can time their retirement to occur just after an active-duty pay raise or just after they have received a pay increase based on years in the service. Some, however, cannot control the timing of their retirement so closely, perhaps because of commitments arising from promotion or schooling.

COMPARISONS WITH OTHER PAY SYSTEMS

Costs, incentives, and management flexibility should be the key considerations in assessing the current military retirement system. They determine whether the system meets the basic criterion: providing adequate incentives to attract needed personnel and doing so at least cost. Comparisons of military pay and benefits with those given in other pay systems may be useful. But their usefulness is limited because the military may want to attract different kinds of people to do different kinds of jobs, a question taken up more fully below.

An analysis by the Rand Corporation compares 1974 military compensation with compensation received in that same year by private sector workers with similar age and education. ^{15/} The study shows that military personnel earn significantly more than their average counterparts in the private sector, in large part because of retirement benefits.

The study first compared the "regular military compensation" (a measure of military salary) of enlisted personnel with the salaries of white high school graduates of similar ages who were

^{15/} Cooper, Military Manpower and the All-Volunteer Force, pp. 364-379.

employed full time. (The comparison was made to white high school graduates in the private sector, since they make up the majority of the military enlisted community.) Enlisted salaries were quite close to median private salaries, except at senior levels (more than 20 years of service), where the military may pay a premium to get exceptional personnel.

The study then added the value of retirement and other benefits to both military and private salaries. For both enlisted and civilians, retirement was valued assuming an individual stays in and retires; hence the comparison is most valid for career personnel. 16/ The total compensation of a military enlisted person—at every point in his career—was 30 to 50 percent above the median compensation of those in the private sector. Looked at another way, the data showed that, throughout his career, the total compensation of a typical enlisted person ranks him between the 75th and the 90th percentiles of all those with similar age and education in the private sector.

The results for officers were more dramatic than for enlisted men. The Rand study compared officers' regular military compensation with salaries of white college graduates. Officers' pay was 20 to 40 percent above the median salary of those with similar age and education in private employment. Again, part or all of these higher salaries may be needed to retain outstanding personnel. In fact, there is some evidence that the Department of Defense is paying the right salaries to officers to attain their quality goals. An exploratory study done in 1974 for the Department of Defense by the Conference Board found that the distribution of salaries among managers in a sample of seven U.S. companies was generally similar to the distribution of salaries among military officers. 17/ The seven companies were chosen by

16/ There are technical difficulties inherent in estimating the value of retirement that suggest caution in interpreting the results. For example, the Rand study assumes that civilian retirement benefits equal 15 percent of private sector salaries, but estimates by the Bureau of Labor Statistics have suggested a higher number—perhaps 25 to 30 percent.

17/ Ruth G. Shaeffer, Comparative Staffing Patterns, A Special Report for the Department of Defense of Preliminary Research Conducted by the Conference Board (The Conference Board, 1974), pp. 1-9.

the Conference Board to be as similar as possible to the Department of Defense in size, diversity of mission, and other characteristics. The study found that, at very senior levels, the military had many fewer high-paid officers.

The Conference Board study did not consider retirement. When the Rand study added retirement and benefits to both military and private sector pay, total compensation for officers at every career point ranged from 70 to 100 percent higher than the median total compensation of private sector workers. Total compensation of the typical officer at all career points ranked him above the 90th percentile of all employees in the private sector with similar age and education.

As the Rand study notes, these results do not necessarily mean that military personnel are overpaid. Particularly at senior levels, the military may want to retain outstanding personnel, as has already been noted. Also, the military may have to pay more than typical private sector compensation because of the unusual features of military life. This added pay for unusual features, often called the military "X factor," could compensate for the risk of combat, submission to military law, unpaid overtime, frequent moves, and other exigencies of military life.

The Rand study compared military and private sector pay. The pay of military personnel and federal civil servants has also been compared. This year's report by the Senate Appropriations Committee compares the total of pay, benefits, and retirement for specific military grades with the total compensation for federal white-collar workers in civil service grades judged to be comparable. ^{18/} This comparison concludes that military personnel earn more than comparable civil servants at every enlisted grade and at all but two of the officer grades. Military compensation exceeds civil service compensation from just a few percent to as much as 57 percent. Only in the officer grades of O-1 and O-6 are military personnel a few percent below their white-collar counterparts in the civil service.

A detailed study of grade linkages between military and federal civil servants, done as part of the Third Quadrennial

^{18/} Report to Accompany H.R. 7933, Department of Defense Appropriation Bill, 1978, S. Rept. 325, 95:1 (July 1, 1977), pp. 22-28.

Review, found linkages between military and white-collar civil servants that are more favorable to the military than those used by the Senate report. Even so, a recent study compared compensation costs of six military paygrades (three for officers and three for enlisted men) and their civil service counterparts using these linkages and found military compensation higher in five of the six grades by from 3 to 22 percent. ^{19/} Only at the officer grade of lieutenant colonel (O-5) were military compensation costs less by 7 percent. Interestingly, the same study found that all three enlisted paygrades received less compensation than their equivalent grades in the federal blue-collar work force. The study attributed this to anomalies in the current pay system for federal blue-collar workers. ^{20/}

Of course, these comparisons between military and civil servants have many of the same limitations as those discussed above with respect to the Rand study. There are technical problems. The comparisons do not account for any "X factor." Also, the linkages between military and civil service grades are at best imprecise and can sometimes be misleading, since military employees and civil servants often do quite different types of work.

COMPARISONS WITH OTHER RETIREMENT SYSTEMS

Comparisons of the military retirement system with other retirement systems can be another useful source of information. As with comparisons of private and military pay, the special requirements that the military retirement system has to meet must be noted. Also, since retirement makes up only part of all compensation, comparisons of retirement systems alone may give a result different from comparison of total compensation systems. With these limitations in mind, this section presents some comparisons and notes major differences.

^{19/} "Shaping the Defense Civilian Work Force," a study prepared for the Senate Committee on Armed Services, 95:1 (September 1977), p. 33.

^{20/} For a discussion of federal blue-collar pay, see Congressional Budget Office, Costs of Defense Manpower: Issues for 1977, Budget Issue Paper (January 1977), pp. 108-115.

That the military system is more generous than typical plans available to public civilian workers or private sector workers is rarely disputed. In general, the military retirement plan features earlier retirement ages, no contribution from active-duty employees, and better cost-of-living adjustments after retirement. The one feature in non-military plans that seems more generous is that most plans offer some benefits to persons who leave after fewer than 20 years of service.

The complexity of different retirement systems quickly turns a specific comparison into a feat of mental juggling. To help in an overall comparison, this paper calculates lifetime retirement earnings of a typical U.S. enlisted man two ways: first, under the current military retirement formula; and then, under formulas for other systems. ^{21/} These lifetime retirement earnings assume that, while he is on active duty, the enlisted man gets pay and allowances at the current military rate and that he then retires under the alternative formulas after 20 or 30 years of service. Thus, the lifetime retirement earnings estimate what a typical U.S. enlisted man would get under alternative retirement schemes, not what a typical private sector worker or civil servant gets. Nor do these lifetime retirement earnings account for differences between the active-duty pay systems, including whether the active-duty pay system requires an employee contribution toward retirement. These limitations require that this single measure be used only as a rough guide.

Table 2 shows lifetime retirement earnings of a U.S. enlisted man under alternative formulas. The U.S. military's formula clearly offers higher lifetime retirement earnings for those retiring with either 20 or 30 years' service. Lifetime retirement earnings for an enlisted man under the military formula are 4 to 19 times higher than the amount he would get under the federal civil service formula or under formulas typical of other public and private sector plans.

^{21/} Earnings are expressed in constant 1978 dollars. For simplicity, they are not "discounted." Discounting is a mathematical adjustment that would reflect the typical person's preference for retirement plans whose benefits are received earlier rather than later. The general conclusions are not changed by discounting at a 5 percent real rate.

TABLE 2. LIFETIME RETIREMENT EARNINGS OF A TYPICAL U.S. ENLISTED MAN UNDER ALTERNATIVE FORMULAS: IN 1978 DOLLARS a/

Retirement Formula	Earnings of Those Who Retire After 20 Years' Service	Earnings of Those Who Retire After 30 Years' Service
U.S. Military	190,000	310,000
Typical Private	10,000	40,000
Typical Nonfederal Public	15,000	60,000
Federal Civil Service <u>b/</u>	20,000	70,000
Typical Policeman/Fireman	70,000	225,000
Australian Military	255,000	320,000
British Military	(Not Allowed until 22 Years of Service)	285,000
Canadian Military	120,000	245,000
West German Military	(Not Allowed until Age 52)	330,000 <u>c/</u>

a/ These numbers assume a U.S. enlisted man enters the service at age 19, progresses through the system at the median paygrade, earning current U.S. military pays and allowances, and then retires after 20 or 30 years of service under the retirement formulas of either the U.S. military or other systems. Numbers assume price and wage growth of 5 percent and 6 percent, but costs are deflated to constant 1978 dollars by dividing by cumulative price growth. For simplicity, numbers are not discounted. Discounting at 5 percent real interest does not change the general conclusions. Specifics underlying these numbers are based primarily on findings of the Defense Manpower Commission and the Third Quadrennial Review of Military Compensation.

b/ These lifetime retirement earnings may not reflect earnings of some civil service retirees. A civil service retiree with 30 years of service, who is also age 55, could retire with an immediate annuity. A military enlisted man with 30 years of service is age 49, and so under the civil service formula would not receive benefits until age 62. A similar caveat applies to 20-year retirees.

c/ For illustration, numbers for West Germany assume retirement is allowed at age 49, but the annuity is not assumed to begin until age 52.

But military jobs do differ from most civilian jobs. The military may need a retirement system that encourages early retirement for some members to maintain the young, vigorous force needed for combat. Thus, a more meaningful result may come from comparing the U.S. military retirement system with systems provided for U.S. policemen and firemen and for military employees of foreign governments. Presumably, these groups require similar youth and vigor.

For this paper, a typical but hypothetical system was constructed for U.S. policemen and firemen based on a 1972 survey of 42 systems covering more than 250,000 policemen and firemen. ^{22/} The U.S. military system seems more generous in most categories. Military personnel can retire earlier with an immediate annuity; they get to their maximum annuity faster; they need make no contribution; and they have better adjustments for increases in the cost of living after retirement. As a result, lifetime retirement earnings of a U.S. enlisted man under the military formula are more than double those under a typical policeman's or fireman's formula for retirement after 20 years of service, and about 30 percent higher for retirement after 30 years. On the other hand, the typical policeman/fireman system does offer a deferred annuity with as few as 15 years of service, whereas military get no pension after 15 years.

