

12

FIFTH QUADRENNIAL REVIEW OF MILITARY COMPENSATION

AD-A142 909



VOLUME IA SUPPORTING APPENDIXES TO UNIFORMED SERVICES RETIREMENT SYSTEM (A - G)

DTIC FILE COPY

JANUARY 1984

This document has been approved
for public release and sale; its
distribution is unlimited.

DTIC
ELECTE
JUL 09 1984
S D E

DEPARTMENT OF DEFENSE
OFFICE OF THE SECRETARY OF DEFENSE

84 07 02 028

REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED		1b. RESTRICTIVE MARKINGS	
2a. SECURITY CLASSIFICATION AUTHORITY		3. DISTRIBUTION / AVAILABILITY OF REPORT Approved for public release; distribution is unlimited.	
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE		5. MONITORING ORGANIZATION REPORT NUMBER(S)	
4. PERFORMING ORGANIZATION REPORT NUMBER(S)		7a. NAME OF MONITORING ORGANIZATION Office of Secretary of Defense ASD, Manpower, Installations and Logistics	
6a. NAME OF PERFORMING ORGANIZATION Fifth Quadrennial Review of Military Compensation	6b. OFFICE SYMBOL (If applicable) Fifth QRCM	7b. ADDRESS (City, State, and ZIP Code) The Pentagon, Room 3E808 Washington, D.C. 20301	
6c. ADDRESS (City, State, and ZIP Code) 5201 Leesburg Pike Skyline Place 3, Suite 1511 Falls Church, VA 22041		9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8a. NAME OF FUNDING / SPONSORING ORGANIZATION OSD, MI&L	8b. OFFICE SYMBOL (If applicable) MI&L	10. SOURCE OF FUNDING NUMBERS	
8c. ADDRESS (City, State, and ZIP Code) Same as 7b		PROGRAM ELEMENT NO. O&M (ADP)	TASK NO.
		PROJECT NO.	WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification) Fifth Quadrennial Review of Military Compensation. Volume IA. Supporting Appendixes to Uniformed Services Retirement System (A-G).			
12. PERSONAL AUTHOR(S)			
13a. TYPE OF REPORT Quadrennial	13b. TIME COVERED FROM 82/10/01 TO 84/06/30	14. DATE OF REPORT (Year, Month, Day) January 1984	15. PAGE COUNT 393
16. SUPPLEMENTARY NOTATION A Quadrennial Review of Military Compensation is required by Title 37, U.S.C. 1008b. The Fifth QRCM was directed by President Reagan in his August 17, 1982 letter to Secretary Weinberger. This volume is part of a multivolume report that includes an Executive Summary, Volume I, IA, IB, IC, II and III.			
17. COSATI CODES		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)	
FIELD	GROUP	pension, retirement, benefits, mobilization, recall, force management, QRCM	
19. ABSTRACT (Continue on reverse if necessary and identify by block number) Volume IA of the multivolume report of the Fifth Quadrennial Review of Military Compensation (Fifth QRCM) provides supplemental and supporting data to the analyses presented in Volume I, Uniformed Services Retirement System, of this Presentially convened, legislatively mandated assessment of the Military Estate Program and active duty Special and Incentive pays, conducted in 1983 and early 1984. Specifically, it contains Appendixes A through G. Appendix A, entitled "Legislative History of the Uniformed Services Retirement System," traces the Uniformed Services retirement system from its meager origins as a provision for the compulsory retirement of certain Navy officers in 1855 to its current, multibillion-dollar form. All statutes known to be pertinent to both the active duty and Reserve Components non-disability retirement systems are addressed in detail. A discussion as to the Congressional intent of the legislation upon enactment is included whenever possible. Although emphasis is placed upon non-disability retirements, disability retirements are also examined.			
20. DISTRIBUTION / AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED / UNLIMITED <input type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS		21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED	
22a. NAME OF RESPONSIBLE INDIVIDUAL Colonel C. F. Reiber, Jr.		22b. TELEPHONE (Include Area Code) 202-756-1914	22c. OFFICE SYMBOL Fifth QRCM

BLOCK 19. (Cont.)

Appendix B, "Study Background," presents, in outline form, a summary of the recommendations of the various commissions and study groups which have addressed the Uniformed Services retirement system. It is organized in such a manner as to facilitate ease of comparison across the major issues (e.g., timing of eligibility, benefit computation, social security integration, et al.)

Appendix C, "Comparison to Foreign Military Systems," contains the National Defense University (NDU), Mobilization Concepts Development Center comparative analysis of the Uniformed Services retirement system with that of six other nations; Australia, Canada, the Federal Republic of Germany, Japan, Great Britain and the Netherlands. Its objectives were to provide a general discussion of military retirement in the context of total military commitments and country needs; to determine the use and obligation of retirees as mobilization assets; and to compare retirement eligibility, value and size.

Appendix D, "Comparison to Private-Sector Systems," recognizes that a valid comparison of the cost to the employer, as well as the total cost to both the employer and the recipient of any retirement benefit, requires that calculations be done using the same funding method, at the same point in time, and applying the same assumptions (economic, demographic, etc.) for all plans. This appendix utilizes a standard method, taken from actuarial science and commonly used for prefunding the retirement plan benefit costs for each new group of employees over their working lives, to conduct a comparison of the Uniformed Services retirement system with those commonly found in the private sector.

Appendix E contains the National Defense University, Mobilization Concepts Development Center study of the current plans, procedures and issues associated with the projected use of retirees under national conditions requiring mobilization. The report entitled, "Mobilization Aspects of the U.S. Military Retirement System," is presented in its entirety. It examines the issue from both a current and historical perspective and assesses the retiree management programs of each of the DoD Services.

Appendix F, "Retirement Cost Growth Analyses," documents the Fifth QRMC's assessment of the causes for the growth of the retirement system costs from \$233,622,204 in FY55 to \$13,195,333,000 in FY82. It discusses the four factors most often identified with such growth and applies a methodology to determine precisely how much, if any, of the added costs can be attributed to each of the factors.

Appendix G, "Force Structure/Retirement Trends and Statistics," contains extensive tables and figures in support of Section VIII, Volume I, covering system costs, force profile data, trends (e.g., age and percent of eligibles retiring), expected service life and continuation rates for each of the DoD Services and DoD overall.

JUL 24, 1984

PAGE 40

UNCLASSIFIED

OP 00 A142808 (U) FIELD/GROUP 000000

UNCLASSIFIED TITLE
QUADRENNIAL REVIEW OF MILITARY COMPENSATION (5TH). VOLUME 1A. SUPPORTING APPENDIXES TO UNIFORMED SERVICES RETIREMENT SYSTEM (A - G).

ABSTRACT

(U) CONTENTS: LEGISLATIVE HISTORY OF THE UNIFORMED SERVICES RETIREMENT SYSTEM; STUDY BACKGROUND; COMPARISON TO FOREIGN MILITARY SYSTEMS; COMPARISON TO PRIVATE-SECTOR SYSTEMS; MOBILIZATION ASPECTS OF THE U.S. MILITARY RETIREMENT SYSTEM; RETIREMENT COST GROWTH ANALYSES; FORE STRUCTURE/RETIREMENT TRENDS AND STATISTICS.

POSTING TERMS ASSIGNED

FOREIGN MILITARY SYSTEMS
USE MILITARY FORCES(FOREIGN)

LEGISLATIVE HISTORY
USE HISTORY
LEGISLATION

MILITARY COMPENSATION
USE MILITARY PERSONNEL
SALARIES

MILITARY RETIREMENT SYSTEM
USE MILITARY PERSONNEL
RETIREMENT(PERSONNEL)

MOBILIZATION
USE MOBILIZATION

RETIREMENT COST GROWTH ANALYSES
USE COST ANALYSIS
GROWTH(GENERAL)
RETIREMENT

STRUCTURE RETIREMENT TRENDS
USE PATTERNS
RETIREMENT
STRUCTURAL PROPERTIES

PHRASES NOT FOUND DURING LEXICAL DICTIONARY MATCH PROCESS

VOLUME 1A

UNCLASSIFIED

VOLUME IA

DESCRIPTION OF CONTENTS

APPENDIX A. Legislative History of the Uniformed Services Retirement System

This appendix traces the Uniformed Services retirement system from its meager origins as a provision for the compulsory retirement of certain Navy officers in 1855 to its current, multibillion-dollar form. All statutes known to be pertinent to both the active duty and Reserve Components non-disability retirement systems are addressed in detail. A discussion as to the Congressional intent of the legislation upon enactment is included whenever possible. Although emphasis is placed upon non-disability retirements, disability retirements are also examined.

APPENDIX B. Study Background

This appendix presents, in outline form, a summary of the recommendations of the various commissions and study groups which have addressed the Uniformed Services retirement system. It is organized in such a manner as to facilitate ease of comparison across the major issues (e.g., timing of eligibility, benefit computation, social security integration, et al.)

APPENDIX C. Comparison to Foreign Military Systems

This appendix contains the National Defense University (NDU), Mobilization Concepts Development Center comparative analysis of the Uniformed Services retirement system with that of six other nations; Australia, Canada, the Federal Republic of Germany, Japan, Great Britain and the Netherlands. Its objectives were to provide a general discussion of military retirement in the context of total military commitments and country needs; to determine the use and obligation of retirees as mobilization assets; and to compare retirement eligibility, value and size.

APPENDIX D. Comparison to Private-Sector Systems

A valid comparison of the cost to the employer, as well as the total cost to both the employer and the recipient of any retirement benefit, requires that calculations be done using the same funding method, at the same point in time, and applying the same assumptions (economic, demographic, etc.) for all plans. This appendix utilizes a standard method, taken from actuarial science and commonly used for prefunding the retirement plan benefit costs for each new group of employees over their working lives, to conduct a comparison of the Uniformed Services retirement system with those commonly found in the private sector.

APPENDIX E. Mobilization Aspects of the U.S. Military Retirement System

This appendix contains the National Defense University, Mobilization Concepts Development Center study of the current plans, procedures and issues associated with the projected use of retirees under national conditions requiring mobilization. The report is presented in its entirety. It examines the issue from both a current and historical perspective and assesses the retiree management programs of each of the DoD Services.

APPENDIX F. Retirement Cost Growth Analyses

This appendix contains the Fifth QRMC assessment of the causes for the growth of the retirement system costs from \$233,622,204 in FY55 to \$13,195,333,000 in FY82. It discusses the four factors most often identified with such growth and applies a methodology to determine precisely how much, if any, of the added costs can be attributed to each of the factors.

APPENDIX G. Force Structure/Retirement Trends and Statistics

This appendix contains extensive tables and figures in support of Section VIII, Volume I, covering system costs, force profile data, trends (e.g., age and percent of eligibles retiring), expected service life and continuation rates for each of the DoD Services and DoD overall.

The Act of February 21, 1946 (Pub. L. 79-305, 60 Stat. 26) authorized the Secretary of the Navy to convene boards to consider and recommend officers in the grades of captain, in the case of the Navy, or colonel, in the case of the Marine Corps, or below for involuntary retirement or elimination. It also lowered the statutory retirement age for Navy and Marine Corps officers from 64 to 62 and permitted voluntary retirement after 20 years of active service, at least 10 years of which were comprised of commissioned service, with retired pay to be computed under the "standard" 2.5 percent formula. The purpose of the Act was to provide a means to break up the officer logjam that had arisen out of the large number of World War II accessions who could no longer be effectively employed. The Act's "plucking" board authority expired June 30, 1949, but its other retirement provisions became permanent law.

The Army and Air Force Vitalization and Retirement Equalization Act of 1948 (Pub. L. 80-810, 62 Stat. 1081) authorized the voluntary retirement of Army and Air Force officers after 20 years of active service, at least 10 years of which were comprised of commissioned service, with retired pay computed by the standard 2.5 percent formula. This law resulted, for the first time in history, in uniform voluntary retirement authority among the officers of all branches of Service.

The Officer Personnel Act of 1947 (Pub. L. 30-379, 61 Stat. 795) as amended by the Officer Grade Limitation Act of 1954 (Pub. L. 83-349, 68 Stat. 65), was for nearly 35 years the main authority for the officer promotion and involuntary retirement systems for the different branches of Service. Although it incorporated all the systems in one piece of legislation, the Act was a product of separate Service planning and policies, and its Army and Air Force program was different from that of the Navy and Marine Corps. The principal involuntary retirement provisions of the Officer Personnel Act were:

<u>Pay Grade</u>	<u>Army and Air Force</u>	<u>Navy and Marine Corps</u>
0-10, 0-9	Retired after 5 years in grade or 35 years of service, but retirement may be deferred to age 64.	Retired after 5 years in grade and 35 years of service, unless selected for continuation.
0-8	Retired after 5 years in grade or 35 years of service, but retirement may be deferred to age 60.	Retired after 5 years in grade and 35 years of service, unless selected for continuation.
0-7	Retired after 5 years in grade or 30 years of service, but retirement may be deferred to age 60.	Rear admiral (lower half) retired after 5 years in grade and 35 years of service unless selected for continuation; brigadier general, USMC retired after second failure of selection for promotion.
0-6	Retired after 5 years in grade or 30 years of service.	Retired after 30 years of service if twice failed selection for promotion, or after 31 years if not twice failed.
0-5	Retired after 28 years of service.	Retired after 26 years of service if twice failed selection for promotion.
0-4, 0-3, 0-2, 0-1	When twice passed over for promotion: Retired if with 20 or more years of service; retained to complete 20 years and then retired if within 2 years of 20-year point; eliminated with severance pay if less than 18 years of service.	Grade 0-4 retired after 20 years of service if twice failed selection for promotion; other grades eliminated with severance pay if twice failed.

In the Defense Officer Personnel Management Act DOPMA, adopted December 12, 1980 (Pub. L. 96-513, 94 Stat. 2835 et seq.), Congress, after some thirty years of experience with these involuntary retirement and force-management provisions and believing that the apparent

differences in the treatment accorded officers in different branches of service did not, in fact, reflect "actual management needs," set out to provide unified retirement authority in an effort to make the career expectations of members more "clearly defined and uniform...across the Services."⁵ The principal provisions of the Act relating to involuntary retirement or release from active duty are as follows:

<u>Pay Grade</u>	<u>Retirement Provisions</u>
0-10, 0-9	Retired at age 62 unless selected by the President for continuation on active duty, in which case retirement may be deferred, but not past age 64.
0-8	Unless specially selected for continuation, retired after five years in grade or upon completion of 35 years of active commissioned service, whichever is later.
0-7	Unless specially selected for continuation or on a list of officers recommended for promotion, retired after five years in grade or upon completion of 30 years of active commissioned service, whichever is later.
0-6	Unless specially selected for continuation or on a list of officers recommended for promotion, retired after 30 years of active commissioned service.
0-5	Unless specially selected for continuation or on a list of officers recommended for promotion, retired after 28 years of active commissioned service.
0-4, 0-3	If eligible for retirement, retired after having twice failed selection for promotion to the next higher grade, unless specially selected for continuation on active duty. If not eligible for retirement, continued on active duty if within two years of becoming eligible for retirement and retired when eligible, otherwise discharged with entitlement to separation pay if eligible therefor, unless specially selected for continuation on active duty. An officer in paygrade 0-4 who is selected for continuation may not be continued on active duty beyond completion of 24 years of active commissioned service unless promoted to the next higher grade; a similar officer in paygrade 0-3 may not be continued beyond completion of 20 years of active commissioned service unless promoted to the next higher grade.

- 0-2 If eligible for retirement, retired after having twice failed selection for promotion to the next higher paygrade; if not eligible for retirement, continued on active duty if within two years of becoming eligible for retirement and retired when eligible, otherwise discharged with entitlement to separation pay if eligible therefor.
- 0-1 May be discharged at any time if less than five years of active commissioned service or if found not qualified for promotion to the next higher paygrade.

In addition to the above, officers in paygrades 0-8, 0-7, and 0-6 who have at least four years in grade and are not on a list recommended for promotion, together with officers in paygrade 0-5 who have twice failed selection for promotion to the next higher paygrade, may be considered for selective early retirement and, if selected therefor, are retired either immediately or as soon as they become eligible.⁶ Officers in paygrades 0-8 through 0-5 who are selected for continuation on active duty may not be so continued for more than five years or beyond the time they reach age 62, whichever occurs first.⁷

The Warrant Officer Act of 1954 (Pub. L. 83-379, 68 Stat. 157) established separate retirement rules for warrant officers, including commissioned warrant officers. Under the Act, a warrant officer could be retired at his own request after 20 years of active service and was required to be retired at age 62 or upon completion of 30 years of active service, whichever occurred first. Retired pay for warrant officers under the Act was computed at the standard rate of 2.5 percent times years-of-service, not to exceed 75 percent.

2. Enlisted Members. Legislative history of non-disability retirement for enlisted personnel is much shorter than for officers. This results primarily from the fact that the objectives of involuntary retirement improved efficiency, a young and able force, promotion opportunity--can be achieved for the enlisted force by an administrative policy of judicious non-acceptance of reenlistments. Thus, statutory involuntary retirement authority is not needed for enlisted personnel, and none has ever been provided.

The Act of February 14, 1885 (23 Stat. 305) was the first enlisted non-disability retirement law. It authorized the voluntary retirement, at the discretion of the Secretary concerned, of Army and Marine Corps enlisted personnel after 30 years of service. Retired pay for such personnel was fixed at 75 percent of the active duty pay of an affected member, plus an allowance in lieu of quarters, fuel and light. The 30-year retirement privilege was extended to enlisted personnel of the Navy by the Act of March 3, 1899 (30 Stat. 1007). The Act of March 2, 1907 (34 Stat. 1217) consolidated the 30-year voluntary retirement authority of the enlisted personnel of all branches of Service into one statute.

The Act of August 29, 1916 (Pub. L. 64-241, 39 Stat. 558) created the Fleet Naval Reserve to provide a pool of experienced personnel who could be recalled to active duty on short notice in time of war or emergency. While there are technical differences between the Fleet Naval Reserve, now divided into separate entities named the Fleet Reserve and the Fleet Marine Corps Reserve, and the retired list, and though the pay received by Fleet Reserve members is known as "retainer" rather than "retired" pay, transfers to the Fleet Reserve are essentially the same as retirements. The 1916 Act permitted enlisted personnel of the Navy and Marine Corps to voluntarily transfer to the Fleet Reserve after 16 or more years of active service. Those with between 16 and 20 years of service were entitled to retainer pay equal to one-third of their base and longevity pay. Those with 20 or more years were entitled to one-half of their base base and longevity pay.

The Naval Reserve Act of 1925 (Pub. L. 68-512, 43 Stat. 1080) fixed the minimum length of active service required for transfer to the Fleet Reserve at 20 years.⁸ The retainer pay formula of 20-year transfers was continued at one-half of base and longevity pay. The Naval Reserve Act of 1938 (Pub. L. 75-732, 52 Stat. 1175) authorized a 10 percent increase in retainer pay for personnel whose conduct marks had averaged 95 percent during their terms of active service. The Act of August 10, 1946 (Pub. L. 79-720, 60 Stat. 997), changed the retainer pay formula to the standard rate of 2.5 percent times years of service, up to a maximum of 75 percent, and eliminated the extra 10 percent for good conduct.

The Act of October 6, 1945 (Pub. L. 79-190, 59 Stat. 539) authorized the voluntary retirement and transfer to the Reserve of Army enlisted personnel with at least 20 but not more than 29 years of active service, with monthly retired pay to be computed at 2.5 percent of the last 6-month's average monthly pay times the number of years of service, up to a maximum of 29 years. As is readily apparent, this formula deviated from the "standard" in two ways - it used an average pay rather than terminal pay as its base, and the highest multiple it allowed was 72.5 percent instead of 75 percent (since only 29 years of service could be used in the computation). The Act of August 10, 1946 (Pub. L. 79-720, 60 Stat. 996) rectified this situation by permitting retirements up to the 30-year point and by providing for the computation of retired pay under the standard formula.

Before adoption of the Military Personnel and Compensation Amendments of 1980 (Pub. L. 96-343, 94 Stat. 1128-1129), only regular enlisted members of the Army and Air Force could retire with immediate entitlement to retired pay after completion of twenty or more years of active service. While Army and Air Force Reserve enlisted members could, in fact, retire upon completion of twenty years of active service, they were not, under preexisting law, eligible to receive retired pay until they reached 60 years of age; in contrast to retired enlisted members of the Navy and Marine Corps Reserve components, who could retire after twenty years of active service with immediate entitlement to retired

pay. To remedy this disparity in treatment, and to insure that there were no unnecessary disincentives to enlisted service in the Army and Air Force Reserve, Congress, in the 1980 Military Personnel and Compensation Amendments, authorized twenty-year retirement with immediate entitlement to retired pay, for Army and Air Force Reserve enlisted members.⁹

3. Retired/Retainer Pay Computations. The Department of Defense Authorization Act of 1981 (Pub. L. 96342, 94 Stat. 1100-1102) affected the first major change in the computation of retired or retainer pay entitlements since uniform voluntary retirement authority was adopted for officers of all branches of Service in the Army and Air Force Vitalization and Retirement Equalization Act of 1948. Under the 1981 Act, the retired or retainer pay of any member of an armed force who first became a member on or after the date of enactment of the Act¹⁰ is computed on the basis of the member's "monthly retired pay base," or "monthly retainer pay base," as applicable, instead of on the basis of the member's terminal basic pay. In practice, a member's monthly retired or retainer pay base is, in turn, an average of the member's highest three years of basic pay, as noted in the relevant Congressional Report:

The committee recommends this change because of the higher and increasing costs of military retired pay and because of the need to increase pay for military personnel while they serve on active duty instead of after their active duty careers are finished. The use of the highest three years pay instead of just terminal basic pay is the computation used for Federal Civil Service retirement and has been endorsed by the Interagency Committee, the Defense Manpower Commission, and the President's Commission on Military Compensation.¹¹

Personnel who were members of the armed forces before the date of enactment were excluded from the new computational method for determining retired or retainer pay entitlements in order to avoid changing the rules after they may have made career decisions on the basis of the preexisting retirement rules and out of concern that such a change could have an adverse effect on the retention of critical classes of personnel.

a. Recomputation. The subject of post-retirement adjustment to retired pay is an issue with major budgetary implications and has received considerable attention in recent years. The history of such adjustments dates to 1870. The Appropriation Acts of July 15, 1870, for the Army and Navy (16 Stat. 315 and 16 Stat. 321, respectively), enacted nine years after the first military retirement system had been created, included a pay raise for officers on the active list. The Act also provided for an adjustment in the retired pay of officers who were already retired based on the new active duty rates. The Navy Act was especially clear in this regard, stating that retired pay was to be based on "the highest pay prescribed in this Act for officers on the active list whose grade corresponds to the grade held by such retired officer." The adjustment of retired pay on the basis of new active duty pay rates has become known as "recomputation" of retired pay.

The Navy Appropriation Act of August 5, 1882 (22 Stat. 284), though it made no change in active duty pay rates, discontinued recomputation for retired Navy officers in these terms: "Hereafter there shall be no promotion or increase of pay in the retired list of the Navy but the rank and pay of officers on the retired list shall be the same that they are when such officers shall be retired." This provision was aimed primarily at preventing post-retirement promotions with attendant pay increases, but its language also had the effect of barring recomputation. Army and Marine Corps officers were not affected by this provision, nor were the enlisted personnel of any Service, including the Navy.

The Navy and Marine Corps Reorganization Act of March 3, 1899 (30 Stat. 1007), resulted in an increase in the active duty pay of Navy officers. The pay of retired Navy officers was not adjusted on the basis of these new rates however, because of the 1882 bar and a stipulation in the 1899 Act that, "nothing in the Act shall operate to increase or reduce the pay of any officer now on the retired list of the Navy."

Recomputation was restored to retired Navy officers by the next Navy pay bill, the Navy Appropriation Act of May 13, 1908 (Pub. L. 60-115, 35 Stat. 128). This Act provided that "the pay of all commissioned, warrant and appointed officers, and enlisted men of the Navy now on the retired list shall be based on the pay, herein provided for, of... officers and enlisted men of corresponding rank and service on the active list."

The Act of May 18, 1920 (Pub. L. 66-210, 41 Stat. 599) authorized a temporary increase in the active duty pay of all personnel "until the close of the fiscal year ending June 30, 1922, unless sooner amended or repealed," while at the same time providing that such "increases... shall not enter into the computation of the retired pay of officers or enlisted men who may be retired prior to July 1, 1922." Thus, not only did the Act bar computation on the basis of the new rates for personnel already on the retired list, it prohibited personnel retiring after the effective date of the Act, but before July 1, 1922, from computing their retired pay on the basis of the higher rates -- and thus despite the fact that such personnel had actually received such higher rates while on active duty. These prohibitions were presumably due to the stop-gap nature of the 1920 pay legislation, evidenced by a provision calling for the creation of a special committee of Congress to "make an investigation and report recommendations to their respective Houses not later than the first Monday in January, 1922, relative to the readjustment of the pay and allowances of the commissioned and enlisted personnel of the several services."

The recommendations of the special Congressional committee led to the Joint Service Pay Act of 1922 (Pub. L. 67-235, 42 Stat. 625), which authorized permanent increases in active duty pay rates. Enlisted personnel on the retired list were allowed to recompute their retired pay on the basis of the new rates, but officers were expressly

prohibited from doing so. This prohibition was removed by the Pay Equalization Act of 1926 (Pub. L. 69-204, 44 Stat. 417), which permitted officers retired before July 1, 1922, to prospectively recompute their retired pay on the basis of the active duty pay rates that had been prescribed effective that date; such officers were not, however, permitted to retroactively reclaim the benefits of recomputation for the period 1922-1926.

The recomputation principle was followed for both officer and enlisted personnel in each of the active duty pay raises that occurred between 1922 and 1949. The Career Compensation Act of 1949 (Pub. L. 81-351, 63 Stat. 802) permitted the pay of any retired member to be computed under the higher basic pay rates it established, but it also gave personnel retired before October 1, 1949 an option that resulted in an election by many such members, particularly officers retired for disability, to forego recomputation. Officers were entitled to disability retired pay of 75 percent of their active duty pay until the disability retirement system was revised by the Career Compensation Act. Under the revised system, they were entitled to retired pay computed by multiplying the basic pay of their grade by either their percentage of disability or their years of active service, up to a ceiling of 75 percent. Those retired before October 1, 1949, could choose to have their retired pay recomputed under the "new" pay rates using the revised method of computation, or to continue to receive 75 percent of the "old" rates. Members with a 50 percent disability and 20 years of service, for example, had a choice between 50 percent of the new rates or 75 percent of the old rates. As it worked out, 60 percent of the new rates was, as a general rule, slightly greater than 75 percent of the old rates. Thus, it took a disability rating of about 60 percent or higher, or at least 24 years of service, to make recomputation advantageous. Many retired members had neither this degree of disability nor length of service; hence, they elected to remain under the pre-October 1949 pay rates and method of computation. Personnel who made such an election were prohibited from having their retired pay recomputed under the subsequent military pay raises of 1952 and 1955, even though recomputation generally was authorized under those pay bills.

b. Cost-of-Living Adjustments. The Act of May 20, 1958 (Pub. L. 85-422, 72 Stat. 122) increased active duty basic pay rates, but prohibited recomputation of retired pay on the basis of the new rates. Instead, it provided for a 6 percent cost-of-living increase in retired pay. It is clear from the legislative history of the Act that Congress had not, at this point, determined whether recomputation should be abandoned permanently or whether it should merely be suspended for this particular piece of legislation. The added cost of recomputation played a major part in its prohibition in the 1958 Act. As explained by the House Armed Services Committee:

A major departure from the Department of Defense proposal lies in the treatment of retired personnel. The Cordiner Group recommended that pay of all retired personnel should

be recomputed on the basis of the net pay scales. The Department of Defense proposal recommended that retired personnel should receive no increase in retired pay. The Committee has taken the middle ground. The cost factor involved, approximately \$65 million, precluded the adoption of the Cordiner Committee recommendation. On the other hand, the Committee felt strongly that the advance in the cost of living has created conditions of hardship which require some measure of relief. Therefore, H.R. 11470 includes an increase of six percent to all personnel retired prior to the effective date of proposed legislation, at a cost of a little over \$35 million.¹²

The Chairman of the Senate Armed Services Subcommittee that handled the pay legislation sounded a similar theme when he introduced the bill in the Senate:

The only reason for changing the present systems of including all retired personnel, at whatever increase was applied to the corresponding rank in the active service, was the question of where to put the money so that it would do the most good, and also the question of the future soundness of the retirement program.¹³

The Uniformed Services Pay Act of 1963 (Pub. L. 88-132, 77 Stat. 210) replaced the recomputation system in permanent law with a method of retired pay adjustment based on increases in the cost of living as measured by the Consumer Price Index (CPI). The permanent shift from a recomputation to a cost-of-living method of adjustment was explained in these terms:

The Committee on Armed Services recognizes the tradition that has attached itself in the past to the method of recomputing retired pay whenever the rates of basic pay for members on active duty are changed. It was not easy in 1958, and it is not easy now, to recommend this break with tradition. Nevertheless, the break was made in 1958 when recomputation of retired pay based on changes in active duty pay rates was not authorized.

The Committee on Armed Services fully realizes the obligation we have to those now retired who have served their Nation. But the committee also recognizes its obligation to those now serving and those who will enter on active duty in the future. The committee cannot disregard the already heavy cost involved in military retirement or the substantial added costs which would result if recomputation were to be retained as a part of the military retirement system.¹⁴

The adjustment method adopted in the 1963 Act required a determination in January of each year of the percentage increase in the CPI, as measured by the annual average of that index for the year. If the increase was three percent or more, retired pay was to be increased by that percent on the first of April.

Despite the creation of the CPI adjustment mechanism and the formal abandonment of recomputation, the Act, in fact, authorized recomputation for two specific groups of retired personnel. Those retired before June 1, 1958, were permitted to recompute their retired pay on the basis of the active duty pay rates prescribed in 1958; and those retired between April 1 and October 1, 1963, were allowed to recompute on the basis of the new active duty pay rates that took effect October 1, 1963.

No retired pay adjustments resulted from the formula adopted in the 1963 Act. The Act of August 21, 1965 (Pub. L. 89-132, 79 Stat. 547), changed the adjustment mechanism to require a monthly determination of the percentage by which the CPI had increased over the base index used for the most recent adjustment of retired pay. When the CPI had increased by at least three percent over the base index and held at three percent or more for three consecutive months, retired pay was to be increased on the first day of the third month following the consecutive three-month period by the highest percent of the increase plus one percent. The one percent add-on was incorporated into the adjustment mechanism, starting with the November 1, 1969 cost-of-living increase by the Act of December 30, 1969 (Pub. L. 91-179, 83 Stat. 837) for the purpose of compensating for the loss of purchasing power during the time the CPI was building up to the three percent level and before the increase in the cost-of-living was actually reflected in higher retired pay. Public L. 91-93 of October 20, 1969 had authorized a similar one percent add-on in Federal Civil Service annuities, and the add-on had been effect for the cost-of-living increase that occurred in Civil Service annuities on November 1, 1969. Section 801, the Act of July 14, 1976 (Pub. L. 94-361, 90 Stat. 923) eliminated the one percent add-on to Service retired pay, contingent upon repeal of the similar one percent add-on for Civil Service retirees. The Act of October 1, 1976 (Pub. L. 94-440, 90 Stat. 1462) amended the preexisting adjustment mechanism by providing that retired and retainer pay was to be adjusted twice yearly -- on March 1st and September 1st -- by the percentage increase in the index, rounded to the nearest 1/10 of one percent, on the preceding January 1st and July 1st, respectively. In 1980, Congress, in the Department of Defense Authorization Act for 1981 (Pub. L. 96-342, 94 Stat. 1098-1099), further amended the adjustment mechanism by deferring the adjustment that would otherwise have taken place in September 1980 and by providing, in effect, that future adjustments should be made only once a year, at the same time Civil Service retirement annuities were adjusted pursuant to 5 U.S.C. 8340(b), and by the same amount.

In August 1982, Public Law 97-253 created a three-year temporary deviation to the calculation and timing of cost-of-living increases. In fiscal years 1983, 1984 and 1985, increases will occur in

April, May and June, respectively. Full cost-of-living increases will still be calculated as before. However, instead of full cost-of-living increases in FY83 and FY85, non-disabled retirees under age sixty-two will receive 3.3%, plus the total amount that the full cost-of-living increase exceeds 6.6%. In FY84, non-disabled retirees under a age sixty-two will receive 3.6%, plus the total amount that the full cost-of-living increase exceeds 7.2%.

B. RESERVE COMPONENTS (TITLE III). Title III of the Army and Air Force Vitalization and Retirement Equalization Act of June 29, 1948 (Pub. L. 800-810, 62 Stat. 1087) created a non-disability retirement program for reserve personnel. The House Armed Services Committee expressed the purpose of the program in these terms:

The underlying purpose in writing this policy as to Reserve components into law that the retirement benefits will furnish an incentive that will hold men in the Reserve Components for a longer period of time. It was stressed by practically every witness who testified on this feature of the bill that the most desirable type of Reserve was a reserve of men with accumulated training. It was also pointed out that the direct monetary emoluments payable to Reserve officers and men were so small that in many instances as the men grew older, became married, and took on family obligations, unless an additional incentive were offered them, they would drop their Reserve training. The reason for this policy is that we now realize that in the chaotic, explosive, and small world in which we live we must have a relatively large group of Reserves, well trained, and able to render help at once in the event of an emergency. We are hoping that the provisions offered in this bill, which to many of us seem liberal, will be an incentive well worth working for. The result should be longer periods of service by Reserves and a larger and better trained force on M-day, should we be so unfortunate as to have another M-day.¹⁵

There have been a number of modifications to the Reserve Components retirement system since 1948, but the purpose of these is more remedial than substantive. The first of the amendatory actions, the Act of August 21, 1958 (Pub. L. 85-704, 72 Stat. 702), allowed a person who was a member of the Reserves before August 16, 1945, to fulfill the active-duty-in-time-of-war reserve retired pay eligibility requirement through active service during the Korean conflict (from June 27, 1950, through July 27, 1953).

The Act of August 25, 1959 (Pub. L. 86-197, 73 Stat. 425) allowed credit in the reserve retired pay system for continuous service in the Federally-recognized National Guard between June 15, 1933, and the date of a member's appointment or enlistment in the National Guard of the United States.

The Act of October 14, 1966 (Pub. L. 89-652, 80 Stat. 902) recognized the complexity and error-prone nature of the Reserve Components retirement point system by requiring that each person who completed 20 years of satisfactory Federal service to be notified of his retired pay eligibility within one year after completing that service. Once such notification was given, or after retired pay was awarded, the person's eligibility could not be revoked on the basis of error, miscalculation, misinformation or administrative determination of years of service, unless such eligibility determination had been based on fraud or misrepresentation of the person concerned. (The amount of the pay may be adjusted on the basis of corrected information, but retired pay eligibility remains in force even if the person would not otherwise be eligible.)

The Act of August 13, 1968 (Pub. L. 90-485, 82 Stat. 751) makes the uniform-retirement-date rule inapplicable to reserve retired pay. The Uniform Retirement Date Act (5 U.S.C. 8301) generally provides that retirement authorized by statute is not effective until the first day of the month following the month in which retirement would otherwise occur.

II. DISABILITY. The practice of providing for special compensation to be paid to persons disabled while performing military service can be traced to some of the earliest enactments of the Federal Congress.¹⁶ The Act of April 30, 1790 (1 Stat. 121), for example, allowed the placement of disabled military personnel on a "list of invalids of the United States." While on this "invalid," or pension, list, officers could receive up to onehalf of their "pay," and enlisted personnel could receive up to \$5 a month for life. This system continued to be the sole means by which disabled military personnel who left active service could be compensated until 1855. While the system gave disabled members some financial security, it did not allow the military Services to purge their active lists of physically unfit members; the choice of staying or leaving rested with the individual.

The Act of February 28, 1855 (10 Stat. 616), was the first law to grant any Service involuntary separation authority. It permitted the Secretary of the Navy to convene examining boards to determine the capability of officers to "perform their whole duty both ashore and afloat," and to remove any officer not capable of such performance. Officers removed from active duty under this authority were to be placed on a "reserved list" with either leave-of-absence pay (approximately 75 percent of sea-duty pay) or furlough pay (50 percent of leave-of-absence pay), unless it was also determined that the officer was himself to blame for the incapacity, in which event he was to be dropped from the rolls without pay. The 1855 Act was not limited to separation for physical disability, as this excerpt from a report of the examining board makes clear:

.... An officer may possess a strong mind and a robust frame, yet, if his moral perception of right or wrong be so blunted and debased as to render him unreliable, he could hardly be ranked as the capable officer.¹⁷

The Act of August 3, 1861 (12 Stat. 287), established a military disability retirement system that covered regular officers of all branches of Service. The basic principles of this system continued to govern disability retirements until a substantially revised system was introduced in the Career Compensation Act of 1949 (Pub. L. 81-351, 63, Stat. 802). The 1861 Act permitted a board of officers, with powers analogous to a court of inquiry or court-martial, to be convened to determine "the facts as to the nature and occasion of the disability of such officers as appear disabled " and to report whether "the incapacity resulted from long and faithful service, from wounds or injury received in the line of duty, from sickness or exposure therein, or from any other incident of service."

The Army's ability to make full use of the disability retirement system was hampered by a provision of the 1861 Act that limited the number of officers on its retired list to seven percent of those on active duty. No limit was ever placed on Navy or Marine Corps retired lists. The seven-percent limit was changed to a numerical ceiling of 300 by the Act of July 15, 1870 (16 Stat. 315) and raised to 400 by the Act of June 18, 1878 (20 Stat. 150). The Act of March 3, 1883 (22 Stat. 456) divided the Army retired list into "unlimited" and "limited" categories. But, only those retired because they had reached the mandatory retirement age of 64 could be assigned to the unlimited list. Disability retirees, along with those retiring voluntarily, had to go to the limited list and, therefore, remained subject to the 400-man ceiling. The Act of February 16, 1891 (20 Stat. 763) reduced the limited list ceiling to 350 but permitted the transfer of disability retirees from the limited to the unlimited list when they reached age 64. The retired list ceiling continued to restrict disability retirements until, under the crushing weight of World War I casualties, the Act of September 17, 1919 (Pub. L. 66-49, 41 Stat. 286) allowed the placement of disability retirees on the unlimited retired list.

The Act of March 2, 1867 (14 Stat. 516) was the first law to authorize disability retirement for enlisted personnel. It provided that a disabled enlisted member of the Navy or Marine Corps with at least 20 years of service could be paid one-half of his active duty pay "in lieu of being provided a home in the naval asylum." Those with at least 10 years of honorable service were entitled to a pension "in a suitable amount for a specified time" at the discretion of the Secretary of the Navy. This 10-year pension authority survives in current law.¹⁸

The Appropriation Acts of July 15, 1870 for the Army and Navy (16 Stat. 315 and 16 Stat. 321, respectively) created an active duty salary system for officers and did away with commutations for rations. Since the existing retired pay formula was based, in part, on commuted rations, it had to be changed also. Disability pay was fixed at 75 percent of base and longevity pay of Army and Marine Corps officers, and at 50 percent of sea-duty pay for Navy officers. The Act of March 3, 1873 (17 Stat. 547) raised the Navy officer rate to 75 percent of sea-duty pay.

The next substantive change in the disability retirement system occurred in the Act of June 4, 1920 (Pub. L. 66-243, 41 Stat. 834), which made the officers of the Naval Reserve eligible for disability retirement on the same basis as regular officers. This provision, though repealed the following year, embodied a new principle. Until then, disabled non-regular officers had been compensated through the veterans' pension system rather than the military retirement system. Pardonably, the National Defence Act of 1920 (Pub. L. 66-242, 41 Stat. 778), enacted the same day as the Navy Act, provided for the integration of non-regular World War I officers into the Regular Army but expressly specified that, if they became disabled, officers so appointed would be eligible only for a pension and not for disability retirement or retired pay. The Act of May 19, 1926 (Pub. L. 69-245, 44 Stat. 564) amended the National Defense Act so as to entitle such officers to the same military disability retirement benefits as regular officers.

The short-lived Navy Act of 1920 had been a tentative step in the direction of placing non-regular officers under the military disability retirement system. The Emergency Officers' Retirement Act of 1928 (Pub. L. 70-506, 45 Stat. 735) took another step in the same direction. It required the establishment of an "emergency officers' retired list" in the Army, Navy and Marine Corps comprised of officers disabled during World War I, defined under the Act as the period from April 6, 1917 to July 2, 1921. Officers placed on the list with a disability rating of 30 percent or more were entitled to "retirement" pay of 75 percent of their terminal active duty base and longevity pay. The emergency officer program was a mixture of the military retirement and veterans' pension systems. The military Services had to make disability determinations and place officers on the emergency retired list. Moreover, the "retirement" pay entitlement of such officers was the same as the "retired" pay entitlement of corresponding regular officers rather than the disability rate fixed under the pension system. On the other hand, once an officer had been placed on the list, he was certified to the Veterans Bureau and paid from funds appropriated for the agency. Furthermore, an officer on the emergency officers' retired list did not hold a "retired status" -- that is, he was not subject to recall nor eligible for such benefits as medical care or commissary and exchange privileges. Over half of the officers on the list lost their eligibility and were removed as a result of economy measures taken during the Great Depression, particularly the Act of March 20, 1933 (Pub. L. 73-2, 48 Stat. 9), which designated November 11, 1918 in place of July 2, 1921 as the end of the World War I eligibility period.

The Emergency Officers' Retirement Act covered only a specific class of non-regular officers -- those disabled in World War I. Other disabled non-regular officers remained wholly under the veterans' pension system until a state of national emergency was declared and a buildup of military forces was begun preceding the entry of the United States into World War II. The Act of April 3, 1939 (Pub. L. 76-18, 53 Stat. 555), entitled disabled non-regular Army personnel to the same disability benefits provided for regular members. Executive Order 8099 of April 28, 1939

assigned responsibility for the administration and payment of such benefits to the Veterans Administration. Accordingly, non regular officers who were retired for disability under the 1939 Act were not placed on the Army retired list nor given a "retired status; rather, they were handled exactly like "emergency" officers. This procedure continued until the enactment of the Career Compensation Act of 1949.

The Act of August 27, 1940 (Pub. L. 76-775, 54 Stat. 864), entitled disabled non-regular Navy and Marine Corps officers to the same disability benefits provided for regular officers. Despite the similarity of this provision to that of the 1939 Army Act, no Executive Order was issued assigning responsibility for it to the Veterans Administration, as had been the case with non-regular Army personnel. Hence, disabled reserve officers of the Navy and Marine Corps were retired and placed on the retired list in the same manner as regular officers. They had the status of retired officers, remained subject to recall to active duty and were paid from Navy and Marine Corps appropriations.

The Act of June 30, 1941 (Pub. L. 77-140, 55 Stat. 394) was the first legislation to extend disability retirement to Army enlisted personnel. The Act allowed soldiers with 20 or more years of service to be retired for disability, with pay equal to 75 percent of their average monthly pay for the six months immediately prior to retirement. (The six-months' average base for computing this retired pay is worthy of note, as far as can be determined, Army enlisted personnel were the only category to whom an average-pay formula was ever applied before enactment of the Department of Defense Authorization Act of 1981 (Pub. L. 96-342, 94 Stat. 1100-1102).

The 1941 law was the last significant modification to the disability retirement system until its 1949 revision. At this point, the compensation authorized for disabled Service personnel had evolved into the following:

<u>Category</u>	<u>Army and Air Force</u>	<u>Navy and Marine Corps</u>
Regular Officers	Service disability retired pay-75% of base and longevity pay	Service disability pay-75% of base and longevity pay
Non-Regular Officers	Veterans Administration "retirement" pay-75% of base and longevity pay	Same as regular officers
Enlisted Personnel, 20 or more years' service	Service disability retired pay-75% of 6-months' average base and longevity pay	Service disability pay-50% of base and longevity pay

Enlisted Personnel,
less than 20 years'
service

Veterans Admini-
stration disability
compensation based on
degree of disability

Veterans Administration
disability compensation
based on degree of dis-
ability.

Allegations of unfairness, inequity and inefficiency in the existing disability retirement system became so extensive following World War II that a special subcommittee of the House Armed Services Committee, chaired by Representative Elston of Ohio, was impaneled to investigate them.¹⁹ The principal complaints against the system were:

- (1) the award of wholly tax-exempt retired pay of 75 percent of active duty pay to any officer retired for disability, regardless of its severity, was unduly generous and costly;
- (2) the system, especially the Army "emergency officer" procedure, discriminated against non regular officers as compared with regulars;
- (3) the system discriminated against enlisted personnel as compared with officers; and
- (4) the fact that retirement authority was limited to permanent disability tended to burden the active list with personnel retained solely for medical observation, and observation and evaluation of the permanency of a disability.

The recommendations of the "Elston" Committee and the Advisory Commission on Service Pay (the so-called "Hook" Commission), which met at about the same time, led to the revised disability retirement system adopted under the Career Compensation Act of 1949 (Pub. L. 81-351, 63 Stat. 802) in which most of the criticized features were changed. Under the new system, all disabilities had to be rated under the standard schedule of rating disabilities in use by the Veterans Administration, and resultant ratings became a factor in disability retired pay entitlement and the taxability thereof. The new system covered officer and enlisted personnel of both the regular forces and authorized temporary as well as permanent disability retirements. The disability retirement system in effect today is basically that adopted in 1949.

References

1. Promotion and Retirement, Hearings before the House Military Affairs Committee, Part I, 69th Congress, 2nd Session (1926) p. 207.
2. Appendix to the Secretary of the Navy's "Annual Report to the President for 1855."
3. Marine Corps officers received the same treatment as Army officers by virtue of a special linkage provision.
4. See Chapter I.A.1, "Basic Pay," above, for a discussion of sea and shore duty pay for Navy personnel.
5. House Report No. 96-1462, accompanying S. 1918, 96th Congress, 2d Session, pp. 48 and 52-53.
6. In adopting this provision, Congress indicated the selective retirement authority was "to be used sparingly and ... primarily as a means of reducing the number of officers in [the affected] grades when necessary to accommodate to such actions as a reduction in officer personnel strengths. These provisions are not intended to be used solely for the purpose of maintaining or improving promotion opportunity or timing." Senate Report No. 96-375, accompanying S. 1918, 96th Congress, 2d Session, p. 7. Also, see House Report No. 96-1462, accompanying S. 1918, 96th Congress, 2d Session, p. 53.
7. In addition to the changes to the retirement system outlined above, the Defense Officer Personnel Management Act established, subject to waiver only by the President, a three-year time-in-grade requirement for voluntary retirement; it explicitly provided that retired members of regular components of the Armed Forces may be recalled to active duty at any time.
8. In a savings provision, the 16-year retirement authority for personnel on active duty on July 1, 1925, was preserved.
9. Senate Report No. 96-424, accompanying H.R. 5168, 96th Congress, 1st Session, pp. 24-26.
10. The Department of Defense Authorization Act of 1981 was enacted September 8, 1980.
11. Senate Report No. 96-826 (Committee on Armed Services), accompanying H.R. 6974, 96th Congress, 2d Session, p. 130. Also see House Report No. 96-1222 (Committee of Conference), p. k98, and Senate Report No. 96-895 (Committee of Conference), accompanying H.R. 6974, 96th Congress, 2d Session, p. 94.
12. House Report No. 1538, accompanying H.R. 11470, 85th Congress, 2nd Session, p. 47.

13. Congressional Record 7612, April 29, 1958, 104.
14. House Report No. 208, accompanying H.R. 5555, 88th Congress, 1st Session, p. 19.
15. House Report No. 816, accompanying H.R. 2744, 80th Congress, 1st Session, p. 11.
16. This chapter is concerned mainly with special compensation for members of the Armed Forces separated from active service upon being found physically unable to perform the duties of their office or grade. It does not address the complementary body of law administered by the Veterans Administration providing compensation and other benefits to veterans who suffer a disability as a result of performing service.
17. Appendix to the Secretary of the Navy's "Annual Report to the President for 1855."
18. 10 U.S.C 6160.
19. "Investigation of the Disability Retirement Systems in the Armed Services," Hearings before the Legal Subcommittee of the House Armed Services Committee pursuant to H. Res. 141 and H. Res 447, 80th Congress, 2nd Session, 1948.

**APPENDIX B
STUDY BACKGROUND**



CAPT NORMAN A. MAYO, USN

STUDY BACKGROUND

A. HOOK COMMISSION, 1948.

1. Retirement Eligibility.

a. Officers.

- (1) At age 60 with 20 or more years of service.
- (2) At any age with 30 or more years of service.

b. Enlisted Members.

- (1) At age 50 with 20 or more years of service.
- (2) At any age with 30 or more years of service.
- (3) Service may allow retirement at 25 years of service as "needs of service."

2. Formula for Retired Pay. At a rate of 2.5 percent per year not to exceed 75% of basic pay.

3. Contributory. No.

4. Vesting. No, but with provision for severance pay for involuntary separation.

5. Severance Pay.

a. Years-of-Service 0-4. One-half month's basic pay times total years of active service.

b. Years-of-Service 5-9. 2.5 months' basic pay plus one month's basic pay times number of years of active service over 5.

c. Years-of-Service 10 and over. 7.5 months' basic pay plus 1.5 months' basic pay times number of years of service over 10, not to exceed 2 years' basic pay.

6. Social Security. No offset.

7. Transition and Save Pay. Five-year phase-in period from enactment, allowing member to elect either Hook plan or current Service retirement plan.

8. Adjustment Mechanism. None.

B. THE GORHAM REPORT/RANDALL PANEL, 1962.

1. Retirement Eligibility. No changes.
2. Formula for Retired Pay. No changes.
3. Contributory. No.
4. Vesting. No.
5. Severance Pay. No changes.
6. Social Security. No offset.
7. Transition and Save Pay. None.
8. Adustment Mechanism. Based on CPI.

C. FIRST QUADRENNIAL REVIEW OF MILITARY COMPENSATION, 1967.

1. Retirement Eligibility.

a. Step 1. Retire at 20 YOS with immediate annuity ranging from 24% at 20 YOS to 51% at 30 YOS.

b. Step 2. Annuity is paid based on inverse function (age 55 at 30 YOS to age 60 at 20 YOS) -- or when the age requirement is met after Step 1 retirement.

2. Formula for Retired Pay.

a. Step 1. Percentage of "high one" salary based on YOS 20 to 40.

b. Step 2. Increase retired pay up to 9% based on YOS and age by inverse function.

3. Contributory. Yes, 6.5% of "comparability salary."

4. Vesting. Yes, member is vested to the amount of contribution.

5. Severance Pay. Lump sum after 10 YOS. No formula specified.

6. Social Security. Integration formula needed to provide equal benefit to members with same time in service. Contribution to retirement to include social security. Retirement offset by 50% of social security benefit.

7. Transition and Save Pay. Five-year phase-in.

8. Adjustment Mechanism. Based on CPI.

D. INTERAGENCY COMMITTEE (IAC), 1971.

1. Retirement Eligibility. Reduced annuity for members retiring with less than 30 YOS (based on age and YOS); increased to full amount when member attains age threshold.

2. Formula for Retired Pay. Through year 24, 2.5%; three percent per year for years 25-30, two percent per year for years 31-35. Max: 88% of HI-3 basic pay.

Reduction: A 2% reduction in retired pay for each year under the age threshold of age 60 for 20-24 YOS, or age 55 for 25 or more YOS. Reduction is lifted when member reaches age threshold. Example: for retirement with 20 YOS at age 42, "normal" retired pay is reduced by 36% (2% times 18 years under the age 60 threshold); the reduction is lifted at age 60.

3. Contributory. No.

4. Vesting. Yes, at 10 YOS; deferred annuity age 60 or lump sum.

5. Severance Pay. Lump sum over 5 YOS (5% of final basic pay times YOS) for involuntary separation, officer and enlisted personnel.

6. Social Security. Yes, 50% offset at age 60.

7. Transition and Save Pay. Transition accomplished within 10 pay raises following implementation.

8. Adjustment Mechanism. CPI.

E. RETIREMENT MODERNIZATION ACT (RMA), 1972.

1. Retirement Eligibility. Reduced annuity for members retiring with less than 30 YOS (two-step annuity); increased to full amount when member would have attained 30 YOS.

2. Formula for Retired Pay. At 2.5% per year through year 24; three percent per year for years 25-30. Max: 78% of HI-1 basic pay.

Reduction: For retirements with less than 30 YOS, multiplier is reduced 15 percentage points. Reduction is lifted at point where member would have attained 30 YOS. Example: for retirement with 20 YOS, the "normal" 50% multiplier is reduced to 35% initially; increased to 50% ten years after retirement. Maximum: 80% of HI-3 basic pay when attain 30-year retirement.

3. Contributory. No.

4. Vesting. At 10 YOS; provides deferred annuity age 60.

5. Severance Pay. Vests after five YOS. Deferred annuity starting at age 60, plus one lump-sum readjustment payment; or two lump-sum payments (one for equity and one for readjustment).

6. Social Security. Yes, 50% offset when old age annuity received.

7. Transition and Save Pay. Based on number of years under new system before 20 YOS.

8. Adjustment Mechanism. CPI.

F. THIRD QUADRENNIAL REVIEW OF MILITARY COMPENSATION, 1975-76.

1. Retirement Eligibility. Reduced annuity for members retiring with less than 30 YOS (two-step annuity); increased to full amount when member would have attained 30 YOS.

2. Formula for Retired Pay. At 2.5% per year through year 24; three percent per year for years 25-30. Max: 78% of Hi-1 basic pay.

Reduction: For retirements with less than 30 YOS, multiplier is reduced 15 percentage points. Reduction is lifted at point where member would have attained 30 YOS. Example: for retirement with 20 YOS, the "normal" 50% multiplier is reduced to 35% initially; increased to 50% ten years after retirement.

3. Contributory. No.

4. Vesting. At 10 YOS; provides deferred annuity age 60.

5. Severance Pay. Vests after five YOS. Deferred annuity starting age 60 plus lump-sum readjustment payment; or two lump-sum payments (one for equity and one for readjustment).

6. Social Security. None.

7. Transition and Save Pay. Based on number of years under new system before 20 YOS.

8. Adjustment Mechanism. CPI.

G. DEFENSE MANPOWER COMMISSION (DMC), 1975-76.

1. Retirement Eligibility. Between 20-30 YOS based on time in combat or non-combat jobs (1.5 credits for each year in combat job, one point per year in non-combat job).

2. Formula for Retired Pay.

a. Maximum: 80% of HI-3 basic pay when attain 30 retirement points; two and two thirds percent per retirement point.

b. Reduction: Permanent actuarial reduction in retired pay for member who retires with 30 points and elects to receive retired pay prior to the 30-year point.