Although more generous than the typical system for policemen and firemen, the military system is not unique in the United States. Each of its major provisions--such as retirement after 20 years of service (regardless of age) and automatic cost-of-living adjustments--is present in some U.S. system. A few systems--notably those for policemen and firemen in New York City--feature most of the major provisions of the military retirement system.

U.S. retirement provisions were also compared with those of the military retirement systems in Britain, Canada, West Germany, and Australia. For personnel who retire after 30 years of service, the provisions seem similar in most cases. This conclusion is borne out by the lifetime retirement earnings in Table 2, which are similar for U.S. enlisted men retiring after 30 years of service under the various formulas. For those retiring

^{22/} Robert Tilove, Public Employee Pension Funds (Columbia University Press, 1976), pp. 222-240.

with 20 years' service, however, the U.S. military formula is more generous than any other except Australia's. The Australian formula offers more, largely because retirees receive postretirement adjustments based on wage increases.

POSTRETIREMENT INCOME

Bearing in mind the amount that military personnel earn after retiring may help the Congress judge the appropriate level of annuities. Indeed, one major study--the 1967 First Quadrennial Review of Military Compensation 23/--asserted that annuities should be set to make up for any losses suffered by military retirees because military service reduced what they could earn after retirement.

Military retirees receive several types of income from the federal government. The major type is an annuity. A typical enlisted person who retires without disability in 1978 will receive around \$6,000 per year in retirement pay; a typical officer retiree will get about \$15,000. 24/ These amounts are automatically adjusted upward each year based on increases in the Consumer Price Index. Military retirees who are 65 or older also receive social security benefits, based on equal contributions by the retiree and the Department of Defense. (Most enlisted and some officers receive an additional \$1,200 per year in social security credits for which no contribution is required.) Also, military retirees are eligible for medical care for themselves and their dependents. Free care is available from military medical facilities on a space-available basis, or retirees can seek care from civilian facilities and be partially reimbursed. Retirees may also receive other benefits, including the use of subsidized commissaries, low-cost housing loans and life insurance, and job preference. (Some of these benefits are also available to all veterans, whether or not they are retirees.)

23/ U.S. Department of Defense, Report of the First Quadrennial Review of Military Compensation, Summary (January 15, 1969), p. S-15.

24/ The typical enlisted retiree is assumed to be an E-7 with 20 years' service; the typical officer retiree is an O-5 with 23 years' service.

In addition to income from the federal government, almost all retirees earn money from a job in the private sector. A 1967 study showed that more than 95 percent of retirees aged 35 to 54 had "second-career" civilian jobs, though employment rates were sometimes lower than among nonretirees of comparable age and education. 25/

At the request of the Senate Appropriations Committee, the Department of Defense compiled the adjusted gross income of military retirees based on 1975 tax returns. These figures give an overall picture of retirement earnings. The adjusted gross incomes include second-career earnings, military annuities, investment and other taxable earnings, plus spouses' earnings in instances when a joint return was filed. The results showed that retirees' returns had a median adjusted gross income of between \$15,000 and \$16,000. About 8 percent of returns showed incomes below \$5,000. The Committee concluded that "there are few retirees who are living on extremely low incomes." 26/

Even more useful is a comparison between the civilian income of retirees and nonretirees with similar age and education. If retirees earn less during their second careers than these comparable civilians, it may be because military service provided them with a less marketable background. And it may be desirable to offset this second-career income loss with retirement pay. The 1967 First Quadrennial Review of Military Compensation analyzed the second-career incomes of military retirees and concluded that there is a substantial second-career income loss. The study recommended that military annuities make up for the loss. 27/

A portion of the "loss" may be by choice, however. Military retirees may simply choose to work less than persons with similar age and education because they receive an annuity. Also, some of

25/ Alan E. Fechter and Bette S. Mahoney, "The Economics of Military Retirement," Research Paper P-414 (Institute for Defense Analyses, July 1967), p. 9.

26/ Senate Appropriations Committee, Report Accompanying H.R. 7933, pp. 39-40.

27/ Report of the First Quadrennial Review of Military Compensation, Volume IV, p. II-9.

the loss could be attributable to geography. Military retirees tend to settle in the South, where both earnings and the cost of living are generally lower. This pattern could confuse a nationwide comparison, and the 1967 study did not adjust for geography. A study now being conducted by Rand will address these issues, providing up-to-date information.

EROSION OF BENEFITS

Some military personnel claim that their compensation has been cut, or "eroded," in recent years. They argue against retirement changes--which would reduce benefits given to some retirees--on the grounds that any further cuts are unfair and might ultimately lead to unionization. The erosion-of-benefits issue is largely irrelevant to the basic criterion used in this study to judge alternative retirement systems. According to that criterion, today's total military compensation--whether it has eroded or not--should be changed if it is not the least amount necessary to attract and keep qualified people. Nonetheless, the issue of erosion of benefits will certainly have a place in the debate on retirement change.

Has there been an erosion? The answer depends on the years examined. A recent study by the Congressional Research Service (CRS) found that, according to comprehensive reviews of total military compensation made by the Department of Defense in 1968 and 1976, real compensation (that is, adjusted for inflation) for the average military member went up during that interval by about 43 percent.^{28/} But there has been a decline in recent years. CRS estimates suggest that real compensation peaked around 1973 and since then has declined by 3.4 percent. Private sector earnings also fell in recent years. After adjustment for inflation, average hourly earnings of nonagricultural workers in the private sector fell 1.5 percent between 1973 and 1976.

The decline in military compensation, reinforced by widely publicized lists of recent erosions in benefits, has not escaped the notice of military personnel. In a 1976 survey, 85 percent of all enlisted men and women agreed that their benefits had eroded.

^{28/} Congressional Research Service, "What's Happening to Military Pay and Benefits," forthcoming.

But personnel may also perceive that, while the benefits are down from 1972 levels, real compensation in 1976 was still roughly competitive with the civilian sector. The 1976 survey showed that more than 50 percent of all military personnel felt that they were earning about the same or more in the military than they could in a civilian job.

It is important that the Congress and the Administration acknowledge these changes--both up and down--in military compensation. The decision on changes to the retirement system must be based on the compensation levels of today, not the peak levels of a few years ago nor the low levels of 1968. But the other reasons for advocating a changed retirement system, particularly the need for different patterns of incentives and the need to minimize costs, should not be overshadowed by this issue of erosion of benefits.

In response to criticisms of the current military retirement system, numerous changes have been recommended. This chapter presents the array. The key benefit changes are described only briefly; a discussion of their advantages and disadvantages fits naturally into the analysis of packages of changes in the next chapter. The more minor benefit changes, transition provisions, and an important accounting change are discussed in greater detail.

KEY BENEFIT CHANGES

Reducing Annuities for Early Retirees

Reducing annuities for early retirees would cut costs and lessen the incentive to retire after just 20 years of service. Thus, this change responds to two key criticisms of the current retirement system. Perhaps for this reason, all five of the major retirement studies have recommended reducing annuities for people who retire "early." ^{1/} Early retirees are usually defined as those who leave with fewer than 30 years' service. Reduced annuities have also won the support of Admiral Rickover and the executive vice president of the Association of the United States Army. ^{2/}

Although all the major studies agree that this change should be enacted, just how much annuities should be reduced is still a matter of dispute. Proposals range from a 30 percent reduction in the annuity of a 20-year retiree, with the reduction lifted after

^{1/} See Chapter I, footnote 1.

^{2/} Testimony of Admiral Hyman Rickover on Dual Compensation and Retirement in the Government, before the House Post Office and Civil Service Committee, reprinted in the Congressional Record, August 5, 1977, p. E5227; "Why Discriminate Against Military People," U.S. News and World Report (August 22, 1977), p. 32.

10 years in retirement, to complete elimination of benefits for a 20-year retiree until he reaches age 60. Most of the proposals gradually phase out the reductions for those who spend more than 20 years on active duty and eliminate reductions altogether for those who spend 30 or more years on active duty. Specific examples of the proposals, and associated pros and cons, are examined in the next chapter.

Providing Benefits Before 20 Years

Providing some benefits--called "vesting"--before 20 years of service would allow defense managers to sever unneeded personnel from the military. It might also improve the equity of the system by making benefits more similar for people who have served almost the same length of time in the military. Four of the five major studies mentioned earlier have recommended vesting before 20. ^{3/} Vesting before 20 was also recommended by the President's Commission on the All-Volunteer Armed Force as a desirable part of the transition to a volunteer military. ^{4/}

When and how much vesting should occur are also widely agreed on. All the studies that recommend earlier vesting concur that some benefits should be provided to persons who leave voluntarily with 10 or more years' service. Most of the studies recommend that those leaving voluntarily receive a deferred annuity, beginning at age 60 or 65, rather than a lump-sum payment. Most also recommend extending benefits to personnel who leave involuntarily after five or more years of service.

Requiring a Member Contribution

Military personnel now make no direct contribution toward their retirement. Four of the five major studies mentioned

^{3/} The exception is the 1967 First Quadrennial Review of Military Compensation.

^{4/} The Report of the President's Commission on an All-Volunteer Armed Force (February 1970), pp. 61-62.

earlier recommended that the system remain noncontributory. ^{5/} But a contributory system has support in the Congress and elsewhere.

A contributory system would require decisions about the amount of the contribution, about whether there is to be a compensatory pay raise, and about whether military personnel would continue to contribute to social security. The pros and cons of a contributory system are discussed in the next chapter.

OTHER BENEFIT CHANGES

Changing the Income Base Used in Calculating the Annuity

The current system calculates annuities as a fraction of a military person's basic pay on the day of his retirement. This provision gives an advantage to those who can time their retirement to begin soon after an overall pay raise, a seniority increase, or a promotion. All the major studies cited above argued that this is inequitable because some military personnel cannot precisely control their retirement date.

The solution is to base annuities on average pay over a period of time, rather than on terminal pay. Two of the five major retirement studies recommended basing annuities on pay in the year during which a person's pay was highest ("high-1"); the other three studies recommended basing annuities on the three years of highest pay ("high-3"). High-3 has the advantage of increasing the incentive to well-qualified people to remain three years rather than just one after a promotion. A high-3 rule would also make the military consistent with the federal civil service retirement system and more consistent with typical public and private sector plans.

Increasing Credits for Personnel with More than 20 Years' Service

The current system bases annuities on 2.5 percent times years of service for the first 30 years, with no credit for service

^{5/} Again, the exception is the 1967 First Quadrennial Review of Military Compensation.

beyond 30 years. Some studies have recommended more credits for senior personnel. These could include higher multipliers for service beyond 24 or 25 years (perhaps 3 percent rather than the present 2.5) and some credits for service beyond 30 years. This change would enhance the incentive for a longer career. But the change has been criticized because it would primarily benefit senior persons, particularly officers, who are already committed to a long career and may have no need for this added incentive. 6/ Because relatively few persons would be affected, this change would not greatly affect costs.