3. Contributory. No.

4. Vesting. At 10 YOS; deferred annuity age 60.

5. Severance Pay. Lump sum over 10 YOS for involuntary separation, officer and enlisted personnel.

6. Social Security. No offset. Formula for retired pay should consider social security benefit.

7. Transition and Save Pay. Changes would be prospective; would not apply to those already in the Service.

8. Adjustment Mechanism. CPI.

H. ASPIN RETIREMENT PROPOSAL, 1976. Congressman Aspin introduced a bill in the 94th Congress, 2d Session, to reform the Service retired pay system and subsequently released a study conducted by his staff. It would have changed the Uniformed Services retirement system to a civilian-type old-age pension; no retired pay until 55-60 years of age for voluntary retirement and an annuity reduction based on second-career income.

1. Retirement Eligibility. Voluntary retirement at age 55 with 30 or more years of service; age 60 with 20-29 years of service.

2. Formula for Retired Pay.

a. 1.5% for 1-5 years, 1.75% for years 6-10, and 2% for 20 over 10 years.

b. Based on highest 3-years' average of Regular Military Compensation (RMC).

c. Voluntary. No retired pay until:

(1) age 62 with 5-19 years of service,

(2) age 60 with 20-29 years of service, or

(3) age 55 with 30 or more years of service.

d. Involuntary. Immediate annuity reduced by one dollar for each two dollars of other earnings until age threshold.

3. Contributory. No.

4. Vesting. Vests after 5 years based on rules above.

5. Severance Pay. None.

6. Social Security. No offset.

7. Transition and Save Pay. Based on number of years under new system before 20 YOS.

8. Adjustment Mechanism. CPI with minor changes.

I. PRESIDENT'S COMMISSION ON MILITARY COMPENSATION (PCMC), 1978.

1. Retirement Eligibility. Based upon age and YOS.
2. Formula for Retired Pay.
 - a. 2% for 1-5 YOS, 2.25% for 6-10 YOS, and 2.75% for 11-35 YOS.
 - b. Maximum. 90% of HI-3 basic pay in past 10 YOS. Member can convert a portion of retirement account to current income; when leaving active duty, member can opt for deferred or accelerated receipt of vested amount.
3. Contributory. No.
4. Vesting. At 10 YOS.
5. Severance Pay. After 5 YOS for involuntary separation, officer and enlisted personnel.
6. Social Security. Varying offset based on YOS (25%-37.5%) to begin at 62 or 65.
7. Transition and Save Pay. With 5 or more YOS may retire under old rules.
8. Adjustment Mechanism. CPI.

J. UNIFORMED SERVICES RETIREMENT BENEFITS ACT (USRBA), 1979.

1. Retirement Eligibility. Two-tier EARLY WITHDRAWAL system.
2. Formula for Retired Pay. First tier at completion of 20 YOS, second tier begins at age 60; vested to all members completing 10+ YOS (but 20-25% reduction for 20-year career compared to current system and 10-15% reduction for 30-year career, depending on grade). Maximum: 76.25% of HI-2 basic pay.
3. Contributory. No.
4. Vesting. At 10 YOS.
5. Severance Pay. Severance pay after 5 YOS for involuntary separation, officer and enlisted personnel.
6. Social Security. Varying offset based on YOS to begin at 62 or 65.
7. Transition and Save Pay. Members on active duty on date of enactment have choice of old or new system.
8. Adjustment Mechanism. CPI.

K. PRESIDENT'S PRIVATE SECTOR SURVEY ON COST CONTROL (GRACE COMMISSION)
TASK FORCE ON DEPARTMENT OF THE AIR FORCE, 1983.

1. Retirement Eligibility.

- a. Immediate annuity available only after 30 years of service.
- b. Deferred annuity payable at age 60 for 20-29 years of service.

2. Formula for Retired Pay.

- a. 1.3% of HI-3 average Basic Military Compensation (BMC) per year of service.
- b. Maximum: 39% of HI-3.

3. Contributory. No.

4. Vesting. No.

5. Severance Pay. No change.

6. Social Security. No offset.

7. Transition and Save Pay.

a. Persons in Service at implementation receive 2.5% of basic pay for prior service; 1.3% BMC for subsequent years.

b. Persons over 10 YOS retain right to immediate annuity at 20 YOS.

8. Adjustment Mechanism. None.

L. PRESIDENT'S PRIVATE SECTOR SURVEY ON COST CONTROL (GRACE COMMISSION)
TASK FORCE ON OFFICE OF SECRETARY OF DEFENSE, 1983.

1. Alternative 1 (OSD 23B). Current system retained but offset one dollar of retired pay for every two dollars earned in retirement above 2/3 of Service retired pay for persons under age 62. Four-year stepped transition from one-for-four to one-for-two. Replaces dual compensation restrictions. 37.5% maximum social security integration (1.25% per year for 20 to 30 YOS).

2. Alternative 2 (OSD 24A).

a. Retirement Eligibility. No changes.

b. Formula for Retired Pay.

(1) 2.5% for each year of service; maximum: 75% of HI-3 average basic pay.

(2) Reduce retiree annuity of those leaving before 30 YOS at 0.5% per month.

c. Contribution. No.

d. Vesting. Yes, at 12 YOS with annuity payable at age 65, or as early as age 55 but reduced by 0.5% per month short of age 65.

e. Severance Pay. None for persons over 12 YOS.

f. Social Security. Maximum offset of 37.5% (1.25% per year).

g. Transition and Save Pay. All persons over 12 YOS remain under current system, all others on new system.

h. Adjustment Mechanism. CPI at start of immediate annuity, but not until age 55 for deferred benefit from 12-19 years early vesting.

**APPENDIX C
COMPARISON TO FOREIGN MILITARY SYSTEMS**



**MOBILIZATION CONCEPTS DEVELOPMENT CENTER
NATIONAL DEFENSE UNIVERSITY
COL ROBERT R. RUMPH, USA
CDR HARDY L. MERRITT, USNR**

EXECUTIVE SUMMARY

This report has been prepared in response to a memorandum from the Director, Joint Staff (DJSM 486-83 of 31 March 1983) requesting that the Mobilization Concepts Development Center of the National Defense University analyze the military retirement systems of six nations in contrast to that of the United States. The memorandum requested a comparative analysis of Australia, Canada, the Federal Republic of Germany, Japan, Great Britain, and the Netherlands for use by the Fifth Quadrennial Review of Military Compensation.

Objectives:

1. To provide a general discussion of military retirement in the context of total military commitments and country needs.
2. To determine the use and obligation of retirees as mobilization assets.
3. To compare retirement eligibility, value, and size.

Approach:

To attain these objectives, the following methods were employed:

1. Interviews with military attaches of the six countries.
2. Review of previous Quadrennial Reviews of Military Compensation.
3. Review of recent academic, professional and contractual research relating to foreign military retirement systems.

Conclusions:

1. The military retirement system of the United States is uniquely structured to provide manpower assets for national mobilization, unlike the comparison countries who do not maintain world-wide commitments.
2. Retired foreign military personnel, with the exception of the Federal Republic of Germany, are not mobilization assets.
3. The comparison countries are generally committed to a philosophy of democratic socialism in which military retirement is integrated into comprehensive state welfare programs, thus making comparisons of actual value extremely difficult.
4. Foreign military retirement systems are primarily designed to augment old-age pensions rather than to be multi-purposive; i.e., recruitment and retention incentives, deferred compensation, and current pay for mobilization recall.

5. There are minimal differences between the logic used in establishing eligibility requirements in the United States and in the comparison countries; however, specific details and compensation amounts vary widely.

Recommendations:

1. Conduct a sensitivity analysis of each system, including computation of both Present Value (PV) and discounted Expected Value (EV) in terms of equivalent U.S. dollars, to include the value of national welfare subsidies for military retirees.

2. Caveat any proposals for modifications of the U.S. military retirement system with the unique mobilization requirements of the "Total Force" manpower base.

TABLE OF CONTENTS

CHAPTER	PAGE
EXECUTIVE SUMMARY.....	C- 1
TABLE OF CONTENTS.....	C-iv
DISCLAIMER.....	C-vi
ACKNOWLEDGEMENTS.....	C-vi
I. COMPARATIVE ANALYSIS.....	C- 1
Introduction.....	C- 1
Retirement Systems and Strategic Relationships.....	C- 1
National Purpose of Military Retirement.....	C- 2
Mobilization and Other Post-Retirement Obligations.....	C- 3
Linkage to Active Force Management.....	C- 3
Retirement Eligibility, Value, and Community Size.....	C- 4
II. INDIVIDUAL ANALYSIS.....	C- 5
Introduction.....	C- 5
Australia.....	C- 5
Canada.....	C- 6
Federal Republic of Germany.....	C- 8
Japan.....	C- 9
United Kingdom.....	C-11
The Netherlands.....	C-12
III. DATA TABULATIONS.....	C-14
Introduction.....	C-14
Australia.....	C-15
Canada.....	C-18
Federal Republic of Germany.....	C-20
Japan.....	C-23
United Kingdom.....	C-25
The Netherlands.....	C-28
Summary of Foreign Military Non-Disability Retirement Systems....	C-30
APPENDIX A: Selected Bibliography.....	C-31
APPENDIX B: Points of Contact.....	C-32
ADDENDUM: The Soviet Union.....	C-35
Attachment 1. Comparsion of Military Compensation Systems.....	C-38

Disclaimer

The analyses and opinions expressed or implied herein are solely those of the authors. They do not necessarily represent the views of the National Defense University, the Joint Chiefs of Staff, the Department of Defense, or any other U.S. Government agency.

Acknowledgements

The authors are indebted to the Director and Staff of the Mobilization Concepts Development Center and the President of the National Defense University for their support of this research. The project could not have been completed by the requested deadline without the superb research assistance of Captain Vincent Davis, USNR-R, Commander Richard T. Pokryfka, USNR-R, and Lieutenant Commander Peter H. Dunn, USNR-R, who performed their annual active duty for training in support of the effort.

A COMPARATIVE EVALUATION OF SIX
FOREIGN MILITARY RETIREMENT SYSTEMS

PART I

COMPARATIVE ANALYSIS

Introduction

This study has been conducted in response to a request by the Director, Joint Staff (DJSM 486-83 of 31 March 1983) that the Mobilization Concepts Development Center (MCDC) of the National Defense University analyze the military retirement systems of six nations in contrast to the United States system in order to provide a multi-national perspective for the Fifth Quadrennial Review of Military Compensation (QRMC). The Operations Deputies have requested that the retirement systems of Australia, Canada, the Federal Republic of Germany, Japan, Great Britain, and the Netherlands be included in the study.

Specifically, the following topics were recommended for analysis as indicators of total military commitment and country needs:

- o National purpose of military retirement
- o Mobilization and other post-retirement obligations
- o Linkage of the retirement system to active force management
- o Retirement eligibility, value, and community size

Retirement Systems and Strategic Relationships

The striking observation, when comparing "the total military commitment and country needs" of the United States against the six other specified countries is that the United States is unique. The six share a number of characteristics from which the United States stands singularly apart, including:

- o The United States is the only country whose lack of preparedness would undermine the security of all others. Inadequate military preparation by the six other countries of this study could degrade but not terminally jeopardize overall Western security. Thus, the security of all depends heavily, directly and immediately upon American security readiness. In this regard, the United States has uniquely included military retirees as manpower assets for less than total mobilization planning.
- o Of the nations being compared, the United States has the strongest economy and one of the longest continuously stable political systems. As a result, most of the free world nations are dependent

upon the United States for their own military security. The United States is the one country most directly threatened in any challenge for worldwide supremacy. It is an unavoidable role and one which requires constant military preparedness. This strategic difference is reflected in the retirement plans of the six countries which minimize the use of retirees for mobilization.

- o The comparison countries are generally committed to a philosophy of democratic socialism, meaning comprehensive cradle-to-grave welfare programs for all citizens. American citizens, on the other hand, rely on private pension programs augmented by social security in their old age. Subsidized housing, childrens' allowances, etc., are not part of a typical American military retirement package. Therefore, the American military retirement system can be compared and contrasted to private retirement systems covering other Americans, but it cannot be legitimately compared to countries whose military retirement systems are augmented by subsidies from the various national welfare systems, unless a sensitivity analysis of each system is conducted. Such an analysis would require the computation of both Present Value (PV) and discounted Expected Value (EV) for each system in terms of equivalent U.S. dollars, a task well beyond the scope and time limitations of this study.

In summary, a comparison of the American system with the other six countries is extremely difficult. The United States has every reason to maintain maximum military strength and therefore requires a sizeable mobilization capability--including a high quality manpower base in the retired and reserve communities. Individual retirement provisions patterned after other countries will serve little purpose for the United States unless they address the pressing need to maintain the "Total Force" manpower base.

National Purpose of Military Retirement

The American retirement system, particularly after World War II, has been designed and redesigned to serve a multitude of purposes. These purposes include:

- o Incentives in recruitment, motivation and retention to maintain a large force of sufficient quality;
- o Deferred compensation for the risks and sacrifices inherent in a military career;
- o Pay for services rendered by virtue of being eligible for recall; and
- o Old-age pensions for those too elderly and/or infirm to be desired for recall or continuing work.

By contrast, the six comparison nations lack a worldwide mobilization commitment and maintain extensive retirement systems for the general public

t rough their various social welfare programs. They therefore tend to view their military retirement systems far more narrowly as elements of national old-age pension systems.

Mobilization and Other Post-Retirement Obligations

The three European countries (UK, FRG and The Netherlands)--because of their distinctive histories--tend to assume that any mobilization would be a total maximum effort in a major crisis for survival. In such a case, retirees would mobilize in the same manner as the general citizens. Each person would quickly be put to work doing whatever his/her background, age and geographic location made most appropriate. The 1982 British (UK) "Statement on the Defence Estimates, Volume 1", is a good example of this kind of logic, where it is stated:

We would therefore have to rely heavily on civil [including retired military] resources to mobilize our full national strengthWe must focus our attention on people exercising their normal skillsTime would not permit the re-training of volunteers, but in many cases their everyday skills could be put to good use.

On the other hand, the three non-European countries are primarily concerned with homeland defense, for the most part because of their geo-strategic locations. As a result, there is even less emphasis on post-retirement obligations.

In short, the comparison countries do not have extensive plans for using retired military personnel as mobilization assets. Rather, these personnel are assumed to have the same obligation as all other able-bodied civilians in a mobilization crisis, which is to step forward and volunteer for whatever they can usefully do.

Linkage to Active Force Management

Primary linkages of the retirement systems to active force management lie in the areas of recruitment, retention and organizational effectiveness. The majority of countries surveyed offer military retirement at an age significantly below that observed in other employment sectors. In each of the countries, early retirement is essential to the organizational well-being of the military for various reasons.

First, quality military personnel are characterized as both aggressive and dynamic. They desire to assume positions of increased responsibility within the organization and, if frustrated in this pursuit, will turn to better opportunities in the private sector. Second, the rigors of a military career mandate the involvement of younger personnel. Third, the on-going retirement/replacement cycle injects innovation and dynamism into the military organization.

Unlike the comparison nations, America must attract, train, and above all retain quality manpower in sufficient numbers to maintain its vast worldwide military commitments. The exodus of trained military personnel during economic upturns clearly indicates the presence of superior opportunities in private business for certain critical skills. To combat this, the military must continue to stress its two most noteworthy economic attractions, a stable income and an adequate retirement.

Retirement Eligibility, Value, and Community Size

All countries surveyed share the common problem of attracting and retaining quality personnel. The solutions to this problem differ in response to the unique circumstances of each particular country, such as the countries' orientation toward a social democratic form of government and their geo-strategic location. There are minimal differences between the logic used in establishing eligibility requirements in the USA and in the six other countries, although the specific details may and do vary widely. These details are highlighted in parts II, and III, as are community sizes.

Insofar as these countries are concerned with military retirement systems, it is within the much larger context of an escalating social welfare system. These are broad socio-economic and political issues, not focused military compensation questions. There is a far less clearcut distinction in these countries, as compared to the United States, between the public and private sectors.

In summary, the national government in each case normally guarantees adequate and fair retirement compensation and benefits for all public and private occupations. The precise definition of "adequate and fair" in the case of any given occupational or professional category is determined within the confines of the respective political processes.

PART II
INDIVIDUAL ANALYSIS

Introduction

This section discusses the individual military retirement systems of each selected country, concentrating on non-disability retirement, disability retirement, and reserve retirement. The analyses contain descriptive data obtained within CONUS from the military attaches of each country's embassy. As such, they provide a quick-look comparison highlighting the unique features of each system rather than an exhaustive econometric calculus of cost/benefit ratios. Such an effort, although most desirable, is beyond the precept of this paper.

Australia

Overview

Australian defense policy emphasizes the development of independent and, within resource constraints, increasingly self-reliant defense capabilities. The scope of activity of the Permanent Defence Force is generally limited to adjoining areas in which military deployments by a potentially unfriendly power could allow it to attack or harass Australia or its territories, the Maritime Resource Zone, and the nearer lines of communication. The Australian alliance with the United States under the ANZUS treaty gives substantial grounds for confidence that in the event of a fundamental threat to Australia's security, U.S. military support will be given. However, even though its security may be ultimately dependent upon U.S. support, Australia must be able to mount a substantial national defense effort. The all-volunteer Permanent Defence Force, the Defence Force Reserve, and increased defense expenditures are designed to accomplish this purpose.

The purpose of the Defence Force Reserve, which includes active and inactive personnel, is to contribute to the defense of Australia and its interests in times of defense emergency or war. The active reserves are those with current training obligations, while the inactive reserves are without training obligations. Plans for the reserve forces include a forward deployment mission in the event of mobilization. Normally, a declaration of war would be required prior to the commitment of reserves. There is no retirement plan for reservists, nor are there any recall provisions for retirees.

Non-Disability Retirement

The Australian Defense Force retirement system is delineated in the Defense Force Retirement and Death Benefits (DFRDB) Scheme. For service members retiring on or after 1 October 1972, retirement pay is payable to members who have completed 20 years or more of effective service. Benefits are identical for all branches of the Defense Force.

Retirement pay is calculated as a percentage of the member's annual salary at retirement based on the number of years of effective service. This varies from 35 percent for 20 years of service to 76.5 percent for 40 years of service. Pay is adjusted annually based on the CPI.

The retirement plan is contributory at the rate of 5.5 percent of current salary. Although members do not become vested in the conventional sense, certain officers who have not attained the notional retiring age designated for their rank may retire early. For them, retirement pay is reduced by 3% for each year that their age falls below the notional retiring age. The notional retiring ages for Army Officers (and equivalent ranks) are as follows: Major and below - 42; Lt. Colonel - 45; Colonel and Brigadier - 50, Major General - 52; Lt. General and General - 55.

For late entrant members who have served more than 15 years but less than 20 years and have attained the retiring age for their rank, the percentage varies from 30% for 15 years to 34% for 19 years. There is no vesting for members with less than 15 years service.

Medical care is not provided to retired members at service facilities. Separate contributory health care programs are available. Survivor benefits include five-eighths of the retirement pay for a surviving spouse.

All retired members in receipt of retirement pay may elect, within twelve months from date of retirement, to commute a portion of their retirement pay; that is, receive a lump sum pre-payment of a portion of future retirement pay. The maximum amount that a retired member may commute is four times the annual retirement pay applicable at the date of retirement. When a retired member commutes, the annual rate of retirement pay is reduced by an amount calculated by dividing the lump sum amount received by the retired member's life expectancy at the date the election is made. For example, if a retired male member is 50 years of age on the date his election is made and his lump sum advance is \$20,000 (i.e., annual retirement pay of \$5,000 x 4), his annual retirement pay would be reduced by \$864.68 (i.e., \$20,000 divided by 23.13 which is the average life expectancy of a male aged 50). Commutation does not reduce the pension which would otherwise be payable to a widow, widower, or children if such pensions become due.

Disability Retirement

Disability retirement pay is provided only for service connected disabilities actually occurring during war. Interestingly, commutation is not allowed for those members receiving a disability retirement. The reason for this is that, actuarially, the disabled retiree will not live long enough for the government to recover the lump sum pre-payment.

Reserve Retirement

There is no retirement plan for reservists.

Canada

Overview

The security policies of Canada closely parallel those of the United States. A member of NATO since its inception, Canada shares responsibility with the United States and other allies for the North Atlantic treaty area. Stemming from its membership in NATO, Canada has been an active participant in the Conference on Security and Cooperation and contributes forces to NATO commands in Europe.

U.S.-Canadian military forces have, since 1958, cooperated on continental air defense within the framework of the North American Air Defense Command (NORAD), an integrated, bilateral military command exercising operational control over U.S. and Canadian air defense forces and providing early warning information on possible air and missile attacks on the North American continent. Canada also works closely with the United States in areas of defense research and production.

Non-Disability Retirement

The Royal Canadian Military Retirement System is based upon three separate legislative acts. Two of these acts, the Canadian Forces Superannuation Act (CFSA) and the Supplementary Retirement Benefits Act (SRBA) apply to non-disability retirement. Under these acts, voluntary retirement is possible provided that at least 20 years of military service are completed. Under these conditions, the early retiree will receive a reduced pension until age 65. Mandatory retirement ages depend upon rank, branch of service and speciality.

Retirement pay is calculated at a rate of 2% of the average annual salary during the best consecutive six year period of pensionable service, not to exceed 35 years. In addition, a lump-sum severance pay is provided upon retirement at the rate of seven days per year not to exceed 210 days. Retirement pay is adjusted periodically in response to changes in the CPI. All annuities and severance payments are subject to taxes.

The retirement plan is contributory at the rate of 7 1/2% of current pay. Retirement becomes vested after 10 years of service. At that time, a retiree may opt for a deferred annuity to commence at age 60 in lieu of the return of his contributions.

Non-disability retirees receive no medical care and must switch upon retirement to commercial health plans at their own cost. Survivor benefits equal 50% of the husband's retirement pay.

Income earned during retirement results in no specific additional taxes or reductions in annuity. If the retiree is employed in the public sector, he has the option of drawing his annuity or crediting his military time toward the public service retirement plan.

Disability Retirement

Disability retirement is administered under provisions of the Pension Act and CFSA. Pensions paid under the Pension Act are not contributory, taxed or dependent on rank or length of service. Compensation rates vary according to the degree of disability found at periodic medical examinations. An additional pension is also provided for dependent children. Under provisions of CFSA, disability results in an immediate annuity if 10 or more years of service were completed. Otherwise, the retiree will receive the greater of a cash termination allowance or the return of his contributions.

Reserve Retirement

Military reservists do not participate in the retirement system. The reserves are perceived to be a local "National Guard." Canada does not intend to use reservists in an overseas or combat role.

Federal Republic Of Germany

Overview

The security policy of the Federal Republic of Germany (FRG) emphasizes the simultaneous pursuit of detente and maintenance of a strong defensive posture. The mission of the Federal Armed Forces is to act in consonance with other NATO forces to preserve or restore the integrity of the territory of the Federal Republic of Germany.

In view of its heavy industrialization and high population density, the Federal Republic of Germany is extremely vulnerable to any attack. About 30% of its population and 25% of its industrial capacity lie within 200 kilometers of neighboring Warsaw Pact states. Since a sustained battle within the territory of the FRG would be highly destructive, the principles of forward defense and rapid response are of vital importance to the Federal Armed Forces.

The Federal Armed Forces form the largest contingent of conventional NATO forces in Europe. They maintain an overall personnel strength of 495,000 which consists of approximately 13% regulars, 40% volunteers and 47% conscripts. In peacetime, the Army maintains operationally ready combat units which must be prepared to respond to surprise attack. The majority of Army units which rely on mobilization can reach operational status within three days.

The FRG relies on a total of 750,000 reservists in its national defense who comprise the bulk of the territorial army. Its mission is to secure rear echelon areas and provide logistical support to forward elements, thereby

ensuring maximum freedom of maneuver. Reservists additionally will augment active forces as necessary. Each year, approximately 185,000 reservists undergo retraining for short periods of time. Retired military personnel are considered a mobilization asset and are subject to recall in the event of national emergency until age 60.

Non-Disability Retirement

Only career military personnel are eligible for retirement. Long term volunteers who have not achieved career status must leave the service by age 40. To be eligible for retirement, career personnel must have served a minimum of 10 years and have reached the mandatory retirement age for the grade obtained. Voluntary early retirement is not permitted. Retirement pay is computed as a percentage of final base pay and duty station allowances. The percentage figure varies between 35% and 75% depending upon years of service. Duty station allowances are determined by rank, number of dependent children and use of on-base housing. Service members do not contribute to the retirement plan nor are there any provisions for vesting. Post-retirement employment results in income which is taxed at substantially higher rates.

Medical care is provided through private practitioners. The retiree is reimbursed for a certain percentage of these costs. Additional medical coverage may be obtained through supplemental health insurance at more favorable group rates. Survivors additionally receive 3000 DM to defray funeral expenses.

Disability Retirement

Disability retirement is computed at 75% of the total base pay and allowances at the highest longevity step of the last grade held. These benefits are fully taxable. The injury must be service related.

Reserve Retirement

Military reservists do not participate in the retirement system. They do, however, receive extensive compensation to offset up to 90% of any income lost while on active duty. In addition, if the reservist has a business, the government will pay for the personnel or expenses necessary to keep it in operation.

Japan

Overview

It is stipulated in the Self-Defense Forces Law of Japan that the primary mission of the SDF is the defense of Japan against direct or indirect aggression in order to maintain Japan's peace, independence, security, and to

maintain public order. The law strictly limits the scope of military operations and the authority of the SDF, placing it under the direction of the prime minister subject to the approval of the Diet.

According to the Japanese National Defense Program Outline, the SDF will respond immediately and forcefully to discourage any aggressor. Limited aggression will be repelled without outside assistance. In the event that it becomes difficult to repel an enemy unassisted, the SDF is prepared to resist by every possible means until U.S. assistance is obtained. The SDF further recognizes its strategic dependence upon the U.S. nuclear umbrella and has no aspirations in this direction.

Under provisions of the Japan-U.S. Security Treaty, U.S. forces are authorized to use facilities and areas in Japan to maintain peace and security in the Far East. Such an arrangement is essential to the mutual security and interests of both nations.

SDF reserve personnel consist of former SDF personnel who have applied for this status. Their primary mission is to augment the active SDF forces when directed by the Defense Agency Director General, in the event that a mobilization order has been issued. They are national civil servants under a special part-time occupational category who must undergo training for a period not exceeding 20 days each year. They are compensated for this training.

Retired SDF personnel are not considered to be a mobilization asset and therefore are not subject to special recall in the event of national emergency. Military retirement currently accounts for approximately 3.8% of the overall national governmental budget.

Non-Disability Retirement

SDF personnel are eligible for early retirement after a minimum of 20 years of completed service. If, however, they elect this option, they will be penalized a percentage of their pension for each year they are below the normal retirement age. Mandatory retirement occurs at ages specified by rank. For reasons unique to Japanese society, retirement at a relatively young age has imposed undue economic hardship upon the retiree. To combat this problem, relief measures in the form of extended retirement ages and employment outplacement have been introduced.

Retirement pay is calculated as a percentage of final military salary. The percentage is based upon years of service with a minimum of 35% at 20 years to a maximum of 75% for 30 years. In addition, there is a terminal grant of four times the final base salary. Retirement pay is periodically adjusted in response to changes in the CPI. The retirement plan is contributory at a rate of 8% of current salary. Eight percent of the resulting pension is tax exempt, reflecting these original contributions. There are no provisions for vesting. Survivor benefits equal 50% of the retiree's pension.

Retired military personnel have exchange privileges. Commissary facilities are not available. Hospitalization is provided through contributory group plans sponsored by the government through private companies.

Disability Retirement

Disability retirement is calculated in the same manner as normal retirement. If a member of the SDF is permanently disabled before achieving 20 years of service, he is discharged from active service and is processed under the national disability plan available for all Japanese citizens.

Reserve Retirement

There are no provisions for the retirement of reserve SDF personnel.

United Kingdom

Overview

The Armed Forces of the United Kingdom include the regular active duty, the regular reserve, and the volunteer reserve forces. The regular reserves consist of service members with completed active service, members with compulsory reserve obligation, and pensioners. The volunteer reserve and auxiliary force personnel include volunteer ex-service personnel and trained civilians.

Non-Disability Retirement

Eligibility for retirement is based upon age, rank and years of service, and there is some variation between the services. For officers, the normal and mandatory retirement age is 55 years. Additionally, officers must have served 34 years. The minimum requirements for early retirement for officers are 37 years of age and 16 years of service. Officers who have at least five years of service by age 26 are eligible for a "preserved" retirement at a reduced rate payable at age 60.

For enlisted, eligibility for retirement requires 22 years of service and 40 years of age. Mandatory retirement for enlisted personnel normally occurs at 27 years of service. Extended service options enable enlisted personnel to extend their careers beyond 22 years of service to age 50.

Retirement pay is 48% of the active duty salary at the highest rank held for two years, and there is a terminal grant of three times the annual pension which is tax free. An additional grant of up to 50% of the actuarially

estimated lifetime pension may be approved. The regular pension is reduced accordingly. For early retirees, the pay scale is stipulated from approximately 27% of the maximum salary for the pay grade at minimum age. The active duty salary is reduced for the imputed cost of retirement. This reduction is 4% for officers and 2.5% for other ranks. Retirement pay is adjusted along with active duty pay adjustments.

Medical and dental care is provided by the National Health Insurance Program. Members are also covered by the Social Security program. Survivor benefits consist of 50% of the pension.

In the event of war, retired officers have at least a moral obligation to return to service. They are not considered to be mobilization assets. Recall of retired enlisted would require approval of Parliament.

Disability Retirement

For service connected injury, there is no minimum requirement for disability retirement. For a non-service connected disability, five years service is required. Benefits are based upon the degree of disability for service connected disabilities and years of service for non-service connected disabilities.

Reserve Retirement

There is no retirement plan for reservists.

The Netherlands

Overview

The Dutch armed forces are composed of conscripts and volunteers. The volunteers include regular servicemen and short-term volunteers. Career servicemen remain in the services for an indefinite period, while the volunteers commit themselves to a certain number of years of service as reserve personnel.

The reserve includes the short-term volunteers who serve for four or six years, and ex-national servicemen (conscripts) who have volunteered for one to four years of service in the reserve after completing their compulsory service.

Non-Disability Retirement

Eligibility for retirement is based upon age and years of service, and there is some variation between the services. The military retirement age is normally 55 years, except for the Navy which is currently 50 years. The age for retirement from the Navy is expected to be 52 years by 1984. The retirement age for all services will eventually be raised to 58.

Annual retirement pay is a percentage of the annual salary at retirement based upon the product of 1.75% of annual salary and the number of years of service. At 40 years of service, the maximum level of 70% of annual salary is reached. During a transition period, 80% of annual salary at age 55 reduces to 70% at age 65.

At age 65, a government pension plan goes into effect. Military retirees continue to receive their retirement pay and receive one third of their normal government pension. Service members contribute 11.7% of their pay toward retirement. After 10 years of service, vesting provisions allow 1.75% of annual salary per year of service to be paid at age 65. There is an annual adjustment of retirement pay for cost of living.

Service members contribute 3% of their pay toward medical care for themselves and 50% of dependent medical care while on active duty. Although this coverage terminates upon retirement, private medical coverage to cover the remaining 50% of dependent care during active duty may be extended to cover the retiree at reduced rates.

There are no recall provisions for retired members.

Disability Retirement

Disabled service members are transferred into restricted career fields on active duty where possible. If discharged, they receive a special invalid allowance as part of a national program. Assistance in obtaining a civilian job is also provided.

Reserve Retirement

There is no retirement plan for reservists.

PART III

DATA TABULATIONS

The following tables present data relevant to the retirement systems of each of the selected countries. In so far as it is possible, presentation formats have been standardized to facilitate a direct comparison of factors across countries. Variations in the level of detail are due to the quality and quantity of information available through the embassies of the countries in question.

Australia

Population: 15,065,000

Defense Budget:

% of GNP = 2.7%
% of GDP = 2.9%
% of CGB = 10.1% (Central Gov't. Budget)

Size of Active Force: 73,247

- o Army
 - Officer -- 4,520
 - Enlisted -- 27,092
 - Cadets -- 1,48733,099 TOTAL ARMY

- o Navy
 - Officer -- 2,227
 - Enlisted -- 13,777
 - Cadets -- 1,30517,309 TOTAL NAVY

- o Air Force
 - Officer -- 3,614
 - Enlisted -- 18,001
 - Cadets -- 1,22422,839 TOTAL AIR FORCE

Size of Reserve Force: 44,067

- o Army
 - Active
 - Officer -- 3,653
 - Enlisted -- 28,600
 - Inactive
 - Officer -- 5,674
 - Enlisted -- 1,74439,671 TOTAL ARMY

- o Navy
 - Active
 - Officer -- 385
 - Enlisted -- 753
 - Inactive
 - Officer -- 976
 - Enlisted -- 1,2243,338 TOTAL NAVY

- o Air Force
 - Active
 - Officer -- 241
 - Enlisted -- 817
 - Inactive
 - Officer -- NOT AVAIL.
 - Enlisted -- NOT AVAIL.
- 1,058 TOTAL AIR FORCE

Non-Disability Retirement:

o Eligibility				
Officer	<u>0-6</u>	<u>0-5</u>	<u>0-4</u>	<u>0-3</u>
YOS	20	20	20	20
AGE	55/50	50/45	45/42	45/42
	(MAX/MIN)			

Enlisted	
Grade	<u>ALL</u>
YOS	20
AGE	50/42
	(MAX/MIN)

- o Pay Calculation: Percent of annual pay at highest grade ranging from 35% for 20 YOS to 76.5% for 40 YOS.
- o Contributory: Yes; 5.5% of base pay
- o Cost of Living Adjustments: Yes
- o Unique Features: May elect a commutation of retired pay and receive a lump sum of up to 4 time annual retired pay. Monthly pension is thereby actuarially reduced.
- o Fringe Benefits: Readjustment Pay
 - Up to 10 YOS: 3/10 of 1 month's total pay for each YOS.
 - 10 to 20 YOS: Refund of retirement contribution

- Exchange/commissary: None
- Medical: None
- Education: Vocational training up to 3 yrs.
prior to retirement on a not-to-
interfere basis.
- Travel: None
- Tax advantages: None
- Survivor Benefits: 5/8 of pension to spouse; contributory.
- o Mobilization Recall: None
- o Vesting: None

Disability Retirement:

- o Special Provisions--cannot receive commutation pay.
- o Pay calculation
 - Class A = 60% or more disability = 76.5% or highest pay.
 - Class B = 30% - 59% disability = Greater of normal
retirement pay or
38% of highest pay.
 - Class C = Less than 30% disability = Greater of normal
retirement pay
or 1 1/2 times
contribution.
- o Fringe Benefits:
 - Medical -- Veterans Affairs Department may
provide hospitalization for war
service-connected disability.
 - Tax advantage -- None
 - Survivor Benefits -- 5/8 of pension to spouse

Reserve Retirement:

- o None

Canada

Population: 24,200,000

Defense Budget:

% of GDP = 3%

Size of Active Force: 81,500

Army - 29,000
Navy - 14,200
Air Force - 38,300

Size of Reserve Force: 21,260

Army - 17,060
Navy - 3,250
Air Force - 950

Size of Retired Community - 22,000 TOTAL

Non-Disability Retirement:

o	Eligibility				
	Officer	<u>0-6</u>	<u>0-5</u>	<u>0-4</u>	<u>0-3</u>
	YOS	30/20	28/20	28/20	28/20
	AGE	55/55	51/51	47/47	45/45
		(MAX/MIN)			
	Enlisted	<u>SGTS</u>	<u>CPL/PVT</u>		
	YOS	30/20	30/20		
	AGE	50/50	44/--		
		(MAX/MIN)			

- o Pay Calculation: 2%3 of averaged salary per YOS to a maximum of 60%. Base is average of 6 highest consecutive YOS.
- o Contributory: Yes; 6.5% of salary
- o Cost of living adjustments: Yes

- o Unique Features: Severance pay of 7 days salary for each year of service up to a maximum of 210 days.
- o Fringe Benefits:
 - Exchange/Commissary: At discretion of local exchange director.
 - Medical: None
 - Education: None
 - Travel: Unknown
 - Tax Advantages: Unknown
 - Survivor Benefits: 50% of pension. Optional contributory Security Insurance Plan or Supplemental Death Benefits.
- o Mobilization Recall: Only if registered; voluntary.
- o Vesting: After 10 YOS, a deferred annuity at age 60 may be elected in lieu of return of contribution.

Disability Retirement

- o Special provisions: Must be service connected
- o Pay calculation
 - Compensated at a rate dependent upon extent of disability. YOS is not a factor.
- o Fringe Benefits:
 - Medical: Expenses and pay until return to active duty or transfer to civilian occupation
 - Tax advantages: Payments under Pension Act are tax free.
 - Survivor Benefits: Same as Regular Retirement

Reserve Retirement:

- o None

Federal Republic of Germany

Population: 61,665,000

Defense Budget:

Percent of GDP: 3.4%

Size of Active Force: 477,300

- o Army
 - Volunteer: 155,000
 - Conscript: 180,000335,000 TOTAL ARMY

- o Navy
 - Volunteer: 25,400
 - Conscript: 11,00036,400 TOTAL NAVY

- o Air Force
 - Volunteer: 67,900
 - Conscript: 38,000105,900 TOTAL AIR FORCE

Size of Reserve Force: Unknown

- o Army - 750,000
- o Navy - Unavailable
- o Air Force - Unavailable

Size of Retired Community: Unavailable

Non-Disability Retirement:

- o Eligibility

Officer	<u>0-6</u>	<u>0-5</u>	<u>0-4</u>	<u>0-3</u>
YOS	10	10	10	10
AGE	58	56	54	52

- o Enlisted

GRADE	<u>ALL</u>
YOS	10
AGE	50

- o Pay calculation: Percent varies by YOS from 35% for 10 YOS to 75% for 35 YOS.

- o Contributory: No
- o Cost of Living Adjustments: No; adjusted with with active duty pay raises.
- o Unique Features:
 - Long term volunteers without career status must leave service by age 40 with a tax free separation bonus equal to 75% of pay for 6 MO. plus 4 times last 1 month's salary.
 - Social security not applicable to active duty military personnel. Members receive social security credit for service upon separation.
 - Military retirement not funded via the defense budget
- o Fringe Benefits:
 - exchange/commissary: None
 - Medical: 50% coverage at private facilities
 - Education: Books, tuition and fees plus 75% of last month's pay for 3 yrs.
 - Travel: None
 - Tax advantages: None
 - Survivor Benefits: 60% of retired pay plus 12% for each minor child, plus one-time payment equal to 2 MO. active duty pay.
- o Mobilization Recall: Yes, to age 60.
- o Vesting: None

Disability Retirement:

- o Special Provisions: Service connected over 10 YOS is same as normal retirement
- o Pay calculation: Under 10 YOS, 75% of base pay and allowances.

o **Fringe Benefits:**

- **Medical: None**

- **Tax advantages: None**

- **Survivor Benefits: 60% of highest pay.**

Reserve Retirement:

o **None**

Japan

Population: 118,519,000

Defense Budget:

% of GNP = .93%

% of CGB - 5.2% (Central Gov't. Budget)

Size of Active Force: 245,000

- o Army - 155,000
- o Navy - 45,000
- o Air Force - 45,000

Size of Reserve Force: 43,600

- o Army - 43,000
- o Navy - 600
- o Air Force - NONE

Non-Disability Retirement:

- o Eligibility

Officer	<u>0-6</u>	<u>OTHERS</u>
YOS	20	20
AGE	54/53	53/50
	(MAX/MIN)	

Enlisted

GRADE	<u>ALL</u>
YOS	20
AGE	53/50
	(MAX/MIN)

- o Pay Calculation: Varies from 35% for 20 YOS to 70% for 40 YOS.
- o Contributory: Yes; 8% of salary
- o Cost Of Living Adjustment: Yes

- o Unique Features:
 - Pensions are 3.8% of Gov't. Budget
 - Not funded in Defense Budget
- o Fringe Benefits:
 - Exchange/commissary: Exchange only
 - Medical: Contributory private group health insurance sponsored by the Government.
 - Education: None; outplacement available
 - Travel: None
 - Tax advantages: 8% of pension is exempt.
 - Survivor Benefits: 50% of pension
- o Mobilization Recall: No
- o Vesting: No

Disability Retirement:

- o Special provisions: If unable to serve until normal retirement, discharged to the state welfare system.
- o Pay calculation: Same as regular retirement
- o Fringe Benefits: None

Reserve Retirement:

- o None

United Kingdom

Population: 55,965,000

Defense Budget

% of GDP = 4.9%

% of CGB = 15% (Central Gov't. Budget)

Size of Active Force: 321,400

o	Army	Officer -- 17,500	
		Enlisted -- 143,500	161,000 TOTAL ARMY
o	Navy	Officer -- 9,500	
		Enlisted -- 54,600	64,100 TOTAL NAVY
o	Air Force	Officer -- 15,000	
		Enlisted -- 73,700	88,700 TOTAL AIR FORCE
o	Marines	Officer -- 700	
		Enlisted 6,900	7,600 TOTAL MARINES

Size of Reserve Force: 286,800

o	Army	Regular Reserves = 139,600	
		Volunteer Reserves = 70,200	
		Ulster Defense = 7,400	217,200 TOTAL ARMY
o	Navy	Regular Reserves = 25,900	
		Volunteer Reserves = 5,400	31,300 TOTAL NAVY
o	Air Force	Regular Reserves = 28,500	
		Volunteer Reserves = 6,000	35,500 TOTAL AIR FORCE
o	Marines	Regular Reserves = 2,100	
		Volunteer Reserves = 1,000	3,100 TOTAL MARINES

Non-Disability Retirement

- o Eligibility
 - Officer ALL
 - YOS 34/16
 - AGE 55/37
 - (MAX/MIN)

 - Enlisted ALL
 - YOS 27/22
 - AGE 40
 - (MAX/MIN)

- o Pay Calculation: Pension varies from 27% of highest salary for 16 YOS to 48% for 34 YOS.

- o Contributory: Yes, active duty salary reduced for imputed cost (officers = 4%, enlisted = 2.5%).

- o Cost Of Living Adjustments: No, adjusted with active duty salaries.

- o Unique Features:
 - Retirement costs are completely funded by annual appropriations within the defense budget

 - Terminal grant is 3 times annual pension tax-free. Additional grant can be up to 50% of actuarially estimated lifetime pension. This reduces pension by 50%.

- o Fringe Benefits:
 - Exchange/Commissary: None

 - Medical: Provided by Britain's National Health Insurance Program.

 - Education: Special vocational or training instruction available; varies with YOS.

8-12 YOS = 1 yr.
Above 12 YOS = 1 1/2 yr.

- Travel: Unavailable
- Tax advantages = Terminal grant tax-free
- Survivor Benefits = 50% of pension
- o Mobilization Recall:
 - Officers Have an implied obligation to serve if called.
 - Enlisted recall requires an act of parliament.
- o Vesting: 5 YOS provides a deferred annuity at age 60.

Disability Retirement:

- o Pay calculation:
 - Service connected based on degree of disability (10% - 100%).
 - Non-service connected based on YOS. Must have achieved at least 5 YOS to qualify.
- o Fringe Benefits:
 - Tax advantages = Non-taxable
 - Survivor Benefits = 90% of pension plus a minor children's allowance

Reserve Retirement:

- o None

The Netherlands

Population: 14,178,000

Defense Budget:

% of GNP = 3.4%
% of GDP = 3.2%
% of CGB = 9.5% (Central Gov't. Budget)

Size of Active Force: 104,000

- o Army = 67,100
- o Navy = 17,000
- o Air Force = 19,000
- o Inter-Service organization = 1,000

Size of Reserve Force: 171,000

- o Army = 145,000
- o Navy = 20,000 (9,000 for immediate recall)
- o Air Force = 6,000

Non-Disability Retirement

- o Eligibility
 - Officer ALL
 - YOS 40/30
 - AGE 55

 - Enlisted ALL
 - YOS 40/30
 - AGE 55
- o Pay calculation:
 - 1.75% of annual salary times YOS.
- o Contributory: Yes; 11.7% of salary.
- o Cost of living adjustments: Yes
- o Unique features:
 - Transition period from age 55 to 65.
 - 80% of pay at age 55 decreased to 70% at age 65.

- Transition period is funded within Defense Budget. After age 65, payment is made through the civilian national pension plan.

- o Fringe Benefits:

- Exchange/Commissary: None
- Medical: For active duty, 3% of salary is contributed for 50% dependent care. On retirement this converts to a private group plan for the member.
- Education: None
- Travel: None
- Tax advantages: None
- Survivor Benefits: Lump sum tax free payment of 3 mo. salary plus monthly payments:
 - 80% of salary if killed in line of duty
 - 70% of salary if killed not in line of duty

- o Mobilization Recall: No

- o Vesting: After 10 YOS, 1.75% of salary per year payable at age 65.

Disability Retirement:

- o Special provisions: Kept on active duty in a limited duty capacity at all possible
- o Pay calculation: 1.75% of annual salary to age 55. Then transferred to National Invalid Allowance.
- o Fringe Benefits: No Difference

Reserve Retirement

- o None

SUMMARY OF FOREIGN MILITARY NON-DISABILITY RETIREMENT SYSTEMS

x = YES

COUNTRY RETIREMENT CHARACTERISTICS	AUSTRALIA	CANADA	FRG	JAPAN	UK	NETHERLANDS
<u>Eligibility Determined By:</u>						
Age	x	x	x	x	x	x
Grade/Rank	x	x	x	x	x	x
Years of Service	x	x	x	x	x	x
<u>Compensation Determined By:</u>						
Age	x			x		
Current Salary in Grade/Rank	x	x	x	x	x	x
Years of Service	x	x	x	x	x	x
<u>Compensation Composed Of:</u>						
Periodic Annuity	x	x	x	x	x	x
Lump Sum Payment	x	x	1	x	x	x
<u>Vesting (Less Than Full Career With Deferred Annuity)</u>						
Contributory Retirement Plan	x	x		x	x	x
<u>Cost of Living Adjustments By:</u>						
National Price Index (CPI)	x	x	x	x	x	x
<u>Active Military Pay Adjustments</u>						
<u>Retirement System Funded Through:</u>						
Defense Budget	x	x		x	x	x
Social Welfare Budget		x	x	x		x
<u>Dependent Survivor Benefits Are:</u>						
Percent of Original Pension	x	x	x	x	x	x
Lump Sum Payment			x			x
<u>Contributory</u>	x	2				
<u>Medical Care Provided To:</u>						
Retiree	3	3				4
<u>Dependents</u>						
<u>Fringe Benefits:</u>						
Exchange Privileges		x		x		
Post-Retirement Education			x		x	
Transportation (Special Rates)						
Subject to Recall		2	x		2	

NOTES: 1 - Early Separation 2 - Voluntary 3 - Service Connected 4 - Contributory

APPENDIX A

Selected Bibliography

- Defense Agency of Japan. Defense of Japan 1982, Trans. The Japan Times, LTD.
- The Kingdom of the Netherlands. Foreign Policy, Ministry of Foreign Affairs. DCV/VK 79 20.
- The Kingdom of the Netherlands. Defence, Ministry of Foreign Affairs. DVL/VK 81 19.
- Lieutenant Colonel A. J. van Vuren, Royal Netherlands Army. "The Royal Netherlands Army Today". Military Review, Vol. LXII, Apr., 1982. pp. 13-28.
- Her Majesty's Stationery Office. Statement on the Defense Estimates 1982, Volumes I and II London: 1982.
- United States Department of State. Background Notes: Canada, Government Printing Office: October, 1979.
- The Conference Board. "Economic Road Map No. 1858: Canada." New York: July, 1979.
- Government of Canada. A Digest of Canadian Forces Retirement Benefits, Ottawa: A-FN-109-001/ID-001
- Australian Government Publishing Service. Defense Report 1981-82, Canberra: 1982.
- Directorate of Public Relations, Department of Defence. "Defence News Release No. 16/83". Canberra: 29 April 1983.
- "The Defence Force Retirement and Death Benefits Scheme." Melbourne: Advocate Press, 1973.
- Australian Information Service. Australia Handbook 1982-83, Canberra: 1982.
- Information and Press Office, Federal Ministry of Defense. "Bundeswehr: The Federal Armed Forces Facts and Figures". Bonn: 1981.
- Ragnhild Sohlberg. "Manpower Procurement Policies, Ground Forces Structures, and Registration Systems: Denmark, The Federal Republic of Germany, Norway, and the United Kingdom." Monterey: Naval Postgraduate School, 1981.

General Accounting Office. "Preliminary Analysis of Military Compensation Systems in the United States and Five Other Countries." Washington, D.C.: 1980.

M.H. Rosen and I. Heymont. "Review and Analysis of Selected Foreign Reserve Systems." Mclean, Va.: Research Analysis Corporation, 1972.

Irving Heymont. "Analysis of the Army Reserve Systems of Israel, Canada, United Kingdom, Federal Republic of Germany, and the Netherlands." McLean, VA: General Research Corporation, 1977.

"The Military Balance 1982/83." London: International Institute for Strategic Studies. Reprinted in Air Force Magazine, Vol. 65, No. 12, Dec. 1982, pp. 61-151.

Office of the Secretary of Defense. "The Third Quadrennial Review of Military Compensation, Volume IX: Reserve Compensation, Sample Foreign Pay Systems." Washington, D.C.: 1976.

APPENDIX B

Points of Contact

Captain Sumihiko Kawamura
Japan Maritime Self-Defense Force
Naval Attache
Embassy of Japan

Colonel Hiromichi Muromoto, Dr. Eng.
Defense Attache (Army)
Embassy of Japan

Rear Admiral Jan J. Leeftang
Netherlands Defense and Naval Attache
Royal Netherlands Embassy

Colonel M.W. Hindricks
Air Attache
Royal Netherlands Embassy

Lieutenant Colonel Tummers
Army Attache
Royal Netherlands Embassy

Captain E.A. Macewan
Defence Attache (Navy)
Embassy of Canada

Major Smart
Defense Attache (Army)
Embassy of the United Kingdom

Air Vice Marshal J.W. Newham
Office of Australian Defence Staff
Embassy of Australia

Lieutenant Colonel Bruce Scrivenor
Defence Attache (Army)
Embassy of Australia

Colonel Wilfried R. Sheffer
Military Attache
Embassy of the Federal Republic of Germany

Lieutenant Colonel Rudolf J. Kueper
Assistant Military Attache
Embassy of the Federal Republic of Germany

Curtis L. Gilroy
Chief, Personnel Policy Research Group
U.S. Army Research Institute

H. Wallace Sinaiko
Smithsonian Institution

Lieutenant Colonel Vales, USAF
Defense Intelligence Agency (JSJ)

ADDENDUM

The Soviet Union

The following information has been provided by the Defense Intelligence Agency, Directorate for Research, in response to an inquiry by the National Defense University.

The Soviet Union

Overview

The composition of the active and reserve components of the Soviet Armed Forces is markedly different from those of the United States and other western military forces. The military manpower policy of the Soviet Union is to maintain a relatively small, long-term politically-reliable, professional officer corps in order to train large numbers of inducted conscripts serving required military obligations of 2 or 3 years. The Soviet equivalent of the US military's career Non-commissioned Officer Corps is nearly non-existent in terms of the USSR's total military manpower; however, the Soviet Warrant Officer program, although small, is increasing. The percentage of commissioned officers, conscripts, career NCO's, and warrant officers in each Soviet force component (Army, Navy, Air Forces, Strategic Rocket Forces, and Air Defense Forces) varies based on the complexity of new equipment, living and working conditions, and the rewards and benefits offered by each branch of the Soviet armed services. Most extended NCO's and warrant officers are found in the Soviet Air Forces, Strategic Rocket Forces, and Navy rather than in the Ground Forces or Naval Infantry.

Extended non-commissioned officers receive no pay for their rank, but are paid according to their "position." However, commissioned officers and warrant officers receive pay for both rank and position. There are a variety of other "pays and allowances" added to these base compensations, but it is position and rank pay upon which retired pay is based at the time of mandatory removal from active service. In addition to their base pay (position pay/rank pay), Soviet commissioned officers, warrant officers, and extended NCO's receive longevity pay for their length of service beginning the second year of active duty for officers and after the 2 or 3 year mandatory conscript service for extended NCO's. The longevity schedule is calculated as a fixed percentage of base pay.

Non-Disability Retirement

In the Soviet Union, a member on active duty in the Armed Forces qualifies for a retirement annuity after 25 years of credible service. Specifically, how the Main Personnel Directorate in the Soviet Ministry of Defense credits accelerated longevity for hardship or hazardous assignments remains unknown. The monthly annuity of a retired serviceman's pension is based upon his rank and position pay if a commissioned or warrant officer, and position pay for extended NCO. Very few active duty servicemen remain NCO's if they decide to make the military a career, but attempt to become warrant officers or commissioned officers if they are not too old.

The Soviet pension system appears to be highly complex and designed to assist those citizens who are too old to help themselves, or have no one left to support them. The payment of allowances to active duty servicemen and their families covers the cost of specific services, or compensates the servicemen for personal or additional expenses in relocating, supporting an increased family (including an extended family), and funeral and burial expenses for family members.

Although a Soviet citizen may qualify for more than one state pension under military and civilian regulations, only one pension will be granted based on the individual's choice. Individuals, who prior to being drafted, worked in mines or in hazardous or harsh work environments are entitled to privileged pensions (additional compensation for equal time at work). All Soviet citizens who are entitled to a state pension may apply for their annuity any time after the right to the pension starts without any time limitations. Additionally, state pensions, whether derived from military or civilian service, are tax free.

The Soviet government provides state pensions to the families of servicemen killed on active duty. The serviceman's family includes children, brothers, sisters, and grandchildren 16 years old or less (18 years old if a student); father, mother, wife, or husband age 55-60 (60 for men, 55 for women); the parents or spouse of a deceased servicemen, regardless of age, if they (parents or spouse) have responsibility for the care of children 8 years old or less; grandfather and/or grandmother when no person exists who, according to law, must support them.

Disability Retirement

For incapacitated Soviet servicemen, there is a complex invalid categorization system on which state pensions are established by the Commission on Pensions. This system has been devised to insure that full and complete civilian and military labor credit has been given the individual, while at the same time not overcompensating him for injuries that have healed or disabilities which have been rectified. Additional pension compensation is given to those individuals residing in rural areas, caring for other incapacitated veterans, awarded the Order of Glory of all three classes, or remaining on active duty with an acceptable disability.

For permanent disabilities incurred on active duty, servicemen have the right to a pension if the disability occurred while on, or as a result of, active duty or within 3 months after discharge from active duty. Pensions are also extended to former Soviet partisans and their families, and to civilian workers and employees partially or completely disabled as a result of wounds, sickness, or mutilations encountered in a region of military actions. The amount of the pension is dependent upon the type and cause of incapacitation, type of work performed, and income before entering active duty.

Reserve Retirement

The structure of the Soviet military reserve forces are significantly different than those in the United States. In the USSR, there are no organized military reserve units, nor are there any provisions for qualifying for a retirement annuity after serving a specified number of years in the Soviet military reserve system. Being in the Soviet military reserves and susceptible to unannounced periodic call-ups is viewed officially as an obligation of Soviet citizenship, and not as a "second career" or "part-time job."