Imposing a Social Security Offset

Four of the five major studies have recommended that, when military retirees begin drawing social security at age 65, their military retirement annuities be decreased, or offset, by one-half or more of the amount of the social security attributable to military service. The rationale is that the military retiree getting retirement pay should at most get social security payments based on his half of the contribution. Critics of the offset argue that military personnel contribute to social security just as do private workers, and so it should not be cut because of their military pension. (Actually, about 40 percent of private pension plans do lower benefits when retirees get social security, though offsets in private pension plans are often smaller than those proposed for the military.)

While the offset plan appeals to some, the Defense Manpower Commission has revealed several problems. The Commission has determined that it is impossible to conclude definitively what part of social security is attributable to military service. The offset method most widely advocated would calculate the amount attributable to military service by assuming that a military person's earnings when he leaves the service are zero. Using this method, a commission staff study found that a retiree's social security pension, after the offset, might in fact be less than what the retiree would get if his social security pension were

6/ H.R. 12505, Uniformed Services Retirement Modernization Act, Hearings before the House Armed Services Committee, Subcommittee on Military Compensation, 93:2 (October 1974), pp. 100-102.

based on his civilian earnings alone, which may be judged unfair. Because of this and other problems, the commission has recommended that military retirement pay not be offset by any part of social security attributable to military service. ^{7/}

Yet another problem with the offset is that it would reduce military pensions when the retiree is over age 65. If pensions are to be reduced, it might be more reasonable to reduce them at earlier ages, when retirees are likely to have civilian jobs.

Banning Double Dipping

Current law requires that retired regular military officers who pursue second careers as federal civilian employees forfeit an average of about one-third of their military retirement pay. ^{8/} The law attempts to minimize instances of "double dipping"--that is, one person being paid twice by the federal government. No forfeiture is required from enlisted or reserve officer retirees.

Double dipping, a controversial issue that is the center of some heated debate, has been criticized by President Carter among others, and both the House and Senate Appropriations Committees included provisions in this year's appropriations bills to require that most military retirees who work for the federal government--officer and enlisted men alike--forfeit all retirement pay. But the provisions were deleted during debate on the floor of both houses.

Advocates of a ban on all double dipping argue that it is unfair for some persons to draw two paychecks from the government. Opponents, however, argue that the ban would unfairly penalize one group of retirees solely because they choose second careers in the federal civil service. A ban, opponents contend,

^{7/} Defense Manpower Commission, Defense Manpower: The Keystone of National Security, Report to the President and the Congress (April 1976), pp. 350-351; and Defense Manpower Commission Staff Studies and Supporting Papers, Volume V (May 1976), pp. 7-55.

^{8/} See 5 U.S.C., section 5532.

would also make it difficult for the civil service to compete in a unique market of experienced personnel.

A ban on double dipping would affect costs. To illustrate the effects, this paper estimates costs assuming a total ban requiring all military retirees who work in the federal civil service to forfeit their entire military retirement pay. Such a ban, it is assumed, would apply only to those entering the federal civil service after the beginning of fiscal year 1979. All other provisions of the current retirement system would remain in effect. This ban could either reduce costs or do the opposite--increase them--depending on how many people avoided employment in the civil service in order not to forfeit their military retirement pay. If no one chose to avoid civil service employment, then forfeiture of retirement pay would save a total of \$730 million in military retirement dollars during the five years 1979 to 1983. (Savings are expressed in constant 1978 dollars.) On the other hand, if all retirees chose to avoid the civil service, then military retirement costs over the next five years would go up by a total of \$18 million. 9/

9/ Both estimates equal a ratio times the cost of retirees who retire in fiscal year 1979 or later. The \$730 million savings are based on the ratio of 1976 retirement pay for retirees who are federal employees (less the amount forfeited by regular officer retirees), divided by total 1976 retirement costs for retirees under age 65. The \$18 million cost increase is based on the ratio of 1976 retirement pay forfeited by regular officers divided by total 1976 retirement costs for retirees under age 65. (Note that costs increase because some of those who avoid civil service work are regular officer retirees who, in the absence of a ban, would join the federal civil service and forfeit about one-third of their retirement pay. If, instead, these officer retirees go to work in the private sector, they would get their full retirement pay, and costs would go up.) Both estimates assume no change in the total number of civil service employees. Both also assume no one already retired before fiscal year 1979 would choose to enter the federal civil service after the ban takes effect, an assumption that should not greatly affect the estimates. People in this category are assumed to be employed in the private sector when the ban takes effect; it seems unlikely that many would choose to leave their private sector jobs, enter the civil service, and give up all their retirement pay.

These numbers encompass a wide range, and it is difficult to know where actual costs would fall within the range. Based on earnings of military retirees now in the federal civil service, however, a ban on all double dipping would cut total pay of the average double dipper by about 30 percent. Such a substantial cut suggests that many new retirees would choose to avoid the federal civil service.

One solution to the controversial issue of double dipping would be a reduction or delay in the annuities of early retirees, which was one of the key changes discussed earlier in this chapter. This would mean that persons in second careers would get no military retirement paycheck, or at least a reduced one, and hence would be double dipping less. Moreover, the reduction or delay would apply to all military retirees, rather than just to those who choose to work in the federal civil service.

Instituting Recomputation

Recomputation is the one proposed change that would affect persons already retired; all the other changes apply only to those who retire after implementation. The proposed change arises because of a switch in the law beginning in June 1958.

Until 1958, retired military personnel received the same pay increases as personnel on active duty. Since that year, retirement annuities have been increasing based on the rising Consumer Price Index, rather than on active-duty pay increases. But since 1958, cumulative pay raises for active-duty personnel have gone up more sharply than has the Consumer Price Index, largely because of substantial raises aimed at achieving a more competitive scale of active-duty pay. As a result, a person who retired before these raises went into effect receives less retirement pay than someone who retired after the raises, even if both held the same paygrade and years of service at retirement.

Table 3 shows the current retirement annuity for typical retirement paygrades, first for those who retired in October 1977 and then for those who retired in June 1958. Because active-duty pay has increased more than the Consumer Price Index since 1958, a retiree who left in 1958 receives 15 to 20 percent less than a retiree who leaves today with the same paygrade and length of service.

TABLE 3. COMPARISON OF ANNUAL RETIREMENT PAY WITH AND WITHOUT RECOMPUTATION: IN DOLLARS

Paygrade and Length of Service at Time of Retirement	Date of Retirement		June 1958 (Recomputed Retirement Pay) <u>c/</u>
	October 1977 <u>a/</u>	June 1958 <u>b/</u>	
E-7 (Army Sergeant 1st Class) with 20 Years' Service	5,800	4,860	6,800
O-4 (Army Major) with 20 Years' Service	10,930	8,740	12,820
O-6 (Army Colonel) with 30 Years' Service	24,030	20,500	28,190

a/ Annuities for 1977 retirees are based on today's pay scales.

b/ Annuities for 1958 retirees are based on 1958 pay scales plus adjustments for all increases in the Consumer Price Index since then.

c/ Recomputed on January 1972 pay scale.

Numerous proposals have been put forth to make up this difference by allowing retirees to recompute their annuities based on more recent pay scales. One common proposal would recompute retirement pay based on the pay scale in effect in January 1972. The third column of Table 3 shows the effect of this recomputation. Under this proposal, annuities of those who retired before 1958 would be higher than annuities of those who retired today with the same paygrade and years of service. This happens because, since 1972, the Consumer Price Index has increased faster than pay raises for active-duty personnel. (Recomputation based on pay scales other than those in effect in 1972 would yield lower

annuities for those who recompute.) Another proposal might involve a recomputation based on today's pay scales, which would mean that all retirees with the same paygrade and years of service would receive the same retirement pay. Still other proposals would limit recomputation to persons over age 60 or to retirees whose annuities fall below a certain level, such as \$3,000 or \$4,000 a year.

Fairness is the argument most often advanced in favor of recomputation. Between 1922 and 1958, and in some years before 1922, military retirement pay was generally recomputed whenever active-duty pay was raised. Supporters of recomputation argue that this system should not have been abrogated for those about to retire. Nor, they argue, is it fair for persons who retired with the same rank and years of service to receive different amounts of retirement pay.

Opponents point out that recomputation would sharply increase military retirement costs. Recomputation for all personnel based on January 1972 scales would increase costs by about \$1.3 billion the first year. If recomputation on January 1972 scales were limited to those aged 60 or older, costs in the first year would go up by \$750 million. If recomputation were based on 1976 pay scales, and limited to those 60 or older, costs in the first year would go up about \$460 million. These cost increases would gradually get smaller as the pool of surviving retirees declined. (All costs are based on estimates by the Department of Defense).

In addition to increasing costs, recomputation would reinstitute a policy of adjusting retirement pay based on active-duty pay increases. The Congress rejected this method in the past. It is not used in the federal civil service, nor in most other public and private retirement plans. Also, the principle underlying recomputation suggests that, once a formula for setting military pay is in effect, the government cannot prescribe a less generous formula for anyone on active duty. Establishing such a principle may set an undesirable precedent.

TRANSITION PROVISIONS

With the exception of recomputation, none of the proposed changes to the military retirement system would affect those already retired. Nor would they decrease the benefits for those who are already eligible to retire. For those on active duty who are not yet eligible to retire, provisions would be needed to move

from the current system to a new one. These transition provisions would consist of a phase-in period, during which the new rules would gradually take effect, and possibly a "save-pay" provision designed to prevent persons who retired under the new rules from getting smaller retirement paychecks than similar persons who retired earlier.

Reduced annuities for early retirees is the key change that would require a phase-in period. All the major studies have agreed that the phase-in should be done gradually, rather than just applying the new rules to those who enter the military after implementation. Gradual change would insure that no one group of retirees would face precipitous changes in their benefits that could lead to charges of inequity and to sharply increased turnover. The major studies have recommended a gradual phase-in of new rules over a period of 5 to 20 years. An even more generous option would institute the new retirement plan only for those who enter the military after the plan is passed.

The choice of a phase-in period could be based on when pay for personnel on active duty became competitive. In hearings in 1974, the Department of Defense argued that competitiveness was achieved around 1967 or 1968. ^{10/} If retirement changes were implemented in 1979, this would mean that within 10 years all military personnel would have received competitive active-duty pay for their entire career. This may suggest a 10-year phase-in. The choice of a phase-in period may also depend on a judgment of what is fair and politic, which could argue for a longer phase-in period. A longer phase-in period--particularly one that changed the retirement system only for those who went on active duty after the changes were approved--would certainly defuse opposition from those now on active duty. Finally, the choice of a phase-in period should consider the timing of the savings. Under the retirement plan recommended by the Department of Defense (see the reduced-to-30 option in Table 6 of Chapter IV), cumulative savings between 1979 and the year 2000 could equal \$11 billion in today's dollars if, as the department recommended, the phase-in period were 20 years. If the phase-in period were only 10 years, cumulative savings would equal \$14 billion. On the other hand, if everyone on active duty at the time of passage

^{10/} House Armed Services Committee, Hearings on H.R. 12505, Uniformed Services Retirement Modernization Act, pp. 95-97.

retired under the old system, cumulative savings between now and the year 2000 would be close to zero.