COMPARISON OF MILITARY COMPENSATION SYSTEMS

I. MILITARY COMPENSATION

	US	U. K.	Canada	Federal Republic of Germany	Sweden	Japan	Australia
Compensation Base	Pay and Allowances.	Salary includes X-Factor for recognition of conditions of service - 10% men - 5% women.	Salary includes 4% Factor for recognition of conditions of service.	Draftee pay & allowances: Career pay + duty station allowance & children's allowance. Same pay scale as Civil Service employees.	Regional salary same as public service pay scales. 3 year longevity step increases.	Basic pay and allowances.	Salary plus service allowance. (See X Factor)
Quarters Allowance	When gov't qtrs. not provided, monthly allowance. Single Off. \$ 120-255 EM \$ 66-144 Married Off. \$ 156-319 EM \$ 116-204	Included in salary. Monthly charges for gov't qtrs based on rank and type of qtrs. Eligible for excess rent allowance when gov't qtrs not available.	Included in salary. Monthly charges for gov't qtrs. Not to exceed 20% gross salary. Metered utilities when possible.	Duty Station Allowance varies with rank, number of dependents 3 Single-394-564 DM Married-186-670 DM/mo.	Included in salary. No charge for qtrs on board ship or in the field.	Officers & Enlisted Above SSCIT max. ¥8,000 monthly, varies with rental paid and rank.	Included in salary if gov't qtrs not occupied, entitled to a subsidy if rented qtrs exceed an amount specified for individual's rank. Charges for gov't qtrs subsidized.
Subsistence Allowance	Officers \$53.05/mo. Enl. \$75.90/mo. Separate & leave rations; in-kind not available \$85.50/mo. Emergency-\$113.70/mo. ¹	Included in salary. Wkly charge for single servicemen £5-11. Eligible for meals out allowance + missed meal payment. ⁴	Included in salary. Deductions for rations provided Officer- \$C93.41 EM \$C69.87 Single members at sea or in field \$C54.64 ⁵ (Monthly rates)	Included in duty station allowance except draftees furnished meals or reimbursed daily 4.00 DM. Purchase meal tickets for specific meals in advance 4.00 DM daily.	Included in salary. No charge for meals aboard ship or in field.	Officers - none EM provided rations on ships or at bases.	Included in salary. Charges are significantly less than the actual cost of providing meals and accommodations.

- 1 Rates effective 1 October 1975.
- 2 No charge for quarters provided aboard ship or in the field or when entitled to a separation expense.
- 3 Rates effective 1 January 1975.
- 4 No charge for meals (1) while on leave 48 hours or more (2) serving at sea or in the field for two nights or more (3) when they live (out) off base. Rates effective 1 April 1976.
- 5 Rates effective August 1976.

I. MILITARY COMPENSATION (Cont'd).

	U.S.	U.K.	Canada	Federal Republic of Germany	Sweden	Japan	Australia
Tax Advantage	Quarters & Subsistence allowance not taxable. Uniform allowances and Hostile Fire Pay not taxable.	Officers uniform maintenance relief of £100/yearly from tax.	Benefit exists. Non-quantifiable.	Extra performance tax exempt, i.e., flight pay, sea pay, sub, jump & overtime pay up to 24,000 DM/yr.	None.	Offrs. & Subsistence allowances not taxable.	Salary tax exempt when serving in a combat area. ¹
Annual Leave	Annual Leave 2 earned at the rate of 2 1/2 da/mo. 30 calendar da/yr. maximum ceiling of 60 da. unless in foreign area where there is hostile activity.	Officers 42 days/yr. EM 30 days. Senior NCO's 42 days/yr. (Calendar days)	Officers 30 days/yr. EM 30 days/yr. (working days) Saturdays, Sundays & Holidays do not count as leave.	Varies with age & rank - min. 21 days/yr. max. 36 days/yr. + two 5 day extra compensation leaves & holiday periods.	24-40 days/yr. max. varies with grade/age. Sundays do not count as leave days.	2 days/mo. or 24 days/yr. Do not count Sunday and only 1/2 day for Saturday as leave days.	20 days/yr. recreation leave. Do not count Saturdays, Sundays or public holidays. Also grant travel time to & from leave + 10 day/yr. for Aviators & sea going pers. for remote area service.
Holidays	9 Holidays with pay per year.	7 days per year.	12 days per year.	Average 12 days per year. Variable by State.	9 days per year.	19 days/yr. include 6 days New Years.	Varies by state. Approx 11 da/yr.
"X" Factor	None.	Included in salary, in recognition of conditions of service, total commitment, Code of discipline, 10% men 5% women.	4% added to rates of pay for LTC and all ranks below.	None.	None.	None.	\$A950 (\$120.05) yr. Fully taxable to all members except some Junior categories & members receiving consolidated pay (Star ranks) ³

- 1 Exemptions for isolation, unpleasant living conditions and climate when posted for Singapore, Malaysia and Papua and New Guinea
- 2 Receive full pay and allowances for time absent as annual leave. Enlisted receive accumulated leave payments upon reenlistment
- 3 Except (a) Cadets and Apprentices (b) General Officers, Brig. Maj. & Lt. Gen Medical & Dental Officers LTC to Maj. Gen.

1. MILITARY COMPENSATION (Cont'd)

	U.S.	U.K.	Canada	Federal Republic of Germany	Sweden	Japan	Australia
Other		Married benefits Free food in mess. Free single accommodations. Family maintenance grant when living apart.	Travel & moving entitlements, same for military as public service employees	Special Christmas bonus, a 13th full month's pay.	Grade A-19 (U.S. equivalent E-9, O-2) and below, weekend, holiday & overtime pay over 42 hr/wk. Night differential pay or compensatory time off.	Commuting allowance reimbursement, max. ¥7000. If more than ¥5000 reimbursement 1/2 excess to max. amt. \$A730/yr	Command Money (Navy) Scagoing vessels, i.e., SubLt \$A146/yr Capt. & CDR \$A730/yr
Reserve Forces	Drill pay awarded on basis of one day's basic pay for each drill period. Retirement system available after age 60.	Annual duty 2 weeks at same salary rates as active duty personnel. Retire at age 55. No special pension.	No special pension. Drill pay, 6 hours or less; 6 hours or more, same salary rates as active duty personnel for 2 weeks duty annually.	Reserve Pay. Dependents Support allowance which is computed as follows: 70% of net civilian pay for single members - 90% of net civilian pay for married members. No special pension.	Unknown.	Unknown	Unknown

1 Reserves on active duty receive same pay and allowances, and special incentive pays as active duty personnel.

II. SUPPLEMENTAL BENEFITS

	U.S.	U.K.	Canada	Federal Republic of Germany	Sweden	Japan	Australia
Medical Care (Active)	Provided full medical & dental care for active duty members.	Free medical/dental service under national health acts. Provided from service or civilian sources.	Provided full medical and dental care at no cost.	Provided full medical & dental care at no cost.	Provided full medical/dental care under national health plan.	Provided full medical & dental care. No cost to service member.	Only the service person is provided full medical and dental care at no cost.
Medical Absence	Granted as necessary. Pay and allowances continue.	Granted as necessary. Salary continues.	Adequate and reasonable time off is provided to meet most employee needs. Salary continues.	Granted as necessary, pay and allowances continue.	Granted as necessary, salary continues.	Receive reduced pay 80% married. 60% single. Max. 3 yrs TB convalescence, 6 mo. other reasons.	Granted as necessary, salary continues.
Medical Care (Dependents)	Provided at service facilities where available and if not available through civilian providers. Costs range from no costs at Service facilities to 20% above \$100 max. per family under CHAMPUS.	Pay weekly "national insurance". An almost free medical/dental service provided under national health acts. pay certain charges for drugs, dental, spectacles at civilian facilities.	Charges for inpatient and outpatient care covered by Provincial Health Ins. Plans. Provided emergency care where no adequate civilian care available.	Member reimbursed 55% + 5% each child max. 75%. An additional 15% when hospitalized. Gov't provides private health insurance. Service men & dependents may carry supplemental ins to provide full coverage.	Provided under national health plan; portion of income tax pays for coverage	Provided under defense welfare association member pays 1/2 actual medical care costs. No cost to join assoc.	Dependents & retired not provided care at service facilities except emergencies. May participate in contributory insurance type program, i.e. Army Health Benefit Society or Medibank plan.
Medical Care (Retired)	Provided at service, facilities where available and, if not available, under CHAMPUS through civilian providers. Costs range from no cost to 25% of inpatient care.	Medical/dental care provided under national health acts. Provided from civilian resources; dependents eligible.	Provincial Health Ins. & Group Surgical & Medical Insurance, Dependents eligible. After age 65 all medical care is free.	Private health ins. provided at no cost. Member reimbursed 55% to 75% depending on marital status & number of dependents. An additional 15% reimbursed when hospitalized. May carry supplemental ins. to provide full coverage.	Provided under National Health Plan.	None provided. May join National Health Insurance. After age 65 all medical care is free.	Dependents & retired not provided care at service facilities except emergency insurance contributory program, i.e., Army Health Benefit Society or Medibank plan.

II. SUPPLEMENTAL BENEFITS (Cont'd)

	U.S.	U.K	Canada	Federal Republic of Germany	Sweden	Japan	Australia
Health Insurance	Personal Matter for additional coverage.	National Insurance weekly deduction cost sharing also covers old age pension.	Dependents, Active Duty - 50/50 cost sharing, member/ government.	Provided by Gov't at no cost to serviceman. ¹ May take full coverage supplement.	Everyone covered under National Health Plan.	Provided Active duty member & dependents. Retired must pay for insurance to age 65.	All Australians receive free medical treatment under MEDIBANK PLAN.
Life Insurance	SGLI max. coverage \$20,000. Convertible to Vet's GLI upon separation or retirement. ²	No gov't insurance services. Contract for group ins. with private companies.	Supplementary death benefit plan mandatory. Monthly contributions by member \$5 for ea. \$C250 of annual salary, max. insurance coverage nearest \$C250 above salary. Retirees eligible.	No. gov't insurance. May take group coverage.	Gov't provides & military union also provides additional group coverage.	All pay ¥1003 monthly for ¥360,000 coverage, depending on cause of death up to ¥580,000.	Personal matter, however, reimbursed up to \$A150/year for conditions of service employment.
Social Security	1976 deduction of 5.85% of monthly basic pay up to maximum annual contribution of \$895.05. ⁴	Subject to adequate contributions. Entitled to flat rate of benefits & dependents eligible.	Canada Pension Plan max. 1.4% x \$C7500 \$C135 does not supplement retirement pension, benefits deducted from retired pay. Payment included in pension contributions.	Not applicable. Covered by disability health survivor benefits and pension. ⁵	Levy on income. Old age benefits Payable - age 65 Benefits deducted from retired pay.	None.	Social Ins., Old age pension - need related. Military retired pay over minimums. Therefore do not receive old age pensions.
Retirement	1 Non-contributory funded, by annual appropriation, Min. 20 yrs ser. 50% base pay. Max. 30 yrs ser. 75% final base pay. CPI adjusted.	Non-contributory, Funded by annual appropriation, 6 Pension + 3 yr. tax free gratuity upon retirement. Adjusted annually based on active duty pay.	Contributory, Employees 7%, Contributions include SS payments. Adversely sound, Gov't 1.8% + fund deficiencies. Pension based on best consecutive 6 years service.	Non-contributory. Min. 10/yr 35% Max. 35/yr 75% of terminal pay and some allowances. Retired pay adjusted with active pay.	Non-contributory Retirement age 60-65 years, 67% salary, CPI adjusted.	Officer 40% EM 35% 20 yr/ser. Max. pension 70% 40 yrs service Minimum pension ¥302,400 per year.	Contributory 5.5% base pay. Min 20 yr ser. 35%, Max 40 yr ser. 76.5% of terminal pay. Retired pay adj. with active pay.

1 Member reimbursed 55% + 5% each child, to maximum of 75%. An additional 15% reimbursed when hospitalized.
 2 Only extra cost attributable to extra hazards of service paid by government.
 3 Additional policies may be subscribed to, up to 40 policies by each member, at a cost of ¥100/month per policy.
 4 Deductions range from E-1 \$21.13/month; to O-10 \$184.24/month until maximum annual contribution reached.
 5 For personnel leaving military service prior to retirement, government pays coverage for period of active duty.
 6 Benefits by any rise in Basic pay and receives Cost of Living Protection.

APPENDIX A
LEGISLATIVE BACKGROUND



LEGISLATIVE HISTORY OF THE
UNIFORMED SERVICES RETIREMENT SYSTEM

I. NON-DISABILITY.

A. ACTIVE DUTY (REGULAR AND NON-REGULAR).

1. Officers. Except for an 1855 statute that provided for the compulsory retirement of certain Navy officers, there was no legislative authority before 1861 that provided for either the voluntary or the involuntary retirement of active duty members of the armed forces from military service. The effect of this lack of authority was described many years later in a Congressional study of Army retirement:

The unsatisfactory personnel conditions in the Regular Army which prompted these repeated recommendations of the War Department that Congress provide some form of retirement for the Regular Army were emphasized during the field service required over the period 1812-1861. While the law provided a pension of one-half pay for disabled officers, there existed no provision for compulsory separation from active service of old and disabled officers', there was no limit to active service save by dismissal or resignation of the officer. Thus, an officer could remain on active duty until death, despite incapacity due to old age, physical disability, etc. In consequence, many junior officers exercised commands in the field beyond their rank, the old and disabled officers who should have exercised these commands being left behind-often on leave whenever field service was performed.¹

The Act of February 28, 1855 (10 Stat. 616) while not a true retirement statute, permitted the Secretary of the Navy to convene examining boards to determine the capability of officers to "perform their whole duty both ashore and afloat" and to remove any officer determined not capable of such performance from the active list. Officers removed from active duty under this provision were to be placed on a "reserved list" with either leave-of-absence pay (approximately 75 percent of sea-duty pay) or furlough pay (50 percent of leave-of-absence pay), unless it was also determined that the officer was himself to blame for the incapacity, in which case he was to be "dropped from the rolls" without pay. Though the main purpose of the Act was to remove physically unfit officers from the active list, the following excerpt from a report of the examining board shows that it could also be used to separate officers for non-disability reasons:

An officer may possess a strong mind and a robust frame, yet, if his moral perception of right or wrong be so blunted and debased as to render him unreliable, he could hardly be ranked as the capable officer.²

The Act of August 3, 1861 (12 Stat. 287), authorized the voluntary retirement, at the discretion of the President, of regular officers of all branches of Service after 40 years of service. This retirement authority was broadened, first by the Act of December 21, 1861 (12 Stat. 329) to provide for the involuntary non-disability retirement of Navy officers with 45 years of service or at age 62, and later by the Act of July 17, 1862 (12 Stat. 594) to establish similar provisions for Army and Marine Corps officers. While these laws provided authority for involuntary retirement, they did not require the Government to exercise it. An officer could be forced to retire after reaching the specified age or length of service, but nothing required relevant authorities to take such action.

The Appropriation Acts of July 15, 1870 for the Army and the Navy (16 Stat. 315 and 16 Stat. 321, respectively) created an active duty salary system for officers and did away with commutations for rations. Since the existing retired pay formula had been based in part on commuted rations, it also had to be changed. Retired pay based on age or years of service was fixed as 75 percent of base and longevity pay for Army and Marine Corps³ officers, and as 50 percent of sea duty pay for Navy officers. The Act of March 13, 1873 (17 Stat. 547) raised the Navy officer rate to 75 percent of sea duty pay. In addition to changing the retired pay formula, the 1870 Army Act authorized the voluntary retirement, again at the discretion of the President, of Army and Marine Corps officers after 30 years of service.

The Act of June 30, 1882 (22 Stat. 118) made retirement mandatory at age 64 for officers of all branches of Service. The existing authority for involuntary but non-mandatory retirement of officers with 45 years of service or at age 62 was not disturbed. The Act also gave officers a non-discretionary right to voluntary retirement after 40 years of service. Earlier laws had authorized voluntary retirement at this service point, but had given the President the power to grant or deny such retirement.

The Act of March 3, 1899 (30 Stat. 1007) introduced an unusual retirement program for Navy officers, the main purpose of which evidently was to improve promotion opportunities. It permitted officers in the grades of lieutenant through captain to request voluntary retirement regardless of age or length of service. Officers making such requests were placed on a list of "Applicants for Voluntary Retirement." If a specified number of promotion vacancies did not occur through "normal" attrition--death, resignation, age or Service retirement, or disability retirement--during a fiscal year, the applicants were retired in order of seniority in a sufficient number to create the vacancies. If this

action failed to achieve the specified vacancy level in any grade, the additional numbers needed to meet the requirement were obtained through involuntary retirements. This "promotion flow" retirement program remained in effect until 1915. The Act of May 13, 1908 (Pub. L. 60-167, 35 Stat. 501), authorized the voluntary retirement of Navy officers after 30 years of service.

The Act of August 29, 1916 (Pub. L. 64-241, 39 Stat. 579) brought two new principles to the non-disability retirement system. First, it established a retirement program integrated with an up-or-out selective promotion plan, and second, it initiated use of the formula that, with minor refinements, remains the essential basis for determining retired pay entitlements; namely, 2.5 percent of monthly active duty pay for each year of service up to 30, or a maximum of 75 percent of such pay. The Act also introduced the practice of rounding years of service in the computation of retired pay entitlements, under which a partial year of six months or more was counted as a whole year and a partial year of less than six months was not counted. The Act permitted the Secretary of the Navy to convene annual selection boards to select officers for promotion to the grades of rear admiral, captain, and commander. A captain who reached age 56, a commander who reached age 50 or a lieutenant commander who reached age 45, without having been selected for promotion to the next higher grade, became ineligible for further consideration for promotion and had to be retired. An officer so retired was entitled to retired pay of 2.5 percent of the shore duty pay⁴ of his grade for each of his years of service, not to exceed 75 percent of such pay.

The Act of June 4, 1920 (Pub. L. 66-242, 41 Stat. 773) provided for the evaluation of Army officers and their separation into two classes, A and B. An officer identified as "inefficient" was placed in Class B and further evaluated; all officers not so identified were deemed Class A officers. A Class B officer was retired if he had attained at least 10 years of commissioned service and the evaluation board affirmed his "B" classification and found that it was not due to his own "neglect, misconduct, or avoidable habits." Unless he had been appointed at age 46 or older, a retired Class B officer was entitled to retired pay of 2.5 percent for each of his years of commissioned service, not to exceed 75 percent; if he had been appointed at age 46 or older, he was entitled, in a rare departure from the 2.5 percent-per-year principle, to a 4 percent-per-year multiple in computing retired pay, though the 75 percent ceiling continued to apply. Class A officers were continued in service, subject to future reclassification.

The Act of June 30, 1922 (Pub. L. 67-259, 42 Stat. 722) required a reduction in the strength of the Army; the retirement system was used to help effect the reduction. The Act provided for a "plucking" board to eliminate officers from the active list. Those chosen for elimination could be retired if they had at least 10 years of commissioned service. Officers "plucked" for retirement after more than 20 years of commissioned service were entitled to retired pay of 3 percent for each year of such service, not to exceed 75 percent; those retired with between

10 and 20 years of commissioned service had the same entitlement, except that their multiple was 2.5 instead of 3 percent. The Act also authorized retirement in the rank of warrant officer for eliminated officers with less than 10 years of commissioned service but at least 20 years of total service. Affected officers were entitled to 2 percent of the pay of such rank for each year of service. While the Act did not place a 75 percent ceiling on this computation, it appears doubtful that any officer retired under this provision would have had the years of service needed to attain a retired pay entitlement in excess of 75 percent.

The Act of June 22, 1926 (Pub. L. 69-413, 44 Stat. 761) replaced the Navy's age-in-grade program with one based on service-in-grade. Under this Act, a captain who had completed 35 years of service without being selected for promotion became ineligible for further consideration and was forced to retire; the break points for commanders and lieutenant commanders were 28 years and 21 years, respectively. The Act of May 29, 1934 (Pub. L. 73-263, 48 Stat. 811) extended the selection program to promotion to the grades of lieutenant commander and lieutenant, and provided that a lieutenant who had not been selected for promotion after 14 years of service, or a lieutenant (junior grade) who had not been selected after seven years, had to be retired. The Act of July 22, 1935 (Pub. L. 74-212, 49 Stat. 487) amended this feature stipulating that lieutenants or lieutenants (junior grade) who had not been selected for promotion by the 14- or 7-year points, respectively, could be retained on the active list as additional numbers in grade until they completed 21 or 14 years of service, respectively, and then retired. Retired pay under all these laws was computed at the standard rate of 2.5 percent per year of service, up to a 75 percent ceiling. The 7-year retirement provision of the 1934 Act is notable as representing the shortest length of service ever fixed for non-disability retired pay eligibility.

The Act of July 31, 1935 (Pub. L. 74-225, 49 Stat. 507) authorized the voluntary retirement of Army officers after 15 years of service, with retired pay of 2.5 percent for each year of service up to a ceiling of 75 percent. This 15-year authority was intended as a temporary measure to help relieve an officer "hump" created by a large influx of World War I officers into the Regular Army. Notwithstanding its temporary purpose, the 15-year authority, though suspended during World War II, remained in effect until 1948.

The Act of June 23, 1938 (Pub. L. 75-706, 52 Stat. 944) revised the Navy's officer selection and retirement processes and became the model for the present system. The Act required that captains, commanders, and lieutenant commanders who had twice failed selection for promotion to the next higher grade be retired after completion of 30, 28, and 26 years of commissioned service, respectively. The Act also authorized the voluntary retirement of Navy officers after 20 years of commissioned service. The "standard" retired pay formula--2.5 percent per year--was used for both voluntary and involuntary retirements under the Act.

II. SUPPLEMENTAL BENEFITS (Cont'd)

	U.S.	U.K.	Canada	Federal Republic of Germany	Sweden	Japan	Australia
Other	Navy, Eligible for round-trip transportation from overhaul location after 31st, 91st & 151st day of overhaul to ships home-ports where dependents reside when overhaul is away from homeport.	Eligible for 3 return leave journeys a year at public expense in (BOAR) 1.	Life Insurance (cont) Member covered by SISIP, serviceman's income security insurance plan, disability payments, survivor benefits, dependent life insurance.	Union membership (2,000) cost 1% of salary. Homes for retirees (rental units) 76-80 sq. meter (3 rma) sq. meter @ 3.85 DM per sq. meter. No voluntary retirement, must serve to compulsory release age.	Retired pay usually not paid prior to age 60.	Unreduced pension commences age 55 - reduced 4%/year prior to age 55.	Commutation of retired pay. May select to receive up to 4 times annual retirement pay in lump sum. Retirement pay correspondingly reduced.

- 1 British Army Overseas Regiment
- 2 SISIP also provides major medical benefits for long term disability. SISIP Benefits are protected against inflation, to a maximum of 2% per year.

III. SPECIAL AND PREMIUM PAYS

	U.S.	U.K.	Canada	Federal Republic of Germany	Sweden	Japan	Australia
Bonus	See enlistment & reenlistment bonuses.	Unknown.	\$C50/mo. in addition to Foreign Duty Allow. for over 6 mo. or 2nd or 3rd tours overseas.	13th mo. pay special Christmas bonus. Service Ann. Bonus 25 - 200 DM 40 - 350 DM 50 - 500 DM	Unknown.	Bonus A - paid on 15 Jun 110% of monthly total salary. 5 Dec. 200% of monthly total salary plus extra 25% special asgn. + admin personnel extra. 3-21% supervisors. 5 Mar. 50%, plus Bonus B - paid on 15 Jun max. 60% of monthly salary 5 Dec. max. 60% of monthly salary for satisfactory performance.	Yearly equal to 17 1/2% of one mo's Basic Salary. Same for Public Service employees.
Enlistment Bonus (E. B.)	Authorized up to \$1,000 for critical skills enlistment or 4 year extension. Has only been used up to \$2,500 for combat arms, Army & Marine Corps.	Servicemen for 6 yr. commitment add £2.10 wkly. for 9 yr commitment add £5.25 wkly.	None	Officers - None Varies with length of enlistment & length of service, 1,000 - 9,000 DM None paid at present.	Unknown.	E. B. is paid to all enlistees, men & women in all skill areas. 2 yr - 100 days Basic Salary 3 yr - 150 days Basic Salary.	Unknown.
Reenlistment Bonus (R. B.)	1 Selective R. B. paid for any manning problem point up to 10 yrs. service. Restricted to a max. of \$12,000 paid by lump sum or installment. 2 Enlisted only. Max. P-1 \$50, P-2 \$100 P-3 \$150 for deelyn-ate critical military specialties and spec. duty assignments. (superior performance discontinued FY73).	Unknown.	Reserve Force Service and Qualification Bonus officer or EM \$C100 to \$C300 (primary reserve).	Officers - None Varies with length of enlistment & length of Service 1,000 - 9,000 DM. Authorized but not used.	None	Paid to all reenlistees for 2nd and subsequent reenlistments, i. e., 2 yr-200 days Basic Salary.	Re-engagement for men (enlistee), \$A1000 (tax free) for 3 yr extension upon completion of initial 6 yr. term.
Proficiency (Monthly)		Unknown.	None.	None	None	In-grade step increase or promotion for superior performance.	None, except for language proficiency. \$A150-900 per year.

644

1 Subject to recruitment for the unserved portion of the reenlistment
 2 Not applicable for officer - 1958 Congress authorized analogous to Enl. Pro Pay. Officers Responsibility Pay. Permissive rather than mandatory. Range O-3, O-4 \$50, O-5 \$100, O-6 \$150.

ATCH 1

III. SPECIAL AND PREMIUM PAYS (Cont'd)

	U. S.	U. K.	Canada	Federal Republic of Germany	Sweden	Japan	Australia
Aviation Career Incentive (Monthly)	Off. - \$100-245 mo. WO - \$100-200 mo. Special pay based on aviation service and officer service. Max. 6 yrs aviation service & 18 yrs off. service. Reduced amount O-7 thru O-10. Must meet performance requirements.	Amount varies with rank. £37.80 Air Comd., £70.20 Flt. Lt., £43.20 Air Load Master.	Higher annual salary, variable amounts for pilots & lower amounts for navigators & engineers. (Separate Pay Scales).	(Tax Free) Flying Pay Supplement jet pilots - 300DM/mo. other pilots 240 DM/mo. Permanent air crew members 190 DM/mo. Air transport escort personnel 100 DM/mo. ¹	"Reward" rate based on grade/yrs of service. Max. reached at 0-4/6yrs & remains constant from then on. Flt. pay taxed at higher rate than salary.	Special pay computed as a percent of salary for all grades jets - 65% recip. -50% of basic pay for rank of member.	Officers \$A75-125 Aircrewmen (Navy) \$A66.67. 1/2 rate Trainer's \$A33.33-37.50.
Nuclear (Navy)	Enlisted, SRB max. of \$15,000. Officers accession \$3,000. ²	Amount varies with rank, £43.20 - 61.80 monthly.	None.	None.	None.	None.	None.
Health Professions (monthly)	Medical 0-2 yrs \$100 - Officers over 2 yrs \$350 Dental 0-2, 2-6 Officer \$100 \$150 6-10 Over 10 \$250 \$350 Optometrists & Veterinarian - \$100.	Separate pay scales Medical officers pay higher than other officer pay.	Separate Pay Scales: Capt (0-3) Doctors \$C1865 Dentists \$C1745 Officer Gen. Service \$C1180	Special pay career officers - Medical Service - 350 DM Special severance pay for non-career medical officers,	None Medical services provided under contract plus per patient fees.	Controlled starting salary allowance reduces after 12 yrs. Varies with location ¥2500 - ¥10,000.	Unknown.
Submarine (monthly)	Officer O-1 O-6 \$115 - 245 WO W-1 W-4 \$105 - 165 EM E-1 E-9 \$50 - 105 (Same scale for self-propelled submersible duty).	Amount varies with rank. Monthly rates £63.20 - 61.80.	Officer cadet & above \$C265, Master warrant officer & above \$C265, Warrant officer & below \$C205. Officer & below also training rates at sea & ashore casual rates for IDY pers.	Tax exempt. Extra performance compensation crewmembers 270 DM.	Yes.	Crew - 40% of Basic Pay Other than crew varies with rank Monthly rate ¥3400 - 30,000.	(Per Year) Single \$A40.77 Married \$A91.25.

- 1 Flying supplement paid in addition to above, part of supplement added to pension base.
- 2 Officers also eligible for continuation bonus of \$20,000 to nuclear qualified for 4 year agreement, to remain on duty beyond their initial service obligation, or \$4,000 per year for an annual incentive bonus for each year's service beyond their initial service and \$2,400 per year for limited duty officers and warrant officers who received nuclear training as enlisted personnel.
- 3 Continuation pay Physicians and Dentists, eligible after 2 years. A maximum of 4 months' basic pay for 1 year additional service. Variable incentive pay for medical officers \$9,000 - \$13,500 yearly based on years of service. Active duty agreement and obligation.

III. SPECIAL AND PREMIUM PAYS (Cont'd)

	U.S.	U.K.	Canada	Federal Republic of Germany	Sweden	Japan	Australia
Flying (Monthly)	EM Crewmember \$50 - \$105 Non crewmember Officer \$110 EM \$55	Specialist Aircrew Amount varies with rank/yrz. £13.20 - 153.30	Aircrew allowance pilot officer \$C100 EM air duty allow. \$C65 Casual daily rate for TDY personnel.	Taxable arduous duty supplement pilots varies with duties 80 DM - 250 DM. Payment aircrew members 125 DM.	Flying personnel receiving flying allowance; varies with rank & ser-vice function 700 - 1100 Kronar	Jet crew 65% Recip crew 50% of 1st step of Basic Pay for rank of member	Paid to enlisted ranks only Flt. Eng. \$A800 Med. Ord. \$A300 Trainees 50% of above rates.
Parachute Jumping (Monthly)	Officers - \$110 EM - \$55	Officers & men £19.50 Instructors £22.50	Paratroop Allowance while filling a position requiring parachute jumping \$C75.	Tax exempt officer & men jump personnel duty 150 DM Qualified Personnel 45 DM.	Yes	Troopmember 27.5% of 1st step of Basic Pay for rank of member Training Group 22% as above	Rate for: Trainees \$A16.50 Qualified Personnel Instructors \$A28.20
Demolition (Monthly)	Officers - \$110 EM \$55	Category 4 - Diving pay - EOD techniques £13.50	Exceptional hazard allowance - officer or EM \$C50 each for normal disposal procedure	Tax exempt Mine Diver 240 DM.	None	Token amount 1 hr. ¥32 daily ¥30-100	Unknown
High or Low Pressure, Leper Care, Thermal Tests, Certain Other Duties	Carrier Flight Deck Duty, High or Low pressure thermal stress, acceleration & deceleration, Deprosy. All as follows following rate: Officer \$110/mo. EM \$55/mo.	Acceleration/Deceleration & Thermal tests EM only - Approx. \$.25 (U.S)(Token) Daily	Field Operations Allowance \$C3 daily when at least 24 hours on Field Operations away from base, Physiological tests \$C 2 daily.	Eligible for flight pay on Altitude Chamber Duty, High Pressure Chamber 1/3 of Rate for Diving Pay.	Unknown	Varies w/low pressure ¥400 - 1260, max. monthly ¥7000.	No Program

146

ATCH 1

III. SPECIAL AND PREMIUM PAYS (Cont'd)

	U.S.	U.K.	Canada	Federal Republic of Germany	Sweden	Japan	Australia
Diving Duty Pay (monthly)	Officers \$110 E.M. \$65 to \$110 Based upon qualification.	Varies with skill & intensity & hazard. Daily rate Category I - \$15.00 Category 4 - \$73.50	Clearance Diver: Officer or E.M. \$C175. Ships Diver or shallow water \$C40. Also casual daily rate.	Tax exempt - varies with diving time & depth. Basic per hr. rate to 5 meters 9.50 DM 25-30 meters 28DM	Yes.	All ranks same Varies with depth ¥3900, 20 meters ¥3000 more than 60 meters.	Ships Divers. \$A5.50 per day; max. of 4 days per month. Army & Air Force personnel. Employer as clearance divers eligible
Other	Personal Money Allowance/Position Pay \$400-\$5,200 yr. Non taxable e.g., LTC, VADM \$500/year.	Hydrographic Pay varies with rank, Daily rate \$6.60 - 41.40 Recorder/Captain.	Rescue Spec \$C150/mo. Isolation allow. varies with accompanied/unaccompanied/envirom/living cost/fuel - utilities.	Overtime ¹ over 60 hrs/wk 0.75DM/hr. (Sun. or Legal Holidays 2) Between 2000-0600 other days 3) Sat. after 1300. Language Groups varies with skill & location 3) DM-160 DM/mo. Not paid for English or French.	Cold Weather Pay - Varies with rank and conditions 1-8% of salary.		A free trip each year for single persons to their home town.

¹ Tax Exempt up to 24,000 DM per year for Sunday, Holiday and Night work. Not applicable for Guard Duty, Maneuvers or Exercises

COMPARISON OF MILITARY COMPENSATION SYSTEMS
IV. OTHER RELATED ITEMS

	US	UK	Canada	Federal Republic of Germany	Sweden	Japan	Australia
Certain Places Pay	EM only monthly rates. E-1&2 \$8.00 E-3 \$9.00 E-4 \$13.00 E-5 \$16.00 E-6 \$20.00 E-7 & 9 \$22.50	Unknown.	Foreign duty allowance officer or man \$C50/monthly plus post rating level. I II III IV \$C37.50 \$C54.17 \$C79.17 \$C100.00	Unknown.	Unknown.	Cold district allowance percent of basic pay, 1/2 rate for men under CPO. Married-single rates varies with area & period payable. From 5%-9% of basic pay.	Varies by isolation, extreme climate, cost of living. Married-single rates varies whether qtr provided or not. \$A6.30 - 114.30/mo.
Sea Duty (monthly)	(Same as Certain Places Pay).	For smaller sea-going ships, Hard lying money, where the living conditions are especially arduous, paid to all ranks (1972) £4.20 mo.	Officers and EM \$C100/month. With 10 or more years on ships \$C150/month casual sea duty allowance/daily rate.	Shipboard allowance tax exempt crew members 10SDM not paid in addition to submarine pay.	Sea allowance varies w/rank and vessel type 180-2550 Kronor.	Warship 27.5% transport 22% support ship 14% of 1st step of basic pay for rank to all crew members.	Sea going allowance single \$A45.67 married \$A56.25
Hostile Fire Pay	² Officers & EM \$6/mo for both. Includes members continued in a missing status.	None.	None.	None.	None.	None.	None.
Family Separation Allowance	FSA-I 5 and FSA-II	Separation allowance 40.65 daily eligible after 30 days duty outside of country where wife residing, or if on sea duty, 3	Separation expense varies whether gov't qtrs & subs. provided monthly.	Separation pay, eligible after 14 days; 6.25 DM/day varies if gov't mess or qtrs avail.	Yes, only incidental expenses.	None.	Separation allowance \$A1.00 per day after 14 days. Not paid to personnel receiving seagoing allowance.

1 Also may be paid tax exempt engine room allowance 30 DM/mo.

2 "Token" and "tangible" recognition of arduous and hazardous service

3 30 day separation qualifies for separation allowance for one year, or to end of separation period. For separations other than overseas or sea duty £50 daily.

4 Rates when quarters and subsistence provided officer \$C30.00 all ranks. If in receipt of Foreign Duty Allowance, \$C52.50 for all ranks, in all other circumstances. Rates when quarters and subsistence not provided officers \$C50.00 month, EM \$C305.00/month.

5 FSA-I, Paid when government quarters not available, and dependents not authorized to accompany. Rate paid is BAQ without dependent rate for his paygrade.

FSA-II Paid at rate of \$30/month when assigned duty away from permanent duty station or homeport for at least 30 or more days.

ATCH 1

COMPARISON OF MILITARY COMPENSATION SYSTEMS (cont.)
 IV. OTHER RELATED ITEMS (Cont'd)

	US	UK	Canada	Federal Republic of Germany	Sweden	Japan	Australia
Commissary and Exchange	Provides items at costs less than at civilian stores. savings average about 20% when used.	NAAFI Self-supporting strictly for convenience due to remoteness.	Canal. Self supporting except for isolated locations. No local taxes. Prices competitive.	An experimental canteen is being tested. Govt provides rent free space & utilities.	None. Isolated post service Coop's. No gov't support.	Small scale PX's and commissaries.	Small scale exchange.
Survivor Benefits	D&IC monthly ¹ E-1 \$241 O-10 \$615, plus \$29 for each child under 18. SBP ² up to 55% of the retired pay. (8-75 rates)	Service connected death entitles survivors to 90% of max. pension for rank regardless of length of service. Survivors of other active or retired receive 50% of pension.	Varies with grade & years of service, & number of children. Under 10 yrs service, lump sum. Over 10 yrs service approx. 50% life time pension.	Varies with grade & length of service. The widows pension equals 60% of member's pension, also children, each 12% orphans, each 20%	Yes.	Line of duty varies with length of service-max. 70% of a year's salary. No line of duty, max. 35% of year's salary.	Widow receives 5/8 member's pension + minor children each receive \$312 per year, plus 1/6 of widow's entitlement.
Burial Costs	Funeral expenses \$75 to \$500 in addition to death gratuity, ³ min. \$800 max. \$3,000.	Yes, necessary expenses + grant.	\$C800-900 - special funeral expenses & cemetery plot costs	Yes. Up to a max. reimbursement of 1,000 DM.	Yes.	One month's total pay, plus burial costs to a max. of one month's total pay.	Active duty member: full costs at public expense.
Dislocation Allowance	One month's BAQ to partially reimburse member for incidental expenses on PCS orders. ⁴	Disturbance allowance is non-taxable to help meet the incidental expenses. Varies according to rank & number of dependents.	May receive in lieu of packing and crating. Varies to or from, accompanied or unaccompanied, moves in 5 years.	Yes. Member 700 DM, Wife 600 DM Children 200 DM Extra 20% if 2 moves in 5 years.	Unknown.	Reimbursed for moving expenses.	Varies with number of moves, married or single rates \$A45 - \$A240.

1 Member's death on Active Duty. Widows in nursing homes who are helpless or blind receive an additional \$72.00/mo. Also some widows eligible for SBP. The amount of benefit equals DMIC + SBP to a maximum of 55 % of retired pay, only for retirement eligible personnel.

2 Member's death after retirement, widow, children entitled to SBP.

3 Death Gratuity (non-taxable) 6 month pay \$800 min. to \$3000 max., plus burial costs above.

4 Paid to a member without dependents on PCS where no government quarters are available.

IV. OTHER RELATED ITEMS (Cont'd)

	U.S.	U.K.	Canada	Federal Republic of Germany	Sweden	Japan	Australia
Overseas Station Allowance	Temporary lodging allowance, per diem housing allowance, average excess costs, cost of living allowance, average relative difference.	Family allowances, motor mileage, local overseas allowance, rent allowance, education allowance.	Foreign service allowance, rent allowance, education allowance, utility allowance, in some locations foreign duty allowance.	Cost of Living 20% extra with family. 2 vehicles shipped, housing allowance varies with rank. Reimburse 90% cost difference above 18% of total pay.	Yes.	Receive overseas cost of living and housing allowances.	Yes, a difficult post allowance is paid. It attempts to maintain the member's same financial position as in Australia.
Separation (Severance) Pays	Paid to regular officers & all reservists with over 5 years continuous active service, not retirement eligible, who are involuntarily released, not to exceed \$15,000.	Gratuities: EM-Regulars with at least 12 yr. service £365 to £495 for 21 years service. Officers with 10 years service £2420.	Entitled to gratuity under 10 years service 1/2 weekly salary times no. years service, 10-20 years service, weekly salary times years service.	Transition allowance: 75% of active duty pay. 4-6 yrs.- 6 month. 6-8 yrs.- 1 yr. 8-12 yrs.- 1 yr. 6 mo. over 12 yrs. 3 yrs.	Unknown.	Varies with length of service. (Pay) 2 yr. - 100 days 3 yr. - 150 days 4 yr. - 200 days	Furlough Entitlement same as public service employees. Each year of service 3/10 mo. salary + service allow. 10 yr. service 3 mo. salary + service allowance.
Clothing Allowance (Monthly)	Initial free issue. Enlisted (Uniform) (Monthly) Men \$6.30 Women \$7.20 Standard \$9.00 \$10.20 Regular officers 3 none, except ROTC. Allowances not taxable.	Free issue & replacements as required for EM. Officers receive non-taxable £220 upon entry & £100 per year for maintenance & replacement.	Officers & EM Females \$C10.25 Males \$C7.25 Not paid where clothing issued.	Officers one time payment AF-Army-965 DM, Navy 1,320 DM-Clothing replacement Allowance 30 DM. EM - free issue & replacement.	Yes.	Free issue upon entry. EM continue to be issued items throughout service. Officers must maintain & replace at own expense.	Free issue upon entry. Officers \$A19.67 thereafter. SNCO \$A14.08 Others \$A11.83 thereafter.

- 1 Officers with more than 10 years of service in addition £485 for each year of service. Officers separated with less than 10 years of service £195 per year of service. The above rates were effective April 1, 1974.
- 2 Basic monthly clothing maintenance allowance is paid for the 7th through the 36th month of continuous active service, standard rate thereafter. Civilian clothing required \$215-320 for EM.
- 3 Reserve officers, paid upon first reporting \$200.00 for reimbursement of purchases of required uniform, \$50.00 each additional 4 year period.

IV. OTHER RELATED ITEMS (Cont'd)

	U.S.	U.K.	Canada	Federal Republic of Germany	Sweden	Japan	Australia
Educational Assistance	Veterans Readjustment benefits paid by VA. Eligible after 18 mo. service for 36 months, plus may receive up to 9 additional months to pursue bachelor's or first professional degree. Full time \$270/mo, no-dependents. ¹ Rates vary by state. FY 74 averaged \$65.77/week. States are reimbursed by Gov't. ²	At end of service, eligible for special training or vocational instruction. Varies with length of service, entitlements. 1 yr - 8-12 yrs. of service. 1 1/2 yr-over 12 yr. of service.	Military and public service have similar benefits. In any fiscal year may be reimbursed \$500.00, 50% of tuition cost, whichever is greater.	Train as required for defense mission & prepare military personnel for transition into civilian community after discharge.	May be granted leave of absence to pursue essential course of study at reduced pay.	Off duty education encouraged. Limited assistance furnished.	Reimbursement of 100% tuition fees of member with 15 years or more service. 75% reimbursement of tuition fees of member with less than 15 years service.
Unemployment Compensation		Yes.	Unemployment Insurance-Employee/Gov't cost share 50/50.	Gov't pays for member's coverage.	Yes. Funded thru income tax.	None.	Unknown.
Trailer	Relocation Pay may be elected in lieu of trailer pay. Self Haul 74¢/mi. Commercial 74¢/mi max.	Self Haul 0.5 pence/mi, paid in lieu of moving furniture at public expense & in addition to mileage allowance	Entitled to cost of moving via commercial hauler on post facilities - Rental spaces, if available	None.	None.	None.	None.
Miscellaneous	Token for Medal of Honor-\$100 mo for life. (Paid by VA).	Entertainment allowances & grants.	Movement grant varies with rank. e.g. SGT \$C300 LTC \$C500.	Government Savings Plan.			Small ship seapay. Hard lying: Officer & EM on seagoing vessels when not entitled to seagoing allowance \$A100 day. Good conduct increment after 5 years service \$A52/year for 5 years. After 10 year, additional \$A52/year.

1 With one dependent \$321 monthly - Two dependents \$366 monthly. Additional amount for each dependent over two \$22.00 a month.
2 Must have served continuously for at least 90 days and was discharged under conditions other than dishonorable.

**APPENDIX D
COMPARISON TO PRIVATE SECTOR SYSTEMS**



MAJGEN STUART H. SHERMAN, JR., USAF

COMPARISON TO PRIVATE SECTOR SYSTEMS

A. GENERAL.

A valid comparison of the cost to the employer as well as the total cost to both the employer and the recipient of any retirement benefit requires that calculations be done using the same funding method, at the same point in time, and the same assumptions (economic, demographic, etc.) for all plans. A standard method taken from actuarial science and commonly used for prefunding the retirement plan benefit costs for each new group of employees over their working lives is called an AGGREGATE ENTRY AGE NORMAL COST. All Federal retirement plans use this valuation method for the calculation of retirement benefit costs expressed as a percentage of the payroll costs. The DoD Actuary uses this method in calculating the required annual valuation of the Military Retirement System in accordance with Chapter 95, Title 31, U.S.C. It is favored by reason of its simplicity, convenience and stability. When applied correctly, to account for the unique aspects among different retirement plans to be compared, it will provide a valid analysis. When used for a comparison, it measures the current compensation value of the deferred benefits of each retirement system. It can also be adjusted for contributions made by the employees (Social Security, thrift plans, etc.) to arrive at an adjusted normal cost. This provides the necessary flexibility to establish meaningful valuation comparisons across different retirement systems and varying employee groups.

Normal cost valuations of retirement benefits result from explicit recognition of the effects of inflation and real pay growth, retirement benefit adjustments, and interest rates. Recognition of the demographic conditions as well as the choice of these economic conditions and interest rate assumptions is very critical in determining the percentage normal cost valuation of retirement or other deferred benefits. Essentially, what is being done for a valid comparison of this type is to superimpose the set of assumptions and conditions of any system being compared to each of the other systems. This measures the cost of each system in the context of the system chosen as the common ruler. This is important when comparing public and private sector plans. Given this sensitivity, three principles are relevant for comparing systems:

1. Valuations comparing two or more groups of employees should use identical sets of assumptions.

2. A reasonable range of assumptions should be used because of the uncertainties of the assumptions over the long time horizon (50 to 80 years) used in the valuation methodology; and

3. The assumption sets chosen for use should be reasonable from both the managements' and members' points of view for each system.

To calculate an entry-age normal cost, the future experience of a group of new Service entrants (or employees) is predicted. Their continuation rates, disability rates, normal retirement rates, death rates, survivorship characteristics, and salaries may be predicted using the appropriate historical data. Predicted yearly total salaries are calculated for the group over their projected employment lifetimes under the benefit plan. The retirement benefits, determined by the retirement plan characteristics, are combined with the experience factors to estimate the yearly total benefits predicted to be paid to the new employees over projections of their combined lifetimes, including those of their survivor beneficiaries.

The present value of the predicted yearly salaries and of the predicted yearly benefits are then calculated using an appropriate rate of interest.

The ratio:
$$\frac{\text{present value of predicted benefits}}{\text{present value of predicted salaries}}$$

is the percentage normal cost of the benefits. It is a percentage of payroll for the new employee group that must be "set aside" to fully fund their retirement benefit. It can be viewed as the aggregate future value of benefits to be earned by the group, as they relate to the aggregate future salaries to be paid to the group during the employment period. It can also be viewed as the percentage of predicted payroll which, if laid aside in an interest bearing fund, would earn interest such that the accumulated principal and interest would just pay off the future benefits as they are predicted to come due until the last beneficiary dies. If an employer pays the annual normal cost and amortizes any existing unfunded liability, the cost for each generation of workers will be funded before the generation retires or expires.

B. Cost Comparisons of Different Retirement Plans

Many past attempts have been made to examine the cost comparability of the Military Retirement System and old age pension plans in the private sector. The most recent attempt at such a cost comparison is contained in the President's Private Sector Survey on Cost Control (PPSSCC), in the Task Force Reports on the Office of the Secretary of Defense (OSD), and on the Department of the Air Force. Specifically, both reports concluded that the military plan is "over five times more costly than the better private sector plans." The OSD report stated that "the normal cost of good private sector plans is between 5 and 6 percent of payroll. The normal cost of the military plan is 35 percent of basic military compensation." This is a ratio of between 6 to 7 times more costly. These comparisons are incomplete and seriously in error, potentially causing decision-makers to have a significantly distorted view of the relative benefit costs.

This problem was partially corrected in the detailed text (but not in the Conclusions) of the Task Force Report on OSD where the additional

employer costs due to Social Security and private sector capital accumulation plans were added to adjust the normal cost percentages. Further, the military figure was decreased to 69% because basic pay is only part of what is called "Basic Military Compensation" or BMC; BMC is commonly used as a surrogate for a salary equivalent for private sector comparisons. The result of these corrections is to lower the military payroll percentage to 41% and and raise the private sector's to 14% - a ratio of about 3 to 1 - which is somewhat more reasonable but still incorrect. Table D-1 summarizes the above adjustments.

Table D-1
Comparison of Military and Private Sector
Retirement Plans Based on PPSSCC Calculations

<u>Adjustment</u>	<u>Military</u>	<u>Private Sector</u>
Normal cost of retirement plan-individual employer percent of covered pay	51% of pay	6% of pay
Add 2% for private sector deferred compensation	51%	8%
Multiply military by .69 for covered pay	35%	8%
Add 6.2% employers Social Security cost on all pay	41%	14%

Additional adjustments beyond the PPSSCC calculations are necessary to correct both the military and private sector employer costs. Table D-2 summarizes these required changes based upon review by the Fifth QRM. To assist the Fifth QRM in this task a contract was let with Hay Associates. Much of the private sector data used in the remaining portion of this Appendix is drawn from the Hay Associates report which is contained at Attachment 1.

Table D-2
Comparison of Military and Private Sector Retirement Plans
Linkage of PPSSCC and 5th QRMC Values

<u>Adjustment</u>	<u>Military</u>	<u>Private Sector</u>
PPSSCC calculation	41%	14%
Adjust military Social Security (-1%) for covered pay (only basic pay) and the free credit \$1200 credit (-1%)	40%	14%
Use Hay private sector normal cost of 8% for the PPSSCC normal cost of 6% (+2%)	40%	16%
Increase of 8% private sector normal cost by 21.6% to introduce military demographic assumptions equivalency (+2%)	40%	18%
Increase of private sector normal cost by 19% to introduce military economic assumptions comparison (5% CPI, 5.5% wage growth and 6% interest) (+2%)	40%	20%

Interestingly, the Task Force Report on the Air Force (Exhibit II-8, page 54) shows an average 10% private sector cost as a percent of pay and also quotes the Hay-Huggins value used in Table D-1; however, it goes on to use the 6% figure in its conclusions. The last two Table D-2 adjustments require explanation. Recall that earlier it was stated that the same assumption set must be used for valid comparisons. To accomplish this, the military demographic assumption set and economic assumption set were used. The 21.6% demographic adjustment upward to the private sector accounts for the increased military life expectancy values used by the DoD Actuary as well as a higher worker retention profile. The 19% upward adjustment for economic assumptions is because the private sector uses a higher wage increase of 6% and generally 2-2.5% real interest (7-7.5%). To measure the impact of using a range of economic assumptions (i.e., shows the cost from either the private sector view or the government's view), the three different economic assumption sets to be used are shown in Table D-3. The resulting employer percentages of payroll values and military to private sector ratios are shown in Table D-4.

Table D-3
Economic Assumption Sets

	<u>DoD</u>	<u>Private Sector (Hay-Huggins)</u>	<u>Fifth QRMC</u>
Inflation (CPI)	5.0%	5.0%	5.0%
Wage Increase	5.5%	6.0%	5.5%
Interest Rates	6.0%	7.0%	7.5%

Given the 5% CPI, the 6.0% interest rate (which produces a 1% real yield) is what the government must use for its return on long-term government securities. On the other hand, a 2.0-2.5% real yield (7.0 to 7.5 interest rate) is what can be realized in the private sector with 2.0% being the most common value used in the past by private actuaries but now being revised upward to 2.5%. These economic assumption sets, when applied still using the military demographics, give a representative range of values and ratios significantly less than the 5 or 6 to one contained in the PPSSCC conclusions.

Table D-4
Comparison of Military, Civil Service and Private Sector
Retirement Plans For Different Economic Assumptions
(Employer Cost as % of Pay)

<u>Economic Assumptions</u>	<u>Military</u>	<u>Civil Service</u>	<u>Private Sector</u>	<u>Military to Private Sector Ratio</u>
DoD	40	30	20	2.0:1
Private Sector (Hay-Huggins)	32	24	18	1.8:1
Fifth QRMC	27	20	17	1.6:1

There are yet two other dimensions to be added to this comparison to show the total story. The first entails adding in the employee or service member contributions (Social Security, private sector company capital accumulation plan savings, etc.) or costs and showing the net adjusted total cost as a percent of salary or pay. Table D-5 shows these values and ratios for the same assumptions used in Table D-4.

Table D-5
Comparison of Military, Civil Service and
Private Sector Retirement Plans
(Total Cost as % of Pay)

<u>Economic Assumptions</u>	<u>Military</u>	<u>Civil Service</u>	<u>Private Sector</u>	<u>Military to Private Sector Ratio</u>
DoD	44	37	29	1.5:1
Private Sector (Hay-Huggins)	37	31	27	1.4:1
Fifth QPMC	32	27	26	1.2:1

The final dimension deals with measuring adequacy at the point at which an individual first retires and the most commonly used relative measure is pay replacement ratios. These ratios attempt to measure how much of pre-retirement income (pay) must be replaced by other sources of income to avert a drop in the standard of living. The 1979 President's Commission on Pension Policy developed some ratio guidelines for married couples retiring in 1980 over selected income levels (6,500-50,000). These ratios along with similar ratios for a military member retiring at 30 years or a private sector retiree at age 65 where all private sector plans provide a full benefit are shown in Table D-6. Care should be exercised in viewing the comparison even though each person is retiring after a "full career" and where the plans provide maximum benefits. The difference between the comparison of employer costs (shown earlier in Tables D-1, D-2, D-4 and D-5) and employee retirement income is explained by the fact that benefits provided in the military are received after 20 to 30 years of service rather than age 65, and that the benefits are more fully indexed.

Table D-6
Pre-retirement Replacement Income Ratios (%'s)
(Retirees at age 65/30 years of service)

<u>Salary (BMC) Level (000)</u>	<u>President's Comm. on Pension Policy</u>	<u>Private Sector Percentile</u>				<u>Military</u>
		<u>90</u>	<u>75</u>	<u>Median</u>	<u>25</u>	
10	78	143	118	102	86	97
20	66	119	101	87	75	83
30	60	110	95	79	67	77
40	57	105	90	75	64	71
50	55	100	86	70	60	67
60	52(est)	100	85	69	59	64
70	50(est)	98	84	68	58	62

As can be seen from Table D-6 the military percentage is just below the median value for the private sector. All values are above the President's Commission values. Also, it should be noted that in 1982 over half of the military retirees BMC income just before retirement was in the range of \$24-30,000. This is the "salary" value where the private sector median and military ratios are the closest.

Another and probably more useful way to compare the individual retirement benefit differences between the Uniformed Services and the private sector is to calculate the total present value of retirement life-stream earnings. To accomplish this across the 10,000 - 70,000 salary ranges, the individual annual value (1982 dollars) of the retirement earnings components must be known and treated separately for present value calculations. Tables D-7 and D-8 give these data and are compatible with data used to calculate percentages in Table D-6. The private sector data were obtained from the Hay Associates 1982 non-cash Compensation Comparison Survey data using the Hay benefit value methodology to put the data on a consistent basis. Table D-9 contains the life annuity multiplier to be used dependent upon the economic (CPI and interest) assumptions. Again, the life annuity factors shown are for either the DoD or QRMC economic assumption sets (Table D-3).