Interestingly, all the major retirement studies have recommended phase-in periods for reductions in benefits, but none has recommended phasing in improvements in benefits. A phase-in of increased benefits for those with fewer than 20 years' service, however, may be a fair companion for a phase-in of benefit reductions. Such a phase-in would also minimize the increases in costs that are likely to occur in the first few years after implementation. And it could prevent a sharp, one-time increase in turnover that may accompany the instant implementation of benefits for those with fewer than 20 years' service.

Transition provisions may also include a save-pay clause. Most of the major retirement studies have recommended what could be termed "generalized" save-pay. This would allow a member who retired under the new rules to receive at least as much retirement pay as any member who retired earlier with the same paygrade and years of service. In its most recent retirement proposal, the Department of Defense has advanced a more restrictive "individualized" save-pay. Individualized save-pay would insure that a person's retirement pay would be at least as much as it would have been if, at some earlier year, he had been eligible and had chosen to retire. For a person who retired with 20 years' service, individualized save-pay would not be helpful because he would not have been eligible to retire at any earlier year.

Generalized save-pay would guarantee that no military retiree would get a smaller retirement paycheck than a similar person who retired shortly before him--perhaps as little as one day earlier. This guarantee may be regarded as equitable. On the other hand, generalized save-pay would affect how soon savings were realized. Under the retirement changes proposed by the Department of Defense, which feature individualized save-pay, cumulative savings between 1979 and the year 2000 would equal \$11 billion in today's dollars. The same plan with generalized save-pay would save less than \$8 billion over the same period.

ACCOUNTING CHANGES

The Administration has indicated that it is considering some changes in the way the federal budget accounts for military

retirement costs. 11/ These changes would simply be adjustments in accounting procedures; they would not affect the benefits any employee got when he retired, nor the cost to the federal government. They could, however, have important effects on how retirement changes would affect costs in the defense function of the budget. At least three accounting changes are being considered.

First, the Defense Retired Pay appropriation may be transferred out of the defense function of the budget, probably into the income security function or an entirely new budget function. (The Defense Retired Pay appropriation pays benefits to former military personnel now on the retirement rolls and to their survivors.)

Second, a charge for retirement costs of today's military personnel may be added to the defense function. The charge would equal the amount actuaries estimate would fully fund the retirement liabilities that today's military personnel earn each year. This charge would reflect expected future growth in prices and wages and future interest rates.

Third, the Administration may propose creation of a military trust fund, similar to the civil service fund, that would hold contributions and pay benefits.

These accounting modifications would not affect total outlays in the federal budget, though outlays in some functions would change. The accounting changes would, however, dramatically alter the visibility of any changes in retirement benefits. Under the changed accounting procedures, the accrual costs of military retirement would show up in the defense function. As the next chapter shows, this means that retirement changes could result in immediate savings in the defense function of from \$1 billion to \$4 billion a year. Under current accounting procedures, which include outlays for past retirees in the defense function, the same retirement changes would result in increases in defense costs in the first few years.

11/ For a more detailed discussion including possible changes in accounting for civil service retirement, see Congressional Budget Office, Retirement Accounting Changes: Budget and Policy Impacts, Background Paper, April 1977.

Implementing the three accounting changes would offer several other advantages. The sizes of the budget functions are sometimes used to evaluate or compare levels of current activity. The proposed accounting changes would make numbers in the defense budget functions better measures for such comparisons. Also, institution of a charge for military retirement would make retirement costs of current military employees more visible. This may make planners in the Department of Defense more frugal in their use of manpower. Finally, the changes would make accounting for military and civil service retirement more consistent.

Probably the major disadvantage of these accounting modifications would be the sensitivity of any retirement charge to technical assumptions and interest rates. This would render the charge subject to accounting "tricks." Assumptions could be made by independent actuaries, however, as is done for the civil service system. Though these independent actuaries may disagree, their disagreement would presumably be on technical grounds rather than political ones. Another disadvantage would be confusion during transition to the new system. During the transition, the defense function and other nondefense functions might appear larger or smaller even if there were no changes in real activity, thus confusing comparisons of spending. It would, however, be relatively easy to state what defense costs would have been in the past if the changes had always been in effect; this should minimize the confusion.

CHAPTER IV. PACKAGES OF CHANGES

All the major studies and the Department of Defense have recommended changes in the military retirement system, but they do not agree on the amount of change. From the array described in Chapter III, four packages of changes have been selected. The packages illustrate a range of change from modest to far-reaching. All four packages feature some benefits for those who leave with fewer than 20 years of service. The packages differ in the amount and length of reductions in annuities for those who retire with fewer than 30 years of service. Also, one package features a member contribution; the others do not.

The key to choosing among these packages is their effects on career patterns and costs. The questions are: How much do they save, and will they lead to a pattern and length of career that will allow the military to accomplish its mission? The choice should also consider the difficulties and risks associated with implementing the packages, particularly the uncertainty about their effects on career patterns and the changes they would require in the current system of military personnel management. The choice might also consider whether the packages provide adequate retirement income, particularly during later years when the retiree cannot hold a civilian job. Since all the packages feature some benefits for those leaving with fewer than 20 years of service, they should all improve the management flexibility and equity of the retirement system.

Table 9 at the end of this chapter summarizes the key changes and effects of the four packages. The reader may find it helpful to refer to this table for a concise overview. Moreover, each of the following sections, which treat the packages one by one, contains an overview in the form of an introductory summary and a concluding overall evaluation of the package at issue. The rest of the section is devoted to more detailed analysis.

REDUCED ANNUITY TO 30 YEARS OF SERVICE

This package, referred to in this paper as the reduced-to-30 option, was drafted by a Department of Defense study group in 1972 and was introduced in the Congress as the Retirement Modern-

ization Act in 1974, 1975, and 1976. Legislative action was never completed. This option would reduce costs, but it should result in only modest changes in current career patterns. Hence, the option would be most consistent with the judgment that the military can best accomplish its mission with career patterns similar to those today.

For persons retiring with fewer than 30 years of service, this package would reduce annuities by creating a "two-step" annuity. The first step would last until the person would have completed 30 years of service, which may be regarded as a full military career. Thus, the first step would last 10 years for someone with 20 years of service. During the first step, the annuity would be reduced by up to about 30 percent. Then, during the second step, the annuity would be restored to close to its level under the current system. Retirement credits already earned at the time of enactment would be protected because any reduction would be phased in gradually over 20 years. Also, a "save-pay" provision would insure that no retiree under the new system would get less than he could have gotten had he retired at an earlier point during his career.

The reduced-to-30 option would also provide some deferred benefits to those who leave with fewer than 20 years of service, whereas the current retirement system does not. For example, a person leaving voluntarily after 10 years of service would receive an annuity equal to 25 percent of his basic pay, but the annuity would not begin until age 60. Under the reduced-to-30 option, the military retirement system would remain noncontributory.

In addition to these key changes, the reduced-to-30 package would base annuities on average pay during the one year of highest pay (high-1 averaging), would increase retirement credits above their current level for service over 24 years, and would require an offset of one-half of social security payments attributable to military service. (Table A of the appendix shows the details of this proposal.)

These changes would affect the pattern of annuities. A brief description of the new pattern may help in judging the adequacy of retirement pay under this option. For a typical enlisted man retiring at age 39 after 20 years of service, the current system provides an immediate, lifetime annuity of \$5,800. But under the reduced-to-30 option, the first-step annuity would be \$4,010. After 10 years, this retiree's annuity would return to \$5,730--which is lower than under the current system only because of the

high-1 averaging. When the retiree's social security payments began after age 65, his military annuity under this option would drop to about \$4,300, reflecting the social security offset. (All these estimates are in today's dollars and assume that all transition provisions are over and the reduced-to-30 option is fully in effect.)

Table 9 at the end of this chapter summarizes all these changes in terms of lifetime retirement earnings, which are expressed in today's dollars but are not discounted. For a typical enlisted man retiring after 20 years of service, lifetime retirement earnings would go from \$190,000 under the current retirement system to \$155,000 under this option, an 18 percent cut. Lifetime retirement earnings for a 30-year retiree would be down 5 percent, while those for a 10-year retiree would be higher.

Effects on Career Patterns

A key to evaluating this alternative retirement system is its effect on the pattern and length of military careers. How would it change voluntary loss behavior (that is, the willingness of people to stay in the military)? And how would it affect involuntary loss behavior (that is, the Department of Defense's willingness to allow people to stay in the military)?

There are no simple answers to these questions. People's willingness to stay in the military under a changed retirement system is particularly uncertain, because little analysis has been done in this area. The changes under this reduced-to-30 option suggest, however, that there would be added incentive to complete a longer career. On the other hand, statements by the Department of Defense indicate that they would be more selective about who they would allow to stay beyond 20 years. On balance, it appears that this option would have relatively modest effects on career patterns.

This generalization can be justified by considering changes in loss behavior--both voluntary and involuntary--at several career zones: after 20 years of service, between 10 and 19 years, and between 5 and 9 years. Changes in the retirement system are unlikely to have important effects on the willingness of new recruits to join the military, because retirement benefits are distant and because young persons "discount" those distant benefits heavily.

To help judge effects on loss behavior, Table 4 provides an estimate of incentives at various career points. The table indicates how much a typical enlisted man earns in retirement benefits if he stays in the military for one more enlistment, which is typically around five years. (Officer benefits show a similar pattern.) Earnings are shown for enlisted persons who have completed various years of service between 0 and 25 in order to indicate incentives to stay in the military at different career points. Of course, retirement benefits are paid only after completing a career; thus, the numbers in the table are just estimates of what those future benefits are worth today. Estimates of these retirement earnings in Table 4 are expressed as annual payments so that they can be compared with annual pays and allowances.

Table 4 shows that the reduced-to-30 package would increase incentives to stay in the military after completing 20 years. The value of staying five more years, after completing 20 years of service, would go from \$3,830 under the current retirement system to \$5,170 under the reduced-to-30 package. Also, people say they would stay longer. A 1976 survey of military enlisted personnel showed that 25 percent of those with 14 to 19 years of service expected to complete a career of 30 years under the reduced-to-30 package, as opposed to 4 percent under the current system. These percentages should be viewed with care, however, since they represent responses to a questionnaire rather than actual changes in behavior. More important, the Department of Defense has stated that it would be more selective about who stays under this system, rather than allowing more to stay. ^{1/} Thus, the number staying beyond 20 years may change little, if at all.

Table 4 also shows a reduction in the pull to stay for 20 years, which may result in higher losses among those with 10 to 19 years of service. Under the current system, a typical enlisted person with 15 years of completed service earns the equivalent of \$18,690 a year in retirement benefits if he chooses to stay five more years. The reduced-to-30 package would cut these annual retirement earnings from \$18,690 to \$13,220--a 30 percent reduction that should reduce the pull to stay for 20 years. The Department of Defense might reinforce this trend,

^{1/} Department of Defense, Report to the Secretary of Defense by the DoD Retirement Study Group (May 31, 1972), p. 38.

TABLE 4. AVERAGE ANNUAL PAY AND RETIREMENT EARNED BY STAYING FIVE MORE YEARS: IN DOLLARS a/

Years of Completed Service	Average Annual Value of Future Retirement Benefits <u>c/</u>			
	Average Annual Pays and Allowances Current System <u>b/</u>	Current System	Reduced Annuity to 30 Years' Service	Reduced Annuity to Age 55 or 60
0	9,810	0	0	0
5	12,930	0	530	815
10	15,100	0	780	530
15	16,890	18,690	13,220	8,700
20	19,340	3,830	5,170	6,550
25	23,940	4,110	7,080	7,710

a/ All numbers assume annual price and wage growth of 5 percent and 6 percent respectively. The discount rate is assumed to be 10 percent a year. Numbers are based on an enlisted man who is at the median paygrade for his years of service.

b/ Numbers here are the present value of regular military compensation. This present value is annuitized over five years to produce an annual average.

c/ Numbers here are the increase in the present value of future nondisability retirement benefits that are earned by staying five more years. This increase is annuitized over five years to produce an annual average. Numbers assume voluntary retirement and ignore death benefits.

since it has in the past indicated willingness to separate more of these mid-careerists involuntarily. 2/ Thus, losses would probably go up, but not sharply. The \$13,220 earned by completing 20 years of service would still be 78 percent of yearly pays and allowances, and this should continue the substantial pull to stay for 20 years under the reduced-to-30 package.

There may also be changes in the number of persons remaining with between five and nine years of service. Table 4 shows an increase in the annual retirement benefits for this group because, under the reduced-to-30 option, they would receive some benefits after 10 years of service. This should cause more to stay. On the other hand, the retirement benefits for those who continue on to 20 years of service would be reduced, which could cause higher losses. The net effect may be only a small increase or no increase in first reenlistments, which usually occur between the third and the fifth years of service. But the 1976 personnel survey suggests that, of those who reenlist, more would remain for at least 10 years. Of course, the Department of Defense could offset any improved retention among those with between five and nine years of service by restricting reenlistments or through involuntary separations. In fact, the department's current management objectives for enlisted men suggest they would hold retention close to the current level, though the objectives could be altered under a changed retirement system.

In sum, the department could offset most changes in voluntary loss behavior through increases in involuntary separations, and there is evidence they would in many cases. Thus, this paper adopts a "base-case" career behavior that assumes no changes in voluntary loss behavior that are not offset. Under the base case, the only deviation from current career behavior is an increase in the number of involuntary separations between 10 and 19 years of service, particularly among enlisted personnel. The size of the increase is based on estimates supplied to CBO by the Department of Defense. The changes under this base case are consistent with the changes assumed by the Department of Defense in estimating costs of the reduced-to-30 option.

A second set of assumptions, called the "alternative-case" career behavior, is used to illustrate the range of possible change. The alternative case assumes that people desire and the

2/ Ibid., pp. 2-8.

Department of Defense allows higher retention among those with between five and nine years of service and those with more than 20 years of service. The actual changes in retention are based largely on the 1976 personnel survey. Since the Department of Defense has expressed a desire to hold down the number of mid-careerists (that is, those with 10 to 19 years of service), this alternative case assumes that the department involuntarily separates enough persons to keep the percentage remaining to 20 years of service at the same level as in the base case.

Table 5 shows the percentage of initial enlisted entrants who remain to various points under the base case, under the alternative case, and under current career behavior (that is, the average behavior over the last three years). In addition, the table shows average career lengths. CBO also developed alternative career patterns for officers using similar assumptions.

TABLE 5. ALTERNATIVE CAREER PATTERNS FOR ENLISTED PERSONNEL UNDER THE REDUCED-TO-30 PACKAGE

Years of Completed Service	Percent of Enlisted Recruits Remaining		
	Current Career Behavior	Base Case	Alternative Case
0-1	100	100	100
4-5	25	25	26
9-10	12	12	20
14-15	10	9	9
19-20	9	8	8
24-25	1	1	2
29-30	0.1	0.1	0.8
Average Career Length	5.7 years	5.4 years	6.1 years

Effects on Costs

In addition to effects on career patterns, an evaluation of this reduced-to-30 option should consider its costs. Estimates in this paper include not only retirement costs; estimates also in-

clude costs for pays and allowances of those on active duty, as well as costs of recruiting, training, and separating active personnel. All of these costs depend on career behavior. The paper evaluates costs first under the base career behavior discussed above, and then under the alternative case which assumes longer military careers.

All of the estimates assume the current system of active-duty pays and allowances, since changes in active-duty compensation are beyond the scope of this paper. Estimates also assume current promotion opportunities, though there is a discussion of the effects of promotion opportunities on costs. ^{3/} All estimates assume that total numbers of military officers and enlisted personnel remain at current levels.

Under base-case career behavior, the reduced-to-30 package would eventually reduce defense manpower outlays. By the year 2000, outlays would go down by \$1.2 billion a year in constant 1978 dollars, and savings would continue to grow significantly in the years beyond 2000 (see Table 6). The total savings between implementation in 1979 and the year 2000 would equal \$11 billion.

Most of the savings would occur because of reductions in annuities for those retiring with fewer than 30 years of service and because of the higher involuntary separations that occur under this base-case career behavior. Those who are involuntarily separated would receive an annuity, but it would cost less than what they would get if they remained for 20 or more years of service. Beyond the year 2000, the social security offset would add substantially to retirement savings. While most of the savings would come from reductions in retirement costs, there would be decreases in active-duty costs as well. These would occur because of increases in involuntary separations under the base case, which would lead to a lower average career length (see Table 5) and hence to lower active-duty pay.

Because of the larger numbers of enlisted personnel, changes in enlisted costs would contribute most of the savings. Of the

^{3/} In this study, "current promotion opportunities" means that the distribution of paygrades in each year of service is assumed to remain at its current level.

TABLE 6. COSTS OF RETIREMENT OPTIONS UNDER BASE-CASE CAREER BEHAVIOR FOR CURRENT SYSTEM AND THREE PACKAGES OF CHANGES: FOR SELECTED FISCAL YEARS, IN MILLIONS OF CONSTANT 1978 DOLLARS a/

	Outlays						Accrual
	1979	1980	1983	2000	2050	Total 1979-2000	Charge 1979 <u>b/</u>
<u>Total Costs (Retirement Plus Active) c/</u>							
Current System	38,200	38,600	39,700	46,800	73,970	935,800	—
Changes under:							
Reduced annuity to 30	100	50	-60	-1,230	-3,780	-11,000	—
Reduced to age 55 or 60	140	90	-80	-2,160	-6,020	-18,900	—
Annuity at age 55 to 62	80	60	-90	-4,480	-8,200	-36,200	—
<u>Retirement Costs Only d/</u>							
Current System	9,400	9,700	10,400	12,400	18,200	247,500	7,100
Changes under:							
Reduced annuity to 30	100	90	40	-970	-3,370	-6,800	-1,600
Reduced to age 55 or 60	140	130	20	-1,900	-5,620	-14,600	-2,400
Annuity at age 55 to 62	90	100	20	-4,220	-7,790	-31,900	-3,800

a/ Estimates assume price and wage growth through 1983 as in the CBO October 1977 projections; annual price and wage growth beyond 1983 is assumed to be 5 percent and 6 percent respectively. All numbers are deflated to constant 1978 dollars by dividing by cumulative price growth.

b/ These numbers are based on the percentage of basic pay that must be set aside to fund future retirement costs. The percentage is based on steady-state calculations and so ignores transition provisions. The percentage assumes annual price growth, wage growth, and interest of 5, 6, and 7 percent respectively. The numbers would be the ones appearing in the Department of Defense's budget under the accounting changes discussed in Chapter III. No estimates are available for reserve (Title III) retirees, but their absence does not affect the savings.

c/ Costs include those under retirement (see note d) plus costs in the military personnel appropriation; also included are costs of recruiting, recruit and initial skill training, and loss-related costs. Training costs are based on average factors that assume the officer trainees are not pilots.

d/ Costs include all those in the current retirement pay appropriation (except that costs of survivors are excluded from the changes). Thus, numbers include involuntary severance costs under the alternative systems, but not under the current system.

total savings of \$1.2 billion in the year 2000, three-quarters or \$900 million would come from enlisted men.

While outlays eventually would decrease, they would go up in the first few years after implementation by as much as \$100 million (see Table 6). This increase would occur because the costs of new benefits to those who retired with fewer than 20 years of service would exceed the savings from reduced annuities for early retirees, which would be gradually phased in.

These near-term increases would appear in the federal budget and in the Department of Defense's budget under current accounting procedures. But the near-term cost picture in the department's budget could be quite different if the accounting changes discussed in Chapter III were implemented. Under these new accounting procedures, the amount that would appear in the department's budget is the money that would have to be set aside, or accrued, to fund fully the reduced-to-30 package. These accrual costs, and hence the department's budget, could go down immediately by \$1.6 billion under this reduced-to-30 package. (Notes to Table 6 define the assumptions underlying these estimates. Estimates may vary depending on actuarial and technical assumptions yet to be fully worked out.)

Costs depend on assumptions about future career behavior. To illustrate this, costs were estimated under an alternative career behavior (see Table 5) that assumes longer careers. Assuming that persons move gradually to this new behavior over 20 years, then savings in the year 2000 would be only \$1.0 billion, compared with \$1.2 billion under base-case behavior. Savings under the alternative career behavior would change for several reasons. Savings from retirement would be greater because more persons would remain past 20 years of service and so would put off their pensions. There would also be declines in costs of training and loss-related expenses because of the longer careers. But active-duty pay would go up more than enough to offset these increased savings. Active-duty pay would go up because, given the current grade distributions by year of service, the increased numbers of senior people would get substantially higher pay.

Maintaining these grade distributions in the face of longer careers may be desirable to provide for appropriate career progression and to offset partially the reductions in retirement pay. On the other hand, it may be desirable to slow promotions in order to hold numbers in senior paygrades at or near their current levels. Slowing promotions would affect costs. For example, if

promotions were slowed enough so that the average pays and allowances per person remained at their current level, then savings in the year 2000 under this alternative career behavior would equal \$1.3 billion. Clearly, promotion policy would play a key role in determining cost savings under the reduced-to-30 option if the Department of Defense allowed longer military careers.