Table D-7
 Annual Income for Persons Retiring at Age 62
 and 20 Years of Service (YOS) -
 Military Age 39/43 and 20 YOS

Salary Level at Retirement (\$000)

	<u>10</u>	<u>20</u>	<u>30</u>	<u>40</u>	<u>50</u>	<u>60</u>	<u>70</u>
1. <u>Social Security at Age 62</u>							
Private Sector	4600	6200	6400	6400	6400	6400	6400
Military	3700	5200	6300	6400	6400	6400	6400
2. <u>Capital Accumulation (Thrift Savings, etc.) - Private Sector Only</u>							
90th Percentile	1919	4034	5720	7392	9069	11136	12977
75th Percentile	1337	2604	3936	4990	6203	7495	8786
Median	873	1243	2386	3014	3661	4256	4936
25th Percentile	431	939	1283	1624	1931	2038	2370
3. <u>Retirement Plan Benefit</u>							
<u>Private Sector</u>							
90th Percentile	3400	6270	10400	14560	18000	22340	26500
75th Percentile	2490	5280	8780	12560	15650	19520	23210
Median	1850	4320	7280	10640	13400	16820	19990
25th Percentile	1310	3360	5930	8800	11050	14000	16770
Military	3390	6780	10170	13560	16950	20340	23730

Table D-8
Annual Income for Persons Retiring at Age 65
and 30 Years of Service (YOS) -
Military age 49/45 and 30 YOS

	<u>Salary Level at Retirement (\$000)</u>						
	<u>10</u>	<u>20</u>	<u>30</u>	<u>40</u>	<u>50</u>	<u>60</u>	<u>70</u>
1. <u>Social Security at Age 62</u>							
Private Sector	5800	7700	9600	11500	13400	15300	17200
Military	4600	6500	8400	10300	12200	14100	16000
2. <u>Capital Accumulation (Thrift Savings, etc.) - Private Sector Only</u>							
90th Percentile	3166	6219	9272	12325	14964	18374	21411
75th Percentile	2205	4396	6587	8778	10969	12366	14497
Median	1441	2875	4309	5742	7174	7722	8145
25th Percentile	710	1549	2387	3225	3886	3362	3910
3. <u>Retirement Plan Benefit</u>							
<u>Private Sector</u>							
90th Percentile	5300	9900	15300	21400	26950	33240	39290
75th Percentile	3780	8160	13800	19620	24700	30540	36350
Median	3000	6800	11700	16700	21000	26340	31520
25th Percentile	2110	5700	9870	14660	19850	25640	28300
Military	5080	10170	15250	20320	25400	30480	35560

Table D-9
Non-Disabled Retiree Life Annuity Multipliers

1. Military (all values assume 5% CPI)

<u>Interest</u>	<u>Age</u>					
	<u>39</u>	<u>43</u>	<u>49</u>	<u>53</u>	<u>62</u>	<u>65</u>
6% Enlisted	29.1	-	22.5	-	14.6	13.0
Officer	-	28.9	-	22.3	16.5	14.6
7.5% Enlisted	22.9	-	18.5	-	12.8	11.5
Officer	-	22.8	-	18.5	14.3	12.8

2. Private Sector (CPI is assumed to be 5% but the indexing applied is shown for 0, 2% as well as 5%)

<u>Interest</u>	<u>Age 62</u>			<u>Age 65</u>		
	<u>0%</u>	<u>2%</u>	<u>5%</u>	<u>0%</u>	<u>2%</u>	<u>5%</u>
6% Enlisted	9.5	11.2	14.6	8.8	10.2	13.0
Officer	10.5	12.4	16.5	9.7	11.3	14.6
7.5% Enlisted	8.6	10.0	12.8	8.0	9.1	11.5
Officer	9.4	11.0	14.3	8.7	10.1	12.8

These combined data were used to calculate the total present value of retirement lifestream earnings for both the Uniformed Services and the private sector. These data are contained in Cases 1-6 in Attachment 2. Cases were constructed as follows:

Retire After Age*/YOS

<u>Case</u>	<u>Uniformed Service</u>	<u>Private Sector</u>	<u>CPI</u>	<u>Interest</u>
1,3**	39 or 43/20	62/20	5%	6%
2,4**	49 or 53/30	65/30	5%	6%
5	39 or 43/20	62/20	5%	7.5%
6	49 or 53/30	65/30	5%	7.5%

* Lower age is enlisted, upper is officer

** Cases 1, 2, 5, and 6 have indexed the private sector pension payment by 2% per annum. Cases 3 and 4 do not index this private sector pension payment.

The ratio of the two total present values was calculated over the full salary range. For the Uniformed Services the enlisted value was used at 10,000 20,000 for the age 62/20 YOS cases and 10,000 - 30,000 for the 65/ 30 YOS cases. The values at 30,000 and 40,000 in these respective cases are a blend of the enlisted and officer values.

Table D-10
(90th Percentile)

<u>Salary (BMC)</u>	<u>Case (Age 62/20 YOS)</u>			<u>Case (Age 65/30 YOS)</u>		
	<u>1</u>	<u>3*</u>	<u>5**</u>	<u>2</u>	<u>4*</u>	<u>6**</u>
10,000	1.04	1.14	0.92	0.99	1.04	0.89
20,000	1.26	1.33	1.06	1.13	1.19	1.01
30,000	1.30	1.40	1.12	1.20	1.28	1.09
40,000	1.26	1.36	1.13	1.20	1.28	1.08
50,000	1.36	1.48	1.17	1.16	1.26	1.07
60,000	1.33	1.46	1.17	1.15	1.25	1.06
70,000	1.34	1.47	1.17	1.15	1.26	1.07

* private sector pension not indexed for inflation.

** 7.5% vice 6% interest.

The 90th percentile private sector values have been used in keeping with the belief that the Uniformed Services should be better than the best private sector plans. The applicable portion of Table D-10 is from 20,000 to 60,000 for age 62/20 YOS and 30,000 to 70,000 for age 65/30 YOS. Table F-11 illustrates the average BMC values for each pay grade at the 20 YOS and 30 YOS career point. Table D-12 shows where the majority

of retirements occur. As can be seen from Table D-11, the majority fall in the 25,000 32,000 salary (BMC at time of retirement) range. Using the applicable salary range (for each case) the retirement lifestream earnings for the Uniformed Services are about 30% higher than the 90th percentile private sector level for 20 YOS and 15% for the 30 YOS.

Table D-11
All Cash BMC Pay Grade Average
(Rounded to Nearest \$000)

<u>Pay Grade</u>	<u>Years of Service</u>	
	<u>20</u>	<u>30</u>
O-7/O-10	71	71-80-81*
O-6	55	62
O-5	50	51**
O-4	43***	-
O-3	37***	-
O-3E	38***	-
O-2E	32***	-
O-1E	26***	-
W-4	36	40
W-3	32	34
W-2	29	30**
W-1	26	-
E-9	31	35
E-8	28	32**
E-7	25	29
E-6	22	-
E-5	19	-
E-4	16	-

Legend

- *O-7 Stays at 71, O-8 is 80.
- **Maximum at 23 YOS, O-5 and E-8 tenure only to 28 YOS (commissioned for O-5)
- ***Maximum pre-20 YOS. Possible tenure is limited to fixed number of years of commissioned service (O-4 at 24, O-3 and under to 20)

Table D-12
DoD Military Retired Population Distribution*
(Non-Disabled Excluding Title III)

Pay Grade	Total FY82 Population**			FY82 Retirees***		
	Avg. YOS at Retirement	Avg Age at Retirement	% of Total	Avg. YOS at Retirement	Avg Age at Retirement	% of Total**
O-7/O-10	33-35	53-59	1	31-36	52-58	1
O-6	29	51	18	29	50	21
O-5	24	46	33	24	46	35
O-4	23	44	24	22	43	23
O-3/O-3E	23	43	7	22	41	6
O-2/O-1	23	43-44	2	22	40	-
W-4	28	48	4	27	46	5
W-3	23	43	5	23	42	4
W-2/W-1	22	43	6	22	41	3
E-9	26	45	7	27	46	10
E-8	23	43	14	24	42	22
E-7	22	42	41	22	41	45
E-6	21	41	30	21	41	21
E-5	21	42	9	21	41	1
E-4/E-1	21	42	-	21	41	-

Legend

*All figures rounded to nearest year or %.

**Percentages are done for officers (W-1/O-10) and enlisted separately.

***Populations are as follows:

Total - Officers	224760	FY82	7178
Warrants	38490		1027
Enlisted	774785		23717

From these revised data one can find that although the military retirement plan is more generous than the private sector it certainly is not 5 to 6 times more generous in its total cost to either the employer (taxpayer) or the employee (service member). The same is true for the comparison of the total individual benefit. In fact, if as the PPSSCC recommended that the military retirement system should be better than the best private sector plans, it is not far off. However, that is not the real issue facing the U.S. Government. The real question remains, "Does the military retirement system effectively serve to help accomplish our national security objectives?" This issue is not only one of efficiency in terms of cost but more importantly does it (1) help provide the necessary number and mix of quality, experienced personnel, both active, reserve and on-call; (2) serve the needs of the individual service member in providing a stable basis for lifetime career planning; and (3) treat the taxpayer fairly. These are broader issues than one of pure economic, however important.

Atlanta
Auckland
Barcelona
Birmingham
Bogota
Boston
Brussels
Calgary
Capetown
Caracas
Chicago
Dallas
Dublin
Dusseldorf
East London
Edinburgh
Frankfurt
Glasgow
Hartford

COMPARABILITY OF MILITARY
AND PRIVATE SECTOR
RETIREMENT PROGRAMS

Helsinki
Houston
Johannesburg
Kansas City
London
Los Angeles
Lyon
Madrid
Manchester
Melbourne
Mexico City
Milan
Minneapolis
Monterrey
Montreal
Newcastle-Upon-Tyne
New York
Paris
Philadelphia
Pittsburgh
Port Elizabeth
Rio de Janeiro
San Francisco
Sao Paulo
Seattle
Singapore
Sydney
Toronto
Utrecht
Vancouver
Washington, DC
Wellington
Zurich

JULY 1983

Prepared by:

Edwin C. Hustead
Director, Actuarial Consulting Services



HAY ASSOCIATES
MEMBER - THE HAY GROUP
WASHINGTON, D.C.

D-15

Atch 1

HAY ASSOCIATES
MEMBER - THE HAY GROUP

Management Consultants

1110 VERMONT AVENUE, N.W. • WASHINGTON, D.C. 20005 • (202) 833-9250

July 12, 1983

Captain Norman A. Mayo
QRMC
5201 Leesburg Pike
Skyline Place 3, Suite 1511
Falls Church, VA 22041

Dear Captain Mayo:

As we discussed on June 28, we have reviewed and finalized the Hay Associates report on the comparability of military and private sector retirement programs. Attached are three copies of the report. We trust that this report will meet your needs and stand ready to discuss it further.

We have also reviewed the cost comparison used by the President's Private Sector Survey on Cost Control (PPSSCC). The PPSSCC comparison began with the 51% military normal cost and their calculation of a 6% private sector normal cost. They then recognized three factors that require adjustment of this comparison. Application of these adjustments changed the comparison to 41% for the military and 14% for the private sector. These adjustments were as follows:

- An addition of 2% to the private sector value to reflect the value of deferred compensation.
- Multiplication of the military value by 69% to allow for the actual covered retirement pay.
- An addition of 6% to both the military and private sector values to include Social Security.

In performing our analysis, we identified four other areas in which adjustments are needed. As a result of these adjustments the comparison was changed to 40% for the military and 20% for the private sector at \$30,000 Basic Military Compensation. Because of the varying effect of Social Security and integrated plans the comparison is slightly different at other BMC levels ranging from 41% compared to 19% at \$10,000 to 38% compared to 18% at \$70,000 (see table 4 of the report).

The first adjustment needed was to reduce the military Social Security value by 1% of pay to allow for the fact that not all of compensation is covered by Social Security even after consideration of the free credit of \$1,200.

D-17

Atch 1

THE HAY GROUP

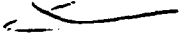
Captain Norman A. Mayo
July 11, 1983
Page 2

Second, the Hay NCC survey shows a normal cost of 8% in the private sector compared to 6% used by PPSSCC. While PPSSCC has referred extensively to the Hay report they did not explain how their cost was derived.

Two additional changes are needed to place both the military and private sector values on a standard yardstick. Therefore, the other two adjustments we made were to use the military demographic and economic assumptions in calculating the private sector values. The introduction of the military demographic assumptions increased the private sector value by 2% primarily because the military valuation includes an assumed improvement in mortality while most private sector valuations do not. Finally, by revising the private sector economic assumptions to the military assumptions the private sector values were increased by another 2%.

In addition to calculating the relative normal cost on the military assumptions, we also performed a comparison using Hay economic assumptions and a set of assumptions selected by QRC. The Hay economic assumptions show a 32% military value versus a 18% private sector value at the \$30,000 BMC level. The QRC economic assumptions show a comparison of 27% military to 17% private sector.

Sincerely yours,


Edwin C. Husted
Director, Actuarial
Consulting Services

Enclosures.

**COMPARABILITY OF MILITARY AND PRIVATE SECTOR
RETIREMENT PROGRAMS**

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION AND SUMMARY OF FINDINGS	D-21
II. METHODOLOGY	D-24
III. COMPARISON OF THE VALUE OF RETIREMENT BENEFITS	D-27
IV. COMPARISON OF THE PRACTICE IN PROVIDING RETIREMENT BENEFITS	D-40
V. LEVEL OF BENEFITS AT RETIREMENT	D-63
 APPENDIX A - Participants in Noncash Compensation Comparison	 D-69

**COMPARABILITY OF MILITARY AND PRIVATE SECTOR
RETIREMENT PROGRAMS**

I. INTRODUCTION

The Quadrennial Review of Military Compensation (QRMC) engaged Hay Associates to perform an analysis of the military retirement system. The objective of the analysis was to compare, both quantitatively and qualitatively, the military retirement system with retirement practices found in the private sector.

The military retirement system was compared to the retirement plan practices of the 805 firms represented in the 1982 Hay Noncash Compensation Comparison (NCC) survey. A list of the 805 firms, which are representative of the plans of large employers in the United States, will be found in Appendix A.

Hay considered it appropriate to include the value of capital accumulation plans with the retirement plans in the comparison. The primary forms of capital accumulation plans (thrift, profit sharing, and stock purchase) set aside money that the employee can use later for retirement income. When an employer considers the total appropriate level of retirement income of the individual; social security, capital accumulation plans, and retirement plans are typically viewed as a total package. For instance, employers with thrift plans, will typically provide lower pension benefits than they would without thrift plans.

Almost all employers provide either a pension plan or a capital accumulation plan or both. The NCC shows that 92% of employers provide a pension plan; 70% provide a capital accumulation plan; and two-thirds provide both types of plans.

The Hay comparisons also include the value of Social Security benefits for both the military and private sector systems. The

Social Security benefit for the military is only based on part of compensation with a tax-free credit of up to \$1,200 a year.

The military retirement system provides higher benefits at an earlier age than the typical pension plan found in the private sector. The typical retirement age in the private sector is age 62, whereas military personnel can retire on unreduced benefits, subject to approval, after twenty years of service. Since most military personnel enter the system between age 19 and 23, the earliest retirement age is age 39 to 43.

The military retirement system also is more liberal than the typical private retirement system since it provides full cost-of-living increases after retirement. Through 1985, however, retired personnel under age 62 will only receive a portion of the cost-of-living increase. Only 8% of private sector employers have a formal cost of living provision within their pension plan, but the majority have provided ad hoc increases with some frequency. The average increase for these employers has been approximately one-third of the growth in the cost-of-living over the last five years.

On the other hand, there are areas where the military benefits are substantially less liberal than average plans found in the private sector. Military personnel have to work twenty years to earn a vested benefit whereas private sector employers are required, by the Federal Government, to provide vested benefits much earlier. The most common provision for vesting in the private sector is full vesting at ten years of service. Further, the military pension is determined on base pay which is only 69% of all Basic Military Compensation (BMC). Private sector plans almost always credit all base compensation and may also consider additional compensation and/or bonuses and incentive awards.

These retirement and capital accumulation plans were compared using the Hay standard normal cost comparison methodology. Since retirement costs are very sensitive to the economic assumptions used to project benefits, the relative cost of the military system was measured using three different sets of economic assumptions. The sets used were the standard Hay assumptions, the military valuation assumptions, and assumptions selected by QRMC:

	<u>Hay</u>	<u>DOD</u>	<u>QRMC</u>
Inflation	5.0%	5.0%	5.0%
Annual Salary Increase	6.0	5.5	5.5
Annual Investment Return	7.0	6.0	7.5

For a BMC of \$30,000, the military retirement benefit under the QRMC set of assumptions was 27.4% of pay versus 16.8% provided by the average employer in the private sector. Using the military retirement system economic assumptions, the comparison was 39.8% to 20.2%. Under the standard Hay economic assumptions, the comparison was 32.4% to 18.3% of pay.

When all benefits deriving from both the employee and the employer contribution are considered, the normal cost comparison under the QRMC set of assumptions was 31.7% to 25.7% of pay; under the military assumptions 44.1% to 29.0%; and, under the Hay economic assumptions 36.7% to 27.1%.

II. METHODOLOGY

The normal cost comparison method was used to establish a cash equivalent value of each pension and capital accumulation plan for the 805 employers represented in the 1982 Hay NCC. For each plan, Hay determined both the Total Benefit (TB) value and the Employer Provided (EP) value. The TB value is the normal cost for the total benefits to be paid from the pension plan. The EP value is the TB less the employee contribution. Thus, the EP value represents the Hay standardized value of the employer contribution for the benefits provided under pension and capital accumulation plans.

The standard Hay normal cost comparison method adds direct employer contributions, for defined contribution plans, to the normal cost for defined benefit plans. Normal cost is the percent of pay needed during the average entering employee's working life to provide the retirement plan benefits accrued by the employees and their survivors. The normal cost is determined using a work force representative of a typical United States employer with economic and other assumptions likely to be used for that employer. The key economic assumptions used by Hay are 5% inflation, 6% general salary increases, and 7% investment return.

The Defense Department valuation of the military retirement system, using the Hay set of economic assumptions, shows a normal cost of 40.0% of the pay that is covered for retirement. However, the Hay normal cost comparison methodology, applied to the military retirement system developed a cost of 32.9% of retirement covered pay. The difference is explained by the different population and demographic assumptions of the two models. One major difference, for instance, is that military costs are higher because they include lower mortality assumptions.

To convert the national standard to the military standard demographics, all Hay normal costs for defined benefit plans were multiplied by 1.216; the ratio of 40.0% to 32.9%. This adjustment did not affect defined contribution plans or employee contributions.

A second adjustment modified the military retirement value to allow for the fact that only a portion of Basic Military Compensation (BMC) is used to determine the retirement benefit. According to the 1982 DoD Statistical Report on the military retirement system, the basic pay covered by retirement represents approximately "69% of BMC for the entire force". Since the normal cost is a direct proportion of the present value of all future pay, the military normal costs were reduced 31% for a valid comparison to private sector benefits which are typically based on all elements of compensation.

After the above mentioned adjustments, the EP and TB values for the 805 Hay survey plans were compared to the military retirement plan values using the Hay standard normal cost comparison method. The values were also calculated for the set of economic assumptions used for the official DoD valuation and a set provided by QRM. In each case the 21.6% demographic conversion adjustment was used. The economic values and the military normal cost were:

	<u>Hay</u>	<u>DOD</u>	<u>QRM</u>
Inflation	5.0%	5.0%	5.0%
Salary Increase	6.0	5.5	5.5
Investment Return	7.0	6.0	7.5
Total military normal cost	40.0%	50.7%	32.8%
Military normal cost after base pay adjustment	27.6%	35.0%	22.6%

The normal cost comparison values also include the value of Social Security benefits. Ultimately, the employer Social Security contribution will be 6.2% of pay. This contribution will obtain up to the maximum salary which, in 1983, is \$35,700. To allow for this, the EP values were increased 6.2% of pay up to \$2,213. The TB values were increased by twice this amount since employer and employee contributions are considered.

The value to be added for Social Security for military personnel is different than for equivalent salaries in the private sector because not all Base Military Compensation is credited as Social Security compensation. The Social Security contribution for military personnel is the same 6.2% but only covers an average of 69% of pay. On the other hand, military personnel receive a \$1,200 tax free credit.

To include the Social Security values in the military benefits, Hay determined that it would be appropriate to add an EP value of 6.2% of base compensation (69% of BMC) plus 12.4% of the \$1,200 tax free credit since the personnel that receive credit do not pay for the \$1,200. To obtain the TB value, the value added was 12.4% of all pay including the free credit.

When base pay is equal to or more than the maximum Social Security salary of \$35,700, the addition of Social Security values does not affect the comparison between military and the private sector. However, before that point, the Social Security benefits do produce different values.

III. COMPARISON OF THE VALUE OF RETIREMENT BENEFITS

The following six charts and accompanying graphs compare the EP and TB values for the military to the range of private sector values for salaries from \$10,000 to \$70,000. Tables 1 and 2 show the results using the Hay economic assumptions; tables 3 and 4 show the results using the official military retirement system economic assumptions; and, tables 5 and 6 show the results using economic assumptions specified by QRMC.

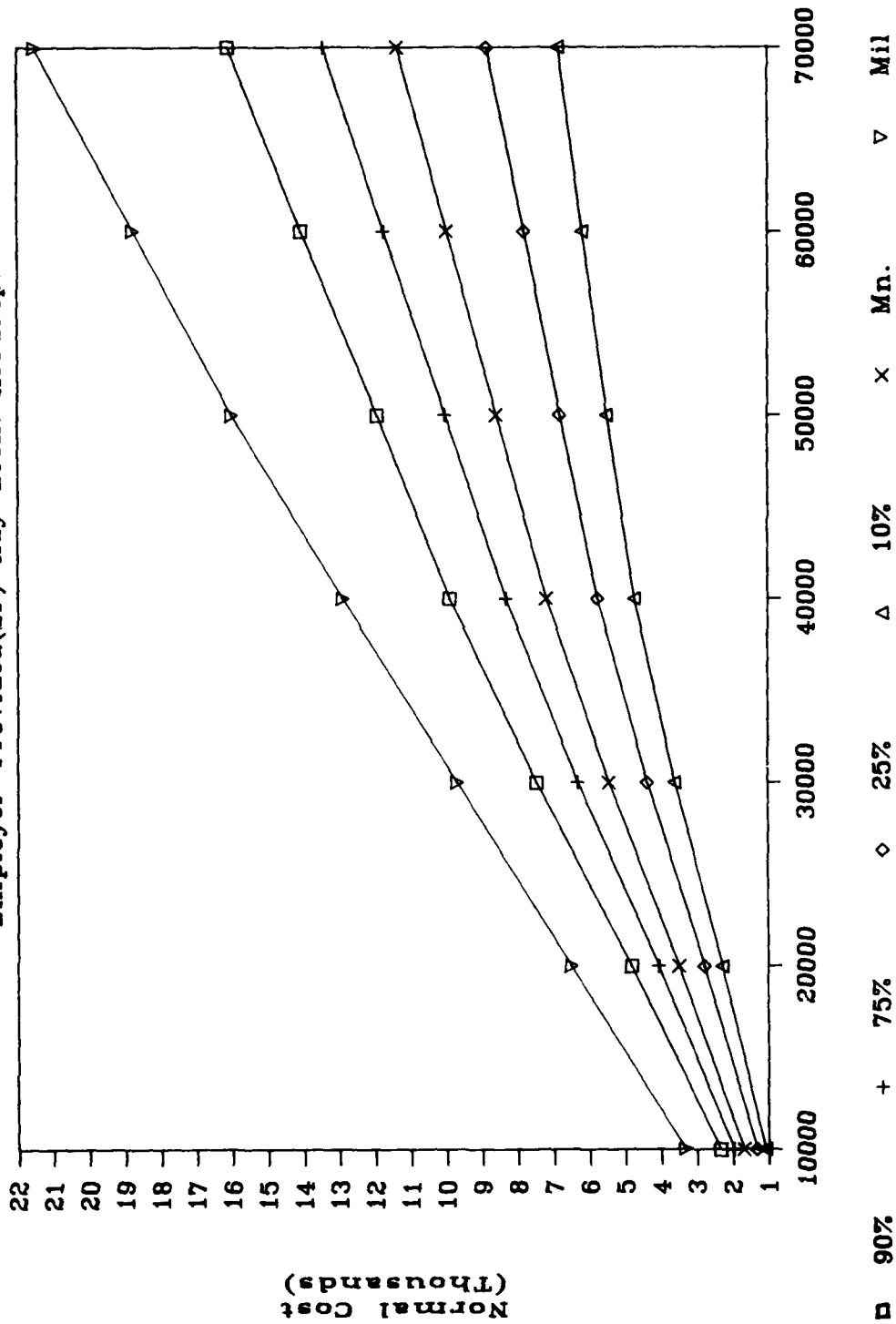
For instance, on the Hay set of economic assumptions, the military retirement system combined with Social Security provides an employer-provided benefit of \$9,712 for an officer earning \$30,000 of Basic Military Compensation. The average employer-provided pension program (including the average capital accumulation plan) is \$5,477. Ninety percent (90%) of the firms provide a benefit of \$7,491 or less. When employee as well as employer contributions are considered (the TB values), the military value is \$10,996 compared to a mean of \$8,143 with 10% of the firms providing benefits of \$10,917 or more.

As an example, the \$9,712 military value in table 1 at \$30,000 BMC was determined as follows:

(1) Basic pay = \$30,000 x .69	= \$20,700
(2) Military retirement normal cost value = \$20,700 x .40	= \$8,280
(3) Covered Social Security value = \$ 20,700 x .062	= \$1,283
(4) Free Social Security credit \$1,200 x .124	= \$149
(5) Total (2) + (3) + (4)	= \$9,712

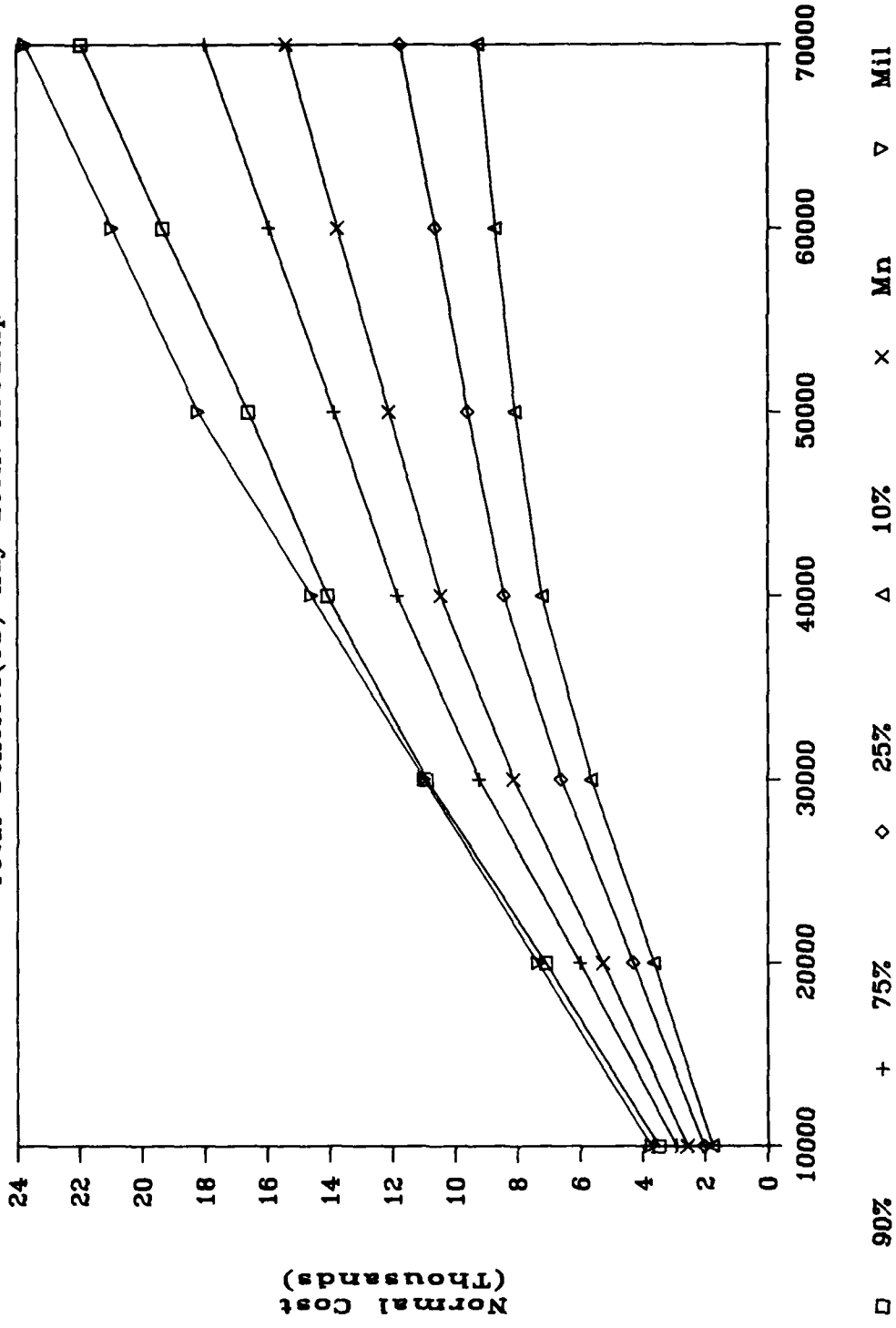
QRMC

Employer-Provided(EP) Hay Econ. Assump.



QRMC

Total-Benefits(TB) Hay Econ. Assump.



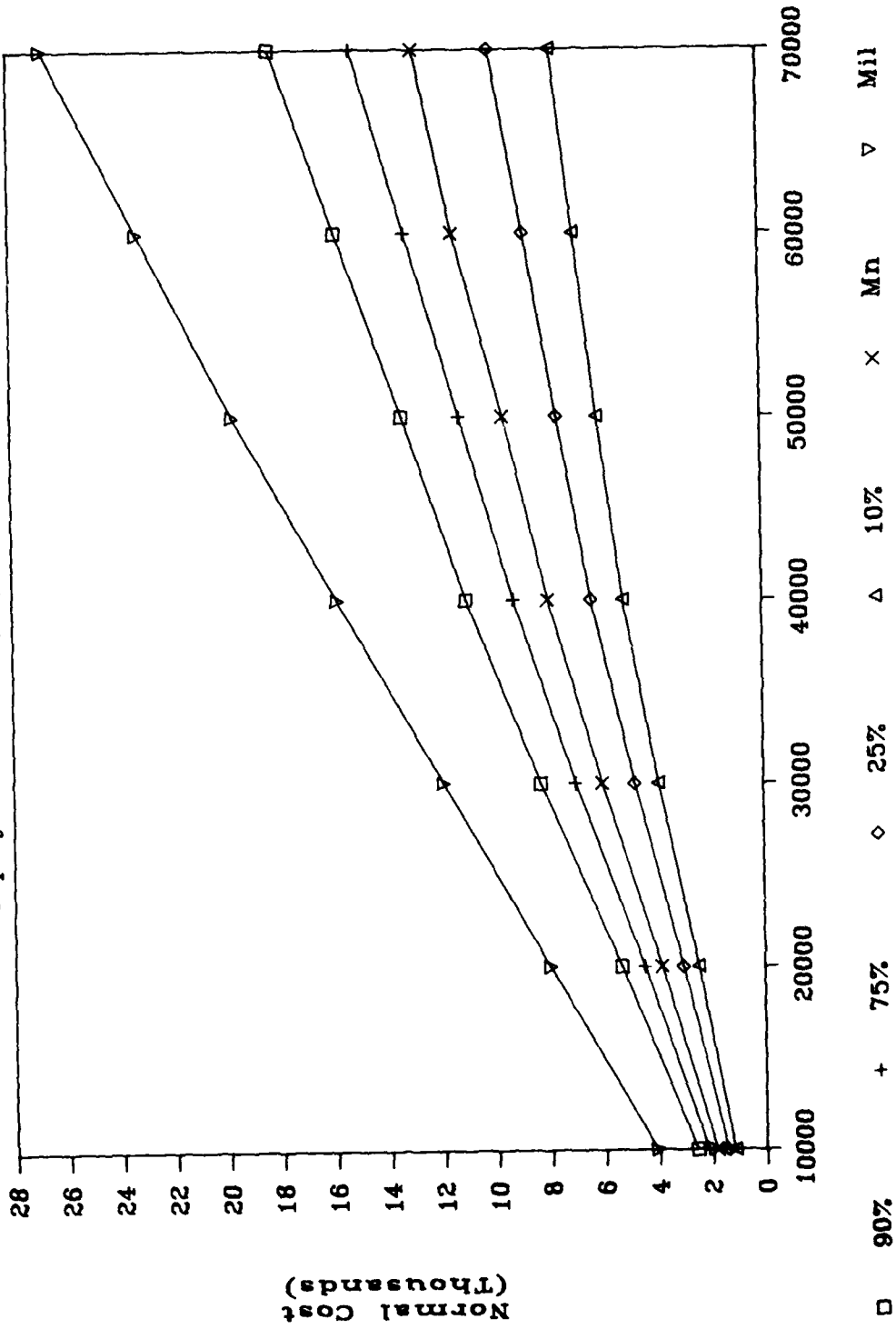
Normal Cost
(Thousands)

D-29

Atch 1

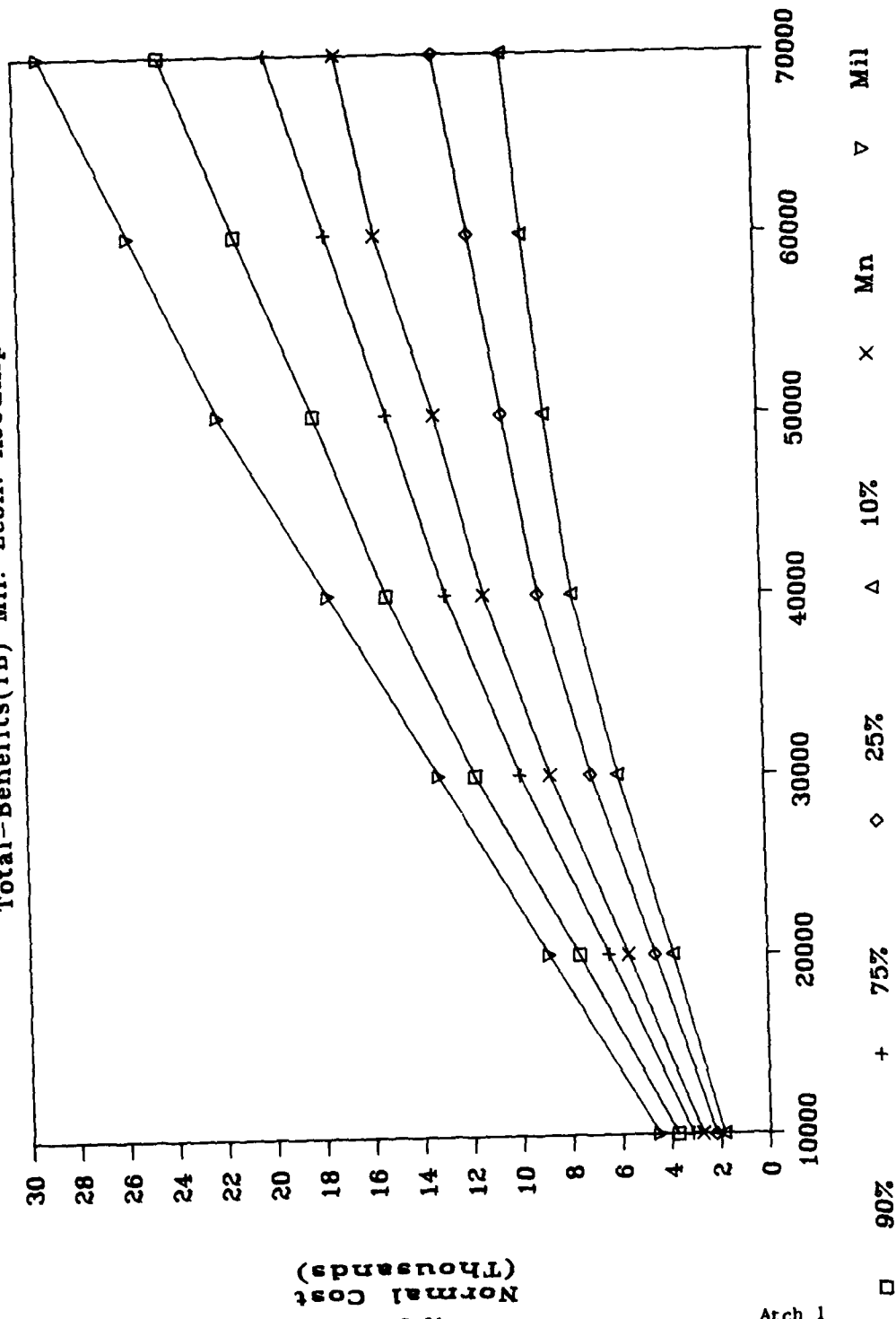
QRMC

Employer-Provided(EP) Mil. Econ. Assump



QRMC

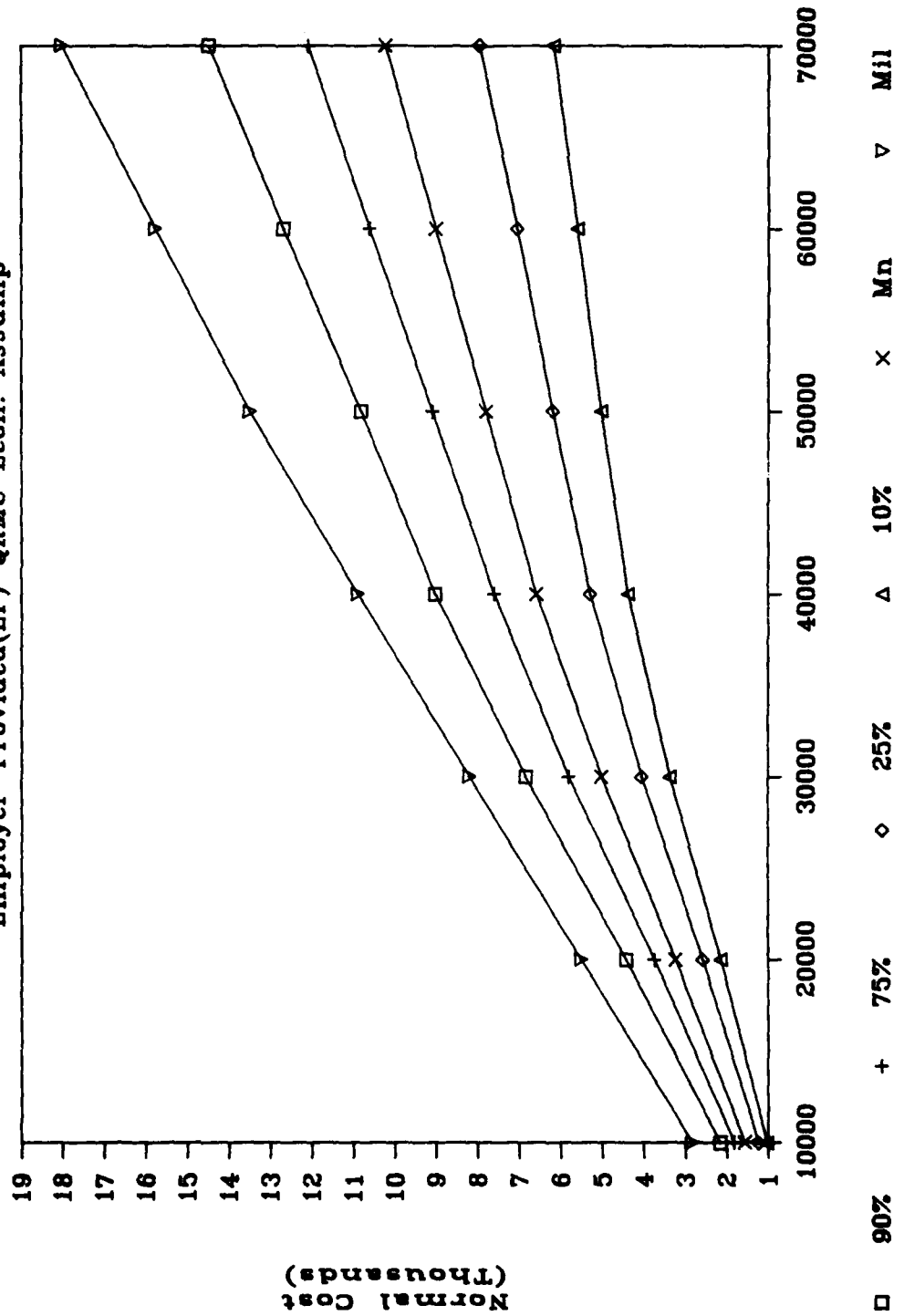
Total-Benefits(TB) Mil. Econ. Assump.



Normal Cost (Thousands)

QRMC

Employer-Provided (EP) QRMC Econ. Assump



QRMC

Total-Benefits(TB) QRMC Econ. Assump.

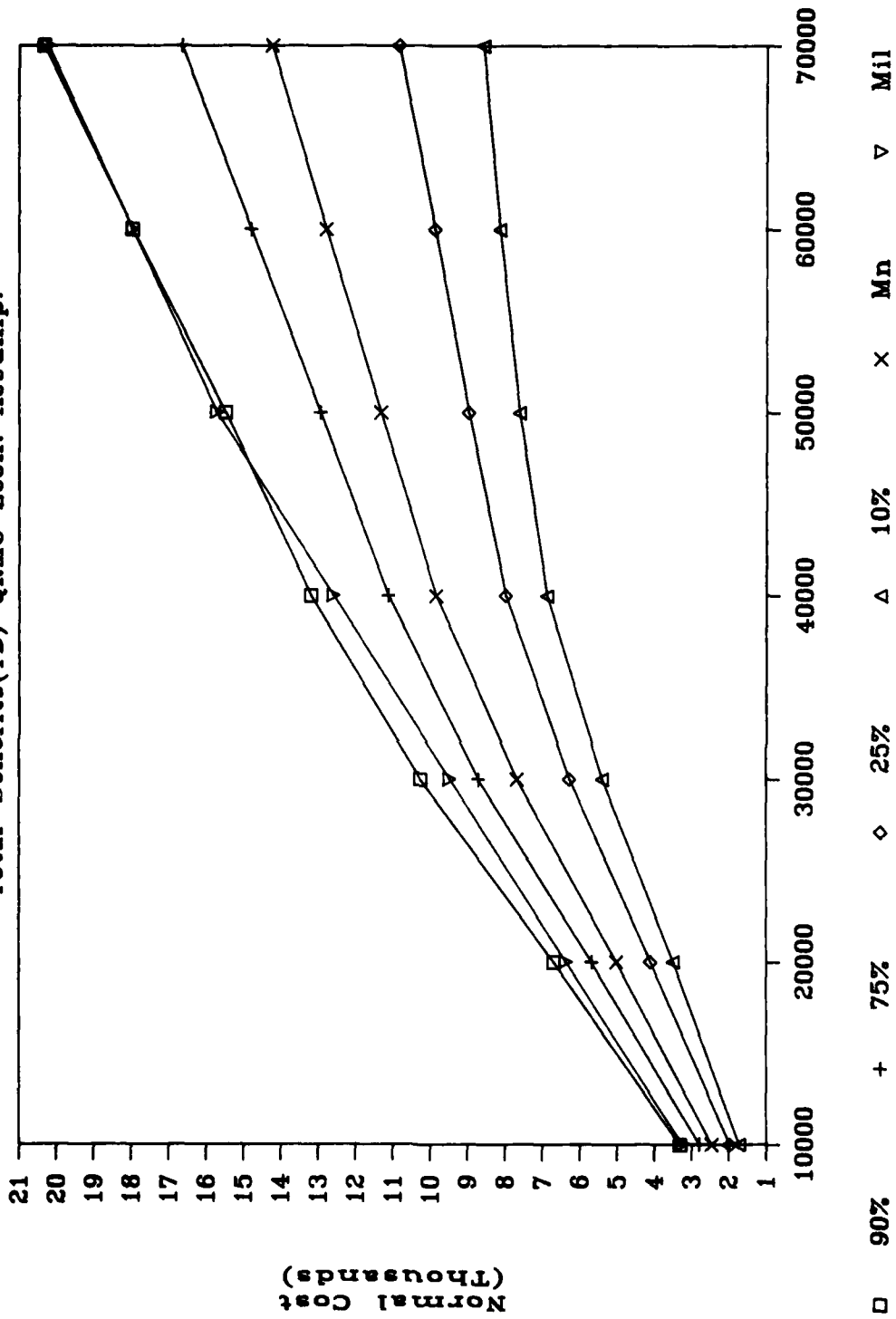


Table 1

**Employer-Provided (EP) Value Total Deferred Income
Hay Economic Assumptions**

	10000	20000	30000	40000	50000	60000	70000
Salary							
90th Percentile	2353	4845	7491	9923	11953	14067	16131
75th Percentile	1984	4091	6348	8356	10048	11758	13459
Median	1652	3436	5324	7002	8328	9647	10991
25th Percentile	1337	2804	4398	5788	6834	7824	8870
10th Percentile	1104	2311	3633	4761	5520	6201	6870
Mean	1707	3524	5477	7215	8608	9994	11380
Military	3337	6524	9712	12901	16013	18773	21533

**Total-Benefits (TB) Value Total Deferred Income
Hay Economic Assumptions**

	10000	20000	30000	40000	50000	60000	70000
Salary							
90th Percentile	3514	7115	10917	14099	16619	19362	21980
75th Percentile	2953	6025	9255	11878	13886	15961	18025
Median	2505	5147	7821	10028	11541	13036	14572
25th Percentile	2081	4322	6626	8471	9612	10651	11774
10th Percentile	1804	3672	5665	7258	8099	8739	9295
Mean	2604	5305	8143	10488	12136	13775	15413
Military	3764	7380	10996	14611	18226	20986	23746

Table 2

	Percentage of Total Salary Employer-Provided (EP) Value Total Deferred Income Hay Economic Assumptions						
	10000	20000	30000	40000	50000	60000	70000
Salary	23.53	24.23	24.97	24.81	23.91	23.45	23.04
90th Percentile	19.84	20.45	21.16	20.89	20.10	19.60	19.23
75th Percentile	16.52	17.18	17.75	17.51	16.66	16.08	15.70
Median	13.37	14.02	14.66	14.47	13.67	13.04	12.67
25th Percentile	11.04	11.56	12.11	11.90	11.04	10.34	9.61
10th Percentile							
Mean	17.07	17.62	18.26	18.04	17.22	16.66	16.26
Military	33.37	32.62	32.37	32.25	32.03	31.29	30.76

	Percentage of Total Salary Total-Benefits (TB) Value Total Deferred Income Hay Economic Assumptions						
	10000	20000	30000	40000	50000	60000	70000
Salary	35.14	35.57	36.39	35.25	33.24	32.27	31.40
90th Percentile	29.53	30.13	30.85	29.70	27.77	26.60	25.75
75th Percentile	25.05	25.74	26.07	25.07	23.08	21.73	20.82
Median	20.81	21.61	22.09	21.18	19.22	17.75	16.82
25th Percentile	18.04	18.36	18.88	18.14	16.20	14.57	13.28
10th Percentile							
Mean	26.04	26.52	27.14	26.22	24.27	22.96	22.02
Military	37.64	36.90	36.65	36.53	36.45	34.98	33.92

Table 3

	Employer-Provided(EP) Value Total Deferred Income Military Economic Assumptions						
	10000	20000	30000	40000	50000	60000	70000
Salary	2603	5368	8315	11058	13408	15847	18233
90th Percentile	2182	4517	7025	9297	11256	13238	15208
75th Percentile	1809	3777	5877	7780	9332	10879	12449
Median	1456	3065	4828	6403	7636	8813	10040
25th Percentile	1189	2504	3953	5227	6129	6957	7756
10th Percentile							
Mean	1872	3877	6046	8013	9634	11450	12865
Military	4077	8004	11932	15861	19713	23213	26713

	Total-Benefits(TB) Value Total Deferred Income Military Economic Assumptions						
	10000	20000	30000	40000	50000	60000	70000
Salary	3764	7638	11741	15234	18074	21141	24082
90th Percentile	3151	6451	9932	12820	15094	17440	19774
75th Percentile	2662	5488	8373	10806	12545	14268	16031
Median	2200	4583	7056	9085	10414	11639	12944
25th Percentile	1889	3865	5984	7724	8708	9496	10181
10th Percentile							
Mean	2769	5658	8712	11285	13163	15441	16897
Military	4504	8860	13216	17571	21926	25426	28926

Table 4

	Percentage of Total Salary Employer-Provided (EP) Value Total Deferred Income Military Economic Assumptions						
	10000	20000	30000	40000	50000	60000	70000
Salary	26.03	26.84	27.72	27.65	26.82	26.41	26.05
90th Percentile	21.82	22.58	23.42	23.24	22.51	22.06	21.73
75th Percentile	18.09	18.89	19.59	19.45	18.66	18.13	17.78
Median	14.56	15.32	16.09	16.01	15.27	14.69	14.34
25th Percentile	11.89	12.52	13.18	13.07	12.26	11.60	11.08
10th Percentile	18.72	19.39	20.15	20.03	19.27	19.08	18.38
Mean	40.77	40.02	39.77	39.65	39.43	38.69	38.16
Military							

	Percentage of Total Salary Total-Benefits (TB) Value Total Deferred Income Military Economic Assumptions						
	10000	20000	30000	40000	50000	60000	70000
Salary	37.64	38.19	39.14	38.09	36.15	35.24	34.40
90th Percentile	31.51	32.26	33.11	32.05	30.19	29.07	28.25
75th Percentile	26.62	27.44	27.91	27.02	25.09	23.78	22.90
Median	22.00	22.92	23.52	22.71	20.83	19.40	18.49
25th Percentile	18.89	19.32	19.95	19.31	17.42	15.83	14.54
10th Percentile	27.69	28.29	29.04	28.21	26.33	25.73	24.14
Mean	45.04	44.30	44.05	43.93	43.85	42.38	41.32
Military							

Table 5

	Employer-Provided (EP) Value Total Deferred Income QRMC Economic Assumptions						
	10000	20000	30000	40000	50000	60000	70000
Salary	2160	4440	6853	9043	10826	12688	14502
90th Percentile	1830	3760	5823	7626	9112	10612	12104
75th Percentile	1530	3172	4896	6400	7550	8693	9861
Median	1245	2602	4065	5312	6212	7057	7963
25th Percentile	1038	2162	3385	4400	5049	5615	6184
10th Percentile	1579	3251	5036	6598	7812	9021	10230
Mean	2837	5524	8212	10901	13513	15773	18033
Military							

	Total-Benefits (TB) Value Total Deferred Income QRMC Economic Assumptions						
	10000	20000	30000	40000	50000	60000	70000
Salary	3320	6710	10279	13219	15492	17983	20351
90th Percentile	2799	5695	8730	11149	12950	14814	16670
75th Percentile	2383	4883	7393	9425	10763	12082	13442
Median	1989	4120	6293	7995	8991	9884	10866
25th Percentile	1737	3522	5417	6897	7627	8153	8609
10th Percentile	2477	5031	7702	9870	11341	12802	14262
Mean	3264	6380	9496	12611	15726	17986	20246
Military							

Table 6

	Percentage of Total Salary Employer-Provided (EP) Value Total Deferred Income QRMC Economic Assumptions						
	10000	20000	30000	40000	50000	60000	70000
Salary	21.60	22.20	22.84	22.61	21.65	21.15	20.72
90th Percentile	18.30	18.80	19.41	19.06	18.22	17.69	17.29
75th Percentile	15.30	15.86	16.32	16.00	15.10	14.49	14.09
Median	12.45	13.01	13.55	13.28	12.42	11.76	11.38
25th Percentile	10.38	10.81	11.28	11.00	10.10	9.36	8.83
10th Percentile	15.79	16.25	16.79	16.49	15.62	15.04	14.61 ^a
Mean	28.37	27.62	27.37	27.25	27.03	26.29	25.76
Military							

	Percentage of Total Salary Total-Benefits (TB) Value Total Deferred Income QRMC Economic Assumptions						
	10000	20000	30000	40000	50000	60000	70000
Salary	33.20	33.55	34.26	33.05	30.98	29.97	29.07
90th Percentile	27.99	28.48	29.10	27.87	25.90	24.69	23.81
75th Percentile	23.83	24.41	24.64	23.56	21.53	20.14	19.20
Median	19.89	20.60	20.98	19.99	17.98	16.47	15.52
25th Percentile	17.37	17.61	18.06	17.24	15.25	13.59	12.30
10th Percentile	24.77	25.16	25.67	24.68	22.68	21.34	20.37
Mean	32.64	31.90	31.65	31.53	31.45	29.98	28.92
Military							

IV. COMPARISON OF THE PRACTICE IN PROVIDING RETIREMENT BENEFITS

A. General

The military retirement system provides 2.5% of covered basic pay per year of service up to thirty (30) years of service. For personnel entering service after September 1980, the benefit is based on the highest three years of basic pay. Benefits are paid to anybody leaving the service after twenty (20) years, but there is no vesting before twenty years. There is no employee contribution. The accompanying tables show the prevalence of practice in the private sector with a comparison, as asterisked, to the military system.

As with the military system, most benefits are based on final average earnings, although typically the average is over five years of service. Most plans also provide a level percentage of earnings, most commonly 1.25% to 1.75% per year of service. Of employers who have a final pay plan, 89% provide an offset for Social Security benefits either through a step-rate or a direct offset formula.

As required by law, most employers provide full vesting at ten (10) years of service with the others providing variations which are usually equivalent to that criteria. Almost all employers also provide benefits on full pay with some also covering bonuses.

In addition to the retirement system, 70% of employers provide capital accumulation plans. The most common are thrift plans where the employer typically matches half of the pay set aside by the employee up to an employer contribution of 3%.

One unique feature of the military retirement system, when compared to the private sector, is the allowance for full retirement after twenty (20) years of service. Because of the need to maintain a young and effective force, this is a practice peculiar to the

A. GENERAL INFORMATION

Retirement Plan Combinations	Survey Participants	
	No.	%
Pension Plan Only	222	28*
Capital Accumulation Plan Only	52	6
Both Plans	515	64
Neither Plan	16	2
Total	805	100
 Employee Contributions		
None	593	81*
Required	82	12
Voluntary only	52	7
Total	727**	100
 Vesting Requirements		
Full at 10 Years Service	540	73
Rule of 45	25	3
Graded - 25% at 5 Years to		
Full at 15 Years	66	9
Full and Immediate	17	2
Full at No. Years Service		
Other than 10	42	6
Combination	4	1
Partial at Stated Years Service		
Then Full at Other Years	38	5
Other	5	1
No Vesting	0	0*
Total Plans	737	100
 Compensation Credited for Coverage		
Incentive Awards		
Included	166	53
Paid But Excluded	147	47
Performance Bonuses		
Included	138	49
Paid But Excluded	143	51
Commissions		
Included	145	67
Paid But Excluded	72	33
Overtime for Exempt		
Included	194	90
Paid But Excluded	22	10

Note: The military retirement system only credits basic pay (excludes quarters allowance, subsistence allowance, etc.).

*Designates provision of the military retirement system.
 **The totals of this and the following pension questions are the portion of the 737 employers with pension plans who have a valid response to each question.

B. BASIS OF PENSION FORMULA

Benefits Determination	Survey Participants	
	No.	%
Final Average Earnings	492	67 *
Final Average Earnings with Flat Dollar Minimum	141	19
Career Average Earnings	43	6
Career Average Earnings with Flat Dollar Minimum	13	2
Flat Dollar Amount	3	0
Straight Money Purchase	24	3
Combination: Greater of Final Average and Career Average Earnings	12	2
Other	9	1
Total Plans	737	100

Types of Final Average Earnings Formula

Level Percent per Year	273	43 *
Step-Rate Percent Per Year of Service	110	17
Varies by Years of Service	108	17
Varies by Age	5	1
Flat Percent After Stated Number Years of Service	71	11
Step-Rate Percent Per Year of Service	14	2
Combination, Greater of Type	26	4
Combination, Additive Type	25	4
Other	9	1
Total	641	100

**Years for Averaging Under Final Average
Earnings Formulae**

Final Year	5	1
Final 2 Years	2	0
Highest 3 Years	35	6 *
Highest 3 of Last 5-15 Years	43	7
Final 3 Years	16	2
Highest 4 Years	1	0
Highest 4 of Last 10-15 Years	4	1
Final 4 Years	1	0
Highest 5 Years	81	13

*Designates provision of the military retirement system.

Years for Averaging Under Final Average Earnings Formulae (continued)	Survey Participants	
	<u>No.</u>	<u>%</u>
Highest 5 of Last 8-15 Years	383	60
Final 5 Years	59	9
Final 9 Years	1	0
Highest 10 Years	1	0
Highest 10 of Last 15 Years	1	0
Final 10 Years	8	1
Total Final Average Plans	<u>641</u>	<u>100</u>
Percent of Pay: Formulae with Level Percent of Pay Per Year of Service		
<1.00	7	2
1.00	14	5
1.01-1.25	18	6
1.26-1.49	19	6
1.50	75	24
1.51-1.75	83	27
1.76-1.99	10	3
2.00	65	21
2.01-2.49	11	4
2.50	1	0 *
>2.50	7	2
Total	<u>310</u>	<u>100</u>

*Designates provision of the military retirement system.

C. SOCIAL SECURITY AND ERISA

Social Security Offset -- Flat Percent Type	Survey Participants	
	No.	%
<50	4	2
50	129	79
51-74	13	8
75	5	3
76-99	11	7
100	2	1
Total	164	100

Social Security Offset -- Percent Per Year	No.	%
<1.00	5	2
1.00	9	3
1.25	42	15
1.26-1.49	30	10
1.50	41	14
1.46-1.66	11	4
1.67	74	26
1.68-1.99	9	3
2.00	44	15
>2.00	23	8
Total Responding	288	100

**Social Security Offset
Percent Per Year of Service
Together with Applicable Maximum**

Percent Per Year	22.5-25	30	33-38	40	43-48	50	54-55	64	67-68	70	No Max.	No.	%
<1.00	-	2	-	-	-	-	-	-	-	-	2	4	1
1.00	1	1	2	2	-	2	-	-	-	-	-	8	3
1.25	-	-	1	-	1	35	-	-	-	3	4	44	15
1.32-1.46	-	-	1	-	-	26	2	-	-	-	2	31	11
1.50	1	1	-	-	3	28	1	3	-	1	3	41	14
1.56-1.71	-	1	1	-	1	75	-	3	-	2	1	84	29
1.72-1.90	-	-	-	1	-	-	2	1	1	-	2	7	2
2.00	-	-	-	-	-	36	-	6	-	3	-	45	16
>2.00	1	-	-	-	1	7	-	1	1	13	-	24	9
Total	3	5	5	3	6	209	5	14	2	22	14	288	
Percent	1	2	2	1	2	72	2	5	0	8	5		100

*Designates provision of the military retirement system.

Plans Subject to ERISA Benefit Maximums	Survey Participants	
	<u>No.</u>	<u>%</u>
ERISA Maximum	603	88
Maximum Below ERISA Limits	33	5
None -- Not Subject to ERISA	23	3
None -- Benefits/Contributions Cannot Reach ERISA Limits	28	4
Total	587	100

NOTE: ERISA limits the maximum annual benefit payable under qualified plans. The old ERISA maximum of the lesser of \$136,425 and 100% of a participant's highest three year average pay was in force at the time of the survey.

*Designates provision of the military retirement system.

D. COST-OF-LIVING INCREASES

Type of Cost-of-Living and Related Pension Adjustments	Survey Participants	
	<u>No.</u>	<u>%</u>
Formal Cost-of-Living Provision within the Plan	57	8 *
Increase by Plan Amendment	227	31
Ad Hoc	156	21
No Adjustment	294	40
Total	734	100

Formal Cost-of-Living Provisions -- Basis for Increases

Full CPI (with or without cap)	33	58 *
Portion of CPI	4	7
Fixed Percentage	17	30
Varies with Investment Earnings	1	2
Other	2	3
Total with Formal Provision	57	100

The fixed percent increases are six at 2%, three at 3%, five at 5%, and one each at 1% and 4%.

The four plans based on a portion of CPI use 50%, 60%, and 66%. Thirty-six of the 37 plans in which adjustments are based on the CPI set a maximum for adjustments in any one year; indicated in the following table.

Maximum Cost-of-Living Increase Per Year

2.0	3	8
3.0	18	49
4.0-5.0	3	8
5.0	8	22
7.5-8.0	2	5
Other	2	5
No Maximum	1	3 *
Total	37	100

*Designates provision of the military retirement system.

Basis of Plan Amendment/Ad hoc Increases in Monthly Pensions	Survey Participants	
	No.	%
Consumer Price Index	17	4
Percentage Increase/Year Since Retirement or Last Increase	155	42
Flat Percentage Increase For All Retirees	62	17
Percentage Increase Varying By Date of Retirement	99	27
Flat Dollar Amount/Year or For All Retirees	16	4
Other	21	6
Total	370	100
One-Time/Ad hoc Percentage Increases Per Year Since Retirement or Last Increase		
<1.0	4	3
1.0-1.9	22	14
2.0-2.9	36	23
3.0-3.9	67	43
4.0-4.9	8	5
5.0	13	9
>5.0	5	3
Total Plans With a One-Time Percent Increase per Year of Retirement	155	100
One-Time/Ad hoc Percentage Increases for All Retirees		
<5	9	15
5-9	21	34
10	19	31
11-14	2	3
15	4	6
20-25	7	11
Total	62	100

*Designates provision of the military retirement system.

**One-Time/Ad hoc Flat Percentage Increases
Per Year Equivalent For Increases Varying
By Date of Retirement**

<1	37	37
1-1.4	31	32
1.5-1.9	17	17
2.0-2.4	3	3
2.5-2.9	5	5
3.0-3.9	4	4
4.0-4.9	1	1
5.0	-	-
>5	1	1
Total	99	100

Date of Last One-Time/Ad hoc Pension Increase

<1970	1	0
1971	1	0
1972	1	0
1973	1	0
1974	7	2
1975	3	1
1976	6	2
1977	9	2
1978	11	3
1979	73	20
1980	117	34
1981	95	26
1982	36	10
Total	361	100

*Designates provision of the military retirement system.

E. UNREDUCED EARLY RETIREMENT BENEFIT

	Survey Participants	
	<u>No.</u>	<u>%</u>
Unreduced Early Retirement Available	321	45 *
Not Available	<u>392</u>	<u>55</u>
Total	713	100

Age-Only Requirement

<u>Age</u>		
60	1	1
60	14	16
62	72	84
63	1	1
Total	<u>88</u>	<u>100</u>

Age and Service Requirement

<u>Years of Service</u>	<u>Age Requirement</u>					<u>No.</u>	<u>%</u>
	<u>56</u>	<u>60</u>	<u>62</u>	<u>63</u>	<u>64</u>		
5-6	-	-	7	-	-	7	4
10	1	13	47	3	-	64	35
14	-	-	2	-	-	2	1
15	1	3	15	-	-	19	11
20	6	7	13	-	-	26	14
25	1	8	6	-	-	15	8
30	-	22	20	-	1	43	24
33-35	-	-	1	-	-	1	1
40	-	3	1	-	-	4	2
Total	<u>9</u>	<u>56</u>	<u>112</u>	<u>3</u>	<u>1</u>	<u>181</u>	
Percent	5	30	62	2	1		100

Age or Service Requirement

<u>Age</u>	<u>Years of Service</u>					<u>No.</u>	<u>%</u>
	<u>5</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>		
55	-	1	-	-	-	1	14
60	-	-	-	1	-	1	14
62	1	-	-	3	1	5	72
Total	<u>1</u>	<u>1</u>	<u>-</u>	<u>4</u>	<u>1</u>	<u>7</u>	
Percent	14	14	-	58	14		100

NOTE: Military retirement system provides for unreduced benefit after 20 years of service at any age.

*Designates provision of the military retirement system.

F. REDUCED EARLY RETIREMENT BENEFIT

Age-Only Requirement

Survey Participants

	<u>No.</u>	<u>%</u>
<u>Age</u>		
50	6	6
55	68	69
60	20	20
62	5	5
Total	<u>99</u>	<u>100</u>

Service-Only Requirement

<u>Years of Service</u>		
5	3	10
10-15	4	13
20	1	3
25	2	7
30	20	67
Total	<u>30</u>	<u>100</u>

Age and Service Requirement

Service Requirement	Age Requirement						<u>No.</u>	<u>%</u>
	<u>45</u>	<u>50</u>	<u>55</u>	<u>57</u>	<u>60</u>	<u>62</u>		
1	-	-	2	-	1	-	3	0
5	1	2	48	2	6	2	61	10
6-9	-	-	4	-	-	1	5	1
10	-	12	351	1	21	-	385	66
13-14	-	-	1	-	-	-	1	0
15	2	6	72	1	7	-	88	15
20	-	5	30	-	2	-	37	6
25	-	5	3	-	1	-	9	2
30	-	-	3	-	-	-	3	0
Total Number	<u>3</u>	<u>30</u>	<u>514</u>	<u>4</u>	<u>38</u>	<u>3</u>	<u>592</u>	
Percent	0	5	87	1	7	0		100

*Designates provision of the military retirement system.

**Type of Reduction in Accrued Pension
for Early Retirement**

**Survey Participants
No.**

Full Actuarial Adjustment	212	33
Rounded Percent Per Year Reduction	408	63
Other	17	3
Varies	8	1
Total	645	100

**Percent of Full Pension Received for
Retirement at Age 60**

<u>Percent</u>		
<60	8	2
60.01-65	19	4
65.01-70	127	23
70.01-75	31	6
75.01-80	65	12
80.01-85	79	15
85.01-90	72	14
90.01-95	71	13
>95	59	11
Total Responses	531	100

**Percent of Full Pension Received for
Retirement at Age 55**

<u>Percent</u>		
<40	40	8
40.01-45	9	2
45.01-50	132	26
50.01-55	32	6
55.01-60	85	17
60.01-65	47	9
65.01-70	58	12
70.01-75	51	10
75.01-80	33	7
>80	16	3
Total Responses	503	100

**Early Retirement Supplements for
All Retirees**

Supplement Equal to S.S.	28	5
Supplement Less Than S.S.	20	3
No Supplement	539	92
Total	587	100

*Designates provision of the military retirement system.

• Supplement for Early retirement at Employer's Request	Survey Participants	
	<u>No.</u>	<u>%</u>
Supplement	45	8
No Supplement	548	92
Total	<u>593</u>	<u>100</u>

*Designates provision of the military retirement system.

G. DISABILITY RETIREMENT BENEFIT

Accrual of Pension Credits While on Disability	Survey Participants	
	No.	%
Allowed	530	73 *
Not Allowed	198	27
Total	728	100

Prevalence of Minimum Age and/or Service Requirements for Disability Pension		
No Requirements	40	18 *
Age Minimum	6	3
Service Minimum	135	59
Age and Service Minimum	42	19
Other	3	1
Total	226	100

Minimum Service Requirement for Disability Pension		
Years Service	No.	%
<2	4	3
2-4	7	5
5-9	24	18
10	53	39
13.3	1	1
15	38	28
20-25	8	6
Total Plans With Service-Only Requirement	135	100

Minimum Age and Service Requirement for Disability Pension									
Years of Service	Years of Service							No.	%
	35	40	45	48	50	55	60		
5	4	1	1	-	1	1	-	8	19
10	1	2	3	-	12	3	1	22	52
15	1	2	3	1	3	-	-	10	24
20	-	-	-	-	1	-	1	2	5
Total	6	5	7	1	17	4	2	42	100
Percent	14	12	17	2	40	10	5		

*Designates provision of the military retirement system.

Disability Pension Benefit	Survey Participants	
	No.	%
Full Accrued	136	56
Actuarially Reduced	67	28
Pension Projected to Normal Retirement Age	17	7
Other	23	9 *
Total Plans With Disability Pensions	243	100

Integration of Disability Pensions

Primary Social Security Disability	101	42
Family Social Security Disability	18	7
Worker's Compensation	37	15
All Employer Supported Plans	24	10
Other	5	2
Not Integrated	89	37 *

NOTE: A number of plans are integrated with more than one of the categories shown above.

Commencement of Disability Pension Payments

At Expiration of Short Term Disability	87	42
After a Specified Elimination Period	64	31
Other	54	26
Total	205	100

*Designates provision of the military retirement system.

G. DISABILITY RETIREMENT BENEFIT

Accrual of Pension Credits While on Disability	Survey Participants	
	No.	%
Allowed	530	73 *
Not Allowed	198	27
Total	728	100

Prevalence of Minimum Age and/or Service Requirements for Disability Pension

No Requirements	40	18 *
Age Minimum	6	3
Service Minimum	135	59
Age and Service Minimum	42	19
Other	3	1
Total	226	100

Minimum Service Requirement for Disability Pension

Years Service	No.	%
<2	4	3
2-4	7	5
5-9	24	18
10	53	39
13.3	1	1
15	38	28
20-25	8	6
Total Plans With Service-Only Requirement	135	100

Minimum Age and Service Requirement for Disability Pension

Years of Service	35	40	45	48	50	55	60	No.	%
5	4	1	1	-	1	1	-	8	19
10	1	2	3	-	12	3	1	22	52
15	1	2	3	1	3	-	-	10	24
20	-	-	-	-	1	-	1	2	5
Total	6	5	7	1	17	4	2	42	
Percent	14	12	17	2	40	10	5		100

*Designates provision of the military retirement system.

H. SURVIVOR BENEFITS

Pre-Retirement Death Benefit Funding	Survey Participants	
	<u>No.</u>	<u>%</u>
Elective, Charged Against Employee Pension	229	32
Automatic and Paid by Plan	494	68
Other	3	-
Total	<u>726</u>	<u>100</u>

Basis of Pension Plan Spouse's Benefit

Accrued Pension Reduced for Early Retirement	566	79
Full Accrued Pension	129	18
Pension Projected to Normal Retirement Date	24	3
Total	<u>719</u>	<u>100</u>

Upon the employee's death prior to retirement, the basic pension benefit described above, is generally reduced for joint and survivor payment, as indicated below.

Reduction in Pension for Payment in Joint & Survivor Form

	Based on Unreduced Benefit		Based on Accrued Benefit		Reduced for Early Retirement	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Full Actuarial Reduction for J&S	11	46	64	50	477	84
Partial Actuarial Reduction for J&S	3	12	11	8	34	6
Unreduced	10	42	54	42	55	10
Total	<u>24</u>	<u>100</u>	<u>129</u>	<u>100</u>	<u>566</u>	<u>100</u>

*Designates provision of the military retirement system.

Percent to Surviving Spouse Under Joint and Survivor Benefit	Survey Participants	
	<u>No.</u>	<u>%</u>
<u>Percent</u>		
40	2	0
50	564	78
55	5	1*
60	8	1
65	2	0
66-67	13	2
70-75	5	1
100	69	10
50% with Employee Choice of Higher Percent at Own Cost	39	5
Other	12	2
Total	719	100
Age and/or Service Requirement for Pension Plan Death Benefits Prior to Early Retirement Eligibility		
No Requirements	61	23
Age Minimum	15	6
Service Minimum	93	36
Age or Service Minimum	11	4
Age and Service Minimum	66	25
Combination	12	5
Other	2	1
Total Plans with Death Benefits Prior to Early Retirement Eligibility	260	100

*Designates provision of the military retirement system.

I. CAPITAL ACCUMULATION PLANS

	<u>No.</u>	<u>%</u>
Thrift Plan		
Provided	322	41
Not Provided	483	59 *
Maximum Employee Contribution Subject to Employer Matching		
<6% of Pay	120	238
6% of Pay	177	56
>6% of Pay	17	5
Employer Matching Contributions		
<50%	27	11
50%	143	58
>50%	81	31
Profit Sharing or Stock Bonus Provided (stock companies only)		
Provided	158	34
Not Provided	306	66
Employer Contributions as a percent of Employee Pay for 1982		
<6%	51	44
6.1%-9%	27	24
>9%	29	26
No Contribution Made	7	6
ESOPs of TRASOPs Provided (stock companies only)		
Provided	138	30
Not Provided	326	70
1981 Employer Contribution as a Percent of Pay		
<1%	14	23
1%-1.99%	18	20
2%-2.99%	12	20
3%-4.99%	9	15
>5%	8	12
Stock Purchase Plan (Stock Companies Only)		
Provided	112	24
Not Provided	352	76 *

*Designates provision of the military retirement system.

military service and other organizations with similar needs for a young workforce. The private sector typically permits retirement at age 62 or 65 with the preference now being age 62. However, in most of the private sector, employees are still very effective in their jobs well past age 62.

While most plans now permit full retirement at age 62, some provide even earlier retirement. Further, practically all employers permit reduced retirement down to age 55. While many of the employers provide a full actuarial reduction, which averages 6% or 7% a year, some employers only require a reduction of 3% to 4% a year.

The QRMC was particularly interested in four aspects of the retirement comparison which are discussed more thoroughly below.

B. Cost-of-Living Provisions

The vehicle used to assure that pension benefits contain a degree of stable purchasing power is an adjustment in the benefit payment. It is normally based on a specified price index. Under the simplest of these arrangements, benefits of retirees may be adjusted to reflect changes subsequent to retirement. The Consumer Price Index is the most frequently utilized basis for adjusting benefit payments.

The frequency of formal cost-of-living provisions in retirement plans is relatively low, 8% of the organizations surveyed in the NCC. However, ad hoc cost-of-living adjustments for retired employees are very common. Currently, 60% of Hay survey participants have made some cost-of-living adjustments. These adjustments are usually given on an ad-hoc basis, generally every other year, typically at the rate of around 3% per year of retirement. As retirement rolls continue to increase, these adjustments will continue to be a necessary part of the orderly transition from active employment to retirement.

Currently, however, there is concern among employers about the cost implications of cost-of-living adjustment provisions in private pension plans combined with the cost impact of automatic adjustment features under Social Security. These concerns have led to the increased use of pension plans integrated with, or offset by Social Security. We feel companies will continue to seek and find funding relief for their defined benefit plans, but despite the added cost, ad-hoc cost-of-living adjustments will remain the norm. More companies will implement formal cost-of-living provisions, yet will probably begin to focus greater attention on other forms of deferred income benefits for employees like capital accumulation.

C. Capital Accumulation Plans

The most dramatic change in deferred compensation benefits during the next several years will involve capital accumulation plans. Often overlooked when comparisons are made between private pension plans and the military retirement system, 64% of the participants in our survey had another form of deferred compensation provided to their employees in addition to a pension plan. In November 1981, the IRS issued proposed regulations (under the Revenue Act of 1978) permitting a capital accumulation plan to provide a cash or deferred arrangement via salary reduction and qualified under Section 401(k) of the IRS code. The opportunity, virtually exclusive to the private sector, allows employees to contribute before tax, in lieu of after tax dollars, to a thrift or profit sharing plan. Even though plans qualified under 401(k) must meet stringent discrimination rules, the advantages are such that we predict a majority of capital accumulation plans will take advantage of Section 401(k) over the next few years.

In addition, Employee Stock Ownership plans (ESOP) and Tax Reduction Act Stock Ownership Plans (TRASOP) have also become increasingly popular. While just 18% of our stock company participants provided such plans in 1978, 30% of these participants

surveyed in 1982 provided ESOPs or TRASOPs. In 1983 a new plan - PAYSOP (Payroll-based Stock Ownership Plan) - replaced TRASOPs. Under a PAYSOP, a given percentage of covered payroll is put into a capital accumulation vehicle. Companies may then take a tax credit for most of the amount put aside for employees in the capital accumulation vehicle. Thus, for a taxpaying, profit making company, this is a virtually free employee benefit to supplement retirement. We predict that virtually all taxpaying companies will install PAYSOPs over the next few years.

In order to make a valid comparison between the retirement benefits of the military system and the private sector retirement plans it is necessary to understand and to take into consideration these company offered capital accumulation plans. These plans offer significant opportunities for employees to not only accumulate capital, but to defer income that would otherwise be taxed. These opportunities can add significantly to the retirement benefits provided by private pension plans.

D. Survivor Benefits

The majority of employers in the United States provide some form of death benefits for the surviving dependents of an employee. Among the companies participating in the 1982 Hay survey, 99% provide survivor benefits in the form of group life insurance. The most common amount provided is a multiple of salary equal to twice an employees salary. Death benefits are sometimes provided in other forms such as supplemental cash payments, split dollar insurance plans and, in recent years, formal survivor income plans. In 1982, the Hay survey indicated 11% of the participants had survivor income plans.

These survivor income plans are different from traditional employer-sponsored death benefit plans in that a benefit is payable only to certain specified dependents of the employee and only if

these dependents survive the employee. Moreover, the benefit is payable in installments and, as a rule, only for the period that the dependency status continues to exist.

The other common form of survivor benefits are those provided by a retirement plan. Survivor income protection can be provided for active or retired employees or for both. When provided before retirement, the coverage frequently has been limited to employees who satisfy an age (usually 50, 55, or 60) and a service (usually 10 or 15 years) requirement. ERISA required that an employee who is eligible for early retirement and is within ten years of the normal retirement date, must have the option of electing a pre-retirement spouse benefit. The required normal form of payment of benefits would be a 50% Joint and Survivor Annuity, unless otherwise elected. In 1982, 78% of the participants of the Hay Survey used the 50% Joint and Survivor form for surviving spouse benefits. The basis of the spouse's benefit provided by 79% of the survey participants was the employees accrued pension reduced for early retirement. Under the military retirement system, survivor benefits are calculated on 55% of the employee's base amount, adjusted by the CPI, and integrated with Social Security and Veteran's benefits. Active members only receive this protection after 20 years of service.

E. Vesting Provisions

A major objective of ERISA was to require vesting of an employee's accrued benefit after some reasonable period of service. The Internal Revenue Service was given the authority to impose more stringent vesting requirements if such action is necessary to prevent discrimination. However, the Congress has directed the IRS not to require a vesting schedule more stringent than 40% vesting after four years of employment with 5% additional vesting for each of the next two years, and 10% vesting for each of the following 5

years. ERISA also stipulates minimum standards that must be followed in determining an employee's accrued benefit for purposes of applying a vesting schedule.

While the vesting practices of companies vary within ERISA guidelines, the military retirement system has no vesting. However, the de-facto vesting provision of the military retirement system is full vesting after 20 years of service. The restrictive military vesting schedule would not be permitted private pension plans under ERISA. The most common vesting schedule used by participants in the Hay NCC survey is full vesting after 10 years of service. This schedule is used by 73% of the survey participants. Under current laws affecting the private pension plans, full vesting of accrued benefits must occur after 15 years of service.

The NCC lists various retirement plan provisions and options available to private pension plans. We have compiled the prevalence of practice of the organizations surveyed. The information on the most relevant provisions is tabulated in this report as follows:

- o The number of companies surveyed providing the listed provision or option; and
- o The percentage of those companies providing the listed provision or option.

V. LEVEL OF BENEFITS AT RETIREMENT

Previous sections have compared the practice of providing retirement benefits between the military system and private systems and the employer costs of these benefits. It is also important to look at the benefits as replacement income at retirement. The standard Hay methodology is to compare the full value of benefits produced by pension plans, capital accumulation plans, and Social Security at retirement at different ages and lengths of service.

Since private sector plans do not typically provide a full benefit after 20 years of service, the tables look at the benefit at the earliest full retirement age used by most plans, age 62, and at age 65 where all plans provide a full benefit. The benefits were compared for employees with 20 and 30 years of service.

Tables 7 through 10 show the comparison of benefits at common age and service conditions. These tables show that the replacement income provided by the military is in the range of the income provided by the plans in the private sector. For instance, the total replacement income for an employee with 30 years of service at age 65 earning \$30,000 is \$23,140 compared to \$24,298 for the average plan and \$32,867 for the 90% level plan. We used the DoD actuaries estimate that basic pay at retirement will be 74% of BMC.

For example, the military benefit for \$30,000 final BMC for age 65 with 30 years of service was determined as follows:

(1) Percentage of salary credited $30 \times .025$	75.0%
(2) Hi-three pay deflator (1) $\times .9163$	68.7%
(3) BMC Adjustment (2) $\times .74$	50.8%
(4) Military retirement pay (3) $\times \$30,000$	\$15,240
(5) Social Security	\$7,900
(6) Total benefit (4) + (5)	\$23,140

The difference between the position of the military values in the comparison of normal costs and employee replacement income is explained by the fact that the benefits provided in the military can be received after 20 years of service, rather than age 62 or later, and that the benefits are fully indexed after retirement.

Table 7

**Replacement Income for Employees Retiring at Age 62
With 20 Years of Service**

	10000	20000	30000	40000	50000	60000	70000
Salary							
90th Percentile	9919	16504	22520	28352	33469	39876	45877
75th Percentile	8427	14084	19116	23950	28253	33415	38396
Median	7323	12263	16066	20054	23461	27476	31326
25th Percentile	6341	10499	13613	16824	19381	22438	25540
10th Percentile	5510	8933	11411	14079	16635	18304	20434
Mean	7602	12551	16594	20811	24363	28638	32733
Military	7090	11980	16470	19960	23350	26740	30130

D-65

**Replacement Income for Employees Retiring at Age 62
With 30 Years of Service**

	10000	20000	30000	40000	50000	60000	70000
Salary							
90th Percentile	12398	21366	29789	38528	46804	56063	64895
75th Percentile	10305	18065	25224	32165	38755	46162	53429
Median	8760	15514	21069	26800	31992	37704	43385
25th Percentile	7366	12828	17435	22115	26197	30477	34985
10th Percentile	6394	10569	13891	17658	20802	23736	26591
Mean	9168	15777	20780	27597	33019	39057	44934
Military	8780	15360	21540	26720	31800	36880	41960

Atch 1

Table 8

**Replacement Income for Employees Retiring at Age 65
With 20 Years of Service**

	10000	20000	30000	40000	50000	60000	70000
Salary	10000	20000	30000	40000	50000	60000	70000
90th Percentile	11679	18934	25484	31956	37503	44508	50999
75th Percentile	10084	16169	22068	27333	31829	37612	43135
Median	8782	14240	18734	23150	26769	31248	35583
25th Percentile	7624	12456	15994	19827	22872	26472	30246
10th Percentile	6488	10637	13576	16693	19852	22227	25386
Mean	9006	14552	19140	24037	27139	32503	37096
Military	7990	13280	18070	21660	25050	28440	31830

**Replacement Income for Employees Retiring at Age 65
With 30 Years of Service**

	10000	20000	30000	40000	50000	60000	70000
Salary	10000	20000	30000	40000	50000	60000	70000
90th Percentile	14266	23810	32867	41837	50014	59714	68801
75th Percentile	11785	20156	28394	35953	43035	51006	58947
Median	10241	17375	23737	29812	35141	41462	47765
25th Percentile	8620	14949	20087	25439	30086	35102	40310
10th Percentile	7699	12442	16699	20892	24192	27496	30643
Mean	10577	17826	24298	30836	36661	43239	49665
Military	9680	16660	23140	28420	33500	38580	43660

Table 9

**Replacement Income for Employees Retiring at Age 62
With 20 Years of Service**

	10000	20000	30000	40000	50000	60000	70000
Salary	99.19	82.52	75.07	70.88	66.94	66.46	65.54
90th Percentile	84.27	70.42	63.72	59.87	56.51	55.69	54.85
75th Percentile	73.23	61.31	53.55	50.13	46.92	45.79	44.75
Median	63.41	52.49	45.38	42.06	38.76	37.40	36.49
25th Percentile	55.10	44.66	38.04	35.20	33.27	30.51	29.19
10th Percentile							
Mean	76.02	62.76	55.31	52.03	48.73	47.73	46.76
Military	70.90	59.90	54.90	49.90	46.70	44.57	43.04

**Replacement Income for Employees Retiring at Age 62
With 30 Years of Service**

	10000	20000	30000	40000	50000	60000	70000
Salary	123.98	106.83	99.30	96.32	93.61	93.44	92.71
90th Percentile	103.05	90.33	84.08	80.41	77.51	76.94	76.33
75th Percentile	87.60	77.57	70.23	67.00	63.98	62.84	61.98
Median	73.66	64.14	58.12	55.29	52.39	50.79	49.98
25th Percentile	63.94	52.84	46.30	44.14	41.60	39.56	37.99
10th Percentile							
Mean	91.68	78.88	69.27	68.99	66.04	65.10	64.19
Military	87.80	76.80	71.80	66.80	63.60	61.47	59.94

Table 10

**Replacement Income for Employees Retiring at Age 65
With 20 Years of Service**

	10000	20000	30000	40000	50000	60000	70000
Salary							
90th Percentile	116.79	94.67	84.95	79.89	75.01	74.18	72.86
75th Percentile	100.84	80.84	73.56	68.33	63.66	62.69	61.62
Median	87.82	71.20	62.45	57.88	53.54	52.08	50.83
25th Percentile	76.24	62.28	53.31	49.57	45.74	44.12	43.21
10th Percentile	64.88	53.18	45.25	41.73	39.70	37.05	36.27
Mean	90.06	72.76	63.80	60.09	54.28	54.17	52.99
Military	79.90	66.40	60.23	54.15	50.10	47.40	45.47

**Replacement Income for Employees Retiring at Age 65
With 30 Years of Service**

	10000	20000	30000	40000	50000	60000	70000
Salary							
90th Percentile	142.66	119.05	109.56	104.59	100.03	99.52	98.29
75th Percentile	117.85	100.78	94.65	89.88	86.07	85.01	84.21
Median	102.41	86.88	79.12	74.53	70.28	69.10	68.24
25th Percentile	86.20	74.75	66.96	63.60	60.17	58.50	57.59
10th Percentile	76.99	62.21	55.66	52.23	48.38	45.83	43.78
Mean	105.77	89.13	80.99	77.09	73.32	72.06	70.95
Military	96.80	83.30	77.13	71.05	67.00	64.30	62.37

APPENDIX A

LIST OF PARTICIPANTS IN NONCASH COMPENSATION COMPARISON

LIST OF PARTICIPANTS

Abbott Northwestern Hospital
 Acacia Mutual Life Insurance Company
 Action Industries, Inc.
 Air Products and Chemicals
 AIRCOA
 Alabama Power Company
 Alascom, Inc.
 Alcan Aluminum
 ALCOA
 Alexander & Baldwin, Inc.
 Allegheny Intermediate Unit
 Allen Bradley Company
 Allendale Mutual Insurance
 Allied Bank International
 Allied Corporation
 Allis Chalmers Company
 AMAX, Inc.
 Amerada Hess Corporation
 American Association
 for the Advancement of Science
 American Bank and Trust of Pennsylvania
 American Bankers Association
 American Broadcasting Company, Inc.
 American Chemical Society
 The American College
 American Council of Life Insurance
 American Crystal Sugar
 American Express Company
 American Family Insurance Group
 American Gas Association
 American Heart Association, Inc.
 American Hoechst
 American Hospital Supply Corporation
 American Institute for Research
 American Institute of CPA's
 American Iron and Steel Institute
 American Public Transit Association
 American Reinsurance Company
 American Security and Trust Company, Inc.
 American Security and Trust Company
 American Shipbuilding
 American Society of Civil Engineers
 American Society of Refrigerator
 & Air Conditioner Engineers
 American Standard, Inc.
 American States Insurance Companies
 American Sterilizer Company
 American Telephone & Telegraph Company
 Ameritrust
 Amersham
 Amfac Hotels
 Amtrak
 Anaconda Minerals Company
 Anchor/Darling Industries
 Anchor Hocking Corporation
 Arthur Anderson & Company
 The Andersons
 ARC America
 Arcata Corporation
 Archbishop Bergan Mercy Hospital
 Archer-Daniels Midland
 Argo International
 Arizona Bank
 Armco, Inc.
 Armco Insurance Group
 Armstrong World Industries, Inc.
 Arvida Corporation
 Asarco, Inc.
 Ashland Oil, Inc.
 Atlantic Aviation Corporation
 Atlantic Mutual Insurance Company
 Automobile Club of Michigan
 Avery Products Corporation
 BABB, Inc.
 Badische Corporation
 Baker Industries
 Baltimore Aircorl
 Bank Fund Staff Federal Credit Union
 Bank Marketing Association
 Bank of New England, N.A.
 BankEast Corporation
 Bankers Life and Casualty Company
 The Bankers Life Company
 Bankers Life of Nebraska
 Barber-Greene Company
 Barclays Bank of California
 Barclays Bank of New York
 Barden Corporation
 Bariven Corporation
 Barnett Banks of Florida
 Basin Electric Power Cooperative
 BATUS, Inc.
 L.L. Bean, Inc.
 Beaven Companies
 Bechtel Corporation
 Bell Helicopter Textron
 Bell Telephone of Pennsylvania
 Berkshire Life Insurance Company
 Berol Corporation
 Bessemer & Lake Erie Railroad Company
 Best Products Company, Inc.
 Bethesda Hospital
 Betz Laboratories
 Beverage Management, Inc.
 Bishop Clarkson Memorial Hospital
 Black & Decker Manufacturing Company
 Dick Blick Company
 Blue Cross Hospital Service, Inc. -
 St. Louis, Missouri
 Blue Cross of Greater Philadelphia
 Blue Cross of Northeast Ohio
 Blue Cross of Northeastern New York
 Blue Cross of Southern California
 Blue Cross/Blue Shield Associations, Inc.
 Blue Cross/Blue Shield of Alabama
 Blue Cross/Blue Shield of Connecticut, Inc.
 Blue Cross/Blue Shield of Delaware, Inc.
 Blue Cross/Blue Shield of Florida
 Blue Cross/Blue Shield of Iowa
 Blue Cross/Blue Shield of Kansas
 Blue Cross/Blue Shield of Maryland
 Blue Cross/Blue Shield of Massachusetts
 Blue Cross/Blue Shield of Michigan
 Blue Cross/Blue Shield of Nebraska
 Blue Cross/Blue Shield of North Carolina
 Blue Cross/Blue Shield of Southern West Virginia
 Blue Cross/Blue Shield of Texas
 Blue Cross/Blue Shield of Virginia
 Boone County National Bank
 Borg Warner Acceptance Corporation
 Boston Edison Company
 B.P. Alaska Exploration
 Braden Steel Corporation
 Bristol-Myers Company
 Brooklyn Union Gas
 Brooks and Perkins, Inc.
 Brown & Williamson Tobacco
 Brunswick Corporation
 Buckeye Gas Products
 Bucyrus Erie Company
 Burger King Corporation
 Burlington Northern, Inc.
 Leo Burnett Company
 Business Men's Assurance Company of America
 Butler Manufacturing Company
 H.E. Butt Grocery Company
 Buttes Gas & Oil Company
 California & Hawaiian Sugar Company
 Cameron Iron Works
 Campbell Soup Company
 Capitol Holding Corporation
 Cargill, Inc.
 Carle Foundation
 Carrier Corporation
 A.M. Castle & Company
 Castle & Cooke, Inc.
 Caterpillar Tractor Company
 Ceco Corporation
 Central Bancshares of the South
 Central Life Assurance
 Central Soya Company, Inc.
 Central Telephone and Utilities Corporation
 Central Trust Bank
 Centronics
 CertainTeed Corporation
 CFS Continental
 Chamber of Commerce of the United States
 Chase Federal Savings and Loan
 Chase Manhattan Bank
 Chemical Bank
 Chesapeake Life Insurance Company
 Chesebrough-Pond's, Inc.
 Chicago Board of Trade
 Chicago Bridge & Iron Industries, Inc.
 Chicago & Northwestern Transportation Company
 Chicago Title and Trust
 Chicago Tribune
 Chipman-Union, Inc.
 Chrysler Corporation
 Ciba-Geigy Corporation

LIST OF PARTICIPANTS (Continued)

Citibank, N.A.	CRST, Inc.	First Interstate Bank of Arizona, N.A.
Citizen's Bank & Trust, Maryland	CSX Corporation	First Mississippi Corporation
Citizen's Gas & Coke Utility	Cyclops Corporation	First National Bank of Clayton
Citizen's Bank	Danly Machine Corporation	First National Bank of Maryland
City Bank & Trust	Dayton Power and Light Company	First National Bank of Mexico, Missouri
City of Chesapeake	Dayton-Hudson Corporation	First National Bank of Minneapolis
City of Colorado Springs	Dead River Company	First National Exchange Bank
City of Hampton	Deluxe Check Printers, Inc.	First Oklahoma Bancorporation
City of Los Angeles	Dentsply International, Inc.	First Pennsylvania Bank
City of Los Angeles (Fire & Police)	Deposit Guaranty National Bank	First Security Corporation
City of Los Angeles (General)	Detroit Edison Company	Fisher-Price Toys
City of Los Angeles (Water & Power)	Dexter Corporation	Flickinger Corporation
City of Newport News	Dial Financial Corporation	Flo-Valve Company
City of Norfolk	Diamond Shamrock	Florida Power Corporation
City of Portsmouth	A.B. Dick Company	Florida Steel Corporation
City of Richmond	DiGiorgio Corporation	FMC Corporation
City of Suffolk	Disston	Foremost-McKesson
Cleveland Electric Illuminating	Distribution Centers, Inc.	L.B. Foster Company
Clow Corporation	Dixie Yarns, Inc.	Four Cities United Way
CNA Insurance	Dominion Bank Shares	Fox & Jacobs, Inc.
The Coastal Corporation	Donaldson Company	Fox-Stanley Photo Products, Inc.
Coca-Cola Bottling Company United, Inc.	Dow Chemical, U.S.A.	Foxboro Company
Coca-Cola Company, Inc.	Dow Corning Corporation	Frantz Manufacturing Company
Cole National Corporation	Dravo Corporation	Freeport-McMoRan, Inc.
Colonial Life and Accident	Duke Power Company	Freightliner Corporation
Columbia Gas System Service Corporation	Dupage County	R.T. French Company
Columbia Hospital	Duriron Company, Inc.	Friendly Ice Cream Corporation
Columbia Nitrogen Corporation	Durr Fillauer Medical, Inc.	Frito-Lay, Inc.
Commercial Security Bank	Dynallectron Corporation	Fruit Growers Express
Commercial Shearing, Inc.	East New York Savings Bank	Fusion Systems Corporation
Commercial Union Insurance Companies	Eastern Stainless Steel	Gallaudet College
Commonwealth National Bank	Ecodyne (Lindsey Div.)	General Electric Company
Commonwealth of Pennsylvania	Economics Laboratory, Inc.	General Foods Corporation
Community Consolidated School District 146	EG & G Idaho	General Mills
Community Federal Savings and Loan	EMC Technologies, Inc.	General Shale Products Corporation
Computer Sciences Corporation	Empire Bank	General Signal Corporation
COMSAT	Energy Reserves Group	Genstar, Ltd.
Congressional Budget Office	Equibank, N.A.	Georgetown Texas Steel
Connecticut Bank and Trust	Equitable Life Assurance Society	Georgia Power Company
Connecticut Mutual Life Insurance	Equitable Trust	Germantown Savings Bank
Consolidated Rail Corporation	Erie Insurance Group	Girard Bank
Continental Bank	Euclid, Inc.	Girl Scouts of the U.S.A.
Continental Corporation	Evans & Sutherland Computers	Godfather's Investments
Continental-Emsco Company	Ex-Cell-O Corporation	Gould SEL, Inc.
Continental Materials Corporation	Excelsior Truck Leasing Company, Inc.	Government Employee's Life Insurance
Contraves Goerz Corporation	Factory Mutual Engineering Corporation	GPU Service Corporation
Conwed Corporation	Farm Credit Banks of Springfield	Grand Trunk Western Railroad Company
Thomas Cooke, Inc.	Farm Credit Banks of St. Paul	Graybar Electric Company
Cooper Industries	Farm Family Life/Mutual Insurance Companies	Great Southern Life Insurance Company
Copperweld Corporation	Federal Express Corporation	Greatwest Casualty Corporation
Corroon and Black of Tennessee, Inc.	Federal Home Loan Mortgage Corporation	GRI Corporation
Cotton States Insurance	Federal National Mortgage Association	GTE Automatic Electric, Inc.
Country Pride Foods, Ltd.	Federal Reserve Bank of San Francisco	Guarantee Federal Savings and Loan
County of Lake	Fidelity Bank	Hahnemann Medical College Hospital
Courier Corporation	Fidelity Mutual Life Insurance	Hallmark Cards, Inc.
Cox Cable Communications, Inc.	Firestone Tire & Rubber Company	Hanes Corporation
Crane & Company, Inc.	First American Bank & Trust, Maryland	John Hancock Mutual Life Insurance Company
Crocker National Bank	First American Bank, N.A.	Hannaford Brothers
Crompton & Knowles Corporation	First Amtekn Corporation	Hart, Schaffner & Marx
Crowley Maritime Corporation	First Bank System, Inc.	Hartford Hospital

LIST OF PARTICIPANTS (Continued)

H.J. Heinz Company
 Hewlett-Packard Company
 Highlands Energy Corporation
 Hillcrest Medical Center
 Hilti Industries, Inc.
 Hilti, Inc.
 Hiram Walker
 Holmes & Narver, Inc.
 Home Federal Savings and Loan
 Home Petroleum
 Honeywell, Inc. - PMSD
 Hooker Chemicals
 Hormel & Company
 Hospital Data Center of Virginia
 Hospital Service Plan of New Jersey
 Houghton Mifflin Company
 Howard Johnson Company
 Howard University
 Howe-Baker, Inc.
 Hubbard Milling
 J.M. Huber Corporation
 Human Resources Research Organization
 Phillip A. Hunt Chemical Corporation
 Hunt Manufacturing Company
 Husky Oil
 Hygeia Coca-Cola Bottling Company
 IBM Corporation
 IBM Employee's Credit Union
 ICI Americas, Inc.
 Illinois Bell Telephone
 Illinois Central Gulf Railroad
 Illinois Power Company
 Illinois Tool Works, Inc.
 INA Corporation
 Inco Electric Energy (ESB)
 Independent Life Insurance
 Indianapolis Life Insurance
 Indianapolis Power & Light
 Ingersoll-Rand Company
 Insurance Services Office
 Interfirst Corporation
 Intermedics, Inc.
 Intermountain Health Care
 International Packings Corporation
 Investors Diversified Services
 Iowa Methodist Medical Center
 Itek Graphic Systems
 & Communications Industries
 IU International Management Corporation
 Industrial Valley Bank
 Jameson Memorial Hospital
 Jefferson Bank of Miami
 E.F. Johnson
 S.C. Johnson & Son
 Jones & Laughlin Steel Corporation
 Joy Manufacturing Company
 Kaiser Foundation Health Plan
 Kaiser Steel
 Kansas City Power & Light
 Kawasaki Motors Corporation, U.S.A.

Kellogg Company
 Kendall Company
 Kennametal, Inc.
 Kennecott Corporation
 Kent-Moore Corporation
 Kepner-Tregoe, Inc.
 Kerr-McGee Corporation
 Kimberly-Clark Corporation
 Knapp-King-Size Corporation
 Koehring Company
 Kroger Company
 Lamb-Weston, Inc.
 Lavino Shipping Company
 Lawrence Livermore Laboratory
 Lebanon Steel Foundry
 Leeds & Northrup Company
 Lever Brothers Company
 Levi Strauss & Company
 Charles Levy Circulating Company
 Leybold Hereaus Vacuum
 Libbey-Owens-Ford Company
 Liberty National Bank & Trust Company
 Liberty National Life Insurance Company
 LIMRA
 Lincoln National Corporation
 Lipe-Rollway Corporation
 Thomas J. Lipton, Inc.
 Lithium Corporation
 Lucas CAV Industries, Inc.
 Lucas Industries, Inc.
 Lutheran Brotherhood
 Lutheran Mutual Life Insurance Company
 Mack Printing Company
 Mack Trucks, Inc.
 Madison General Hospital
 Magnetic Controls Company
 Mallinckrodt
 Manchester Memorial Hospital
 Manufacturers and Traders Trust
 MAPCO, Inc.
 Marathon U.S. Realities
 Mary Kay Cosmetics
 Maryland National Bank
 Massachusetts Mutual Life Insurance Company
 The Mathes Company
 Matsushita, Inc.
 Mattel, Inc.
 May Department Stores Company
 Mayflower Corporation
 McGraw-Edison Company
 Robert E. McKee, Inc.
 McQuay-Perflex, Inc.
 Mead Corporation
 Mellon Bank
 Memorex Corporation,
 Memorial Hospital Medical Center of Long Beach
 Memorial Hospital System of Houston
 Memphis Light, Gas, & Water Division
 Merchants Insurance Group
 Merck & Company, Inc.

Metpath, Inc.
 Metropolitan Life Insurance Company
 Fred Meyer, Inc.
 MIB, Inc.
 Michigan Wisconsin Pipe Line Company
 Mid-Atlantic Toyota Distributors, Inc.
 Midcon Corporation
 Midland Mutual Life Insurance Company
 Midwest Stock Exchange, Inc.
 Milchem, Inc.
 Miles Laboratories
 Milwaukee Sanitation Department
 Minnesota Fabrics, Inc.
 Minnesota Mining & Manufacturing Company
 Minnesota Mutual Life Insurance Company
 Minolta Corporation
 Missouri Pacific Railroad Company
 Mitre Corporation
 Mitsubishi International
 Modern Drop Forge
 Modern Merchandising, Inc.
 Modine Manufacturing Company
 Monarch Capital Corporation
 Montana Power Company
 Montefiore Hospital and Medical Center
 Montgomery Ward and Company
 Moog, Inc.
 Moore Business Forms, Inc.
 Morgan Guarantee Trust Company of New York
 Phillip Morris, U.S.A.
 Morrison, Inc.
 Morrison-Knudsen Company
 Motorola, Inc.
 MSI Insurance Company
 Murphy Oil Corporation
 Mutual Benefit Life Insurance
 Mutual Broadcasting System
 Mutual Federal Savings and Loan Association
 Mutual Life Insurance Company of New York
 Mutual of Omaha
 NACUBO
 Nalco Chemical Company
 Narco Scientific Industries, Inc.
 National Bank of Detroit
 National Can Corporation
 National Constructors Association
 National Electrical Manufacturing Association
 National Gypsum Corporation
 National Railroad Labor Conference
 National Rural Utilities Cooperative
 Finance Corporation
 National Savings and Trust Bank
 National Supply
 Natomas
 Navy Federal Credit Union
 NCNB Corporation
 NCR Corporation
 NERCO
 New England Mutual Life Insurance Company

LIST OF PARTICIPANTS (Continued)

Newport News Shipbuilding & Drydock
 Nipponendo of Los Angeles
 NKC, Inc.
 Norfolk & Western Railway Company
 North American Philips Corporation
 North Mississippi Medical Center
 Northern Trust Bank
 Northern Trust Company
 Northwest Bancorporation
 Northwest Industries, Inc.
 Northwest Pipeline Corporation
 Northwestern Bell Telephone Company
 Northwestern Mutual Life Insurance Company
 Northwestern National Life Insurance Company
 Norton Company
 Ohio Edison Company
 Ohio Medical Indemnity Mutual Corporation
 Ohio Valley Medical Center, Inc.
 OKIDATA Corporation
 Old Kent Bank and Trust
 Old Stone Bank
 Olin Corporation
 Omaha Airport Authority
 Omaha Public Power District
 Overseas Development Council
 Owens-Corning Fiberglas Corporation
 Owens-Illinois, Inc.
 Paccar, Inc.
 Pacific Mutual Life Insurance
 Pacific Resources, Inc.
 Pako Corporation
 Palco, Inc.
 Paper Converting Machine Company
 Peavey Company
 Pendleton Woolen Mills
 Penn Central Energy Group
 Penn Virginia Corporation
 Pennfield Corporation
 Pennsylvania Blue Shield
 Pennsylvania Medical Society
 Pennsylvania Power & Light Company
 Pennwalt Corporation
 Pentagon Federal Credit Union
 Peoples Gas, Light & Coke Company
 Peoples Natural Gas Company, Inc.
 Peoples Savings Bank
 Peoples Security, Maryland
 Perkin-Elmer Company
 Pet, Inc.
 Pfizer, Inc.
 Philadelphia Electric Company
 Philips Coal Company
 Piedmont Natural Gas
 Pillsbury Company
 PIMA County Governmental Center
 Pioneer Savings and Loan
 Pittsburgh & Lake Erie Railroad Company
 Pittsburgh National Bank
 Pizza Hut, Inc.
 Plains Electric Generation
 & Transmission Cooperative
 Pontiac State Bank

Gregory Poole Equipment Company
 Portland General Electric
 Power Authority of State of New York
 PPG Industries
 PQ Corporation
 Preferred Risk Mutual Insurance Company
 T. Rowe Price Associates, Inc.
 Price Brothers Company
 Protective Life Insurance Company
 Provident Life and Accident Insurance
 Company
 Provident National Bank
 Public Broadcasting Service
 Public Service Company of New Mexico
 Puget Sound National Bank
 Puritan-Bennett Corporation
 Racal-Milgo, Inc.
 Rainier National Bank
 Rapistan, Inc.
 Raymond International
 Reading & Bates Corporation
 Recognition Equipment
 Recreation Vehicle Industry
 Red Owl Stores
 Michael Reese Hospital
 Regional Transportation Authority
 Research Triangle Institute
 Research-Cottrell, Inc.
 Resnord, Inc.
 R.J. Reynolds Industries
 Reynolds Metals
 Richardson-Vicks, Inc.
 Richmond School District
 Riggs National Bank
 Riviana Foods, Inc.
 A.H. Robbins
 Rogers Corporation
 Rouse Company
 Royal Bank of Canada
 Royal Insurance Company
 Royster Company
 Ryan Homes, Inc.
 Ryder System, Inc.
 Safeguard Industries, Inc.
 Saga Corporation
 Samaritan Health Services
 San Diego Trust and Savings Bank
 Sanders Associates, Inc.
 Sandia Corporation
 Sandvik, Inc.
 Santa Fe Railroad
 Santee Cooper/S. Carolina
 Public Service Authority
 Schering-Plough Corporation
 Schreiber Foods, Inc.
 SCM Corporation
 Scott Paper Company
 Sears, Roebuck and Company
 Sentry Insurance Company
 Shaklee Corporation

Shawmut Bank of Boston, N.A.
 Sherex Chemical Corporation
 Siemens Corporation
 Sierra Pacific Power Company
 SIFCO Industries, Inc.
 Signode Corporation
 Sioux Valley Hospital Association
 R & G Sloane Manufacturing
 Smith & Welton
 Society For Savings
 Society of Manufacturing Engineers
 Solar Energy Research Institute
 Soltex-Polymer Corporation
 Sonoco Products Company
 Soo Line Railroad Company
 Sorbus Service Division of M.A.I.
 South Jersey Industries, Inc.
 South Suburban Hospital
 Southeast Bank, N.A.
 Southern Company Services
 Southern Pacific Transportation Company
 Southern Railway System
 Spohn Hospital
 SPS Technologies
 St. Joe Minerals Company
 St. Luke's Episcopal & Texas Children's Hospital
 St. Luke's Hospitals (Fargo)
 St. Mary's Medical and Health Center
 St. Paul Companies, Inc.
 St. Paul Fire and Marine
 St. Vincent Hospital and Medical Center
 A.E. Staley Manufacturing Company
 Stanadyne, Inc.
 Standard Oil of California
 State Department Federal Credit Union
 State Farm Insurance Companies
 State Merit System (Georgia)
 State of Virginia
 State of Wisconsin
 State Street Bank and Trust Company
 Stauffer Chemical Company
 Steelcase, Inc.
 Steiger-Tractor, Inc.
 Storer Broadcasting Company
 Strategic Planning Association
 Student Loan Marketing Association
 Suburban Bancorporation
 Suburban Propane Gas
 Sun Chemical Company
 Sun Company, Inc.
 The Sunpapers
 Supermarket General Corporation
 Susquehanna Corporation
 Sverdrup/Aro Technology, Inc.
 Syntex
 Syracuse Research Laboratories
 Systems Research Laboratories
 Talon
 Tennessee Valley Authority
 Terra Chemicals International, Inc.