Overall Evaluation

The reduced-to-30 option could save money. Savings could amount to about \$1 billion per year by the year 2000, with total savings of \$11 billion between now and the end of the century. Moreover, as the arguments above point out, the reduced-to-30 option would be likely to lead to only modest changes in the pattern and length of military careers. Thus, it seems most consistent with the judgment that military needs are best met by the current career pattern. By making only modest changes in current career patterns, this option would require the least change in current systems of military personnel management, including promotion policies. Also, because it would make the smallest reductions in retirement pay among the options in this paper, this option would pose the least risk of interfering with the ability of the Department of Defense to retain the people it needs. Finally, this reduced-to-30 option may be viewed as equitable by those on active duty, since it features a transition period of 20 years, the longest among the options in this paper.

On the other hand, among packages of changes in this paper, the reduced-to-30 package would be least consistent with the idea that military careers should be lengthened significantly. If careers are to be lengthened significantly, then annuities given to those who retire at 20 probably must be further reduced in order to make longer service more attractive.

REDUCED ANNUITY TO AGE 55 OR 60

This package, referred to as the reduced-to-55 option, was designed by an interagency committee in 1971. The Department of Defense was one of the key members of the committee. The package is a middle-ground option, both in terms of savings and in terms of effects on career patterns. It would save more and would be likely to lead to somewhat longer careers than the reduced-to-30 option. But it should not cause major changes in military career patterns.

Like the reduced-to-30 option, this one would create a two-step annuity. But the reductions during the first step would be larger and they would last longer. For a person who retires after 20 years, first-step annuities would be reduced until age 60, versus reductions to age 50 or so under the reduced-to-30 option. The reductions under this option would range from 34 to 42 percent below current annuity levels--versus about 30 percent under the reduced-to-30 option. ^{4/} Those retiring with more than 24 years of service would, under the reduced-to-55 option, receive a smaller reduction that would last only until age 55. The reductions under this option are designed to cut retirement pay during years when the retiree is likely to hold a civilian job.

This package would phase in the changes during the 10 years following its implementation rather than the 20 years allowed under the reduced-to-30 option. But, like the reduced-to-30 option, this one would provide some benefits to those who leave with fewer than 20 years of service and would leave the military retirement system noncontributory.

In addition to these key changes, the reduced-to-55 package would base annuities on average pay during the three years when pay was highest (high-3 averaging), would increase retirement credits above their current level for service over 24 years and provide some credits for service over 30 years, and would require an offset of one-half of social security payments attributable to military service. (Table A of the appendix shows the details of this proposal.)

These changes would affect the pattern of annuities. A comparison of this pattern with the pattern under the current system may help judge the adequacy of retirement pay. Under the current retirement system, a typical enlisted man retiring at age 39, after 20 years of service, receives \$5,800 a year throughout his retired years. Under this option, he would receive \$3,110 until he reaches age 60. Between ages 60 and 65, he would receive

^{4/} Reductions would equal 2 percent times years below age 60 at time of retirement. Thus, reductions for a 20-year enlisted retiree would be greater than for a 20-year officer retiree because the enlisted retiree is younger. The range of 34 to 42 percent ignores high-3 averaging, which would increase the percentage.

\$5,360--which is less than under the current system only because of the high-3 averaging. When the retiree's social security payments began after age 65, his annuity under this option would fall to about \$4,000. (All these annuities are expressed in today's dollars. The annuities under the reduced-to-55 option assume that all transition provisions are over and that the new option is fully in effect.)

Table 9 at the end of this chapter summarizes all these changes in terms of lifetime retirement earnings, which are expressed in today's dollars but are not discounted. For a typical enlisted man retiring after 20 years of service, lifetime retirement earnings under the reduced-to-55 option would equal \$110,000 compared with \$190,000 under the current retirement system; this would mean a 42 percent reduction. For a typical enlisted 30-year retiree, lifetime retirement earnings would be down only 15 percent, while for a typical 10-year retiree, lifetime retirement earnings would be higher under this option than under the current system.

Effects on Career Patterns

The difference in effects on career patterns between this option and the reduced-to-30 option would be one of degree rather than kind. The pull to stay for 20 years and the push to leave immediately after 20 would be reduced even more than under the reduced-to-30 option (as the numbers in Table 4 suggest). These changes should result in more tendency to leave among those with 10 to 20 years of service, which may only mean that the department has to separate fewer people involuntarily to maintain the desired number of these mid-careerists. The changes should also increase the tendency to stay in the service among those who complete 20 years of service, though some or all of this could be offset by increases in involuntary separations. The changes in behavior among those with 5 to 9 years of service would be particularly uncertain. On the one hand, benefits for completing a career under this option would be less than under the current system, which should cause more to leave. But this reduced-to-55 option would offer a lump-sum payment to those who leave after completing 10 or more years of service, which may be a strong inducement to stay from 5 years of service to 10.

Although it is difficult to know the exact shape of the career force under this option, the arguments above suggest that changes would not be drastic. The Department of Defense may

agree. In recent Congressional testimony, a witness for the Defense Department characterized the reduced-to-55 option as likely to shape a "somewhat older force [than the reduced-to-30 option] and space out promotions, but otherwise not inconsistent with the principles underlying [the department's personnel management objectives]." ^{5/} This seems to agree with the characterization of the reduced-to-55 option as middle-ground in terms of effects on career patterns.

There is little analytic basis for differentiating numerically between career behavior under this reduced-to-55 option and under the reduced-to-30 package. Hence, this paper uses the same base and alternative career patterns as were used for the reduced-to-30 option to evaluate costs (see Table 5 for details). Under the reduced-to-55 option, the alternative career pattern, which assumes longer careers, may be more likely to occur than under the reduced-to-30 option.

Effects on Costs

Given base-case career behavior, the pattern of savings under this option would be similar to that under the reduced-to-30 option, but savings would eventually be larger. By the year 2000, costs under this option would go down by \$2.2 billion a year in constant 1978 dollars. The total savings between 1979 and the year 2000 would equal about \$19 billion, and savings would continue to grow in the years beyond 2000 (see Table 6). As was the case under the reduced-to-30 option, about three-quarters or \$1.6 billion of the total savings in the year 2000 would come from changes in costs of enlisted personnel.

Outlays would increase in the first few years after implementation by as much as \$140 million a year. As under the reduced-to-30 option, however, the near-term cost picture in the budget of the Department of Defense would be very different if the accounting changes discussed in Chapter III were implemented. Under the new accounting system, the costs in the defense budget

^{5/} Colonel Leon S. Hirsh, Jr., "Military Nondisability Retirement System" (statement before the House Committee on Armed Services, Subcommittee on Military Compensation, October 12, 1977; processed), p. 25 and attached comparison of retirement systems.

would be those required to fund the system fully. And these costs might go down from \$7.1 billion under the current retirement system to \$4.7 billion under this reduced-to-55 option.

As was the case under the reduced-to-30 option, savings would be somewhat lower under the alternative career behavior defined in Table 5. Assuming that behavior shifts gradually to the alternative pattern over 10 years, savings by the year 2000 would equal \$1.5 billion a year under the longer careers of the alternative pattern, compared with \$2.2 billion under the base-case career patterns. Savings would be lower because there would be more persons with seniority, who--given current grade distributions by years of service--would draw higher active-duty pay. If promotions were slowed enough to keep average costs per person constant, then savings under the alternative career case would equal \$2.0 billion in the year 2000.

Overall Evaluation

The reduced-to-55 option would save about \$2 billion per year by the year 2000. Total savings would equal \$19 billion between now and the year 2000. The option should also increase substantially the incentive to stay beyond 20 years of service.

But the reduced-to-55 package seems unlikely to result in a drastic change in current career patterns, which feature large numbers of retirements after 20 years of service. This seems true because there would still be a substantial pull to stay for 20 years of service and a substantial drop in the value of staying after 20 years, which would cause many to leave. Also, the Department of Defense might limit the number staying past 20. Since this option seems unlikely to cause drastic changes in career patterns, it should not necessitate major changes in the personnel management and promotion plans currently in use by the department.

On the other hand, further reductions in benefits for early retirees may not be possible without far-reaching changes in career patterns. The option would reduce annuities for 20-year enlisted retirees by more than 40 percent for 20 years or longer. There would also be substantial reductions for officers. Significantly larger reductions might leave only token payments that would not induce large numbers of retirements and would make it difficult for the Department of Defense to force out large numbers of people. Thus, this option may approach the largest cost savings possible without significant changes in career patterns and personnel management policies.

ANNUITY AT AGE 55 TO 62

This package, referred to as the annuity-at-55 option, is far-reaching and would be likely to result in significantly longer military careers. The age eligibility rules for a retirement annuity under this plan would be those currently in effect for federal civil servants. Those completing 5 to 19 years of service would receive an annuity beginning at age 62. Those completing 20 to 29 years of service would receive an annuity beginning at age 60, while those completing 30 or more years would receive an annuity at age 55. ^{6/} This package would move from the current to the new eligibility rules over a period of 10 years, thus offering some protection to senior personnel on active duty at the time of implementation.

While the eligibility rules would be similar, this plan would differ from the federal civil service system in two ways. It would not require a contribution from military personnel. Also, it would feature a substantial cash bonus (equal to one year's basic pay for those retiring with 20 years) if a military person were involuntarily separated with less than 30 years of service. This bonus, which has not been proposed in previous studies, would be designed to provide the Department of Defense with the flexibility to attract and retain those personnel, particularly enlisted combat personnel, who must be separated with less than 30 years of service in order to maintain a vigorous fighting force.

Although this bonus is a new proposal, it is similar to a mechanism proposed by the Defense Manpower Commission to provide greater incentives to those whose careers must be short. The commission's mechanism would classify military jobs as combat or noncombat; there could also be gradations between purely combat and purely noncombat jobs. Those serving a full career in purely combat jobs could retire with an instant annuity after 20 years of service; those serving in purely noncombat jobs would have to complete 30 years of service to get a full, instant annuity.

^{6/} Unlike the federal civil service plan, the annuity-at-55 plan would allow retirement at these ages with an immediate annuity, regardless of whether the person was on active duty when he reached age 55 or 60.

While attempting to achieve similar results, the bonus may have advantages over the commission's mechanism, which would result in early retirement of those with a certain career pattern. First, the bonus would allow the department to separate those who can no longer be effectively used in the military, rather than separating those with a particular career pattern. Second, it would give the department more flexibility to respond to changing needs by altering the bonus criteria. Third, it might minimize demands by military personnel for their share of jobs that lead to early retirement; such demands could greatly complicate the task of assigning people to suitable jobs. Finally, the bonus could be more closely controlled by the Congress, since it would be authorized and appropriated annually rather than being an entitlement that builds up over many years.