LIST OF PARTICIPANTS (Continued)

Tesoro Petroleum Corporation	United Nuclear Corporation	The Washington Post
Tetley, Inc.	United Services Life Insurance Company	Washington Public Power Supply System
Texas Federal Savings and Loan	United Telecommunications	Wausau Homes, Inc.
Texas Instruments	United Virginia Bank	Webster Spring
Texas Oil & Gas Corporation	United Way of Southeastern Pennsylvania	Wesley Medical Center
Texas Utilities Services, Inc.	Universal Oil Products	West Penn Motor Club
Textron, Inc.	University Hospitals of Cleveland	Western Forge Corporation
Thermo Electron	University of Alaska	Western Life Insurance
Third National Bank and Trust of Dayton	University of California	Western Publishing
TIAA - CREF	Upjohn Company	Western Union International
Time Life Books	Upstate Milk Cooperative	Western Union Telegraph
Timex Corporation	U.S. Brewers Association, Inc.	Westin Hotels
Tonka Corporation	U.S. Gypsum Company	Morris Wheeler
Topps Chewing Gum, Inc.	U.S. Life Corporation	Wheeling Dollar Savings and Trust
Tower Federal Credit Union	Utah International, Inc.	Wickland Oil Company
Townsend-Textron Cherry Fasteners	Utah Power and Light Company	Amherst H. Wilder Foundation
Trailer Train Company	Valero Energy Corporation	John Wiley & Sons, Inc.
Transamerica Corporation	Vallen Corporation	Williams Brothers Engineering
Travenol Laboratories	Valley National Bank	Williams Companies
Triangle Corporation	Versa Technologies	Williams International
Triangle Publications, Inc.	Viacom International	Wisconsin Public Service Corporation
Uarco, Inc.	Virginia Chemical Corporation	Wool Bureau, Inc.
UCI Corporation	Virginia National Bank	F.W. Woolworth Company
Unigard Mutual Insurance Company	Volunteer Electric Cooperative	Barry Wright Corporation
Union Carbide Corporation	Vulcan, Inc.	Wm. Wrigley Jr. Company
Union Mutual Life Insurance Company	Wagner Electric Company	Wyman-Gordon Company
Union Pacific Railroad Company	Ward Foods	YMCA of the United States
Union Planters National Bank	Warner & Swasey Company	Zale Corporation
Union Special Corporation	Washington National Corporation	Zayre Corporation
Unit Rig & Equipment Company	Washington Natural Gas	Zenith Radio Corporation
United Hospital		
United Insurance Company of America		

1982 LIST OF PARTICIPANTS BY MAJOR CATEGORY

INDUSTRIALS

Action Industries, Inc.
 Air Products and Chemicals
 Alabama Power Company
 Alascom, Inc.
 Alcan Aluminum
 ALCOA
 Alexander & Baldwin, Inc.
 Allen Bradley Company
 Allied Corporation
 Allis Chalmers Company
 AMAX, Inc.
 Amerada Hess Corporation
 American Broadcasting Company, Inc.
 American Crystal Sugar
 American Hoechst
 American Hospital Supply Corporation
 American Shipbuilding
 American Standard, Inc.
 American Sterilizer Company
 American Telephone & Telegraph Company
 Amersham
 Amtrak
 Anaconda Minerals Company
 Anchor/Darling Industries
 Anchor Hocking Corporation
 The Andersons
 ARC America
 Arcata Corporation
 Archer-Daniels Midland
 Argo International
 Armco, Inc.
 Armstrong World Industries, Inc.
 Asarco, Inc.
 Ashland Oil, Inc.
 Atlantic Aviation Corporation
 Avery Products Corporation

 Badische Corporation
 Baltimore Aircoil
 Barber-Greene Company
 Barden Corporation
 Bariven Corporation
 Basin Electric Power Cooperative
 L.L. Bean, Inc.
 Bechtel Corporation
 Bell Helicopter Textron
 Bell Telephone of Pennsylvania
 Berol Corporation
 Bessemer & Lake Erie Railroad Company
 Best Products Company, Inc.
 Betz Laboratories
 Beverage Management, Inc.
 Black & Decker Manufacturing Company
 Dick Blick Company
 Boston Edison Company
 B.P. Alaska Exploration
 Braden Steel Corporation
 Bristol-Myers Company
 Brooklyn Union Gas
 Brooks and Perkins, Inc.
 Brown & Williamson Tobacco
 Brunswick Corporation

Buckeye Gas Products
 Bucyrus Erie Company
 Burger King Corporation
 Burlington Northern, Inc.
 Butler Manufacturing Company
 H.E. Butt Grocery Company
 Buttes Gas & Oil Company

 California & Hawaiian Sugar Company
 Cameron Iron Works
 Campbell Soup Company
 Cargill, Inc.
 Carrier Corporation
 A.M. Castle & Company
 Castle & Cooke, Inc.
 Caterpillar Tractor Company
 Ceco Corporation
 Central Soya Company, Inc.
 Central Telephone and Utilities Corporation
 Centronics
 Certainteed Corporation
 CFS Continental
 Chesebrough-Pond's, Inc.
 Chicago Bridge & Iron Industries, Inc.
 Chicago & Northwestern Transportation Company
 Chicago Tribune
 Chipman-Union, Inc.
 Chrysler Corporation
 Ciba-Geigy Corporation
 Citizen's Gas & Coke Utility
 Cleveland Electric Illuminating
 Clow Corporation
 The Coastal Corporation
 Coca-Cola Bottling Company United, Inc.
 Coca-Cola Company, Inc.
 Cole National Corporation
 Columbia Gas System Service Corporation
 Columbia Nitrogen Corporation
 Commercial Shearing, Inc.
 COMSAT
 Consolidated Rail Corporation
 Continental Corporation
 Continental Emsco Company
 Continental Materials Corporation
 Contraves Goerz Corporation
 Conwed Corporation
 Cooper Industries
 Copperweld Corporation
 Country Pride Foods, Ltd.
 Courier Corporation
 Cox Cable Communications, Inc.
 Crane & Company, Inc.
 Crompton & Knowles Corporation
 Crowley Maritime Corporation
 CRST, Inc.
 CSX Corporation
 Cyclops Corporation

Danly Machine Corporation
 Dayton Power and Light Company
 Dayton-Hudson Corporation
 Dead River Company
 Deluxe Check Printers, Inc.

Dentsply International, Inc.
 Detroit Edison Company
 Dexter Corporation
 Diamond Shamrock
 A.B. Dick Company
 DiGiorgio Corporation
 Disston
 Distribution Centers, Inc.
 Dixie Yarns, Inc.
 Donaldson Company
 Dow Chemical, U.S.A.
 Dow Corning Corporation
 Dravo Corporation
 Duke Power Company
 Duriron Company, Inc.
 Durr-Fillauer Medical, Inc.

 Eastern Stainless Steel
 Ecodyne (Lindsey Div.)
 Economics Laboratory, Inc.
 EMC Technologies, Inc.
 Energy Reserves Group
 Euclid, Inc.
 Evans & Sutherland Computers
 Ex-Cell-O Corporation
 Excelsior Truck Leasing Company, Inc.

Federal Express Corporation
 Firestone Tire & Rubber Company
 First Mississippi Corporation
 Fisher-Price Toys
 Flickinger Corporation
 Flo-Valve Company
 Florida Power Corporation
 Florida Steel Corporation
 FMC Corporation
 Foremost-McKesson
 L.B. Foster Company
 Fox & Jacobs, Inc.
 Fox-Stanley Photo Products, Inc.
 Foxboro Company
 Frantz Manufacturing Company
 Freeport-McMoran, Inc.
 Freightliner Corporation
 R.T. French Company
 Friendly Ice Cream Corporation
 Frito-Lay, Inc.
 Fruit Growers Express
 Fusion Systems Corporation

General Electric Company
 General Foods Corporation
 General Mills
 General Shale Products Corporation
 General Signal Corporation
 Genstar, Ltd.
 Georgetown Texas Steel
 Georgia Power Company
 Gould SLL, Inc.
 GPU Service Corporation
 Grand Trunk Western Railroad Company
 Graybar Electric Company

Atch 1

INDUSTRIALS (Continued)

GRI Corporation
GTE Automatic Electric, Inc.

Hallmark Cards, Inc.
Hanes Corporation
Hannaford Brothers
Hart, Schaffner & Marx
H.J. Heinz Company
Hewlett-Packard Company
Highlands Energy Corporation
Hilti Industries, Inc.
Hilti, Inc.
Hiram Walker
Home Petroleum
Hooker Chemicals
Hormel & Company
Houghton Millfin Company
Howard Johnson Company
Howe-Baker, Inc.
Hubbard Milling
J.M. Huber Corporation
Phillip A. Hunt Chemical Corporation
Hunt Manufacturing Company
Husky Oil
Hygeia Coca-Cola Bottling Company

IBM Corporation
ICI Americas, Inc.
Illinois Bell Telephone
Illinois Central Gulf Railroad
Illinois Power Company
Illinois Tool Works, Inc.
Inco Electric Energy (ESB)
Indianapolis Power & Light
Ingersoll-Rand Company
Intermedics, Inc.
International Packings Corporation
Itek Graphic Systems & Communications Industries

E.F. Johnson
S.C. Johnson & Son
Jones & Laughlin Steel Corporation
Joy Manufacturing Company

Kaiser Steel
Kansas City Power & Light
Kawasaki Motors Corporation, U.S.A.
Kellogg Company
Kendall Company
Kennametal, Inc.
Kennecott Corporation
Kent-Moore Corporation
Kerr-McGee Corporation
Kimberly-Clark Corporation
Knapp-King-Size Corporation
Koehring Company
Kroger Company

Lamb-Weston, Inc.
Lebanon Steel Foundry

Leeds & Northrup Company
Lever Brothers Company
Levi Strauss & Company
Charles Levy Circulating Company
Leybold Hereaus Vacuum
Libbey-Owens-Ford Company
Lipe-Rollway Corporation
Thomas J. Lipton, Inc.
Lithium Corporation
Lucas CAV Industries, Inc.
Lucas Industries, Inc.

Mack Printing Company
Mack Trucks, Inc.
Magnetic Controls Company
Mallinckrodt
MAPCO, Inc.
Mary Kay Cosmetics
The Mathes Company
Matsushita, Inc.
Mattel, Inc.
May Department Stores Company
Mayflower Corporation
McGraw-Edison Company
Robert E. McKee, Inc.
McQuay-Perfex, Inc.
Mead Corporation
Memorex Corporation
Memphis Light, Gas, & Water Division
Merck & Company, Inc.
Michigan Wisconsin Pipe Line Company
Mid-Atlantic Toyota Distributors, Inc.
Midcon Corporation
Milchem, Inc.
Miles Laboratories
Milwaukee Sanitation Department
Minnesota Fabrics, Inc.
Minnesota Mining & Manufacturing Company
Minolta Corporation
Missouri Pacific Railroad Company
Mitsubishi International
Modern Drop Forge
Modern Merchandising, Inc.
Modine Manufacturing Company
Montana Power Company
Montgomery Ward and Company
Moog, Inc.
Moore Business Forms, Inc.
Phillip Morris, U.S.A.
Morrison, Inc.
Morrison-Knudsen Company
Motorola, Inc.
Murphy Oil Corporation
Mutual Broadcasting System

Nalco Chemical Company
Narco Scientific Industries, Inc.
National Can Corporation
National Gypsum Corporation
National Railroad Labor Conference
National Supply
Natomas
NCR Corporation
NERCO

Newport News Shipbuilding & Drydock
Nipponenso of Los Angeles
Norfolk & Western Railway Company
North American Philips Corporation
Northwest Industries, Inc.
Northwest Pipeline Corporation
Northwestern Bell Telephone Company
Norton Company

Ohio Edison Company
OKIDATA Corporation
Olin Corporation
Omaha Public Power District
Owens-Corning Fiberglas Corporation
Owens-Illinois, Inc.

Paccar, Inc.
Pacific Resources, Inc.
Pako Corporation
Palco, Inc.
Paper Converting Machine Company
Peavey Company
Pendleton Woolen Mills
Penn Central Energy Group
Pennfield Corporation
Pennsylvania Power & Light Company
Pennwalt Corporation
Peoples Gas, Light & Coke Company
Peoples Natural Gas Company, Inc.
Perkin-Elmer Company
Pet, Inc.
Pfizer, Inc.
Philadelphia Electric Company
Philips Coal Company
Piedmont Natural Gas
Pillsbury Company
Pittsburgh & Lake Erie Railroad Company
Pizza Hut, Inc.
Plains Electric Generation & Transmission Cooperative
Gregory Poole Equipment Company
Portland General Electric
Power Authority of State of New York
PPG Industries
PQ Corporation
Price Brothers Company
Public Broadcasting Service
Public Service Company of New Mexico
Puritan-Bennett Corporation

Racal-Milgo, Inc.
Rapistan, Inc.
Raymond International
Reading & Bates Corporation
Recognition Equipment
Recreation Vehicle Industry
Red Owl Stores, Inc.
Research-Cottrell, Inc.
Rexnord, Inc.
R.J. Reynolds Industries
Reynolds Metals
Richardson-Vicks, Inc.

INDUSTRIALS (Continued)

Riviana Foods, Inc.
 A.H. Robbins
 Rogers Corporation
 Royster Company
 Ryan Homes, Inc.
 Ryder System, Inc.

 Safeguard Industries, Inc.
 Saga Corporation
 Sanders Associates, Inc.
 Sandvik, Inc.
 Santa Fe Railroad
 Santee Cooper/S. Carolina Public Service Authority
 Schering-Plough Corporation
 Schreiber Foods, Inc.
 SCM Corporation
 Scott Paper Company
 Sears, Roebuck and Company
 Shaklee Corporation
 Sherex Chemical Corporation
 Siemens Corporation
 Sierra Pacific Power Company
 SIFCO Industries, Inc.
 Signode Corporation
 R & C Sloane Manufacturing
 Smith & Welton
 Solitec-Polymer Corporation
 Sonoco Products Company
 Soo Line Railroad Company
 Sorbus Service Division of M.A.I.
 South Jersey Industries, Inc.
 Southern Company Services
 Southern Pacific Transportation Company
 Southern Railway System
 SPS Technologies
 St. Joe Minerals Company
 A.E. Staley Manufacturing Company
 Stanadyne, Inc.
 Standard Oil of California
 Stauffer Chemical Company
 Steelcase, Inc.
 Steiger-Tractor, Inc.
 Storer Broadcasting Company
 Suburban Propane Gas
 Sun Chemical Company
 Sun Company, Inc.
 The Sunpapers
 Supermarket General Corporation
 Susquehanna Corporation
 Syntex

 Talon
 Tennessee Valley Authority
 Terra Chemicals International, Inc.
 Tesoro Petroleum Corporation
 Tetley, Inc.
 Texas Instruments
 Texas Oil & Gas Corporation
 Texas Utilities Services, Inc.
 Textron, Inc.
 Thermo Electron
 Time Life Books

 Times Corporation
 Tonka Corporation
 Topps Chewing Gum, Inc.
 Townsend-Textron Cherry Fasteners
 Trailer Train Company
 Travenol Laboratories
 Triangle Corporation
 Triangle Publications, Inc.

 Uarco, Inc.
 UGI Corporation
 Union Carbide Corporation
 Union Pacific Railroad Company
 Union Special Corporation
 Unit Rig & Equipment Company
 United Nuclear Corporation
 United Telecommunications
 Universal Oil Products
 Upjohn Company
 Upstate Milk Cooperative
 U.S. Gypsum Company
 Utah International, Inc.
 Utah Power and Light Company

 Valero Energy Corporation
 Vallen Corporation
 Versa Technologies
 Viacom International
 Virginia Chemical Corporation
 Volunteer Electric Cooperative
 Vulcan, Inc.

 Wagner Electric Company
 Ward Foods
 Warner & Swasey Company
 Washington Natural Gas
 The Washington Post
 Washington Public Power Supply System
 Wausau Homes, Inc.
 Webster Spring
 Western Forge Corporation
 Western Publishing
 Western Union International
 Western Union Telegraph
 Wickland Oil Company
 John Wiley & Sons, Inc.
 Williams Brothers Engineering
 Williams Companies
 Williams International
 Wisconsin Public Service Corporation
 F.W. Woolworth Company
 Barry Wright Corporation
 Wm. Wrigley Jr. Company
 Wyman-Gordon Company

 Zale Corporation
 Zayre Corporation
 Zenith Radio Corporation

INDUSTRIAL SERVICES

 AIRCOA
 American Association for the Advancement of Science

 American Chemical Society
 American Society of Civil Engineers
 American Society of Refrigerator & Air Conditioner Engineers
 Amfac Hotels
 Arthur Anderson & Company

 Baker Industries
 BATUS, Inc.
 Leo Burnett Company

 Computer Sciences Corporation

 Dynallectron Corporation

 EC & C Idaho

 Factory Mutual Engineering Corporation

 Holmes & Narver, Inc.
 Honeywell, Inc. - PMSD
 Hospital Data Center of Virginia
 Human Resources Research Organization

 I.U. International Corporation

 Kepner-Tregoe, Inc.

 Lavino Shipping Company
 Lawrence Livermore Laboratory

 Marathon U.S. Realities
 Metpath, Inc.
 MIB, Inc.
 Mitre Corporation
 National Constructors Association
 National Electrical Manufacturing Association

 Penn Virginia Corporation

 Regional Transportation Authority
 Rouse Company

 Sandia Corporation
 Society of Manufacturing Engineers
 Solar Energy Research Institute
 Strategic Planning Association
 Sverdrup/Aro Technology, Inc.
 Systems Research Laboratories

 Transamerica Corporation

 U.S. Brewers Association, Inc.

 Westin Hotels
 Morris Wheeler
 Wool Bureau, Inc.

FINANCIALS (BANKS)

Allied Bank International
 American Bank and Trust of Pennsylvania
 American Security and Trust Company, Inc.
 American Security and Trust Company
 Ameritrust
 Ameritrust Federal Savings & Loan
 Ameritrust
 Arizona Bank

BankEast Corporation
 Bank of New England, N.A.
 Barclays Bank of California
 Barclays Bank of New York
 Barnett Banks of Florida
 Boone County National Bank

Central Bancshares of the South
 Central Trust Bank
 Chase Federal Savings & Loan
 Chase Manhattan Bank
 Chemical Bank
 Citibank, N.A.
 Citizen's Bank & Trust, Maryland
 Citizen's Bank
 City Bank & Trust
 Commercial Security Bank
 Commonwealth National Bank
 Community Federal Savings and Loan
 Connecticut Bank and Trust
 Continental Bank
 Crocker National Bank

Deposit Guaranty National Bank
 Dominion Bankshares Corporations

East New York Savings Bank
 Empire Bank
 Equibank, N.A.
 Equitable Trust

Farm Credit Banks of Springfield
 Federal Reserve Bank of San Francisco
 Fidelity Bank
 First American Bank & Trust, Maryland
 First American Bank, N.A.
 First Amtegn Corporation
 First Bank System, Inc.
 First Interstate Bank of Arizona, N.A.
 First National Bank of Clayton
 First National Bank of Maryland
 First National Bank of Mexico, Missouri
 First National Bank of Minneapolis
 First Oklahoma Bancorporation
 First Pennsylvania Bank
 First Security Corporation

Germantown Savings Bank
 Girard Bank
 Guarantee Federal Savings and Loan

Interfirst Corporation
 Industrial Valley Bank

Jefferson Bank of Miami

Liberty National Bank & Trust

Manufacturers and Traders Trust
 Maryland National Bank
 Mellon Bank
 Morgan Guarantee Trust Company of
 New York

National Bank of Detroit
 National Savings and Trust Bank
 NCNB Corporation
 Northern Trust Bank
 Northern Trust Company
 Northwest Bancorporation

Old Kent Bank and Trust
 Old Stone Bank

Peoples Savings Bank
 Pittsburgh National Bank
 Pontiac State Bank
 Provident National Bank
 Puget Sound National Bank

Rainier National Bank
 Riggs National Bank
 Royal Bank of Canada

San Diego Trust and Savings Bank
 Shawmut Bank of Boston, N.A.
 Society for Savings
 Southeast Bank, N.A.
 State Street Bank and Trust Company
 Student Loan Marketing Association
 Suburban Bancorporation

Texas Federal Savings and Loan
 Third National Bank and Trust of Dayton

Union Planters National Bank
 United Virginia Bank

Valley National Bank
 Virginia National Bank

Wheeling Dollar Savings and Trust

FINANCIALS (INSURANCE)

Acacia Mutual Life Insurance Company
 Allendale Mutual Insurance
 American Family Insurance Group
 American Reinsurance Company
 American States Insurance Companies
 Armco Insurance Group
 Atlantic Mutual Insurance Company
 Automobile Club of Michigan

BABB, Inc.
 Banker Life and Casualty Company
 The Bankers Life Company
 Bankers Life of Nebraska
 Beaven Companies
 Berkshire Life Insurance Company
 Business Men's Assurance Company of
 America
 Capital Holding Corporation

Central Life Assurance
 Chesapeake Life Insurance Company
 Chicago Title and Trust
 CNA Insurance
 Colonial Life and Accident
 Commercial Union Insurance Companies
 Connecticut Mutual Life Insurance
 Corroon and Black of Tennessee, Inc.
 Cotton States Insurance

Equitable Life Assurance Society
 Erie Insurance Group

Farm Family Life/Mutual Insurance
 Companies
 Fidelity Mutual Life Insurance

Government Employee's Life Insurance
 Great Southern Life Insurance Company
 Greatwest Casualty Corporation

John Hancock Mutual Life Insurance
 Company

INA Corporation
 Independent Life Insurance
 Indianapolis Life Insurance
 Insurance Services Office

Liberty National Life Insurance Company
 LIMRA
 Lincoln National Corporation
 Lutheran Brotherhood
 Lutheran Mutual Life Insurance Company

Massachusetts Mutual Life Insurance
 Company
 Merchants Insurance Group
 Metropolitan Life Insurance Company
 Fred Meyer, Inc.
 Midland Mutual Life Insurance Company
 Minnesota Mutual Life Insurance Company
 Monarch Capital Corporation
 MSI Insurance Company
 Mutual Benefit Life Insurance
 Mutual Life Insurance Company of New York
 Mutual of Omaha

New England Mutual Life Insurance
 Company
 Northwestern Mutual Life Insurance Company
 Northwestern National Life Insurance
 Company

Pacific Mutual Life Insurance
 Preferred Risk Mutual Insurance Company
 Protective Life Insurance Company
 Provident Life & Accident Insurance Company

Royal Insurance Company

Sentry Insurance Company
St. Paul Companies, Inc.
St. Paul Fire and Marine
State Farm Insurance Companies

TIAA - CREF

Unigard Mutual Insurance Company
Union Mutual Life Insurance Company
United Insurance Company of America
United Services Life Insurance Company
U.S. Life Corporation

Washington National Corporation
Western Life Insurance

OTHER FINANCIALS

American Bankers Association
American Express Company

Bank Fund Staff Federal Credit Union
Bank Marketing Association
Borg Warner Acceptance Corporation

Chicago Board of Trade

Dial Financial Corporation
Farm Credit Banks of St. Paul
Federal Home Loan Mortgage Corporation
Federal National Mortgage Association
First National Exchange Bank

Home Federal Savings and Loan

IBM Employee's Credit Union
Investors Diversified Services

Kaiser Foundation Health Plan

Midwest Stock Exchange
Mutual Federal Savings and Loan Association

National Rural Utilities Cooperative Finance Corporation
Navy Federal Credit Union

Pentagon Federal Credit Union
Peoples Security, Maryland
Pioneer Savings and Loan

T. Rowe Price Associates, Inc.

State Department Federal Credit Union

Tower Federal Credit Union

BLUE CROSS/BLUE SHIELD

Blue Cross Hospital Service Inc. - St. Louis, Missouri
Blue Cross of Greater Philadelphia

Blue Cross of Northeast Ohio
Blue Cross of Northeastern New York
Blue Cross of Southern California
Blue Cross/Blue Shield Associations, Inc.
Blue Cross/Blue Shield of Alabama
Blue Cross/Blue Shield of Connecticut, Inc.
Blue Cross/Blue Shield of Delaware, Inc.
Blue Cross/Blue Shield of Florida
Blue Cross/Blue Shield of Iowa
Blue Cross/Blue Shield of Kansas
Blue Cross/Blue Shield of Maryland
Blue Cross/Blue Shield of Massachusetts
Blue Cross/Blue Shield of Michigan
Blue Cross/Blue Shield of Nebraska
Blue Cross/Blue Shield of North Carolina
Blue Cross/Blue Shield of Southern West Virginia
Blue Cross/Blue Shield of Texas
Blue Cross/Blue Shield of Virginia
Hospital Service Plan of New Jersey
Ohio Medical Indemnity Mutual Corporation
Pennsylvania Blue Shield

OTHER SERVICES

Abbott Northwestern Hospital
Allegheny Intermediate Unit
The American College
American Council of Life Insurance
American Gas Association
American Heart Association, Inc.
American Institute for Research
American Institute of CPA's
American Iron and Steel Institute
American Public Transit Association
Archbishop Bergan Mercy Hospital
Arvida Corporation

Bethesda Hospital
Bishop Clarkson Memorial Hospital

Carle Foundation
Chamber of Commerce of the United States
City of Chesapeake
City of Colorado Springs
City of Hampton
City of Los Angeles
City of Los Angeles (Fire & Police)
City of Los Angeles (General)
City of Los Angeles (Water & Power)
City of Newport News
City of Norfolk
City of Portsmouth
City of Richmond
City of Suffolk
Columbia Hospital
Commonwealth of Pennsylvania
Community Consolidated School District 146
Congressional Budget Office
Thomas Cooke, Inc.
County of Lake

Dupage County

Four Cities United Way

Callaudet College
Girl Scouts of the U.S.A.
Godfather's Investments

Hahnemann Medical College Hospital
Hartford Hospital
Hillcrest Medical Center
Howard University

Intermountain Health Care
Iowa Methodist Medical Center

Jameson Memorial Hospital

Madison General Hospital
Manchester Memorial Hospital
Memorial Hospital Medical Center of Long Beach
Memorial Hospital System of Houston
Montefiore Hospital and Medical Center

NACUBO
NKC, Inc.
North Mississippi Medical Center

Ohio Valley Medical Center, Inc.
Omaha Airport Authority
Overseas Development Council

Pennsylvania Medical Society
PIMA County Governmental Center

Michael Reese Hospital
Research Triangle Institute
Richmond School District

Samaritan Health Services
Sioux Valley Hospital Association
South Suburban Hospital
Spohn Hospital
St. Luke's Episcopal & Texas Children's Hospital

St. Luke's Hospitals (Fargo)
St. Mary's Medical and Health Center
St. Vincent Hospital and Medical Center
State Merit System (Georgia)
State of Virginia
State of Wisconsin
Syracuse Research Laboratories

United Hospital
United Way of Southeastern Pennsylvania
University Hospitals of Cleveland
University of Alaska
University of California

Wesley Medical Center
West Penn Motor Club
Amherst H. Wilder Foundation

YMCA of the United States

PRESENT VALUE OF RETIREMENT LIFESTREAM EARNINGS
(\$000)

Case 1.

Assumptions. Military personnel retire at 20 years of service; enlisted members at age 39 and officers at age 43. Private Sector workers retire at 20 years of service and age 62.

Economic factors are 5% CPI, 6% interest. Social Security is fully indexed with CPI from age 62. Private sector capital accumulation is not indexed. Private sector retired pay is indexed by 2% vice 5% CPI. Military pay is fully indexed from age of retirement. Military Social Security annual payment has been inflated to age 62 from age 39 or 43 by 5% and then discounted back to 39 or 43 by 6%. It was then modified by the probability of living to age 62. The respective total multipliers are .66 for enlisted and .74 for officers.

MILITARY EARNINGS

BMC At Retirement	Social Security		Capital Accum		Retired Pay		Total	
	Enl	Off	Enl	Off	Enl	Off	Enl	Off
	10	35.6	-	-	-	98.6	-	134.2
20	50.0	-	-	-	200.0	-	250.0	-
30	60.6	77.1	-	-	295.9	293.9	356.5	371.0
40	-	78.3	-	-	-	391.9	-	470.2
50	-	78.3	-	-	-	498.9	-	577.2
60	-	78.3	-	-	-	587.8	-	666.1
70	-	78.3	-	-	-	685.8	-	764.1

PRIVATE SECTOR EARNINGS (MEDIAN LEVEL)

Salary At Retirement	Social Security		Capital Accum		Retired Pay		Total	
	Enl	Off	Enl	Off	Enl	Off	Enl	Off
10	67.2	-	8.3	-	20.7	-	96.2	-
20	90.5	-	11.8	-	48.4	-	150.7	-
30	93.4	105.6	22.7	25.1	81.5	90.3	197.6	220.9
40	-	105.6	-	31.6	-	131.9	-	269.2
50	-	105.6	-	38.4	-	166.2	-	310.2
60	-	105.6	-	44.7	-	208.6	-	358.9
70	-	105.6	-	51.8	-	247.4	-	405.3

PRIVATE SECTOR EARNINGS (90TH PERCENTILE)

<u>Salary At Retirement</u>	<u>Social Security</u>		<u>Capital Accum</u>		<u>Retired Pay</u>		<u>Total</u>	
	<u>Enl</u>	<u>Off</u>	<u>Enl</u>	<u>Off</u>	<u>Enl</u>	<u>Off</u>	<u>Enl</u>	<u>Off</u>
10	67.2	-	18.2	-	38.1	-	123.5	-
20	90.5	-	38.3	-	70.2	-	199.1	-
30	93.4	105.6	54.3	60.1	116.5	129.0	264.3	294.6
40	-	105.6	-	77.6	-	180.5	-	373.8
50	-	105.6	-	95.2	-	223.2	-	424.0
60	-	105.6	-	116.9	-	277.0	-	499.5
70	-	105.6	-	136.3	-	328.6	-	570.5

Case 2.

Assumptions. Military retire at 30 years of service and age 49 for enlisted or 53 for officer. Private Sector retire at 30 years of service and age 65.

Economic factors are 5% CPI, 6% interest. Social Security is fully indexed with CPI from age 65. Private sector capital accumulation is not indexed. Private sector retired pay is indexed by 2% vice 5% CPI. Military pay is fully indexed from age of retirement. Military Social Security annual payment has been inflated to age 65 from age 49 or 53 by 5% and then discounted back to 49 or 53 by 6%. It was then modified by the probability of living to age 65. The respective total multipliers are .70 for enlisted and .81 for officers.

MILITARY EARNINGS

BMC At Retirement	Social Security		Capital Accum		Retired Pay		Total	
	Enl	Off	Enl	Off	Enl	Off	Enl	Off
10	41.9	-	-	-	114.3	-	156.2	-
20	59.3	-	-	-	228.4	-	287.7	-
30	72.1	-	-	-	342.9	-	415.0	-
40	73.9	95.6	-	-	457.2	453.1	531.1	548.7
50	-	95.6	-	-	-	566.4	-	662.0
60	-	95.6	-	-	-	679.7	-	775.3
70	-	95.6	-	-	-	793.0	-	888.6

PRIVATE SECTOR EARNINGS (MEDIAN LEVEL)

Salary At Retirement	Social Security		Capital Accum		Retired Pay		Total	
	Enl	Off	Enl	Off	Enl	Off	Enl	Off
10	75.4	-	12.7	-	30.6	-	118.7	-
20	100.1	-	25.3	-	69.4	-	194.8	-
30	105.3	-	34.6	-	119.3	-	259.3	-
40	105.3	118.3	43.8	48.2	170.7	189.2	319.2	355.7
50	-	118.3	-	58.6	-	237.3	-	414.2
60	-	118.3	-	68.1	-	297.6	-	484.0
70	-	118.3	-	79.0	-	356.2	-	553.4

PRIVATE SECTOR EARNINGS (90TH PERCENTILE)

<u>Salary At Retirement</u>	<u>Social Security</u>		<u>Capital Accum</u>		<u>Retired Pay</u>		<u>Total</u>	
	<u>Enl</u>	<u>Off</u>	<u>Enl</u>	<u>Off</u>	<u>Enl</u>	<u>Off</u>	<u>Enl</u>	<u>Off</u>
10	75.4	-	27.9	-	54.1	-	157.3	-
20	100.1	-	54.6	-	101.0	-	255.7	-
30	105.3	-	83.0	-	156.4	-	344.7	-
40	105.3	118.3	107.3	118.3	219.7	243.4	432.3	480.0
50	-	118.3	-	145.2	-	304.5	-	567.0
60	-	118.3	-	178.2	-	375.6	-	672.1
70	-	118.3	-	207.7	-	443.9	-	769.9

Case 3.

Assumptions. Military retire at 20 years of service and age 39 for enlisted or 43 for officer. Private Sector retire at 20 years of service and age 62.

Economic factors are 5% CPI, 6% interest. Social Security is fully indexed with CPI from age 62. Private sector capital accumulation is not indexed. Private sector retired pay is not indexed. Military pay is fully indexed from age of retirement. Military Social Security annual payment has been inflated to age 62 from age 39 or 43 by 5% and then discounted back to 39 or 43 by 6%. It was then modified by the probability of living to age 62. The respective total multipliers are .66 for enlisted and .74 for officers.

MILITARY EARNINGS

BMC At Retirement	Social Security		Capital Accum		Retired Pay		Total	
	Enl	Off	Enl	Off	Enl	Off	Enl	Off
	10	35.6	-	-	-	98.6	-	134.2
20	50.0	-	-	-	200.0	-	250.0	-
30	60.6	77.1	-	-	295.9	293.9	356.5	371.0
40	-	78.3	-	-	-	391.9	-	470.2
50	-	78.3	-	-	-	498.9	-	577.2
60	-	78.3	-	-	-	587.8	-	666.1
70	-	78.3	-	-	-	685.8	-	764.1

PRIVATE SECTOR EARNINGS (MEDIAN LEVEL)

Salary At Retirement	Social Security		Capital Accum		Retired Pay		Total	
	Enl	Off	Enl	Off	Enl	Off	Enl	Off
10	67.2	-	8.3	-	17.6	-	93.1	-
20	90.5	-	11.8	-	41.0	-	143.3	-
30	93.4	105.6	22.7	25.1	69.2	76.4	185.3	207.0
40	-	105.6	-	31.6	-	111.7	-	249.0
50	-	105.6	-	38.4	-	140.7	-	284.7
60	-	105.6	-	44.7	-	176.6	-	326.9
70	-	105.6	-	51.8	-	209.9	-	367.8

PRIVATE SECTOR EARNINGS (90TH PERCENTILE)

<u>Salary At Retirement</u>	<u>Social Security</u>		<u>Capital Accum</u>		<u>Retired Pay</u>		<u>Total</u>	
	<u>Enl</u>	<u>Off</u>	<u>Enl</u>	<u>Off</u>	<u>Enl</u>	<u>Off</u>	<u>Enl</u>	<u>Off</u>
10	67.2	-	18.2	-	32.3	-	117.7	-
20	90.5	-	38.3	-	59.6	-	188.5	-
30	93.4	105.6	54.3	60.1	98.8	109.2	246.6	274.8
40	-	105.6	-	77.6	-	152.9	-	346.2
50	-	105.6	-	95.2	-	189.0	-	389.8
60	-	105.6	-	116.9	-	234.6	-	457.1
70	-	105.6	-	136.3	-	278.3	-	520.2

Case 4.

Assumptions. Military retire at 30 years of service and age 49 for enlisted or 53 for officer. Private Sector retire at 30 years of service and age 65.

Economic factors are 5% CPI, 6% interest. Social Security is fully indexed with CPI from age 65. Private sector capital accumulation is not indexed. Private sector retired pay is not indexed. Military pay is fully indexed from age of retirement. Military Social Security annual payment has been inflated to age 65 from age 49 or 53 by 5% and then discounted back to 49 or 53 by 6%. It was then modified by the probability of living to age 65. The respective total multipliers are .68 for enlisted and .79 for officers.

MILITARY EARNINGS

BMC At Retirement	Social Security		Capital Accum		Retired Pay		Total	
	Enl	Off	Enl	Off	Enl	Off	Enl	Off
10	41.9	-	-	-	114.3	-	156.2	-
20	59.3	-	-	-	228.4	-	287.7	-
30	72.1	-	-	-	342.9	-	415.0	-
40	73.9	95.6	-	-	457.2	453.1	531.1	548.7
50	-	95.6	-	-	-	566.4	-	662.0
60	-	95.6	-	-	-	679.7	-	775.3
70	-	95.6	-	-	-	793.0	-	888.6

PRIVATE SECTOR EARNINGS (MEDIAN LEVEL)

Salary At Retirement	Social Security		Capital Accum		Retired Pay		Total	
	Enl	Off	Enl	Off	Enl	Off	Enl	Off
10	75.4	-	12.7	-	26.4	-	114.5	-
20	100.1	-	25.3	-	59.8	-	185.2	-
30	105.3	-	34.6	-	103.0	-	243.0	-
40	105.3	118.3	43.8	48.2	147.3	162.4	295.8	328.9
50	-	118.3	-	58.6	-	203.7	-	380.6
60	-	118.3	-	68.1	-	255.5	-	441.9
70	-	118.3	-	79.0	-	305.7	-	502.9

PRIVATE SECTOR EARNINGS (90TH PERCENTILE)

<u>Salary At Retirement</u>	<u>Social Security</u>		<u>Capital Accum</u>		<u>Retired Pay</u>		<u>Total</u>	
	<u>Enl</u>	<u>Off</u>	<u>Enl</u>	<u>Off</u>	<u>Enl</u>	<u>Off</u>	<u>Enl</u>	<u>Off</u>
10	75.4	-	27.9	-	46.6	-	149.8	-
20	100.1	-	54.6	-	87.1	-	241.8	-
30	105.3	-	83.0	-	134.9	-	323.2	-
40	105.3	118.3	107.3	118.3	189.6	208.9	402.2	455.5
50	-	118.3	-	145.2	-	261.4	-	523.9
60	-	118.3	-	178.2	-	322.4	-	618.9
70	-	118.3	-	207.7	-	381.1	-	707.1

Case 5.

Assumptions. Military retire at 20 years of service and age 39 for enlisted or 43 for officer. Private Sector retire at 20 years of of service and age 62.

Economic factors are 5% CPI, 7.5% interest. Social Security is fully indexed with CPI from age 62. Private sector capital accumulation is not indexed. Private sector retired pay is indexed by 2% vice 5% CPI. Military pay is fully indexed from age of retirement. Military Social Security annual payment has been inflated to age 62 from age 39 or 43 by 5% and then discounted back to 39 or 43 by 7.5%. It was then modified by the probability of living to age 62. The respective total multipliers are .48 for enlisted and .57 for officers.

MILITARY EARNINGS

BMC At Retirement	Social Security		Capital Accum		Retired Pay		Total	
	Enl	Off	Enl	Off	Enl	Off	Enl	Off
10	22.7	-	-	-	77.6	-	100.3	-
20	31.9	-	-	-	155.3	-	187.2	-
30	38.7	51.3	-	-	232.9	231.9	271.6	283.2
40	-	52.2	-	-	-	309.2	-	361.4
50	-	52.2	-	-	-	386.5	-	438.7
60	-	52.2	-	-	-	463.8	-	516.0
70	-	52.2	-	-	-	541.0	-	593.2

PRIVATE SECTOR EARNINGS (MEDIAN LEVEL)

Salary At Retirement	Social Security		Capital Accum		Retired Pay		Total	
	Enl	Off	Enl	Off	Enl	Off	Enl	Off
10	58.9	-	7.5	-	18.5	-	84.9	-
20	79.3	-	10.7	-	43.2	-	133.2	-
30	81.9	91.5	20.5	22.4	72.8	80.0	175.2	193.9
40	-	91.5	-	28.3	-	117.0	-	236.8
50	-	91.5	-	34.4	-	142.4	-	268.3
60	-	91.5	-	40.0	-	185.0	-	316.5
70	-	91.5	-	46.4	-	219.9	-	357.8

PRIVATE SECTOR EARNINGS (90TH PERCENTILE)

Salary At Retirement	Social Security		Capital Accum		Retired Pay		Total	
	Enl	Off	Enl	Off	Enl	Off	Enl	Off
10	58.9	-	16.5	-	34.0	-	109.4	-
20	79.3	-	34.7	-	62.7	-	176.7	-
30	81.9	91.5	49.2	53.8	104.0	114.4	235.1	259.7
40	-	91.5	-	69.5	-	160.2	-	321.2
50	-	91.5	-	85.2	-	198.0	-	374.7
60	-	91.5	-	104.7	-	245.7	-	441.9
70	-	91.5	-	122.0	-	291.5	-	505.0

Case 6.

Assumptions. Military retire at 30 years of service and age 49 for enlisted or 53 for officer. Private Sector retire at 30 years of service and age 65.

Economic factors are 5% CPI, 7.5% interest. Social Security is fully indexed with CPI from age 65. Private sector capital accumulation is not indexed. Private sector retired pay is indexed by 2% vice 5% CPI. Military pay is fully indexed from age of retirement. Military Social Security annual payment has been inflated to age 65 from age 49 or 53 by 5% and then discounted back to 49 or 53 by 2.5%. It was then modified by the probability of living to age 65. The respective total multipliers are .58 for enlisted and .71 for officers.

MILITARY EARNINGS

BMC At Retirement	Social Security		Capital Accum		Retired Pay		Total	
	Enl	Off	Enl	Off	Enl	Off	Enl	Off
10	30.7	-	-	-	94.0	-	124.7	-
20	43.4	-	-	-	188.1	-	231.5	-
30	52.7	-	-	-	282.1	-	334.8	-
40	54.0	73.6	-	-	375.9	375.9	429.9	449.5
50	-	73.6	-	-	-	469.9	-	543.5
60	-	73.6	-	-	-	563.9	-	637.5
70	-	73.6	-	-	-	657.9	-	731.5

PRIVATE SECTOR EARNINGS (MEDIAN LEVEL)

Salary At Retirement	Social Security		Capital Accum		Retired Pay		Total	
	Enl	Off	Enl	Off	Enl	Off	Enl	Off
10	66.7	-	11.5	-	27.3	-	105.5	-
20	88.6	-	23.0	-	61.8	-	173.4	-
30	93.2	-	31.5	-	106.5	-	231.2	-
40	93.2	103.7	39.4	42.8	152.3	169.1	284.9	315.6
50	-	103.7	-	52.6	-	212.1	-	368.4
60	-	103.7	-	61.1	-	266.0	-	430.8
70	-	103.7	-	70.9	-	318.4	-	493.0

PRIVATE SECTOR EARNINGS (90TH PERCENTILE)

Salary At <u>Retirement</u>	<u>Social Security</u>		<u>Capital Accum</u>		<u>Retired Pay</u>		<u>Total</u>	
	<u>Enl</u>	<u>Off</u>	<u>Enl</u>	<u>Off</u>	<u>Enl</u>	<u>Off</u>	<u>Enl</u>	<u>Off</u>
10	66.7	-	25.3	-	48.2	-	140.2	-
20	88.6	-	49.7	-	90.1	-	228.4	-
30	93.2	-	75.5	-	139.5	-	308.2	-
40	93.2	103.7	97.5	106.1	196.0	217.6	386.7	427.4
50	-	103.7	-	130.2	-	272.2	-	506.1
60	-	103.7	-	159.9	-	335.7	-	599.3
70	-	103.7	-	186.3	-	396.8	-	686.8

**APPENDIX E
MOBILIZATION ASPECTS
OF THE
U.S. MILITARY RETIREMENT SYSTEM**



**MOBILIZATION CONCEPTS DEVELOPMENT CENTER
NATIONAL DEFENSE UNIVERSITY
COL ROBERT R. RUMPH, USA
CDR HARDY L. MERRITT, USNR**

EXECUTIVE SUMMARY

During the remainder of this decade, the total pool of military non-disability retirees will approach 1.5 million pretrained individuals, consisting of about one-third retired officers. This represents sixty-eight percent of the present active duty contingent of our armed forces. Although the numbers of retirees considered to be mobilization assets under current DoD guidance (Classes I and II) vary considerably by data source, the most current "estimate" of active force and reserve retirees is just under 850,000. This represents about sixty percent of the total retired population. Strength figures are based primarily upon retiree personnel data files maintained by the respective Services and vary in accuracy for the accounting of retiree assets. Until recently, factual data on the availability and utilization of retirees was rather sketchy and retiree strength projection methodology was not--and still is not--uniform throughout DoD. Reconciliation of data should continue between the Defense Manpower Data Center (DMDC) Office of the DoD Actuary and the respective Services FY84-88 Program Objective Memorandum (POM). The total retired population in each Service can be expected to experience a slow but steady growth; however, for the most part, that portion of the retired population considered to be mobilization assets (Classes I and II) will probably not change significantly. It is doubtful that, except in special cases, any other category of retired persons would be considered as mobilization assets.

Military retirees of all Services, particularly the Regular retirees capable of performing duty, should be considered for mobilization assignments. This effort should be proactive across all the Services. At a minimum, these retirees could reasonably be available to relieve active duty military manpower now assigned to the Support Activities category of the armed forces, consisting of a little under 650,000 projected requirements in FY84. This would permit about one-third of the total active duty forces dedicated to those functions to be reassigned to combat-related elements or service (support) units where shortages will occur. This figure does not include Reserve Component military manpower also assigned to Support Activities, nor does it include comprehensive consideration of the entire spectrum of CONUS-based positions that could be filled by retirees making more youthful and efficient military personnel available for deployment. Given the present condition of the Selected Reserve--more particularly the Individual Ready Reserve (IRR)--and overall deterioration of the Standby Reserve inactive status strength, combined with lack of effective legislative authority to recall unobligated veterans, this pool of retirees is particularly valuable as a "mobilization asset" in the truest sense of the term. Skill deterioration in utilization of retirees for support functions is deemed to be factor of minor concern, considering the vast experience and knowledge gained over a military career and the proven competency for service.

There should be no difference between the Service components concerning liability for recall to active duty; hence, there is a real need to achieve standardization of the authorities to order retirees to active duty. As a

general observation regarding recall, by statutory authority: Regular retirees are more readily available than Reserve retirees; Army and Air Force Regular retirees are more readily available than Navy and Marine Corps; and retired Regular officers are more readily available than retired Reserve officers. Of all the retired categories, the mobilization vulnerability of retired Regular enlisted members to involuntary recall is the least understood, since between their 20th and 30th service anniversary and upon transfer to the Army, Air Force, Fleet or Fleet Marine Corps Reserve respectively, they essentially enjoy a "dual status" which requires further legal determination or change in legislation concerning appropriate recall authority. The ambiguity of current recall authorities militate for legislative review and revision.

In the absence of a state of war or declaration of national emergency, Regular retirees of the Army and Air Force could be selectively recalled to strengthen the armed forces quickly with available trained assets of upwards to 575,000 personnel. Additionally, Regular enlisted retirees in the Fleet Reserve and Fleet Marine Corps Reserve numbering some 93,000 strong can be called up for training (up to two months every four years) and precedent exists for the Army and Air Force to execute similar periodic mobilization training duties, if desired, to immediately augment active duty forces for a limited period in the interest of national defense under conditions of "partial" and "full" mobilization.

Retirees who are not presently considered for use as mobilization assets (age limitation, retired over ten years or disabled), de facto Class III, constitute considerable potential in their individual areas of expertise for use in an extreme national emergency involving "total" mobilization. This is a subject suitable for further study.

Assessment of the Service plans and procedures for recall of retirees results in the following observations:

- o The Marine Corps has the most mature program for the recall and integration of retirees into OPLANS for a mobilization contingency. The computerized match of requirements (billets) with specified skilled assets is most noteworthy. Expedient alert notification is fully accomplished by mailgram--although subject to communication network overload constraints at time of implementation. In sum, this program stands at the forefront, reflecting the spirit and intent of current DoD guidance.
- o The Army program for recall and integration of retirees into the CONUS sustaining base under a mobilization contingency is maturing steadily. Retirees with "hip pocket" orders -- and therefore not subject to communication network overload in times of emergency -- have increased sufficiently in numbers; the program only requires further refinement to iteratively meet internal goals involving MOS mismatch. Recent initiatives involving the consideration of retirees during "partial" mobilization, assignment of retirees to flesh out

USAR Training Divisions and use of overseas retirees in-theater add significant credibility to the Army program. This program now stands up well under close scrutiny.

- o The Navy program for recall and integration of retirees exists via NAMMOS inasmuch as the requirements (billets) by officer and enlisted grades have been identified. However, matching specified assets with concomitant skills has not received sufficient emphasis and the established milestones for accomplishment are quite optimistic. Unless a robust approach is taken to realistically expedite target dates, the program will become moribund and lack the necessary degree of credibility demanded by compliance with DoD directives.

- o The Air Force program for recall and integration of retirees is virtually non-existent due to philosophical reservations on their effective use, primarily due to availability and skill deterioration. Although the Air Force recognizes the potential for retiree utilization in a national emergency and accordingly maintains asset lists, planning for eventual use of retirees is being deferred until such crises must be ultimately reckoned with. As such, the program lacks the thrust and impetus desired by DoD guidance.

A new DoD Directive entitled "Management and Mobilization of Regular and Reserve Retired Military Personnel" is currently in the staffing process. This document, when published, will no doubt improve uniformity among the Services in establishing mobilization categories for all retirees, tracking and screening procedures, and obtaining changes in personnel information which affect mobilization availability. It is essential that this document also include specific instructions to the respective Services regarding what portion of the retiree pool can and should be used, and what type positions are appropriate for fill. This should alleviate variances in service interpretation of DoD guidance.

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY.....	E-1
TABLE OF CONTENTS.....	E-v
DISCLAIMER.....	E-vii
ACKNOWLEDGEMENTS.....	E-vii
INTRODUCTION.....	E-1
HISTORICAL PERSPECTIVE.....	E-3
World War II.....	E-3
Korean War.....	E-5
Berlin Crisis and Vietnam War.....	E-6
Perspective on Retirees as Mobilization Assets.....	E-7
RETIREE INVENTORY.....	E-9
LEGISLATIVE BASIS FOR RECALL OF RETIREES.....	E-11
AIR FORCE RETIREE MANAGEMENT PROGRAM.....	E-15
Assessment of the Air Force Retiree Recall Program.....	E-16
ARMY RETIREE MANAGEMENT PROGRAM.....	E-19
Assessment of the Army Retiree Recall Program.....	E-20
MARINE CORPS RETIREE MANAGEMENT PROGRAM.....	E-25
Assessment of the Marine Corps Retiree Recall Program.....	E-26
NAVY RETIREE MANAGEMENT PROGRAM.....	E-29
Assessment of the Navy Retiree Recall Program.....	E-30
SUMMARY AND CONCLUSIONS.	E-33
POINTS OF CONTACT.....	E-37
BIBLIOGRAPHY.....	E-41
APPENDICES	
Appendix A: Legal Authorities -- Air Force Retirees.....	E-45
Appendix B: Legal Authorities -- Army Retirees.....	E-47
Appendix C: Legal Authorities -- Navy/Marine Corps Retirees.....	E-49
ADDENDUM: COAST GUARD RETIREE MANAGEMENT PROGRAM.....	E-51

DISCLAIMER

The analyses and opinions expressed or implied herein are solely those of the authors. They do not necessarily represent the views of the National Defense University, the Joint Chiefs of Staff, the Department of Defense or any other U.S. government agency.

ACKNOWLEDGEMENTS

The authors are indebted to the Director and staff of the Mobilization Concepts Development Center and the President of the National Defense University for their support of this research. The project could not have been completed within the established target dates without the superb research assistance accomplished by Colonel James E. McSlarrow, USA, and Captain Norman L. Beal, USNR, while in resident student status at the Industrial College of the Armed Forces. The editorial assistance provided by Major Luther F. Carter, USMCR, while on active duty for training with the National Defense University is also gratefully appreciated.

INTRODUCTION

In response to a Memorandum from the Vice Director, Joint Staff (DJSM 418-83) dated 18 March 1983, the President of the National Defense University (NDU) tasked the Mobilization Concepts Development Center (MCDC) to conduct a study of the mobilization aspects of the military retirement system for use by the Fifth Quadrennial Review of Military Compensation (QRMC). Specifically, the tasking requested that a study be accomplished to articulate current plans, procedures and issues associated with the projected use of retirees under national conditions requiring a mobilization. This study is important from the following standpoints:

- o Retiree potential should be included in baseline figures for military balance, including both peacetime strengths and time-phased availability of wartime augmentations under "partial", "full" and "total" mobilization;
- o Retiree assets are considered to be a necessary ingredient in building and maintaining a more effective Total Force structure;
- o Retiree recall statutory authorities are not definitive, inasmuch as the legal basis for recall under certain circumstances lacks sufficient clarity; and
- o The potential use of retirees during mobilization generates presents issues for policy consideration and yields insight into implementation problems.

Retired military personnel constitute a pool of individuals who are not currently members of either the active force or the Selected Reserve and who have prior military experience. Pretrained individuals are important military assets and are a potential source of military manpower which would be available to reinforce our force structure during the early stages of a major conflict. In the event of mobilization, retirees could be recalled to active duty to be used as fillers to bring non-tactical units to wartime strength and to expand the continental United States (CONUS) support base. In recent years, wartime manpower planning has shown that the supply of pretrained individual manpower would be insufficient to meet the early needs of the military Services; therefore, the retiree pool constitutes assets with a minimal deterioration of military skill proficiency level to meet time-phased wartime requirements. The Department of Defense has recognized the need to seek better utilization of this source of wartime manpower and is placing due emphasis on the retired community as a mobilization asset.

The analytical framework for this study includes individual discussion sections concerning: a historical perspective tracing the use of military retirees during past national emergencies; composition of the retiree inventory; legislative basis and authorities for recall of retirees; descriptions of respective Service management programs; an assessment of the respective Service plans and procedures for recall; and a recap summary.

HISTORICAL PERSPECTIVE

Retired military members have historically been called upon to reenter active duty only in times of war or armed conflict. Notwithstanding this, the true significance of the total numbers involved and the degree of volunteerism exercised are subject to continued debate. An analysis of the use of retirees from a historical perspective follows:

World War II

In discussions concerning past manpower mobilization by the armed forces, it has become apparent that there were no realistic or practical plans for addressing manpower utilization prior to World War II. Mobilization requirements, even today, are characterized by disagreements over the best means of identifying skills and apportioning available manpower for optimum utilization. In 1940, total Army Reserves numbered only 43,000 and the Army National Guard stood at just over half that figure. To augment the active forces during the period from 1940-1941, the National Guard was mobilized and increased to 60,000 strong. The sea services recalled about 17,500 retired enlisted men in 1942 representing 65% of paid retirees available to them, but the vast majority were voluntary. By 1944, it became evident that there was a shortage of manpower in uniform. By the end of the war, there was no strategic reserve uncommitted in any theater. This could be interpreted as remarkably accurate planning for minimum required forces, providing a fairly narrow margin of victory.

It is pertinent to consider quantity when addressing requirements for the armed forces in light of the experience of World War II. The United States mobilized twelve million men from which there were formed approximately one hundred divisional-sized or equivalent units. This startling fact must be considered in any future global war. During the war, the number of fighting men required by the Armed Forces was dependent upon, among other factors, the number and types of equipment supported in the inventory. Considering this, it becomes apparent that a portion of the required increase should be attributed to the support roles necessary for sustaining combat units. It is in this area that retired personnel become important assets.

By way of example, in July 1944, the President authorized a strength ceiling of 3,384,000 for the Navy to be reached by June 1945. This was considerably more personnel than the pre-Pearl Harbor estimate of a yearly increase of 160,000, then thought to be necessary for the building of a two-ocean fleet. By June 1945, the Navy experienced a 20-fold increase from the 160,997 personnel initially on active duty when the Naval Expansion Act of 1940 became law. This figure included the recall of 5,700 retired active duty enlisted personnel and 3,010,293 Reserves. To reach this strength, the Navy procured personnel at an average rate of 14,200 per week. The high point was reached during fiscal year 1943-44 when the rate of 25,000 per week was equivalent to manning a Navy of the 1940's every seven weeks. Training and processing this manpower source in the face of changing requirements both as

to types of skills and numbers was a challenging mission. New programs and technological improvements in equipment required approximately half a million specifically trained officers and men. The task of transforming large numbers of civilian personnel into technically trained Navy men required careful selection and classification on the basis of natural abilities and prior education. When manpower became critical and it became evident that many billets could be filled by women, legislation was enacted in July 1942 to admit them to the officer and enlisted ranks of the Navy. Three years later, more than 82,000 women were serving in the continental United States and certain bases overseas.

The broad scope of amphibious warfare in the Pacific brought about a 16-fold expansion of Marine Corps personnel over a five-year period. The over-all strength of the Marine Corps expanded from 28,364 personnel in July 1940 to 476,709 personnel in June 1945. 185,000 men comprising the ground units of the Fleet Marine Forces were shipped overseas. The aviation branch of the Fleet Marine Forces consisted of 80,000 men and the Marine Corps women's reserve was organized and brought to its maximum strength of 18,000.

The United States Coast Guard was placed under the operational control of the Navy in November 1941. During the war years, its normal functions were greatly expanded, and its operations were enlarged to include naval duties especially suited to its personnel, requiring an increase from 13,776 in July 1940 to 171,192 in June 1945. This figure includes 136 retired personnel recalled, 52,845 Temporary Reservists and Coast Guard Auxiliary, along with 143,523 Reserves. This expansion included an increase in personnel assigned from Coast Guard units -- 66,000 for the Navy and 6,700 for the Army/Marine Corps. Early in 1942, the Coast Guard was given responsibilities for the protection of ports against sabotage and other contingencies as well as handling explosives and other dangerous cargoes which entailed a maximum of 31,000 personnel ashore and 10,400 afloat. Coastal protection involved approximately 23,500 men. Additionally, an air-sea rescue service was established in 1944, and the Coast Guard had 33,000 men operating and maintaining the long-range aids to navigation, to include weather and hydrographic functions.

Considerable Army manpower was assigned to the Zone of Interior and when the demand for combat troops was critical, about 600,000 enlisted men who were qualified for overseas duty were serving in fixed installation in jobs that would never take them outside the United States. Eventually, this number was reduced by one-half toward the end of 1944. The Army National Guard and Reserve were mobilized and by June 1941, more than 55,000 Reserve officers had been ordered to active duty. Call-up of the enlisted Reserve was subject to criticism due to the fact that in many cases the Services laid claim to personnel whose skills would have been better utilized in areas unrelated to their Reserve assignment. It should be recognized that in December 1942, the voluntary enlistment of men between the inclusive ages of 18 and 37 years was ordered terminated as of February 1943. From that date on, manpower requirements for the Services were supplied by the Selective Service System which inducted an enlisted total equivalent to the Army's peacetime strength for each month of recruiting. Army historical records indicate that from 1941-1945, peaking in June of 1943, a total of 1,042 retired officers were recalled to active duty.

Throughout the period, the pressure of organizing, recruiting and mobilizing manpower assets while simultaneously conducting wartime operations did not permit each Service the luxury of studying of use of smaller and less demanding assets, such as the retired military community. Quite possibly, some retirees may have enlisted immediately and some may have volunteered for induction through the Selective Service System. In any case, it can be assumed that better planning on the part of each Service would have improved policies and controls governing use of their talents, thereby releasing substantial numbers of personnel qualified for duty in combat areas through the substitution of limited service personnel. By a careful process of selection and placement, it is probable that thousands more retired personnel possessing sufficient health, intelligence and ability to work at the required degree of efficiency could have been found and used to good advantage.

Korean War

During the interim period prior to the outbreak of the Korean War, mobilization planning was based upon the assumption that the next war would be a "total" effort in the mold of World War II. There were no provisions for a "partial" mobilization, which ultimately led to an ill-prepared and chaotic call-up for the Korean War. Lessons learned from the confused Korean mobilization led to the Armed Forces Reserve Act of 1952 (66 Stat. 489) and the Reserve Forces Act of 1955. This legislation created clearly defined categories of reservists; the Ready Reserve, Standby Reserve and Retired Reserve. Until that time, there were 2,500,000 personnel in the Active Reserve which included one quarter in the Organized Reserve and the remainder in the Volunteer Reserve. Additionally, there was an Inactive Reserve, sometimes included as part of the Volunteer Reserve by some Services, but for the most part, these were personnel age 60 with no military commitment who were awaiting retirement and pension under Public Law 810. Reviewing the principal problems which arose out of the necessity for "partial" mobilization reveals the following: the manner in which the reserves were organized apparently did not lend itself to calling portions to active duty; officers not in organized units, whether Volunteer or Inactive, were just as important as those in units; and, the essentiality of maintaining the integrity of organized reserve units in event of "total" mobilization was not addressed.

Required active forces for the Korean War demanded a fifty percent strength increase, from two million personnel. At that time, the number of Reserve units had increased dramatically until the assigned strength of the Army Reserve, in particular, stood at 600,000 in June 1950. More than 165,000 Individual Reservists were ordered to active duty in numerous recalls. The Army individually recalled almost 100,000 enlisted Inactive and Volunteer Reserve. By July 1950, the Presidential authorization under Public Law 599 involuntarily recalled all Reserve and retired personnel to meet the strength requirement of 971,000 for the Air Force. It is interesting to note that of 100,000 Reserves called up, over 24,000 requested deferment, including sixty percent for hardship reasons. Additionally the Air Force Reserve, numbering 56,000 officers and 90,000 enlisted (which included Air National Guard) constituted seventy-one percent of the Air Force on active duty. Approximately 19,000 Volunteer Reserve airman plus Inactive Reserve airman

totaling approximately 46,750 were ordered to active duty. In the Organized Reserve of the Navy, some 1,300 officers and 10,000 enlisted volunteered and were ordered to active duty, as was the case with 8,000 officers in the Volunteer Reserve. Officer members of the Organized Reserve in the Navy ordered involuntarily to active duty numbered 6,500 out of 26,000 on the rolls; likewise, Volunteer Reserve recalls numbered 2,100 out of 250,000 on the rolls. Petty officers of the Organized Reserve in the Navy ordered involuntarily to active duty numbered 39,000 out of 68,000; likewise, Volunteer Reserve recalls numbered 47,000 out of 310,000. Navy enlisted members of the Organized Reserve in non-rated status who were involuntarily ordered to active duty numbered 19,000 out of 93,000; likewise, Volunteer Reservists numbered 23,000 out of 320,000. From the beginning of the Korean action until May 1952, 4646 Fleet Reservists were ordered to active duty, as well as 5,500 enlisted retirees--the latter representing approximately seventy-one percent of those available and on the rolls in 1951. By June 1950, the Volunteer Reserve was by far the largest component of the Marine Corps Reserve, with 87,655 reservists on inactive duty, thereby exceeding the active duty strength by 13,382. At the end of March 1951, 51,942 of the 84,821 Reservists on active duty were Volunteer Reservists.

By 1953, our Ready Reserve stood at 1.8 million. In January 1954, recognizing the personnel problems during the Korean outbreak, the Director of the Office of Defense Mobilization submitted a report to the President concerning the availability of manpower to operate a military training program, to supply military personnel for active service, and to simultaneously meet the needs of the civilian economy. This report recognized the benefits of maintaining a strong reserve while decreasing the numbers in a total active duty military force. It also pointed out the importance of new technology to national security, in that there was an increasing military requirement for manpower with technical skills to maintain and operate modern weapon systems. This requirement provided an incentive to the armed forces to make long-term career service attractive and placed heavy emphasis on activities to promote enlistments and reenlistments. The report also contained a section relating to the Reserve Act noting that the terms "Ready Reserve" and "Standby Reserve" represented arbitrarily established categories and therefore did not indicate the degree of readiness for military operations. Further, it included the observation that the Ready Reserve, at that time, could not be considered in a high state of training or availability for service; whereas, the Standby Reserve was deemed to be in a suitable state of readiness for active duty. In conclusion, the Office of Defense Mobilization suggested that the Retired Reserve would also be utilized as a resource for mobilization in any extended conflict.

Berlin Crisis and Vietnam War

The Army Reserve was just beginning to feel the beneficial effects of the 1952 and 1955 Acts when more than 400 Army Reserve units and 40,000 Individual Reservists were mobilized for the 1961 Berlin Crisis, not including an involuntary recall of retirees. The President ordered the Reservists to active duty to demonstrate America's national resolve by reinforcing the

country's non-nuclear capability. Correspondingly, the Vietnam era is of insignificant value to assess retired mobilization issues, because in 1965, the President decided not to recall to active duty either Reservists or retirees. The limited number of retirees that did in fact serve did so on a voluntary basis.

Perspective on Retirees as Mobilization Assets

It can be argued that the vast majority of the retired population -- even after 30 years of service -- do not suddenly wish to be non-contributors in a national mobilization effort. There is a psychological and sociological cast to military members and their families that goes well beyond the obligation of the average citizen. For most not in uniform, patriotism and national interests are often abstracts that are brought to light in a true national crisis; however, by contrast, military members live with the visible elements of this abstract and are aware that they constitute a public symbol in recognition of these ideals. A retirees' career experience provides him with a strong allegiance to service and country. To promote the belief that the Retired Reserve is not a mobilization asset in time of crisis ignores these basic tenets. The experiences of World War II, Korea, and to some degree, Vietnam point out that proper planning and administration can -- and will -- make the retired community a viable mobilization asset.

RETIREE INVENTORY

According to data available through the Defense Manpower Data Center (DMDC) Office of the DoD Actuary, long-term retired military strength projections through the year 2000 increase steadily over the period, and the number of enlisted retirees approach one million in the out years, with the officer retiree ranks leveling at half a million. Each Service includes projection of retired military strength in its annual Program Objectives Memorandum (POM), by category for regular and reserve, officer and enlisted, and determines the number of retirees considered to be mobilization assets by the following categories:

- o Class I -- Under age 60 and retired less than 5 years.
- o Class II -- Under age 60 and retired 5 to 10 years, with the notable exception of the Army which has no upper limit on years since retirement.
- o All other personnel, including disabled retirees and retirees who have been retired more than 10 years or are 60 years and older, are excluded (de facto Class III).

Service projection methodology varies considerably and estimates of the retired rolls are tempered by socioeconomic conditions and actuarial factors. Because the Services have inadequate management data on the Reserve retiree population, inventory changes are approximated and are suspect in a rigorous analysis of retiree inventory forecasts. The total retiree population has averaged a 45,000 growth-rate per year from 1977 to the FY82 total of 1,426,000. The most current "estimate" of retirees who are considered to be mobilization assets as of 30 September 1982 can be compared with similar data reported in the same timeframe in 1981 (strengths in thousands):

<u>Service</u>	<u>Regular Retirees</u> (Classes I & II)		<u>Reserve Retirees</u> (Classes I & II)	
	1982	1981	1982	1981
o Army	216.9	184	27.5	72
o Navy	205.7	106	19.3	27
o Marine Corps	42.5	25	3.4	3
o <u>Air Force</u>	314.0	84	19.2	9
o DoD Total	779.1	399	69.4	111

(Source: Reserve Forces Policy Board)

The grand total of both Regular and Reserve retirees in Classes I and II for 1982 was 848,500 as compared to the 1981 total of 510,000. The 1981 figure has been confirmed by other DoD sources to be approximately 514,000, although with the exception of the Navy and Marine Corps, there is a great differential in the numbers by Service breakdown. For example, the Army second source estimate for combined regular and reserve (Classes I & II) retirees is about 100,000 less than that indicated; correspondingly, the Air Force is about the same amount over that indicated.

The 1982 figure indicates a large overall increase in the number of available retirees--almost a forty percent increase--with a significant rise in each Service of Regular retiree mobilization assets and an overall mixed-Service readjustment in Reserve retiree mobilization assets. This large swing is not easily explained, unless a total reevaluation of the inventory was undertaken by each Service, but lends credence to the belief that factual data on the availability and utilization of retirees is often misleading or inaccurate. This inconsistency in data militates for standardizing the reporting format so that information can be tracked successively each year. Relying on strength projections of questionable accuracy could result in an adverse impact on future management decisions regarding retirees.

LEGISLATIVE BASIS FOR RECALL OF RETIREES

Numerous sections of Title 10 United States Code (USC) provide the authority to order to active duty different categories of retired personnel. Pertinent legislative authorities for each service are included in Appendices A, B, and C. The following broad categories of retiree recall assets are provided for discussion:

- o Regular officers who retire with 20 or more years of active service are immediately placed and permanently retained on the Regular Officer Retired List maintained by the respective Service Secretary. Under the provisions of 10 USC 688, Retired Regular officers of all Services may be recalled to active duty by the Service Secretary at any time under regulations prescribed by the Secretary of Defense. This would appear to be a delegated action to the Service Secretary from the broader provisions of 10 USC 3504 for the Army, and 10 USC 8504 for the Air Force, which authorizes recall to active duty by the President at any time without legal restrictions in the interest of national defense. Confusion exists in the application of 10 USC 688 when applied to the other services. 10 USC 6485 authorizes officers of the Regular Navy and Regular Marine Corps who request retirement after 20 or more years of service and at least 10 years of commissioned service to be available for recall without consent to active duty at sea or on shore in a state of war or national emergency declared by the President and ordered by the Secretary of the Navy. They can be recalled at any other time, only with consent. Consequently, the Army and Air Force mobilization assets represent the most readily available trained officer manpower to augment the active forces in peace and war. All retired regular officers from the respective Services provide a major capability to expand the force quickly in time of national emergency.

- o Reserve officers who retire after 20 or more years of active service or with 20 or more years credit for various types of service are transferred to the Retired Reserve. They can be recalled only with their consent, or in a state of war or national emergency declared by Congress, without their consent, under the provisions of 10 USC 675 -- with the proviso under 10 USC 672, that involuntary recall will be made only upon determination by the Service Secretary with the approval of the Secretary of Defense that there are no other reserve personnel readily available. Because of the determination caveat, and without consent, these mobilization assets represent trained officer manpower to augment the active forces only in times of national emergency. It should be noted that retired reserve officers with credit "for various types of service" may lack the degree of experience to be considered mobilization assets, and some officers placed in the Retired Reserve as a result of failure to meet standards of effectiveness may not be deemed of sufficient quality to merit recall.

- o Regular enlisted members who have completed 20 years of service, and are between their 20th and 30th service anniversaries, by law can be retired (in the case of the Army and Air Force) and, by request (in the case of the Navy and Marine Corps), are transferred to the Army Reserve, Air Force Reserve, Navy Fleet Reserve and Fleet Marine Corps Reserve respectively until their 30th service anniversary. Retired enlisted members in this category deserve special attention because of their status: for the Army and Air Force they are in dual status as both Retired Regulars and Reservists (separate legal opinions by the Services for the most part classify the latter in the Retired Reserve category as a matter of course); and, for the Fleet Reservists of the Navy and Marine Corps, although not formally retired, they enjoy a status similar to retirees in that they receive retainer pay and may be called up for not more than two months of training every four years. Confusion exists, inasmuch as availability for recall depends upon the determination of the status selected and authority by which it is invoked. For members of the Army and Air Force, there could be three alternatives for recall to active duty, because of their status: as a Reservist, without consent, under the general authority of 10 USC 672 during a state of war or national emergency declared by the Congress or the President and ordered by the Service Secretary at his determination; as Retired Regulars under authority of 10 USC 688, 10 USC 3504 and 10 USC 8504 at the discretion of the President at any time in the interest of national defense by the Service Secretary; or, as a Retired Reservist, without consent, under authority of 10 USC 675 during a state of war or national emergency declared by Congress. A determination must be made as to which authority would be most appropriate; but in any case, these mobilization assets represent trained enlisted manpower to augment the active forces only in times of emergency (as a worst case determination). Arguments have been made for the least restrictive determination as a Retired Regular. On the other hand, for members in the Navy and Marine Corps, since there is an optional category in this case, there could be two alternatives for recall to active duty because of their status: as Fleet Reserve (which could also be construed to be categorized as Retired Reserve) without consent, under the authority of 10 USC 6485 in a state of war or national emergency by the Service Secretary; or, as Retired Regulars under the authority of 10 USC 6482 in a state of war or national emergency declared by Congress or the President. In both instances, these mobilization assets represent trained enlisted manpower to augment the active forces only in times of emergency.

- o Regular enlisted members who retire with 30 or more years of active service may retire directly at their discretion, or after completion of a combined total of 30 years of service and/or Reserve duty, and are transferred to the Regular Retired list maintained by the Service Secretary. Army and Air Force Regular enlisted retirees are available for recall at any time by the President in the interest of national defense under provisions of 10 USC 688, 10 USC 3504 and 10 USC 8504. However, in the Navy and Marine Corps, they may be ordered

to active duty in a state of war or national emergency by the Secretary of the Navy under provisions of 10 USC 6482. It appears that after completing reserve duty, the Army and Air Force retirees represent the most readily available source of trained enlisted manpower to augment the active forces in peace and war.

- o Reserve enlisted members who retire with 20 or more years of active service on a "varied basis" (Army and Air Force), or when active service and Reserve time equals 30 years (Navy and Marine Corps), are transferred to the Retired Reserve. They can be recalled only with their consent or in a state of war or national emergency declared by Congress, without their consent, under the provisions of 10 USC 675 -- with the proviso under 10 USC 672, that involuntary recall will be made only upon determination by the Service Secretary with the approval of the Secretary of Defense that there are no other reserve personnel readily available. Because of the determination caveat, and without consent, these mobilization assets represent trained enlisted manpower to augment the active forces only in times of national emergency. Additionally, Retired Reserve enlisted members with active service on a "varied basis" may lack the degree of experience to be considered mobilization assets. Presently, no Service has significant numbers of retired reserve enlisted members who have retired after 20 or more years of active duty.

AIR FORCE RETIREE MANAGEMENT PROGRAM

The wartime manpower planning process commences with force level guidance sent by the Air Staff to the Major Commands (MAJCOMs). The MAJCOMs determine their total manpower needs and submit requirements to HQ, Department of the Air Force. These requirements are consolidated and processed by the Air Force Wartime Manpower and Personnel Readiness Team (AFWMPRT) at Ft. Richie, MD. A time-phased Air Force wartime manpower requirements list is produced and forwarded to the Deputy Chief of Staff for Manpower and Organization, and the Director of Personnel Plans. The DCS for Manpower and Organization is responsible for developing personnel policy for all Air Force manpower, including retirees. The Director of Personnel Plans serves as the focal point for all mobilization actions, including retired mobilization management policy, and approves total force planning factors for time-phased wartime manpower supply data. The Chief of Air Force Reserve has delegated personnel management responsibilities for retirees to the Air Force Reserve Personnel Center (ARPC) in Denver, CO. ARPC's management responsibilities, however, do not include selecting individuals to fill mobilization positions. Records of all military retirees are maintained by the Air Force Manpower and Personnel Center (AFMPC) in San Antonio, TX. The AFMPC selects personnel to fill wartime positions, including available retirees, during mobilization. Selections are passed to ARPC who notifies the individual for call to active duty.

Currently, Air Force studies indicate a manpower shortage of small dimensions in wartime mobilization planning. The total strength of both officer and enlisted retired inventories is expected to increase at a modest rate; however, the number of retirees who are mobilization assets (Classes I & II) is not expected to increase significantly. Comparison of strength projections from the Service POM with Defense Manpower Data Center (DMDC), Office of the DoD Actuary data, for both officer and enlisted, coincide but the former reflects the impact on enlisted retiree classification of skill deterioration rates as a more accurate assessment of retiree mobilization potential. Total (Regular and Reserve) officers in retired status in 1983 approximate 148,000 increasing by about 22,000 through 1987; likewise, the number of total (Regular and Reserve) enlisted in retired status in 1983 is approximately 334,000 increasing by about 36,000 through 1987. The retired officers considered to be mobilization assets (Classes I & II) in 1983 approximate 28,000 (75% Regular officers) increasing by about 11,000 through 1987; whereas, enlisted strength as mobilization assets in 1983 approximate 67,000 (45% Regular enlisted) decreasing by about 7,000 through 1987, due to an estimated mean skill deterioration period virtually eliminating all Class II retirees as mobilization assets.

The Air Force could expect to have at least 95,000 retirees, under current initiatives, and probably up to 221,000 available by the beginning of 1984. There are sufficient wartime positions appropriate for these retirees; for FY84, there are 273,600 active Air Force members projected in the Support Activities category of the Armed Forces. There are presently no positions identified to accommodate retirees; however, when authorization to recall

retirees is accomplished, they would be used as unit fillers in the event of "full" mobilization. The remaining members of the retired pool (Class III and/or age limitation) are not considered as mobilization assets; however, they do constitute a considerable potential for use in assisting the Civil Reserve Air Fleet (CRAF), Military Airlift Command (MAC), Military Traffic Management Command (MTMC), War Air Service Program (WASP) and Civil Air Patrol (CAP) in an extreme national emergency involving "total" mobilization.

Assessment of the Air Force Retiree Recall Program

Current laws provide for the involuntary recall of retirees to active duty with the Air Force; however, the Air Force does not propose at this time to seek authority to recall any retirees involuntarily unless there has been a formally declared war or national emergency. In essence, the Air Force will mobilize and meet contingencies with the existing peacetime force structure, primarily through the use of the Selected Reserve which is considered to be immediately available. As a practical matter, the Air Force believes it unwise to expect prior-service members in civilian status to be available in a timely, predictable manner during the early stages of a contingency. If and when authorized, retirees would be recalled on a highly selective basis to fill shortages by grade and Air Force Specialty Code (AFSC). Members would be used to fill positions in CONUS sustaining units vacated by members deployed to a theater or as theater replacements. The specific timing, duration, size and provisions of the recall would be determined by the contingency and statutory authorities. Retirees with the most recent service by date of retirement would be selected first in order to minimize the need for requalification. Retirees in Class III would be considered for recall only on a case-by-case basis. Application by qualified volunteers would be accepted. Members will normally be recalled involuntarily in the following priority: Individual Ready Reserve, Retired Regulars, Standby Reservists and Retired Reservists. Retired resource assets totaling 199,229 personnel are reported to be available by the Air Force, composed of 179,262 Retired Regulars (23,357 officers and 156,315 enlisted) and 19,557 Retired Reserve (14,688 officers and 4,889 enlisted).

Air Force Regulation (AFR) 28-5, Change 2, currently in draft revision, outlines responsibilities for the mobilization of Retired Regular members. Retired members of the Regular Air Force may be recalled to extended active duty for an indefinite period and represent a viable filler resource of highly trained and experienced officer and NCO assets during a war or national emergency. Retired members will not be involuntarily recalled during a Presidential callup authority or partial mobilization except on a case-by-case basis. Selection criteria include only those personnel 60 years of age or under and those without documented physical disability. Members excluded from this criteria may be recalled in a shortage AFSC in order to resolve critical unfilled requirements. The Secretary of the Air Force notifies responsible Air Force agencies of the recall action and provides any special guidance or instructions. Headquarters, USAF determines the need and seeks authority to recall retired regulars. AFMPC identifies shortages to be filled by retirees

and provides requirements to the ARPC who publishes special orders, creates Western Union mailgram tapes, makes substitutions as necessary and processes applications for delays and exemptions. If after 30 days it is reasonably determined that a retiree has no knowledge of the recall orders, ARPC will revoke the orders and the member will remain in retired status until located and selected for subsequent recall. If the situation warrants, all retirees, regardless of age or physical status are susceptible to recall.

Because of the Air Force philosophy concerning the use of retirees in any contingency short of a national emergency -- and maybe justifiably so, given the unique Service perspective on skill deterioration -- the retiree recall program does not fully meet the spirit and intent of DoD desires regarding their use as mobilization assets. The Air Force has made it a matter of record for over a decade that mobilization of personnel cannot be approached only in terms of trained bodies, due to the highly mechanized nature of the Service, but must be couched in terms of complex equipment and complex skills. Notwithstanding, current planning does not provide for the use of retirees in any detail and there is a need not only to use this resource in order to maximize potential, but also to plan comprehensively for that use.

ARMY RETIREE MANAGEMENT PROGRAM

The wartime manpower requirements are developed in the Force Management and Operations Directorates of the Office of the Deputy Chief of Staff for Operations and Plans (ODCSOPS). These directorates establish time-phased plans for the generation and deployment of Army forces based upon inputs from the Major Commands (MACOMs). The Office of the Chief of Staff for Personnel (DCSPER) establishes the time-phased manpower program designed to supply adequate levels of Army manpower, including retirees, upon mobilization. Within DCSPER, the Mobilization Division of the Personnel Plans and Systems Directorate is responsible for establishing detailed mobilization manpower needs and the Army manpower programs necessary to meet these requirements. Thus, the Mobilization Division serves as the focal point for all mobilization manpower planning, including retirees. On the personnel side, the Army has assigned responsibility for the management of retiree assets to the Reserve Components Personnel and Administrative Center (RCPAC) in St. Louis, MO. RCPAC provides appropriate input to the Mobilization Division via the Adjutant General regarding retiree resources available. As the field agency responsible for personnel management of Army retirees, RCPAC performs numerous functions, to include: accessing and maintaining personnel records for Army retirees; operating the wartime assignment and notification system for retirees; and, managing retirees who are mobilization assets.

Currently, Army studies indicate a large manpower deficit to meet the demand in wartime mobilization planning. The total strength of both officer and enlisted retired inventories is expected to increase at a moderate rate; however, the number of retirees who are mobilization assets (Classes I & II) is not expected to increase significantly. Comparison of retiree strength projections from the Service POM with Defense Manpower Data Center (DMDC), Office of the DoD Actuary data, for both officer and enlisted, generally corroborate each other. Total (Regular and Reserve) officers in retired status in 1983 approximate 212,000 increasing by about 15,000 through 1987; likewise, the number of total (Regular and Reserve) enlisted in retired status in 1983 is approximately 276,000 increasing by 45,000 through 1987. The retired officers considered as mobilization assets (Classes I & II) in 1983 approximate 76,000 (25% Regular officers) increasing by about 7,000 through 1987; and, enlisted strength as mobilization assets in 1983 approximate 179,000 (95% Regular enlisted) increasing by about 5,000 through 1987.

The Army could expect to have over 255,000 eligible (Class I and II) retirees immediately available by the beginning of 1984. There are not quite enough wartime positions deemed to be appropriate for these retirees; for FY84, there are 174,600 active Army members projected in the Support Activities category of the armed forces and there could be as many as 182,000 CONUS jobs for retired personnel. Presently, only 123,000 identified requirements are assigned for fill in the CONUS support base to accommodate retirees and hopefully free an equivalent equal number of active personnel for combat units in the event of "full" mobilization--although not one-for-one if used on an augmentation basis. The remaining members of the retired pool (Class III and/or age limitation) are not considered as mobilization assets;

however, they do constitute a considerable potential for use in augmenting DoD Civilian Manpower (Borrowed Military Manpower) or in Military Support to Civil Authority (MACA/MSCD) and National Defense Executive Reserve (NDER) roles in an extreme national emergency involving "total" mobilization.

Assessment of the Army Retiree Recall Program

The Army retiree recall program was initiated in 1977. Current policies and procedures, however, only date back to November 1981 when enough data had been developed to issue involuntary preassignment orders for Army retirees. As of January 1983, over 123,000 retirees have received active duty preassignment orders directing them to a CONUS Army installation in the event of full mobilization. Of this number, 6,700 retired members voluntarily requested preassignment orders. On 2 April 1983, the Army announced plans to increase retiree preassignment totals to 200,000.

The Army's retiree recall program generally follows the broad guidelines of DoD Directive 1352. AR 601-10, Subject: "Mobilization of Retired Members of the Army" is currently under revision. Category I and II personnel are assigned to Army installations in a non-deployable status based upon requirements identified in Mobilization Tables of Distribution and Allowances (MOBTDA). Thus, Army retiree personnel needs in wartime are based on installation level mobilization planning and Army manpower authorization documents down to Unit Identification Code (UIC). RCPAC issues preassignment orders by matching The Army Authorization Document System (TAADS) based requirements file, which is derived from MOBTDA, against computerized Adjutant General retiree lists by grade, skill, and category. Preassignment orders then alert the retiree of his involuntary recall status to an installation closest to the retiree's geographical area. The Army retiree asset file currently lists 238,000 retirees eligible for recall, while the RCPAC TADS requirements file numbers 182,000 positions suitable for retirees--and, as indicated, 123,000 MOBTDA positions have been filled. The nearly 50,000 position short-fall means that many skills are in a shortage status. Retired personnel in specialties such as medical, dental and judge advocate are limited, while TAADS requirements for infantrymen, cannon/missile sergeants and track vehicle repairmen are fewer than assets available. MOS imbalance is an important factor affecting the percent of retirees who receive preassignment orders.

From May 1981 to March 1982, the General Accounting Office (GAO) reviewed the Army retiree recall program and concluded that it required improvement in three major areas: show rate predictability; skill deterioration/refresher training; and installation accession planning. While the Army recognized the overall validity of the report, the report was considered premature because it was conducted shortly after the program was implemented. The process of developing retiree asset files and a MOBTDA authorization requirements base has been a complex and time-consuming undertaking. This initial process has now been largely completed and, if evaluated today, should receive high marks for installation-level accession planning.

The GAO report made major conclusions on the basis of little or no data. For example, it assumed the need for a high degree of capability and competency on the part of a retiree, and concluded that skill decay would be a serious detriment to the potential use of retirees. It charged that the Army had no meaningful data on skill decay and retiree qualifications. Indeed, retiree skill qualification requirements have not been well defined. But, there is justification for the position that high initial skill levels may not, in fact, be required for the kinds of jobs allocated for retirees. It should be pointed out that retirees are not assigned to deployable combat units. Skill decay as a meaningful factor for a TDA position determined suitable for a retiree is not the same problem as it might be for a retiree deploying immediately with a combat or combat support unit with the Army's latest equipment. Also, most of the Army's manpower shortfall occurs well after M-day at a point where retirees should be able to perform acceptably. The basic premise is the need to release those better able to fight, and some degradation of effort is expected of all categories of personnel called upon to serve immediately upon hostilities. It is Army policy that installation commanders determine the exact timing that a retiree replaces an incumbent active unit member.

Additionally, the lack of data concerning probable show rates was noted as a serious flaw in the program. The report advocated a more "scientific" approach--i.e., the use of statistical survey data. Again, the actual recall process delimits this as a serious problem. In accordance with HQDA Letter 601-82-2, DAPE-DSM, Subject: Mobilization Preassignment and Recall of Retired Army Personnel, dated 20 July 82, the installation/activity commander during mobilization will determine (most importantly) where and when a recalled retiree can effectively replace an incumbent active component member and how soon the active member may be released for reassignment. Preassigned retirees then report to an installation for actual assignment based on MOBTDA (UIC) generated requirements and become a pretrained manpower pool for the installation in their specialty. Thus, a small percentage variation in report rates would not be an unmanageable situation for the installation commander who has the final say on the actual assignment of retirees and other mobilization assets.

Because of the Army's highly decentralized mobilization concept, Army MOBTDA's are developed at the installation level. The Army MACOMs, who have responsibility for MOBTDA development, hold the position that the installation/activity commander is best suited to determine mobilization needs. However, early MOBTDA's were developed without sufficient guidance to installation commanders. Most MOBTDA determinations include the installation perception of retiree capability, availability and mobilization conditions. Thus, the most vulnerable part of the Army retiree preassignment program is the actual "hands on" development of MOBTDA and the follow-on actual assignment of retirees to a MOBTDA position. A review of five Training and Doctrine Command (TRADOC) service school TDAs revealed a wide disparity in actual positions considered suitable for retirees. As a result of this uneven approach, many positions suitable for retirees have not been so designated. For example, in the absence of more definitive guidance, the combat arms

schools at Fort Benning, Sill and Knox tended to code many training and key administrative positions as suitable for active duty personnel only. Subject to an in-depth analysis, it could be demonstrated that many more TRADOC TDA positions--and other MACOMs as well--could be designated for retirees. Many of these positions would require the specialties that now appear to be in an over-supply status such as infantry, armor and artillery trainers. Preassignment of such personnel in these specialties would make better use of combat and combat support pretrained personnel assets. To help overcome this problem, TRADOC reported that recent guidance to the field required almost all military MOBTDA positions to be coded suitable for retirees.

There also appears to be a widely held bias at the installation level favoring the assignment of other pretrained personnel assets before considering a retiree in MOBTDA positions. For example, personnel from non-deployable active units at various installations are assigned to installation MOBTDA positions ahead of retirees. It appears that many CONUS installations prioritize the use of retirees at a fairly low level, expecting to get a fair share of a newly created active component pool. This expectation may not be the case under "full" mobilization and a realistic appraisal would indicate that retirees may be the only source of available manpower for many MACOM positions. Confusion in the field concerning the exact correlation of Military Personnel Office (MILPO) retiree lists and the corresponding MOBTDA would be minimized by a better understanding of the preassignment program at the installation level. A detailed MOBTDA review at the MACOM level would also help resolve many inconsistencies that now impact on the program.

A retiree follow-on refresher program could be suggested to improve and solidify the program. The Army makes a strong point that the administration cost of the 123,000 preassigned retirees now in the program is highly cost effective at three million dollars annually. It is argued that training costs are avoided and not even required. However, this austere approach could lead to criticism of retiree accession planning. There is little doubt that MOBTDA requirements and the retiree computerized asset file do not have to match by grade and skill--position for position--in order for the installation commander to satisfy the most demanding mobilization scenario. However, there should be a reasonable match on a large number of positions, including the most critical positions, in order to avoid severe degradation during mobilization. Many retirees have reported that an annual two-week active duty tour to a preassigned position at the installation/activity level would greatly reduce potential confusion. In all fairness to the retiree, he/she should have a good idea what would eventually occur. It would also permit the Army to evaluate the retirees physical and mental qualifications, much of it subjective by nature; in turn, the retiree would feel more involved and committed. A two week program, or something considerably less, should not be billed simply as a "training cost". Most importantly, a program of this kind would help the installation commanders to do a better job in terms of need determination, accession planning, billeting, and other administrative processes. Such a refresher program would add credibility to the Army claim that retirees are an important source of pretrained manpower in the event of mobilization.

In order to more fully utilize its pretrained manpower assets in the event of mobilization, the Army has adopted two new programs which further commits itself to the use of retirees as viable pretrained assets. The first is the use of retirees under conditions of "partial" mobilization on a selected basis. The other program envisions the extensive use of retirees in USAR Training Divisions which are tasked to take over the CONUS training base on mobilization. These divisions have a minimal cadre strength during peacetime and expand as required, depending upon the activity assigned during wartime. The latter program should increase the use of retirees significantly in many of the present over-supply combat and combat support specialty categories.

On balance, the Army retiree recall program is a successful and dynamic one. Current procedures provide for the identification and use of thousands of eligible retirees. As the program is refined, particularly at the installation level, many aspects of the program will undoubtedly improve. For example, the TAADS requirements base requires only a broader DA policy, MACOM review, and better retiree alignment procedures to resolve many problems brought about by a necessarily decentralized approach. Adoption by the Army of a refresher active duty period would increase the effectiveness of the program at all levels. Use of retirees under "partial" mobilization would significantly expand the possible use of retirees. The programming of retiree assets to USAR Training Divisions recognizes the importance of retirees as a pretrained combat arms asset. Now that the data base has been developed, it is time for the Army to reevaluate its procedures and institute a more disciplined and centralized approach to ensure conformity.

MARINE CORPS RETIREE MANAGEMENT PROGRAM

The wartime manpower requirements are determined by the Manpower Policy, Planning Programming and Budget Branch under the Deputy Chief of Staff for Manpower. This branch is responsible for developing manpower mobilization policy and plans relating to the utilization of Marine Corps retirees, and serves as the focal point for retiree policy in HQ, USMC. Programs are developed by the Deputy Chief of Staff for Reserve Affairs (DCSRA) who is responsible for the management and administration of individual member records, and is assisted by the Marine Corps Reserve Forces Administrative Center (MCRFAC) located in Kansas City, MO. In 1980, a reorganization effort resulted in the creation of the Marine Corps Reserve Support Center (MCRSC), and MCRFAC was incorporated into the new organization. The new MCRSC has the personnel management responsibility of maintaining personnel records and identifying individuals to fill selected mobilization positions, but does not include management of retirees except for maintaining the personnel records for members of the Fleet Marine Corps Reserve. Other retiree records are maintained by the Office of the Deputy Chief of Staff for Manpower, and mobilization assignment of retirees is made by HQ, USMC, with back-up assignment capability at the MCRSC.

Currently, the Marine Corps has reported manpower assets adequate to meet the demand in wartime mobilization planning. The total strength of both officer and enlisted retired inventories reflects a steady increase in the retired population, and the number of retirees who are mobilization assets is expected to remain constant. Comparison of strength projections from the Service POM with Defense Manpower Data Center (DMDC), Office of the DoD Actuary data, for both officer and enlisted, indicates a smaller retired population and may therefore exclude a substantial number of retirees. Total (Regular and Reserve) officers in retired status in 1983 approximate 27,000 (89% Regular officers) increasing by about 5,000 through 1987; likewise, total Regular, Reserve and Fleet Reserve) enlisted in retired status in 1983 approximate 54,000 (71% Regular Enlisted) increasing by about 2,000 through 1987. It is noteworthy that about one-quarter of the enlisted retired strength are in the Fleet Marine Corps Reserve. Total mobilization assets (Classes I & II) from active and reserve retirees approach 45,000.

The Marine Corps could expect to have well over 45,000 eligible (Class I & II) retirees immediately available by the beginning of 1984. There are just about enough wartime positions deemed appropriate for these retirees; for FY84, there are 44,100 active Marine Corps members projected in the Support Activities category of the armed forces. There are currently 45,000 scheduled recall positions which could accommodate retirees and hopefully augment combat units in the event of "full" mobilization. Equally important to note is the fact that the retiree mobilization assets cited herein include approximately 15,000 members of the Fleet Marine Corps Reserve. Although not formally retired, they are in a status similar to retirees and therefore must be discounted to preclude duplication in statistical analysis.

Assessment of the Marine Corps Retiree Recall Program

A change in USMC manpower management philosophy was reflected in late 1978, with a change in the status of the system for mobilization. Previously, the active force data base resided in the Manpower Management System file, which was maintained in a computer at the Marine Corps Automated Services Center in Kansas City. It received updates from all reporting units company-size and above, and from Headquarters Marine Corps in Washington, DC. This information was maintained in a weekly extract called the Headquarters Master File. The reserve force data base, held separately in the Reserve Personnel Management Information System file, was maintained by the Marine Corps Reserve Facility, also in Kansas City, MO. It received inputs from the Reserve units spread throughout the country. The retired list data base, also held at the reserve facility, received inputs from Headquarters, USMC and from those commands retiring individual marines. The system was under the control of the Director of Personnel Management who reported to the Deputy Chief of Staff for Manpower. A computer-aided assignment model was used at Headquarters, USMC to match active force personnel against the force structure billets for requirements, using policy logic normally employed for assignment of the peacetime force. The same model had been used for personnel assignments since 1966. When the active forces were mobilized, the unfilled billets were recorded on magnetic tape and sent by courier to the Reserve Facility in Kansas City to be filled by reservists or retirees. Reserve forces then were mobilized by matching the unfilled total force billets (active and reserve) against the reserve file after identifying eligibility. A newly designed computer model, the Reserve Automated Manpower Process, under the control of the Deputy Chief of Staff for Reserve Affairs was used to identify the individual reservists to be called up. After identification, each was issued assignment orders, and a temporary personnel data file was created and forwarded to the receiving command.

Retired individuals were mobilized by predesignation to fill selected billets in the Continental United States (CONUS) supporting base and, because the number of retirees to be mobilized was quite small, preassignments from the retired list were made manually by the Office of the Deputy Chief of Staff for Reserve Affairs. This system was obviously operations driven. The Deputy Chief of Staff for Operations identified the active and reserve units' manpower requirements and passed that information to the manpower department. The DC/S for Manpower scanned the active lists to fill the active force structure, then sent any remaining active force requirements to the reserve facility for call up of reserves. Likewise, when the DC/S for Operations identified the reserve units to be mobilized, that information was passed to the manpower department and the reserve affairs departments. This policy, for simplicity of execution and cohesion of active force, precluded any attempt at centralized, operations-analysis optimization of personnel assets. In essence, the Marine Corps, like all the other services, questioned if it had the best system, policies, and organization for mobilization.

Since that time, the Marine Corps has proposed and implemented a centralized system integrating previously existing computer programs with improved results. Headquarters, USMC can now identify requirements by Operations Order (OPORDER) and respond accordingly. Headquarters, USMC matches wartime billet requirements against the active force file, then matches the remainder against the reserve force file to determine who is to be called up. The reserve and retired force file is now maintained at Headquarters, USMC, as well as in Kansas City. The assignments list, on magnetic tape, is sent to the reserve facility for an abridged run to create personnel files for those to be called up, and transmission to the receiving commands once the marines are actually assigned to the units. Headquarters, USMC creates the assignment orders and delivers them to the Washington, D.C. Western Union mailgram Center for delivery to the called-up Marines. The new centralized method also creates all the reports necessary for Headquarters, USMC to respond to status inquiries. In 1981, this new method was successfully tested using a new scenario, structure, and personnel assets. The centralization has worked well, and control was significantly improved. This system uniquely matches individual reservists and retirees to specific mobilization billets.

The Marine Corps has the most mature retiree mobilization system of any of the Services today. The problems currently confronting planners are primarily administrative. Critical areas of concern are: transportation of mobilized individuals after recall; effective management cadre for recallers; identification of civilian skills acquired by retirees to update specialities; cost and applicability of the requirements to obtain annual physicals, with a military physical every four years; and maintenance of a current address system for the retired population.

NAVY RETIREE MANAGEMENT PROGRAM

The wartime manpower requirements are determined through the mobilization planning guidance from the Chief of Naval Operations (CNO). Fleet Commanders determine time-phased mobilization manpower requirements and forward them to the Deputy CNO for Manpower, Personnel and Training (OP-01) for validation by the Total Force Programming Division (OP-12) and forwarding to the Total Force Planning Division (OP-11) for inclusion in the Navy Manpower Mobilization System (NAMMOS). NAMMOS currently contains the total time-phased wartime manpower requirements for mobilization. Overall program and policy guidance are established by the Assistant for Reserve Plans from the Mobilization Plans Branch, Total Force Planning Division (OP-113R) and is coordinated with the Military Personnel/Training Division (OP-13). The Naval Reserve Personnel Management Department of the Naval Military Personnel Command (NMPC-9) is responsible for developing retiree resource requirements, assisted by the Naval Reserve Personnel Center (NRPC). Records administration, training and personnel management of all Navy retirees are the responsibility of the NRPC. The Navy's management structure is facilitated by the direct link between OP-01, NMPC and NRPC, with OP-113R as the focal point to adequately handle management of mobilization programs designed to improve the mobilization of all personnel, including retirees.

Currently, Navy studies indicate an apparent manpower shortage of small dimensions in wartime mobilization planning. The total strength of both officer and enlisted retired inventories is expected to increase at a modest rate, with relatively little change in the number of retirees who are mobilization assets (Classes I & II). Comparison of strength projections from the Service POM with Defense Manpower Data Center (DMDC), Office of the DoD Actuary data, for both officer and enlisted, indicates a larger than normal retired population and may therefore substantially overstate the number of available retirees. Total (Regular and Reserve) officers in retired status in 1983 approximate 184,000 increasing by about 7,000 through 1987; likewise, total (Regular, Reserve and Fleet Reserve) enlisted in retired status in 1983 approximate 292,000 increasing by about 2,000 through 1987. The retired officers considered mobilization assets (Classes I & II) in 1983 approximate 41,000 (50% Regular officers) increasing by about 1,000 through 1987; whereas, enlisted strength as mobilization assets remains constant at around 97,000 (90% Regular enlisted) through 1987. It is noteworthy that over three-quarters of the enlisted retired strength (Classes I & II), are in the Fleet Reserve.

The Navy could expect to have more than 138,000 eligible (Classes I & II) retirees immediately available by the beginning of 1984. There are sufficient wartime positions deemed to be appropriate for these retirees; for FY84, there are 156,700 active Navy members projected in the Support Activity category of the armed forces. There are presently no positions specifically designated to accommodate these retirees, however, the capability exists within NAMMOS to identify billets suitable for fill by retirees and hopefully free an equivalent number of active duty personnel for combat units in the event of "full" mobilization. Equally important to note is the fact that the retiree mobilization assets cited herein include approximately 78,500 members of the

Fleet Reserve. Although not formally retired, they are in a status similar to retirees, and must therefore be discounted to preclude duplication in statistical analysis. The remaining members of the retired pool (Class III and/or age limitation) are not considered as mobilization assets; however, they do constitute a considerable potential for use in assisting the Merchant Marine effort, Military Sealift Command (MSC), Military Traffic Management Command (MTMC) and the National Defense Reserve Fleet (NDRF) in an extreme national emergency involving "total" mobilization.

Assessment of the Navy Retiree Recall Program

The Navy's Selected Reserve and Individual Ready Reserve programs were basically restructured in the early 1970's and are considered to be highly effective. The retiree recall program is being totally automated today and it is expected to be fully operational some time in 1984 at the earliest. Once operational, there probably will be billet assignment problems. To date, the Navy has not identified billets for assignment of Fleet Reserve personnel. A change to unit manpower planning documents is envisioned which will require each unit to evaluate billets and identify those which can be used for recalled Fleet Reservists. The target date for accomplishment is early 1985, but it is unlikely that operational units will have a good idea of the Fleet Reservist's capability.

In 1979, the Navy implemented the Navy Manpower Mobilization System (NAMMOS), a process for projecting long and short-term mobilization requirements for its active and reserve components. This macro-level, computer assisted system estimates the time-phased requirements for mobilization by establishing peacetime levels and extrapolating manpower profiles based on projected scenarios. The NAMMOS analysts forecast these for seven fiscal years through the use of regression analysis and linear modeling. Since its inception, the system claims a yearly correlation of .85 to .95 between predicted and actual values.

At present, there are two design shortcomings which serve to hinder NAMMOS effectiveness. First, the estimates are based on "full" as opposed to "total" mobilization assumptions and do not provide a realistic assessment of the manning needs in the event that the latter should occur. In addition, since the projections are based on present requirements (through a survey of tables of organization, staffing standards, ship requirements and true position coverage), the concept is based upon extrapolating future needs from present patterns. The intrusion of a stochastic event, the type of event most likely to trigger a mobilization crisis, could impair the value of the predictions appreciably. Despite the problems, however, NAMMOS does provide an empirical basis for ascertaining manpower needs when such needs were previously determined solely through intuitive presumption.

There are two smaller programs in the Navy today that are designed to utilize Fleet Reservists. First is the Convoy Commodore Program, which has identified requirements for 1400 to 1500 Convoy Commodores upon "total" mobilization. They undergo training and are pre-assigned for mobilization. The second program is the Joint Augmentation Unit (JAU) program, wherein retirees can volunteer to train for assignment to manpower processing units

for the Selective Service System. Upon mobilization, they report to predesignated facilities and begin processing draftees. There is also a plan to change the Naval Reserve Training Plan (NRTP) so that retirees can drill in a no-pay status. This program does not in any way provide for preassignment to any specific unit.

To date, the Naval Reserve Personnel Center (NRPC) performs a manual update of requirements on a monthly basis. The matching is limited to officer and enlisted by numbers only. There is no provision for identifying skill requirements for any specific billet, which severely handicaps the use of Fleet Reservists as a mobilization asset. A more viable mobilization program for retirees would include a skill recognition scale. Skills would have to be related to billets and records would have to be maintained on current civilian skills of Fleet Reservists.

Overall, the Navy retiree recall program will be more effective once the potential of the NAMMOS system is fully realized. However, the procedure for the identification and use of thousands of eligible retirees is only on the near horizon, given the current emphasis and rate of maturity. Considering the amount of time required by others to integrate retirees into mobilization documents, no lesser time can be envisioned for the work that must follow. Time, therefore, is critical and piecemeal measures will not serve. Failure to act vigorously in accounting and planning for the effective use of retirees will certainly detract from the credibility of meeting projected wartime manpower shortages.

SUMMARY AND CONCLUSIONS

The present non-disability retirement system is an outgrowth of a law enacted in 1870, and in the intervening one hundred-odd years, has been modified repeatedly to attract and retain qualified personnel and provide a socially acceptable means to separate personnel in the interest of a youthful and vigorous military establishment. However, the military retirement system is a complex subject, when taken in the broader context of availability for recall as a "mobilization asset". The economic and sociological costs can be identified and measured, no matter how subtle, only if data can be obtained and systematically analyzed. The relatively large increase in the retired population experienced in the past decade, especially during the Vietnam timeframe, has begun to abate somewhat but the direct cost of retired individuals as a function of the military budget has been rising sharply. The critical fact is that the current projections on the growth of the retired population, and its attendant cost under the present system, may well be acceptable only if justified in terms of the national need to maintain these assets readily available in a crisis or national emergency.

The military retirement system basically comprises three separate components: disability retirement, non-disability Reserve retirement and non-disability Regular retirement. Of the total numbers of individuals who retire each year, the retired disabled and Reserves account for a negligible number in comparison to the far larger non-disability group, and the focus should remain on this latter group. Although the original intent underlying non-disability retirement was to compensate an individual for service extending beyond 30 years, eligibility for retirement came to be set at 20 years of active service. Previous studies indicate that over one-half of retirees leave the service before completing 23 years of active duty, are under 50 years old and are retired less than 6 years as the norm. Most would be competent, healthy and reasonably available for recall with an acceptable yield rate.

Retiree data analysis is a particularly troublesome problem in that pay and personnel files are inconsistent, combined with the fact that current reports do not adequately reflect the various categorizations of retirees to allow yearly reconciliation. Development of improved sources of data and projection methodology is needed and should be vigorously pursued.

The ultimate proof of military retirees as a "mobilization asset" is based upon their availability for call-up during peace, and vulnerability to involuntary recall in time of war or national emergency. Almost, but not equally as important is the requirement to maintain a reasonable degree of professional proficiency at a desired standard, along with provisions for maintaining suitable physical/medical fitness. Finally, the respective Services must fully incorporate these viable assets into on-going mobilization planning. Indicated at Table 1 is a matrix of recall vulnerabilities -- which highlights the variegated authority presently in the system and suggests a real need for examination. Currently, each Service is wrestling with the skill decay and physical deterioration portion of this equation -- the Army and Marine Corps more so than the others. This enigma could be assuaged

somewhat by more definitive DoD guidance regarding the types of positions that could be filled in an emergency and closer personal coordination between Service and retirees, at least on an annual basis. Adoption of a questionnaire or other scientific statistical approach, such as is being done by the Army and Air Force at this time, may provide the aggregate data necessary for appropriate determination of retiree suitability; however, a one-on-one requirement-to-asset interface on-site would be preferable, if cost effective. Lastly, planning for the utilization of retirees in the Total Force structure is continuing at a varying pace among the Services. Suffice it to say that the Army is within one year of being where the Marine Corps stands now -- i.e., the refinement phase, requiring only minor readjustment and fine tuning of the program. Correspondingly, the Navy is at least two to three years behind where the Army is now and has the appropriate vehicle to catch up with ease, should motivation so dictate. The Air Force, on the other hand, has the least sophisticated program and may not stand the test of time in regard to the current exhaustive and multi-faceted examination of the present military retirement system.

TABLE 1

RETIRED CATEGORY (BY SERVICE) AND METHOD OF RECALL TO ACTIVE DUTY

<u>Retired Category</u>	<u>Armed Service</u>	<u>Recall during Peacetime</u>		<u>Recall during War or National Emergency</u>	
		<u>Consent</u>	<u>Involuntary</u>	<u>Consent</u>	<u>Involuntary</u>
Regular Officers	Air Force	Yes	Yes	Yes	Note 2
	Army	Yes	Yes	Yes	Note 2
	Marine Corps	Yes	No	Yes	Note 3
	Navy	Yes	No	Yes	Note 3
Regular Enlisted	Air Force	Yes	No	Yes	Note 2
	Army	Yes	No	Yes	Note 2
	Marine Corps	Yes	Note 1	Yes	Note 3
	Navy	Yes	Note 1	Yes	Note 3
Reserve Officers	Air Force	Yes	No	Yes	Note 4
	Army	Yes	No	Yes	Note 4
	Marine Corps	Yes	No	Yes	Note 4
	Navy	Yes	No	Yes	Note 4
Reserve Enlisted	Air Force	Yes	No	Yes	Note 4
	Army	Yes	No	Yes	Note 4
	Marine Corps	Yes	No	Yes	Note 4
	Navy	Yes	No	Yes	Note 4

- Notes:
- 1 - Up to 2 months training every 4 years
 - 2 - Anytime by the President
 - 3 - National emergency declared by the President
 - 4 - National emergency declared by the Congress

POINTS OF CONTACT

The research conducted during this study primarily involved a literature search, review of regulations and directives and analysis of available statistical data. Visits were made to the Office of the Secretary of Defense and the military Service headquarters which materially contributed to the collection of reference material. The following Department/Service and Agency sites were visited chronologically during the period:

Office of the Secretary of Defense

Interview with Lieutenant General R. D. Tice, USA, Deputy Assistant Secretary (Military Personnel and Force Management) OASDMRA&L and Major General Sherman, USAF, Director, Quadrennial Review of Military Compensation

Interview with Captain N. Mayo, USN, and Colonel C. Reiber, USA, Director's Staff, Quadrennial Review of Military Compensation

Interview with Captain R. Jones, USN, and Messrs B. Amis and P. Ogloblin, Compensation Policy, Office of the Assistant Secretary of Defense (Military Personnel and Force Management) OASDMRA&L

Interview with Colonel J. Gould, USAFR, Director for Mobilization Planning and Operations, Office of Deputy Assistant Secretary (Reserve Affairs) OASDMRA&L/RA

Interview with Colonel S. Denney, USA, Director for Mobilization Planning and Requirements, Office of the Deputy Assistant Secretary (Program Integration) OASDMRA&L

Office of the Joint Chiefs of Staff

Telephone conversation and material furnished by Lieutenant Colonel M.J. Campbell, USMC, J-1 Directorate, Office of the Joint Chiefs of Staff

Department of the Air Force

Interview with Colonel Arcari, USAF, Director of Entitlements Division, Headquarters U.S. Air Force (AF/MPXE)

Telephone conversation and material furnished by Colonel W. Freeman, USAFR, Headquarters U.S. Air Force (AF/MPXJ)

Briefing by Major J. Decker, USAF, Plans and Utilization Division, Headquarters U.S. Air Force (MPMX)

Department of the Army

Interviews with Dr. H. Ludden and Major T. Prostack, USA, Mobilization Division, ODCSPER, Headquarters Department of the Army (DAPE-PSM)

Interview with Colonel Trisdel (USA, retired) and Lieutenant Colonel L. Holmes, USA, Compensation and Entitlements Division, ODCSPER, Headquarters Department of the Army

Interview with Lieutenant Colonel Modine, USA, and Mr. D. Johnson, Headquarters Department of the Army (DAMO-FDP)

Interview with Sergeant Major Grahm and Mr. Z. Monar, MOBTA Division, Force Development Directorate, Headquarters U.S. Army Training and Doctrine Command (TRADOC)

Interview with Captain McDonald, USA, Mobilization Division, Force Development Directorate, Headquarters U.S. Army Training and Doctrine Command (TRADOC)

Interview with Captain Stuart, USA, Management Division, Force Development Directorate, Headquarters U.S. Army Training and Doctrine Command (TRADOC)

Interview with Mr. W. Alson and Ms. E. Brown, Mobilization Branch, Headquarters U.S. Army Training and Doctrine Command (TRADOC)

Interview with Sergeant Crane and Mr. Minetti, Military Personnel Office (MILPO),
Headquarters U.S. Army Training and Doctrine Command (TRADOC)

Interview with Captain Heffley, Military Personnel Office (MILPO),
Headquarters U.S. Army Logistics Management Center.