Although the bonus would have some advantages, both the commission's mechanism and the bonus would require that the Department of Defense set criteria for who would get early retirement. The criteria would probably have to be based on type of job, or skills, or the like. Since most jobs and skills have their arduous aspects, it would be difficult to make these distinctions in a way that military people viewed as fair.

The annuity-at-55 proposal would have a marked effect on the pattern of annuities. A typical enlisted man retiring at age 39 after 20 years of service would receive nothing until age 60 under this option; then, he would begin receiving \$5,360 a year. Under the current system, he receives \$5,800 beginning at retirement. (Annuities are expressed in today's dollars. The annuities under the annuity-at-55 option assume the new option is fully in effect and that retirement is voluntary.)

Table 9 at the end of this chapter summarizes these changes in terms of lifetime retirement earnings. For a typical enlisted man retiring after 20 years of service, lifetime retirement earnings would equal \$65,000 under this option compared with \$190,000 under the current system, a cut of 66 percent. For a typical enlisted retiree with 30 years of service, lifetime retirement earnings would go down 32 percent. Lifetime retirement earnings for those who retire with 10 years of service would be higher than under the current system, which provides almost nothing, but would be lower than under either of the previous two options.

Effects on Career Patterns

The pattern of incentives offered by retirement under this option would be markedly changed (see Table 4). This package would thus be likely to lead to an entirely different career pattern. Retirement benefits under this option would begin earlier, reflecting provision of some benefits after only five years of service. But the value of retirement would build up much more slowly. By the time a typical enlisted man had completed 15 years of service, the value of staying to 20 under this annuity-at-55 option would be only \$1,700 a year, down sharply from the current system (\$18,690 a year) and even from the reduced-to-55 option (\$8,700 a year). Clearly, the pull to stay for 20 years would be significantly reduced. Moreover, whereas all the previous options feature a sharp drop in the value of retirement after a person completes 20 years of service, this option would not. The value of retirement benefits would continue to grow, and in fact would grow most quickly as one nears completion of 30 years of service. Clearly, there would be little push to leave after 20 years; indeed, just the opposite is true.

These results suggest that this package is most consistent with a much different career pattern. Losses after 20 years of service should be much lower, with the typical career lasting for 30 to 35 years. This of course assumes that the Department of Defense would allow these people to stay. This seems more likely, however, because those involuntarily separated would not receive any instant annuity as they would under earlier options. Losses from 10 to 20 years of service should occur more evenly, and probably at a higher overall rate since the lure of 20-year retirement would not be there. Losses from five to nine years of service would be particularly uncertain, though they could be substantially higher because retirement benefits after 20 years of service are down sharply.

To illustrate this changed pattern, this paper assumes an alternative career pattern consistent with the discussion above. Table 7 shows the percentage of enlisted personnel who might remain to various points under the alternative case. These particular numbers have little analytic basis and are for illustration only. For comparison, Table 7 also shows current career behavior and base-case behavior that were discussed above. CBO has also formulated an alternative pattern for officers based on assumptions similar to those discussed above.

TABLE 7. ALTERNATIVE CAREER PATTERNS FOR ENLISTED PERSONNEL
UNDER THE ANNUITY-AT-55 PACKAGE

Years of Completed Service	Percent of Enlisted Recruits Remaining		
	Current Career Behavior	Base Case	Alternative Case
0-1	100	100	100
4-5	25	25	20
9-10	12	12	10
14-15	10	9	6
19-20	9	8	4
24-25	1	1	3
29-30	0.1	0.1	3
34-35	0	0	2
Average Career Length	5.7 years	5.4 years	6.3 years

Effects on Costs

To establish a range and to be consistent with earlier estimates, costs are first estimated under the same base-case career behavior assumed for earlier options. Then costs are evaluated under the alternative career behavior defined in Table 7.

Under the base-case career behavior, this option would result in substantial savings. By the year 2000, Table 6 shows costs would be reduced by \$4.5 billion a year and savings would continue to grow after the year 2000. About two-thirds or \$3 billion of this total would come from changes in enlisted costs. Cumulative savings between implementation in 1979 and the year 2000 would total more than \$36 billion in constant 1978 dollars. Costs would go up for several years after implementation of this option. But if the accounting changes discussed earlier were implemented, then costs in the budget of the Department of Defense might fall immediately from \$7.1 billion under the current system to \$3.3 billion under this plan. (All these estimates assume that about

one-half of the retirees with 20 to 24 years of service would be involuntarily separated and so would receive the special bonus established under this option.)

Much more than under the two previous options, savings for the annuity-at-55 option would depend on changes in career behavior and accompanying changes in personnel management. It is possible that the more senior force that would be likely to result under this option would be judged more productive. If so, fewer people may be required to accomplish the military mission, which could push savings up.

On the other hand, personnel numbers could remain constant, and the Department of Defense might maintain current promotion opportunities. In this case, savings could be much lower. For example, assuming that people moved gradually over 10 years to the alternative career behavior defined in Table 7, and assuming that promotion opportunities were maintained, then savings by the year 2000 would amount to only \$2.8 billion compared with the \$4.5 billion under the base case. Savings would be down primarily because of the significant increases in numbers staying past 20 years of service. Given the current distribution of paygrades by years of service, these persons would be at senior grades that draw high active-duty pay. As has been discussed earlier, it may be desirable to maintain current distributions to provide adequate career progression and to offset the reductions in retirement pay. On the other hand, it may be desirable to slow promotions, in which case savings would go back up. For example, if promotions were slowed enough to keep the average cost per person at the same rate as under the base-case career behavior, then savings by the year 2000 would equal \$3.9 billion per year.

Overall Evaluation

This option would modify the entire pattern of military careers. Fewer personnel would tend to complete 20 years of service. But many more of those who do complete 20 years' service would probably stay for careers of 30 or more years, which would lead to an older career force. Thus, this option seems most consistent with a judgment that the military can accomplish its missions with older careerists. The option also offers the potential for large cost savings, though the amount of savings would depend critically on changes in career patterns and accompanying changes in personnel management.

But, of all three options, this one would create the most administrative turbulence. It is likely that promotion points, and perhaps even the number of paygrades, would have to be modified to account for the increase in those desiring a 30-year or 35-year career. Perhaps even more important, this option would be the riskiest of the three in terms of the fundamental criterion. It is possible that the package, in conjunction with active-duty pays and allowances, would not allow the Department of Defense to attract and retain adequate numbers of personnel. This difficulty might be particularly true for those with combat skills that are less marketable in the private sector, though the bonus for those involuntarily separated with less than a 30-year career would be designed specifically to compensate these people. Certainly a far-reaching change of this sort would have to be monitored closely to insure that, in conjunction with the system of pays and allowances for active personnel, it met the department's needs.

ANNUITY AT AGE 55, PLUS CONTRIBUTION

Under current law, military personnel make no explicit contribution toward their retirement. A member contribution could be added to any of the packages discussed above, but in this paper its effects are illustrated by assuming that a contribution is added to the annuity-at-55 option that has just been discussed. In all other respects, the annuity-at-55 option is unchanged. Defining this contributory system requires not one, but three key decisions.

Key Decisions

Amount of the Contribution. Under the annuity-at-55 option, full funding of military retirement would require a contribution of about 18 percent of basic pay, given the assumptions in this paper about future interest rates and wage and price growth. A more commonly discussed option, however, would require that military personnel contribute 7 percent of their basic pay toward retirement, matched by a contribution by the Department of Defense. This is the contribution currently required of federal civil servants and their employers, and it is the one assumed in this section. If refunds of the contribution were given to those who left before earning any retirement benefits, the refunds would include 3 percent annual interest, as do refunds to federal civil servants who leave before qualifying for any benefits.

Offsetting Pay Raise. Requiring a contribution would reduce the take-home pay of all military personnel. This cut may be deemed inequitable. And it could leave military take-home pay below levels necessary to attract needed personnel, especially high-quality enlisted recruits who are already in short supply. Thus, some propose that any contribution be offset by a matching increase in pay. Because the offsetting pay raise is a key decision, this paper shows the effects of this decision separately.

Integration with Social Security. Military personnel currently participate in the federal social security system. Since federal civil servants do not, it could be argued that a member contribution to the military retirement fund should be accompanied by removal of the military from the social security system. This, however, would substantially cut the revenues of the already troubled social security fund. Hence, a more sensible option might be to make the 7 percent member contribution a total contribution toward both social security and military retirement. On basic pay up to the maximum amount taxable for social security, military personnel would contribute the 5.85 percent that is currently required for social security and 1.15 percent (7 minus 5.85) toward military retirement. ^{7/} On basic pay in excess of the maximum taxable amount, military personnel would contribute a full 7 percent toward retirement. This was the mechanism recommended by the First Quadrennial Review of Military Compensation in 1967. Because it is a key decision, this paper illustrates costs and effects assuming first a 7 percent contribution including the social security contribution and then a 7 percent contribution in addition to social security.

Effects on Costs

Table 8 shows the costs of various contributory retirement systems, assuming the systems were implemented along with the annuity-at-55 option. Thus, the costs in Table 8 can simply be added to those in Table 6 in order to produce the costs of any desired package.

^{7/} Numbers in this section do not account for the recently passed revisions to the social security system.

TABLE 8. COSTS AND SAVINGS UNDER CONTRIBUTORY SYSTEMS COUPLED WITH ANNUITY-AT-55 OPTION: FOR SELECTED FISCAL YEARS, IN MILLIONS OF CONSTANT 1978 DOLLARS a/

	1979	1980	1983	Total 1979-1983
<u>7% Contribution in Addition to Social Security Contribution</u>				
Contribution (less refunds)	-1,010	-890	-750	-4,220
Offsetting Pay Raise	<u>1,140</u>	<u>1,130</u>	<u>1,120</u>	<u>5,640</u>
Total	130	240	370	420
<u>7% Contribution Including Social Security Contribution</u>				
Contribution (less refunds)	-190	-170	-140	-790
Offsetting Pay Raise	<u>210</u>	<u>210</u>	<u>200</u>	<u>1,030</u>
Total	20	40	60	240

a/ Numbers assume a contribution of 7 percent of basic pay, in addition to or including a 5.85 percent social security contribution. Refunds, with 3 percent annual interest, are given to those who leave with fewer than five years of service. The offsetting pay raise is enough to maintain take-home pay. The offsetting raise is assumed not to increase other pays (for example, retired pay, bonuses linked to basic pay). All estimates are made using base-case career behavior (see Table 7). Price and wage growth through 1983 is as in the CBO October 1977 projections; beyond 1983, annual price and wage growth is assumed to be 5 and 6 percent respectively. All numbers are deflated to constant 1978 dollars by dividing by cumulative price growth.

Table 8 shows that the contribution itself--even less refunds--would always reduce costs to the federal government. Costs could go down by more than \$4 billion in the next five years. These savings would occur because the take-home pay of military personnel would be reduced. The savings would be more than eaten up, however, if there were an offsetting pay raise. This would occur because of the high turnover among young personnel in the military. Pay would be raised to make up for their retirement contribution, but then most of them would leave the military and so would get back their retirement contribution as well as benefiting from the offsetting raise. 8/

These conclusions apply regardless of whether the contribution were in addition to or included the social security contribution. But, if the contribution included social security, savings from the contribution and any net cost increases would be considerably lower.

Table 8 concentrates on effects on costs to the government because this is the appropriate measure for evaluating the option. But effects on the budget of the Department of Defense would differ from effects on the total federal budget because of accounting procedures. Under current procedures, the contribution by civil service employees is treated as a tax revenue. If this procedure were used for the military contribution, then savings from the contribution would not appear in the budget of the Defense Department. The costs of an offsetting pay raise would, however, appear in the department's budget, as would the costs of any employer contribution. Thus, under accounting procedures analogous to those in civil service, the department's budget would go up under a contributory system. Only if the costs of current retirees were transferred out of the budget of the Department of Defense, which was discussed as part of the accounting changes in Chapter III, would the department's budget be reduced.

8/ If an offsetting pay raise were given, so that no one's take-home pay were cut, it might be desirable not to give anyone a refund of their contribution, regardless of when they left the military. This would avoid a cost increase but would not result in savings.

The Pros and Cons

One of the key reasons for advocating a contributory retirement system is to reduce costs of defense manpower. Since a contribution coupled with an offsetting pay raise would increase costs, it seems most reasonable to limit discussion to a contributory system without an offsetting pay raise.

Such a system would save money. It would also make the military retirement system more consistent with the civil service retirement system, which requires an employee contribution, and consistent with most public sector retirement plans, which almost always require contributions. A contribution could also increase the visibility of retirement benefits to employees. And from the employee's view, payment of a contribution might establish a firmer right to current benefits and reduce the chance of benefit cuts.

There are, however, major disadvantages to a contributory system. In the absence of an offsetting pay raise, the system would cut the take-home pay of all personnel. This cut may exacerbate problems of obtaining enough high-quality enlisted recruits, even though most of these junior personnel would eventually receive refunds of their contribution. This cut in take-home pay for new recruits would exist regardless of the nature of the option, but it would be much larger if the contribution were in addition to the social security contribution.

Another disadvantage is that a contributory system would result in a substantial refund that would create an incentive to leave the military after the first enlistment. Higher losses at this point would be contrary to the general goal of keeping more of these journeymen personnel. Requiring a contribution would also run counter to practices in the private sector, in which only about 20 percent of all retirement systems require a contribution.

Moreover, imposing an explicit contribution would be inconsistent with the argument that military personnel already make an "implicit" contribution to their retirement because military pay is depressed below what it would be if the retirement system were contributory. While there is no hard evidence either establishing or refuting this implicit contribution, the House Armed Services Committee has argued that it exists. The Senate Armed

Services Committee argued that there is no evidence of an implicit contribution. 9/

In sum, there are major disadvantages to a contributory system. These disadvantages have led four of the five major retirement studies to reject an explicit contribution; only the 1967 report of the First Quadrennial Review recommended a member contribution.

SUMMARY

While all of the major retirement studies and the Department of Defense have recommended some change in the military retirement system, there is less agreement about how much change. Table 9 summarizes the four options presented in this chapter, which illustrate the range of likely change. The choice among these options will not be easy, since the topic is complex and emotional. But the choice should start with a judgment about what kind of career pattern the military should have, keeping in mind the costs. A judgment that the military should make only modest changes to the current career pattern suggests either the reduced-to-30 or the reduced-to-55 option, which still result in considerable cost savings. A judgment that the military could accomplish its role with a substantially older force suggests an option like the annuity-at-55 option, with its higher risk but accompanying higher potential for savings.

9/ U.S. General Accounting Office, A Contributory Retirement System for Military Personnel, FPCD-76-43 (March 4, 1976), pp. 31-33.

TABLE 9. SUMMARY OF PACKAGES

	Current System	Reduced to 30 Years of Service
<u>Key Changes</u>		
Annuity for 20-Year Retiree <u>a/</u>	50% of basic pay	Reduced 30% below current level for 10 years, then restored.
Benefits for 0-19 Years' Service?	No	Yes
Member Contribution Required?	No	No
Phase-in for Reduced Annuity	—	20 years
Lifetime Retirement Pay <u>b/</u>		
30-year retiree	\$310,000	\$295,000
20-year retiree	\$190,000	\$155,000
10-year retiree	0	\$15,000
<u>Summary of Effects</u>		
Overall Evaluation	Features large losses after 20 years of service, but few losses from 10 to 19 years. Costs increasing through end of this century.	Retains career pattern similar to today's, but costs less. Low risk. Proposed by DoD.
Effect on Career Patterns	See above	Continued high losses after 20 years likely. Retention may be higher from 5 to 9 years and lower from 10 to 19 years.
Required Changes in Personnel Management Policies	None	Few required
Costs (constant dollars)		
FY 2000	\$46.8 billion	Saves \$1.2 billion
Total FY 1979-2000	\$936 billion	Saves \$11 billion
Costs in DoD Budget if Accounting Procedures Change	\$7.1 billion	Saves \$1.6 billion

(Continued)

a/ Percentage reductions ignore high-1 or high-3 averaging, which depends on inflation assumptions.

b/ Total retirement pay for typical enlisted man expressed in today's dollars but undiscounted. Assumes retirement at median paygrade for given year of service, and average mortality rates.

TABLE 9. (Continued)

Reduced to Age 55 or 60	Annuity at Age 55 to 62	Annuity at 55, With Contribution
Reduced 34-42% below current level to age 60, then restored. <u>c/</u>	Annuity begins at age 60.	Annuity begins at age 60.
Yes	Yes	Yes
No	No	Yes
10 years	10 years	10 years
\$265,000	\$210,000	\$210,000
\$110,000	\$65,000	\$65,000
\$15,000	\$10,000	\$10,000
Middle-ground option. More savings and longer careers than reduced-to-30 option. But no fundamental change.	Far-reaching change. Significantly longer careers. Many per- sonnel management changes. High risk. High potential savings.	See annuity-at-55. Savings may be more or less than annuity-at-55 depending on offsetting raise. Possible re- cruiting problems.
Similar to reduced- to-30 except probable increase in those staying past 20.	Strong incentive to stay 30 years or more. Retention may be lower from 5 to 19 years of service, though results uncertain.	Same as annuity-at-55 but possible recruiting problems among junior enlisted.
Some to accommodate longer careers, but no fundamental changes.	Fundamental changes in all phases of personnel management.	Same as annuity-at-55.
Saves \$2.2 billion Saves \$19 billion	Saves \$2.8 to \$4.5 billion Saves \$26 to \$36 billion	See Table 8 See Table 8
Saves \$2.4 billion	Saves \$3.8 billion	See Table 8

c/ Range depends on whether retiree is an officer (low end of range) or enlisted (high end).

APPENDIX

APPENDIX TABLE A. DETAILED PROVISIONS OF ALTERNATIVE RETIREMENT SYSTEMS

	Current System	Reduced Annuity to 30 Years of Service	Reduced Annuity to Age 55 or 60	Annuity at Age 55 to 62
Retirement Base	Terminal basic pay.	High-1 basic pay.	High-3 basic pay.	High-3 basic pay.
Formula for Computing Annuity (Voluntary Separation)	Retirement base times 2.5 percent per YOS (maximum 75 percent).	Retirement base times 2.5 percent per YOS (10-24 YOS) plus 3 percent per YOS (25-30 YOS) to maximum of 78 percent, less 15 percentage points until time when 30 YOS would have been completed.	Retirement base times 2.5 percent per YOS (10-24 YOS) plus 3 percent per YOS (25-30 YOS) plus 2 percent per YOS (31-35 YOS) to maximum of 88 percent. Annuity reduced until age 60 (less than 25 YOS) or age 55 (25 or more YOS). Reduction equals 2 percent of annuity for each year under age threshold.	Retirement base times 2.5 percent per YOS (maximum 87.5 percent).
When Annuity Begins (Voluntary Separation)	More than 20 YOS: upon retirement; 0-19 YOS: no benefits.	More than 20 YOS: upon retirement; 10-19 YOS: age 60 a/; 0-9 YOS: no benefits.	More than 20 YOS: upon retirement (with reduction if applicable); 10-19 YOS: lump-sum payment equal to 5 percent per YOS times terminal basic pay b/; 0-9 YOS: no benefits.	More than 30 YOS: age 55; 20-29 YOS: age 60; 5-19 YOS: age 62; 0-4 YOS: no benefits.
Formula for Computing Annuity (Involuntary Separation)	Enlisted: no annuity c/; officer: lump-sum payment equal to 10 percent times YOS times retirement base (maximum \$15,000).	More than 20 YOS: same as voluntary; 5-19 YOS: lump-sum payment of 10 percent times YOS times terminal basic pay b/; 0-4 YOS: no benefits.	More than 20 YOS: same as voluntary; 10-19 YOS: same as voluntary plus lump-sum payment equal to 5 percent per YOS times terminal basic pay; 5-9 YOS: lump-sum payment equal to 5 percent per YOS times terminal basic pay; 0-4 YOS: no benefits.	More than 5 YOS: same as voluntary plus lump-sum payment equal to 5 percent per YOS times terminal basic pay; 0-4 YOS: no benefits.

(Continued)

APPENDIX TABLE A. (Continued)

Social Security Integration	None	Annuity reduced by half of social security payments attributable to military service.	Annuity reduced by half of social security payments attributable to military service.	None
Reduction for Continued Federal Employment (Double Dipping)	Over 20 YOS: regular officers forfeit about 1/3 of annuity.	Same as current system	Same as current system	Same as current system
Price Adjustment	Automatic based on CPI.	Same as current system d/	Same as current system	Same as current system d/
Phase-In Period for Reduced Annuities for Early Retirees	Not applicable	20 years	10 years	10 years
Save-Pay Provisions	Not applicable	Individualized e/	Individualized e/	None

NOTE: YOS = Years of Service.

- a/ If retiree dies before the deferred annuity starts, survivors receive a lump-sum payment.
- b/ Retirees have a choice of a lump sum or deferred annuity. In this paper, all are assumed to elect the lump sum.
- c/ Enlisted receive involuntary separation pay in a few circumstances, but these are ignored in this paper.
- d/ Deferred annuities are adjusted for price increases between retirement and the time when payment begins.
- e/ Individualized save-pay insures that a retiree's pay would be at least as much as it would have been if, at some earlier year, he had been eligible and had chosen to retire.