Interview with Ms. V. Crowder, Management and TDA Development Branch,
Headquarters U.S. Army Logistics Management Center

Interview with Mr. T. Coldwell, Reserve Components Personnel and
Administration Center

Interview with Messrs C. Gilroy and C. Dale, Ms. G. Nogami and Captain E. Williams, USA, Personnel Policy Research Group, U.S. Army Research Institute.

Telephone conversation with Ms. J. Davis, Curator, U.S. Army Center of
Military History

Telephone conversation and material furnished by Mr. J. Webb, U.S. Army
Center of Military History

Department of the Navy

Interview with Captain L. Wardlow, USN, (OP-13), Captain T.A. Kelly, USN
(OP-113R) and Commander W.T. Cook, USN (OP-113C) Office of the Chief of
Naval Operations

Briefing by Captain T. Hale, USN, and Commander T. McGinlay, Military
Compensation Policy Branch, Office of the Chief of Naval Operations

Interview with Major J. Creed, USMC, Plans Programs and Budget, Headquarters
U.S. Marine Corps

Interview with Ms. B. Lynch, Research Analyst, Navy Library

Federal Agencies

Interview with Colonel R. Baldwin, USA, Federal Emergency Management Agency
(NP-MP)

Interview and information furnished by Lieutenant Commander D. Wood, USCG,
Headquarters U.S. Coast Guard

BIBLIOGRAPHY

- Appley, Lawrence A. Manpower Resources for National Security. Washington: U.S. Govt. Print. Off., 1954.
- "Army To Notify Retirees of Plan for Mobilization." New York Times, 3 April 1980, p. A12.
- Brayton, Abbott A. "American Mobilization Policies for the 1980s." RUSI Journal 126 (March 1981): 26-33.
- Coffey, Kenneth J. Manpower for Military Mobilization. Washington: American Enterprise Institute, 1978.
- Corson, John J. Manpower for Victory: Total Mobilization for Total War. New York: Farrar and Rinehart, 1943.
- Croizat, V. J. "The Military Retiree - Forgotten Firehorse." U.S. Naval Institute Proceedings (July 1972): 63-69.
- Earley, Pete. "Some Old Soldiers Aren't Fading Away Yet." Washington Post, 5 November 1982, p. A13.
- Fagan, Brian J. Manpower Mobilization for the U.S. Marine Corps: Who Is In Charge of What? Washington: Industrial College of the Armed Forces, 1982.
- Giusti, Ernest H. Mobilization of the Marine Corps Reserve in the Korean Conflict, 1950-1951. Washington: U.S. Marine Corps, Historical Branch, 1951.
- Heimdahl, William C. and Marolda, Edward J. Guide to United States Administrative Histories of World War II. Washington: Naval Historical Division, 1976.
- Kline, Edward C., Jr. Navy Enlisted Mobilization Training. Washington: Linton and Company, 1979.
- Loome, James, et. al. Analyses of Pretrained Individual Manpower Strengths and Training. McLean, VA: General Research Corp., 1981. (ADA105204)
- Loome, James; Cottle, Robert and McNiff, John. Pretrained Individual Manpower Study. McLean, VA: General Research Corp., 1981. (ADA097015)
- "Manpower Controls in a Future Emergency." Report of the Economic Mobilization Course, Industrial College of the Armed Forces, Washington, D.C., 7 March 1947. (SR47-30)
- "Recalling Retirees: Survey Charts Responsiveness." Air Force Times, 5 May 1980, p. 4.

Skinner, Russell, "Utilization of Manpower in the Armed Forces." Lecture presented at the Industrial College of the Armed Forces, Washington D.C., 7 February 1947.

Stewart, William G. Air Force Retirees as Mobilization Assets. Washington: Linton and Company, 1978. (ADA054112)

Stewart, William G. Army Retirees as Mobilization Assets. Washington: Linton and Company, 1978. (ADA054109)

Stewart, William G. Marine Corps Retirees as Mobilization Assets. Washington: Linton and Company, 1978. (ADA054410)

Stewart, William G. Military Retirees as Mobilization Assets. Washington: Linton and Company, 1978. (ADA053781)

Stewart, William G. Mobilization Inventories of Military Retirees. Washington: Linton and Company, 1979. (ADA067858)

Stewart, William G. Navy Retirees as Mobilization Assets. Washington: Linton and Company, 1978. (ADA054111).

U.S. Bureau of Naval Personnel. "Annual Report of the Bureau of Naval Personnel to the Secretary of the Navy for the Year Ending 30 June 1952." Memorandum dated 22 September 1952.

U.S. Congress. House. Committee on Armed Services. Military Posture and H.R.5068, Department of Defense Authorization for Appropriations for Fiscal Year 1978: Hearings. 95th Cong., 1st Sess. Washington: U.S. Govt. Print. Off., 1977.

U.S. Congress. House. Committee on Armed Services. Reserve Components; Hearings. 82nd Cong., 1st Sess. Washington: U.S. Govt. Print. Off., 1951.

U.S. Department of Defense. Annual Report of the Secretary of Defense on Reserve Forces. Fiscal Years 1974-1977. Washington: Dept. of Defense, 1975-79.

U.S. General Accounting Office. Army's Ability to Mobilize and Use Retirees as Planned is Doubtful. Washington: GAO, 1982.

U.S. Navy Department. "Annual Report Fiscal Year 1945," Secretary of the Navy. Washington, 1946.

U.S. Office of the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics). Manpower Requirements Report for FY 1983. Washington, 1982.

U.S. Office of the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics). Manpower Requirements Report for FY 1984. Washington, 1983.

U.S. Reserve Components Personnel and Administration Center. Retiree Mobilization Program. St. Louis: RCPAC, 1982.

U.S. Reserve Forces Policy Board. Fiscal Year 1981 Readiness Assessment of the Reserve Components. Washington: Office of the Secretary of Defense, 1981.

U.S. Reserve Forces Policy Board. Fiscal Year 1982 Readiness Assessment of the Reserve Components. Washington: Office of the Secretary of Defense, 1983.

U.S. War Department. "Strength of the Army: 1 October 1945." Office of the Adjutant General. Washington: November 1945. (GC-P3-31)

"Veterans Pool Availability for Mobilization (Emergency Reserve)." Defense Management Issues Analysis #2. Washington: Industrial College of the Armed Forces, 1979.

Wilson, George C. "Guard Chief One Happy General." Washington Post, 17 May 1983, p. A17.

APPENDIX A

Legal Authorities -- Air Force Retirees

- o 10 U.S.C. 672 Recall authority for Reserve components in a state of war or national emergency declared by Congress the Service Secretary may, without consent, order any unit and any member not assigned to a unit of a reserve component to active duty--however, a member of an inactive status list or in a retired status may not be ordered to active duty unless the Secretary concerned, with the approval of the Secretary of Defense, determines that there are not enough qualified Reserves in an active status in the required category who are readily available--or at any time with consent of the member
- o 10 U.S.C. 675 Retired Reserve may be ordered to active duty, without consent, only in a state of war, national emergency declared by Congress or otherwise authorized by law
- o 10 U.S.C. 688 Recall authority for Regulars by the Secretary of the Air Force at anytime, under regulations prescribed by the Secretary of Defense
- o 10 U.S.C. 8504 President may order any retired member of the Regular Air Force to active duty at any time in the interest of national defense
- o 10 U.S.C. 8911 Regular and Reserve officers may retire with 20 or more years of active service with at least 10 years of active service as an officer, upon request and at the discretion of Secretary of the Air Force
- o 10 U.S.C. 8914 Regular enlisted members between their 20th and 30th service anniversaries, are retired and at their request transferred to the Air Force Reserve until their 30th service anniversary
- o 10 U.S.C. 9817 Regular enlisted members past their 30th service anniversary, or completion of Air Force Reserve, will retire
- o 10 U.S.C. 8925 Years of service computation schedule for inactive service credit
- o 10 U.S.C. 8966 Retired Regular officers after their 30th anniversary are placed on the Regular Officers Retired list Retired Reserve maintained by the Secretary of the Air Force

APPENDIX B

Legal Authorities -- Army Retirees

- o 10 U.S.C. 672 Recall authority for Reserve components in a state of war or national emergency declared by Congress the Service Secretary may, without consent, order any unit and any member not assigned to a unit of a reserve component to active duty--however, a member of an inactive status list or in a retired status may not be ordered to active duty unless the Secretary concerned, with the approval of the Secretary of Defense, determines that there are not enough qualified Reserves in an active status in the required category who are readily available--or at any time with consent of the member
- o 10 U.S.C. 675 Retired Reserve may be ordered to active duty, without consent, only in a state of war, national emergency declared by Congress or otherwise authorized by law
- o 10 U.S.C. 688 Recall authority for Regulars by the Secretary of the Army at any time, under regulations prescribed by the Secretary of Defense
- o 10 U.S.C. 1331 Retired reserve officers must be at least 60 years of age in order to receive retired pay
- o 10 U.S.C. 1332 Retired reserve officers must have at least 20 years of qualifying service to receive retired pay
- o 10 U.S.C. 3504 President may order any retired member of the Regular Army to active duty as considered necessary in the interest of national defense
- o 10 U.S.C. 3911 Regular and Reserve officers, upon request, may be retired by the Secretary of the Army with at least 20 years of service, at least 10 years of which has been active service as an officer
- o 10 U.S.C. 3914 Regular enlisted members who have at least 20 years but less than 30 years of service, are retired and become a member of the Army Reserve until their 30th service anniversary
- o 10 U.S.C. 3917 Regular enlisted members with at least 30 years of service retire at their own request
- o 10 U.S.C. 3925 Years of service computation schedule for inactive service credit
- o 10 U.S.C. 3966 Regular officers and Regular enlisted (after 30th anniversary) retirees are placed on appropriate retired list maintained by Secretary of the Army

APPENDIX C

Legal Authorities --- Navy/Marine Corps Retirees

- o 10 U.S.C. 672 Recall authority for Reserve components in a state of war or national emergency declared by Congress the Service Secretary may, without consent, order any unit and any member not assigned to a unit of a reserve component to active duty--however, a member of an inactive status list or in a retired status may not be ordered to active duty unless the Secretary concerned, with the approval of the Secretary of Defense, determines that there are not enough qualified Reserves in an active status in the required category who are readily available--or at any time with consent of the member
- o 10 U.S.C. 675 Retired Reserve may be ordered to active duty, without consent, only in a state of war or national emergency declared by Congress or otherwise authorized by law
- o 10 U.S.C. 688 Recall authority for Regulars by the Secretary of the Navy at any time, under regulations prescribed by the Secretary of Defense
- o 10 U.S.C. 6321 Regular Navy, Regular Marine Corps, Naval and Marine Corps Reserve officers with 40 or more years of service retires at own request
- o 10 U.S.C. 6322 Regular Navy, Regular Marine Corps, Naval and Marine Corps Reserve officers with at least 30 years but less than 40 years of service retires at the discretion of the Secretary of the Navy
- o 10 U.S.C. 6323 Regular Navy, Regular Marine Corps, Naval and Marine Corps Reserve officers may request retirement after 20 or more years of service and at least 10 years commissioned service, at discretion of the President
- o 10 U.S.C. 6326 Regular enlisted members with 30 or more years of service retire directly, without service in the Fleet (Marine Corps) Reserve
- o 10 U.S.C. 6330 Members with 20 or more years of service may request transfer to the Fleet (Marine Corps) Reserve and serve until their 30th service anniversary
- o 10 U.S.C. 6331 Transfer from Fleet (Marine Corps) Reserve to Regular Retired List or Retired Reserve at 30th service anniversary

- o 10 U.S.C. 6481 Recall authority for retired officers in the Regular Navy and Regular Marine Corps in a state of war by national emergency declared by the President
- o 10 U.S.C. 6482 Recall authority for retired enlisted members of the Regular Navy and Regular Marine Corps in a state of war or national emergency by the Secretary of the Navy
- o 10 U.S.C. 6485 Recall authority for members of the Fleet (Marine Corps) Reserve in a state of war, national emergency declared by Congress or the President or when otherwise authorized by law

ADDENDUM

COAST GUARD RETIREE MANAGEMENT PROGRAM

Effective with the publication of the 6 April 1983 "draft copy" of United States Coast Guard Reserve and Retiree Mobilization Manual as COMDTINST M3060.9G in the near future and full implementation of the contents of that document, the new Coast Guard mobilization planning system is intended to identify the most effective wartime use of all available personnel resources. It includes reassignment of active service personnel from low priority missions, assignment of specific duties to Ready Reservists, Standby Reservists, active and reserve retirees, new recruits and the Coast Guard Auxiliary. The Coast Guard Reserve is organized and maintained exclusively as a mobilization resource. The Coast Guard recognizes retirees only as an additional source of highly trained personnel. Personnel requirements for the Coast Guard are determined by District Commanders who translate force component listings from Operation Plan (OPLAN) Time-phased Force and Deployment Lists into individual mobilization billets for the computerized MOBSYSTEM data base, resulting in a personnel requirements list of billets for each approved OPLAN. MOBSYSTEM consists of a series of computer programs which provide the mechanism for matching individuals to mobilization billets and issuing MOBORDERS.

Assessment of the Coast Guard Retiree Recall Program

Because there are no plans currently in existence that require the recall and assignment of retirees in the event of war or national emergency, the need for improvement and reorganization has recently been recognized--thus, a new program is under development. Billets are identified and entered into the new MOBSYSTEM data base. The MOBSYSTEM programs create a series of management reports designed to assist in the evaluation of mobilization readiness at all levels of command. As part of the input files, information on active and reserve retirees (except those reservists retired without pay) including rank/rate, address, SSAN, age and date of retirement is maintained; likewise, a district, personnel file includes retiree information for that specific district and a master billet file describing all mobilization billet requirements are also maintained. Through integration of eight separate programs, the MOBSYSTEM ultimately results in the accounting and processing of mobilization assignments. Each billet requiring fill is assigned by the District Commander to a specific Selected Reserve unit to identify individual assets. Inadequate personnel resources available cause billets to remain vacant, and the remaining OPLAN requirements are then assigned as Individual Ready Reserve (IRR) billet requirements.

Matching of reserve assets is handled at the group and unit level which permits assignments based on local knowledge and promotes unit training stability. The IRR requirements are matched to mobilization billets by the District mobilization administrative offices. At this point, if there are still billet assignment requirements, remaining retirees will be matched by a procedure utilizing Classes I & II fill in that priority. The MOBSYSTEM program which prints unassigned personnel lists will only show the retirees in these latter two groups. Once an individual is assigned to a mobilization

unit, his Commanding Officer issues temporary mobilization orders until the District can issue permanent computerized orders. Each individual will ultimately be issued computerized advanced orders for mobilization (MOBORDERS) by the District Reserve Mobilization Administration (MOB ADMIN) unit. The orders are designed to be wallet-sized and carried at all times. Detailed instructions on reporting, along with basic information for the gaining command to process the individual to active duty, are contained in these orders.

Although the Coast Guard will have a system which allows recall and assignment of retirees, there is little need envisioned for these assets. The OPLANS in existence today fully utilize the approximately 6,000 Selected and Individual Ready Reserve under mobilization conditions. A retired community of approximately the same size exists (approximately 4000 to 6000), but there is no great necessity for their use since the re-sizing of Coast Guard mobilization billets from over 171,000 in World War II to the present 6000 billets in today's OPLANS. Notwithstanding, under conditions of "full" mobilization, there will be an urgent need to use retirees to accomplish necessary and envisioned expansion of active forces, especially in time of war or when the President directs the Coast Guard to become an element of the Navy under provisions of 14 USC 3. During "total" mobilization, retirees constitute a considerable potential for use in assisting the merchant marine effort and vital port protection/harbor security missions. Therefore, plans for retiree utilization are incomplete and are still to be accomplished.

Legal Authorities -- Coast Guard Retirees

- o 14 U.S.C. 331 In time of war or national emergency, the Secretary of the Department in which the Coast Guard is operating may order any regular officer on the retired list to active duty
- o 14 U.S.C. 359 In time of war or national emergency, the Commandant of the Coast Guard may order any enlisted man on the retired list to active duty
- o 10 U.S.C. 675 Retired reserve may be ordered to active duty, without consent, only in time of war, national emergency declared by the Congress or otherwise authorized by law

**APPENDIX F
RETIREMENT COST ANALYSES**



CAPT NORMAN A. MAYO, USN

RETIREMENT COST GROWTH ANALYSES

Over the last 27 years (1955-1982), the cost of active duty non-disability retirement has grown from \$233,622,204 in FY55 to \$13,195,333,000 in FY82. The purpose of this appendix is to examine and explain this cost growth and to determine its primary causes. Before attempting this analysis, it is necessary to define non-disability retirement. Non-disability retirements come from two separate and distinct sources, active duty and Reserve Component retirement (commonly called "Title III" retirements because legislative authority for this category of retirements was established by Title III of the Army and Air Force Vitalization and Retirement Equalization Act of June 29, 1948). Although, in general, Title III retirements have been excluded from the analysis of the non-disability retirement system, it was found that Title III retirement cost history follows the same pattern as the active duty system; however, because it is less mature, the cost has grown at a higher percentage.

Recognizing that the 1955 data is somewhat imprecise, Table F-1 displays both the numbers of retirees and the costs associated with both active duty and Title III non-disability retirements for the period of time being examined. It should be noted that in FY55 the average cost of an officer retirement annuity was \$4,053, while an enlisted retirement annuity was \$1,861. In FY82 these annuity averages were \$20,183 and \$8,932, respectively.

It is postulated that four factors have caused the increase in retired benefits:

1. increase in the retired population;
2. increase due to CPI inflation;
3. increase due to basic pay (retired pay base) exceeding inflation; and
4. increase due to retired pay adjustment mechanism (COLA).

Each of these four factors is examined separately below.

FACTOR ONE: INCREASE IN THE RETIRED POPULATION. The retired officer population has increased from 25,381 in FY55 to 263,153 in FY82, a factor of 10.368. Similarly, the enlisted population has increased from 64,936 in FY55 to 774,931, a factor of 11.934.

FACTOR TWO: INFLATION. Inflation, as measured by the Customer Price Index (CPI), has increased by a factor of 3.647 (computed using Department of Labor, Bureau of Labor Statistics CPI for 1955 to 1982).

Growth in retired costs from FY55 to FY82 directly attributable to Factors 1 and 2 can be computed using these two points. These computations will then establish how much of the increased costs remains to be attri-

Table F-1

FY55-FY82 Number of Retirees and Associated Costs*

	FY55		FY82		Increase FY55-FY82	
	<u>Number</u>	<u>Cost</u>	<u>Number</u>	<u>Cost</u>	<u>Number</u>	<u>Cost</u>
<u>Officer:</u>						
Total Non-Disability Retirees	33,335	\$113	370,303	\$6,163	336,968	\$ 6,050
Title III Non-Disability Retirees	7,954	10	107,150	852	99,196	842
Active Duty Non-Disability Retirees	25,381	\$103	263,153	\$5,311	237,772	\$ 5,208
<u>Enlisted:</u>						
Total Non-Disability Retirees	64,936	\$121	801,025	\$7,032	736,089	\$ 6,911
Title III Non-Disability Retirees	0	0	26,094	110	26,094	110
Active Duty Non-Disability Retirees	64,936	\$121	774,931	\$6,922	709,995	\$ 6,801
<u>Total:</u>						
Total Non-Disability Retirees	98,271	\$234	1,171,328	\$13,195	1,073,057	\$12,961
Title III Non-Disability Retirees	7,954	10	133,244	852	125,291	842
Active Duty Non-Disability Retirees	90,317	\$224	1,038,084	\$12,343	947,767	\$12,119

*In millions

buted to Factors 3 and 4. If only the size of the retired population had increased between 1955 and 1982, the FY82 non-disability costs would have been:

OFFICER:	\$102,869,193 X 10.368 = \$1,066,547,900
ENLISTED:	\$120,591,614 X 11.934 = <u>\$1,439,140,200</u>
TOTAL:	<u>\$2,505,687,100</u>

NOTES: OFFICER. The cost factor is the officer cost of active duty nondisability retirement in 1955. This cost is multiplied by 10.368, the factor which represents the officer retired population growth 1955-1982 (263,153 divided by 25,381)

ENLISTED. The cost factor is the enlisted cost of active duty non-disability retirement in 1955. The factor 11.934 represents the enlisted retired population growth 1955-1982 (774,931 divided by 64,936)

Considering the factors of increased population and CPI inflation, the following would result:

OFFICER:	\$102,869,193 X 10.363 X 3.647 = \$3,889,700,100
ENLISTED:	\$120,591,614 X 11.934 X 3.647 = <u>\$5,248,544,100</u>
TOTAL:	<u>\$9,138,244,200</u>

This says that \$3,889,700,100 is what officer non-disability retirement would cost in FY82 if increased population and inflation were the only factors being considered. But, we know that officer non-disability retirement cost \$5,311,187,324 in FY82. Therefore, there is \$1,421,487,200 that must be due to other factors. Later, we will calculate how much of this \$1,421,487,200 is possibly attributable to Factors 3 and 4.

Similarly, for the enlisted non-disability retirement costs, accounting for both increased population and CPI inflation, implies FY82 costs would have been \$5,248,544,100. This value compares to an actual enlisted cost of \$6,922,035,172, or a difference of \$1,673,491,100 which will also be evaluated as attributable to Factors 3 and 4.

FACTORS 3 and 4. Before proceeding with an analysis of the pay raise mechanism and the retired pay mechanism impact on FY82 retired pay costs, a brief explanation of three factors must be made. We need to understand the CPI adjustment mechanism, the base pay increases that have occurred, and the retired pay adjustment mechanism during the period 1955 to 1982. Listed in Table F-2 are the annual or "as occurring" changes and their cumulative impact. Note that the CPI cumulative column shows 3.647, the rate used to adjust for inflation in the previous discussion of Factor 2. Also, the basic pay increases are the actual increases in basic pay for retirement-eligible active duty members, i.e., those with over 20 years of service. The retired pay adjustment mechanism reflects the increases

in retirement benefits of those on the retiree pay rolls at the time the adjustment occurred. As shown in Table F-2, this mechanism tracks closely with the CPI through 1971. Beginning in 1972, when the 1% "kicker" (or add-on) was instituted, the cumulative retired pay adjustment mechanism outpaces the CPI. The kicker was removed from this adjustment mechanism in 1976.

Table F-2
CPI, Base Pay, and Retired Pay Adjustment Mechanism Indices
(1955 = 100)

	CPI		Basic Pay* (over 20)		Retired Pay Adjustment Mechanism	
	%	Cum	%	Cum	%	Cum
1955	0.0	100.00	0.0	100.0	0.0	100.00
56	1.4	101.36	0.0	100.0	0.0	100.00
57	3.6	104.97	0.0	100.0	0.0	100.00
58	2.8	107.92	0.0	100.0	6.0	106.00
59	0.8	108.82	15.6	115.6	0.0	106.00
60	1.7	110.63	0.0	115.6	0.0	106.00
61	1.0	111.77	0.0	115.6	0.0	106.00
62	1.0	112.90	0.0	115.6	0.0	106.00
63	0.6	113.58	0.0	115.6	5.0	111.30
64	2.0	115.84	14.7	132.59	0.0	111.30
65	1.8	117.87	2.5	135.91	4.4	116.19
66	2.9	121.27	7.4	145.96	3.7	120.49
67	2.8	124.66	3.2	150.63	0.0	120.49
68	4.2	129.86	5.6	159.07	3.9	125.19
69	5.4	136.88	6.9	170.04	5.3	137.10
70	6.0	145.02	12.6	191.47	5.6	144.78
71	4.2	151.13	8.1	206.98	4.5	151.30
72	3.3	156.11	7.9	223.32	4.8	158.56
73	6.2	165.84	14.4	255.49	6.1	168.23
74	11.1	184.16	6.2	271.33	6.3	188.67
75	9.1	200.91	5.5	286.25	5.1	212.76
76	5.7	212.44	5.0	300.56	5.4	224.25
77	6.5	226.24	3.62	311.44	4.3	245.12
78	7.6	243.44	6.2	330.75	4.9	263.31
79	11.3	271.04	5.5	348.94	6.9	292.45
80	13.5	307.69	7.02	374.06	7.7	333.87
81	10.4	339.59	11.7	417.83	4.4	348.56
82	7.4	364.71	14.3	477.58	8.7	378.88

* Percentage base pay increases reflect the average increases for members over 20 years of service. The fact that the entire pay raise went into basic pay in the 1960's, and that large increases in basic pay occurred upon transition to the AVF, caused the base pay index to exceed CPI.

Turning to the FY82 retiree population, we know the composition of retirees on the FY82 rolls. Table F-3 shows the numbers of non-disability retirees on the retiree rolls as of 30 September 1982 by the year in which they retired. The average retirement benefit being received in 1982 for members who retired in preceding years is also shown. With these data, we can multiply the annual payments by the populations for each year of retirement and sum to check for correctness of data. Doing this for the officer values, for instance, results in an aggregate cost of \$5,359,138,092. This compares favorably with the budgeted \$5,311,187,324 in Table F-1, a net difference of \$48 million, or less than 1%.

Table F-3
Number of Non-Disability Retirees on the Retired Rolls 30 September 1982
by Year of Retirement and their Average 1982 Retirement Benefit

Fiscal Year of Retirement	Officer		Enlisted	
	Number	Average Annual Retired Pay Received/Annual	Number	Average Annual Retired Pay Received/Annual
1955(and prior)	8,154	\$14,784	11,390	\$ 7,119
56	2,506	14,328	2,782	6,785
57	3,972	14,232	3,623	6,866
58	4,180	14,244	4,277	6,831
59	3,931	14,628	5,152	7,027
60	5,145	15,312	10,169	6,843
61	10,201	14,928	13,262	6,600
62	8,478	14,976	15,696	7,013
63	11,727	14,976	23,673	6,451
64	11,583	16,565	25,208	6,831
65	10,889	17,760	25,336	6,992
66	9,919	19,080	26,976	7,465
67	10,162	20,184	36,873	8,052
68	10,347	20,544	38,269	8,087
69	9,699	21,384	36,006	8,582
70	14,538	23,700	35,365	9,746
71	12,828	23,580	41,604	9,907
72	10,173	24,564	43,939	9,757
73	11,639	25,452	46,991	10,287
74	11,452	25,272	49,094	10,345
75	11,280	24,984	48,675	10,091
76	14,303	23,592	52,794	9,976
77	9,226	21,840	35,005	9,412
78	9,421	21,408	30,880	9,469
79	10,873	21,288	30,833	10,362
80	10,361	20,544	31,492	9,343
81	7,961	20,100	25,850	9,135
82	8,205	19,328	23,717	8,854
TOTAL:	263,153		774,931	

The amount currently being received in FY82 by an officer retiring in 1955 (or earlier) is \$14,784. This retirement benefit in 1955 was \$4,053 per year (\$337.81 per month), the result of dividing \$102,869,193 by 25,381 (Table F-1). Enlisted personnel retiring in 1955 or earlier received an average of \$1,857 (\$120,591,614 divided by 64,936), or \$154.75 per month, in 1955. These same retirees in 1982 received an average retired benefit of \$7,119.

Using 1955 as the base year, it is now possible to isolate the influence of basic pay raises and retired pay adjustments on the costs of maintaining the retired force. The values of \$337.81 per month (\$4,053.72 per year) for officers and \$154.75 per month for enlisted, are used as the basis for constructing Tables F-4 and F-5. A description of the contents of each column in Tables I-4 and I-5 follows.

Column I: The value of the officer/enlisted retirement benefit that was initially received upon retirement. It reflects the fact that the retired pay base is established by basic pay and is, therefore, influenced by the basic pay raise mechanism.

Column II: The value of the initial retirement benefit adjusted by CPI to reflect 1982 dollars.

Column III: The CPI adjusted value of the initial 1955 benefit in 1982 dollars.

Column IV: What the retiree actually received in 1982.

Column V: The amount currently received in 1982 that is attributable to the basic pay raise mechanism. It is the difference in Column II and Column III. Remember, we have already isolated the amount of the FY82 costs attributable to CPI inflation (Factor 2). Therefore, this column isolates only the amount of the current annuity attributable to the pay raise mechanism.

Column VI: The amount of the current benefit attributable to the retired pay adjustment mechanism. It is the difference of the amount currently received (Column IV) less the CPI adjusted value (Column III) less the amount previously identified as attributable to the basic pay raise mechanism (Column V).

Using Column V of Table F-4 and Table F-5, along with the numbers of retirees on the 1982 retirement rolls from Table F-2, one can now determine the amount of the retirement budget attributable to adjustments in basic pay. Similarly, using Column VI of Table F-4, one can determine the amount of the retirement budget attributable to the retired pay adjustment mechanism. These calculations are shown in Table F-6 for officers and Table F-7 for enlisted retirees.

Table F-4
 Analysis of Retired Pay Benefit and Costs in FY82
 Attributable to Basic Pay Raises and Retired Pay Adjustment
 (Officer)

YEAR	PAY ADJUSTMENT	COLUMN I	COLUMN II	COLUMN III	COLUMN IV	COLUMN V	COLUMN VI
1955		\$ 4,053	\$14,784	\$14,784	\$14,784	\$ 0	\$ 0
1956		4,053	14,586	14,784	14,328	198	258
1957		4,053	14,083	14,784	14,232	701	149
1958		4,053	13,699	14,784	14,244	1,084	544
1959	15.60%	4,686	15,704	14,784	14,628	920	1,076
1960		4,686	15,447	14,784	15,312	663	135
1961		4,686	15,291	14,784	14,928	507	363
1962		4,686	15,138	14,784	14,976	354	162
1963		4,686	15,047	14,784	14,976	263	710
1964	14.70	5,375	16,922	14,784	16,565	2,139	358
1965	2.50	5,509	17,046	14,784	17,760	2,262	714
1966	7.40	5,916	17,795	14,784	19,080	3,011	1,286
1967	3.20	6,106	17,864	14,784	20,184	3,080	2,320
1968	5.60	6,448	18,019	14,784	20,544	3,325	2,435
1969	6.90	6,893	18,366	14,784	21,384	3,582	3,018
1970	12.60	7,761	19,519	14,784	23,700	4,735	4,181
1971	8.10	8,390	20,247	14,784	23,580	5,463	3,333
1972	7.90	9,053	21,150	14,784	24,564	6,366	3,412
1973	14.40	10,357	22,777	14,784	25,452	7,993	2,675
1974	6.20	10,999	21,782	14,784	25,272	6,998	3,490
1975	5.50	11,604	21,065	14,784	24,984	6,281	3,919
1976	5.00	12,184	20,917	14,784	23,592	6,133	2,675
1977	3.62	12,625	20,352	14,784	21,840	5,568	1,448
1978	6.20	13,408	20,087	14,784	21,408	5,303	1,321
1979	5.50	14,145	19,034	14,784	21,888	4,250	2,254
1980	7.02	15,138	17,943	14,784	20,544	3,159	2,601
1981	11.70	16,909	18,160	14,784	20,100	3,376	1,940
1982	14.30	19,328	19,328	14,784	19,328	4,544	0

Table F-5
 Analysis of Retired Pay Benefit and Costs in FY82
 Attributable to Basic Pay Raises and Retired Pay Adjustment
 (Enlisted)

FISCAL YEAR	PAY ADJUSTMENT	COLUMN I	COLUMN II	COLUMN III	COLUMN IV	COLUMN V	COLUMN VI
1955		\$1,857	\$6,772	\$6,772	\$7,119	\$ 0	\$ 347
1956		1,857	6,682	6,772	6,785	90	103
1957		1,857	6,451	6,772	6,866	321	415
1958		1,857	6,276	6,772	6,831	496	555
1959	15.60%	2,147	7,195	6,772	7,027	423	168
1960		2,147	7,077	6,772	6,843	305	234
1961		2,147	7,006	6,772	6,600	234	406
1962		2,147	6,936	6,772	7,013	164	77
1963		2,147	6,894	6,772	6,451	122	443
1964	14.70	2,462	7,751	6,772	6,831	979	920
1965	2.50	2,523	7,806	6,772	6,992	1,034	814
1966	7.40	2,710	8,150	6,772	7,465	1,378	685
1967	3.20	2,797	8,183	6,772	8,052	1,411	131
1968	5.60	2,954	8,296	6,772	8,087	1,524	209
1969	6.90	3,158	8,414	6,772	8,582	1,642	168
1970	12.60	3,556	8,943	6,772	9,746	2,171	803
1971	8.10	3,844	9,276	6,772	9,907	2,504	631
1972	7.90	4,147	9,688	6,772	9,757	2,916	69
1973	14.40	4,744	10,433	6,772	10,287	3,661	146
1974	6.20	5,039	9,979	6,772	10,345	3,207	366
1975	5.50	5,316	9,650	6,772	10,091	2,878	441
1976	5.00	5,582	9,583	6,772	9,976	2,811	393
1977	3.62	5,783	9,322	6,772	9,412	2,550	90
1978	6.20	6,142	9,201	6,772	9,469	2,429	268
1979	5.50	6,480	8,719	6,772	10,362	1,947	1,643
1980	7.02	6,934	8,219	6,772	9,343	1,447	1,124
1981	11.70	7,746	8,319	6,772	9,135	1,547	816
1982	14.30	8,854	8,854	6,772	8,854	2,082	0

From Table F-6 it has been determined that \$970,045,340 of the amount currently received by officer retirees in FY82 is a result of the basic pay multiplier exceeding the CPI during the period 1955 to 1982. Similarly, \$462,906,623 is attributable to the retired pay adjustment mechanism. In total, these two factors account for \$1,432,951,963 of the \$1,421,487,200 difference between retired pay in 1982 and 1955 retired pay adjusted for retired population growth and CPI inflation during the period 1955 to 1982. Thus, these factors explained all (100.8%) of the costs unexplained by growth in the officer retiree population and by inflation.

Evaluation of the enlisted data (Table F-7) indicates that \$1,555,489,223 is attributable to the fact that the basic pay multiplier exceeded the CPI, while \$172,833,739 is attributable to the retired pay adjustment mechanism. These two factors account for \$1,728,322,962 of the \$1,673,491,100 difference between 1982 retired pay and 1955 enlisted retired pay adjusted for retired population growth and CPI inflation during the period. Thus, these two factors explain all (103.3%) of the costs unexplained by growth in the enlisted retiree population and by inflation.

Conclusions.

1. Nearly all of the growth in retired costs between 1955 and 1982 (from \$223,460,807 to \$12,233,222,496) is attributable to four factors. The following data shows how these costs are distributed across these factors:

<u>Factor</u>	<u>Amount</u>	<u>%</u>
Officer:		
Population Growth	\$1,066,547,900	8.72
CPI Inflation	2,823,142,200	23.08
Basic Pay Growth	970,045,340	7.93
Retired Pay Adjustment	462,906,623	3.78
Enlisted:		
Population Growth	1,439,140,200	11.76
CPI Inflation	3,809,403,900	31.14
Basic Pay Growth	1,555,489,223	12.72
Retired Pay Adjustment	172,833,739	1.41
TOTAL:	\$12,299,519,125	100.54
BUDGET:	\$12,233,222,496	
NET DIFFERENCE:	\$ 66,000,000 + (or .5%)	

2. The following factors are not considered to be major factors associated with the growth in the retired costs FY82.

- Change in officer/enlisted retired mix
- Change in grade/rank/YOS at retirement
- Life expectancy increases
- Establishment of paygrades E8/9

Table F-6
Costing Recapitulation in 1982 Dollars (Officers)

	# RETIRED	BASIC PAY ADJUSTMENT		RETIRED PAY ADJUSTMENT	
		AVERAGE	TOTAL	AVERAGE	TOTAL
1955(or before)	8,154	\$ 0	\$ 0	\$ 0	\$ 0
56	2,506	-	496,188	258	-
57	3,972	-	2,784,372	149	-
58	4,180	-	4,531,120	544	-
59	3,931	920	3,616,520	1,076	2,273,920
60	5,145	663	3,411,135	135	-
61	10,201	507	5,171,907	363	-
62	8,478	354	3,001,212	162	-
63	11,727	263	3,084,201	710	-
64	11,585	2,139	24,780,315	358	-
65	10,889	2,262	24,630,918	714	-
66	9,919	3,011	29,866,109	1,286	12,755,834
67	10,162	3,080	31,298,960	2,320	23,575,840
68	10,347	3,325	34,403,775	2,435	25,194,945
69	9,699	3,582	34,741,818	3,018	29,271,582
70	14,538	4,735	68,837,430	4,181	60,783,378
71	12,828	5,463	70,079,364	3,333	42,755,724
72	10,173	6,366	64,761,318	3,414	34,730,622
73	11,639	7,993	93,030,527	2,675	31,134,686
74	11,452	6,998	80,141,096	3,490	39,967,480
75	11,280	6,281	70,849,680	3,919	44,206,320
76	14,303	6,133	87,720,299	2,675	38,260,525
77	9,226	5,568	51,370,368	1,448	13,359,248
78	9,421	5,303	49,959,563	1,321	12,445,141
79	10,873	4,250	46,210,250	2,254	24,507,742
80	10,361	3,159	32,730,399	2,601	26,948,961
81	7,961	3,376	26,876,336	1,940	15,444,340
82	8,205	4,554	37,283,520	0	0
Total		\$970,045,340		\$462,906,623	

GRAND TOTAL: \$1,432,951,963

Table F-7
 Costing Recapitulation in 1982 Dollars (Enlisted)

	# RETIRED	BASIC PAY ADJUSTMENT		RETIRED PAY ADJUSTMENT	
		AVERAGE	TOTAL	AVERAGE	TOTAL
1955(or before)	11,786	\$ 0	\$ 0	\$ 347	\$ 4,089,048
56	2,782	-	250,380	103	286,546
57	3,623	-	1,162,983	415	1,503,545
58	4,277	-	2,121,392	555	2,373,735
59	5,152	423	2,179,296	168	-865,536
60	10,107	305	3,082,635	234	2,365,038
61	13,262	234	3,103,308	406	5,384,372
62	15,696	164	2,574,144	77	1,208,592
63	23,673	122	2,888,106	443	10,487,139
64	25,208	979	24,678,632	920	23,191,360
65	25,336	1,034	26,197,424	814	20,623,504
66	26,976	1,378	37,172,928	685	18,478,560
67	36,873	1,411	52,027,803	131	4,830,363
68	38,269	1,524	58,321,956	209	7,998,221
69	36,006	1,642	59,121,852	168	6,049,008
70	35,365	2,171	76,777,415	803	28,398,095
71	41,604	2,507	104,301,230	631	26,252,124
72	43,939	2,916	128,126,120	69	3,031,791
73	46,991	3,661	172,034,050	146	6,860,686
74	49,094	3,207	157,444,460	366	17,968,404
75	48,675	2,878	140,086,650	441	21,465,675
76	52,794	2,811	148,403,930	393	20,748,042
77	35,005	2,550	90,525,000	90	3,150,450
78	30,880	2,429	75,007,520	268	8,275,840
79	30,833	1,947	60,031,850	1,643	50,658,619
80	31,492	1,447	45,568,925	1,124	35,397,000
81	25,850	1,547	39,989,950	816	21,093,600
82	23,717	\$2,082	49,378,794	0	0
TOTAL			\$1,555,489,223		\$172,833,739

GRAND TOTAL: \$1,728,322,962

**APPENDIX G
FORCE STRUCTURE/RETIREMENT TRENDS
AND STATISTICS**



MAJGEN STUART H. SHERMAN, JR., USAF

FORCE STRUCTURE/RETIREMENT TRENDS AND STATISTICS

This appendix contains various Figures and Tables in support of Section VIII of Volume I, "Uniformed Services Retirement System."

A. EXPLANATION OF FIGURES. The first part of the appendix contains Figures G-1 through G-51. Figures G-1 and G-2 deal with retirement system costs. Figures G-3 and G-4 are DoD force profile data. Figures G-5 through G-51 display various trends (age, percent of eligibles retiring, YOS at retirement, etc.) of the retirees.

B. EXPLANATION OF TABLES. Tables G-1 through G-30 are the basic DoD and Service force strengths by each year of Federal active service. These have been drawn from both automated data (FY71 through FY82) and non-automated records (remaining years) located at Defense Manpower Data Center (DMDC). They represent the most complete set of longitudinal data (30 years) known to exist, but they are not without problems. Data for FY57 and FY59 were missing and the QRMC attempted to recreate it by extrapolation. The enlisted data are believed reasonable, although the officer data are suspect.

Tables G-31a through G-40b reformat these strengths by cohort (entry) year and years-of-service (YOS) one through 30+. These tables are for DoD and each of the Services for both officers (G-30a through G-35b) and enlisted personnel (G-36a through G-40b).

Tables G-41 through G-50 are summaries of those data for various years of service. The average years-of-service (YOS) and expected service life (ESL) are also shown for each segment of the population summarized.

Tables G-51 through G-55 are historical officer annual continuation rates for the period FY74 through FY82, as well as several multiple year averages of these rates obtained from DMDC. DoD-wide and Service-specific data are listed.

Tables G-56 through G-60 are the annual continuation rates for enlisted personnel from FY73 through FY82.

Figure G-1
TOTAL DOD SERVICE RETIREE (NON-DISABLED / DISABLED) COST
 (ECONOMIC ASSUMPTIONS - 5% COLA, 5.5% WAGE, 6% INTEREST)
 (CONSTANT FY DOLLARS)

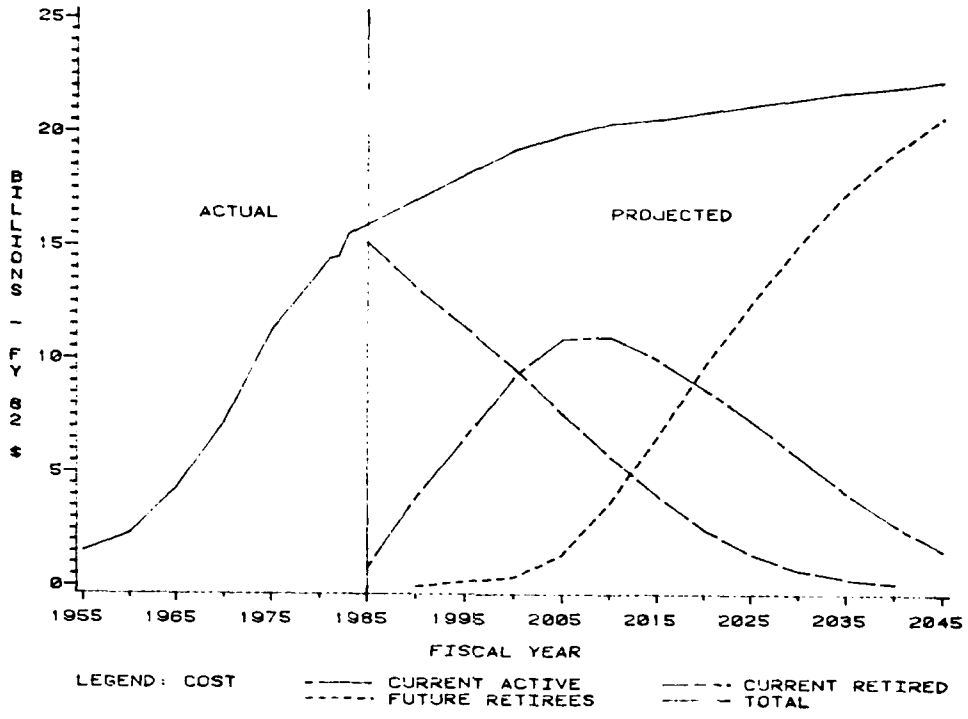


Figure G-2
TOTAL DOD SERVICE RETIREE (NON-DISABLED / DISABLED) COST
 (ECONOMIC ASSUMPTIONS - 5% COLA, 5.5% WAGE, 6% INTEREST)
 (THEN YEAR \$)

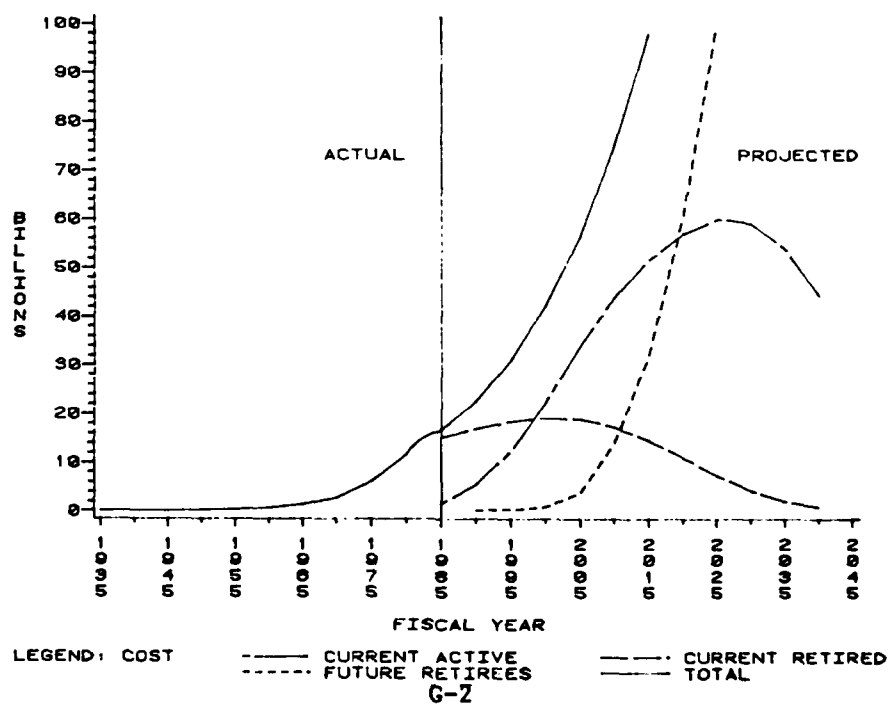
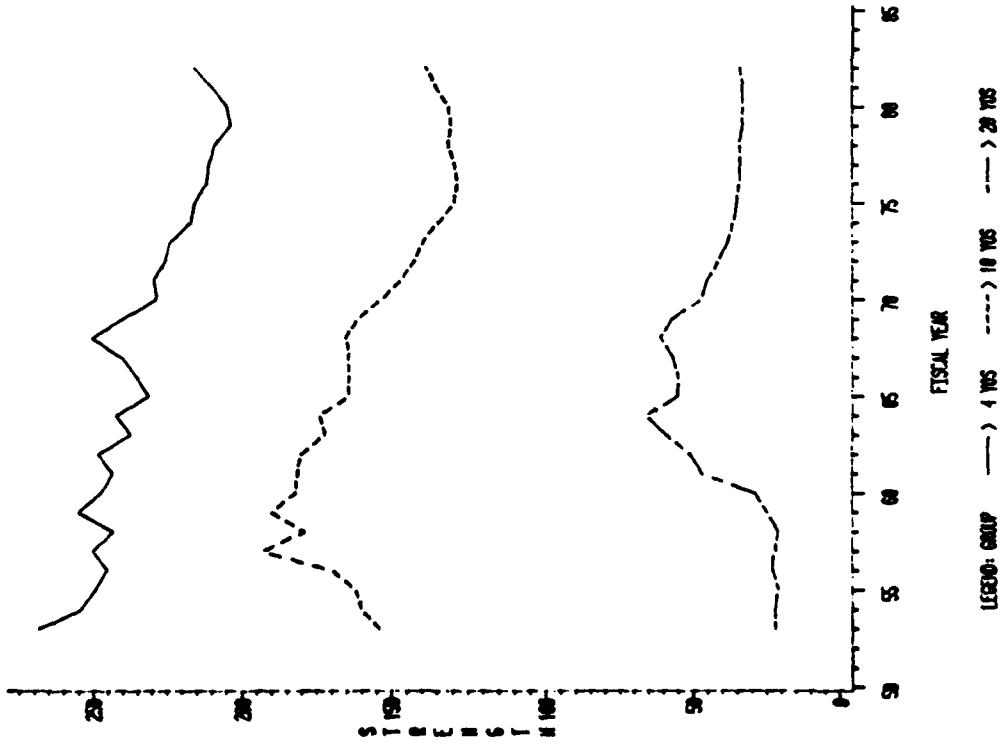


Figure G-3
DOD TOTAL SERVICE STRENGTHS - OFFICER
 (THOUSANDS)



G-3

Figure G-4
DOD TOTAL SERVICE STRENGTHS - ENLISTED
 (THOUSANDS)

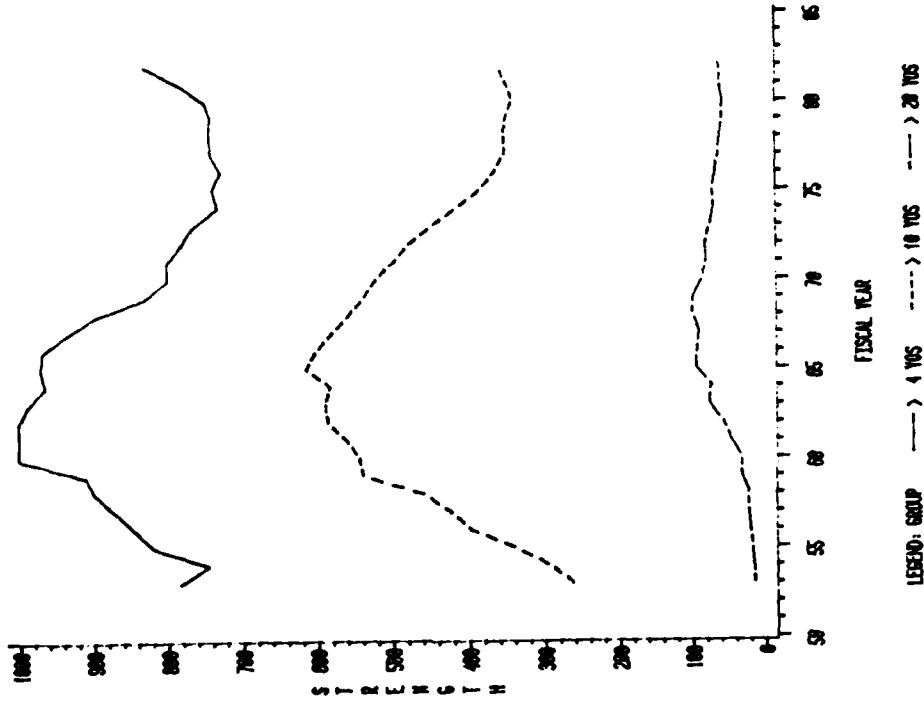


Figure G-5
DOD RETIREMENTS
 TYPE=ENLISTED SERVICE=ARMY

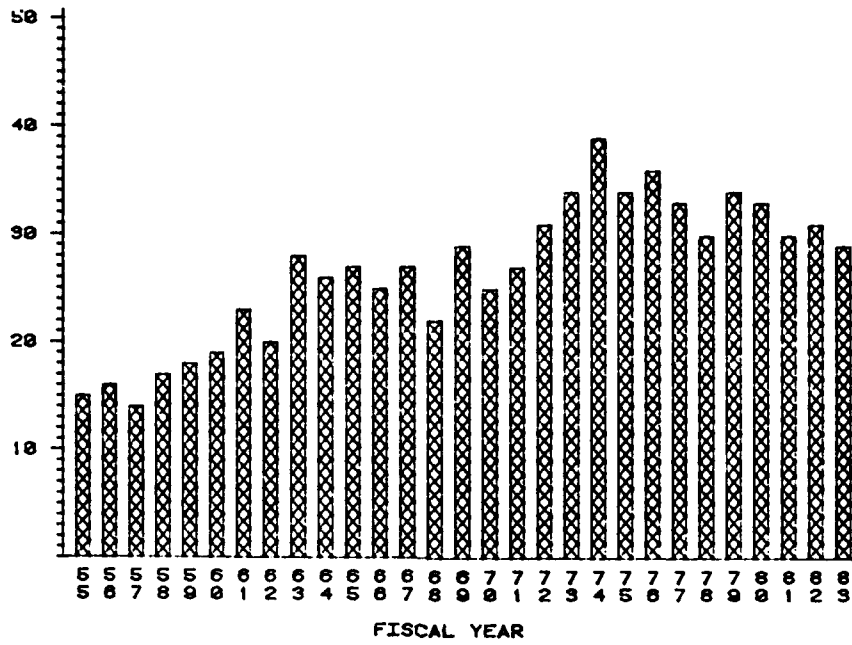


Figure G-6
DOD RETIREMENTS
 TYPE=ENLISTED SERVICE=NAVY

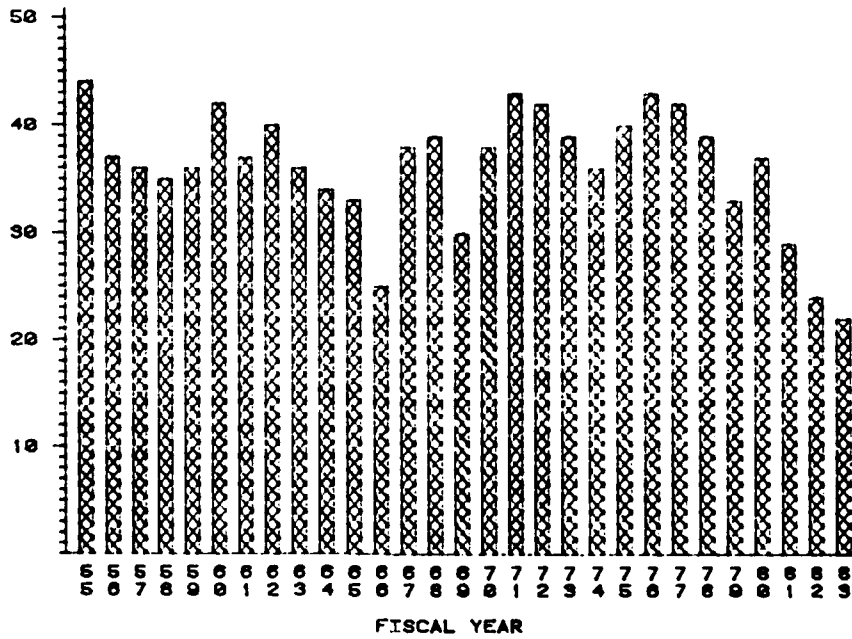


Figure G-7

DOD RETIREMENTS

TYPE=ENLISTED SERVICE=MARINE

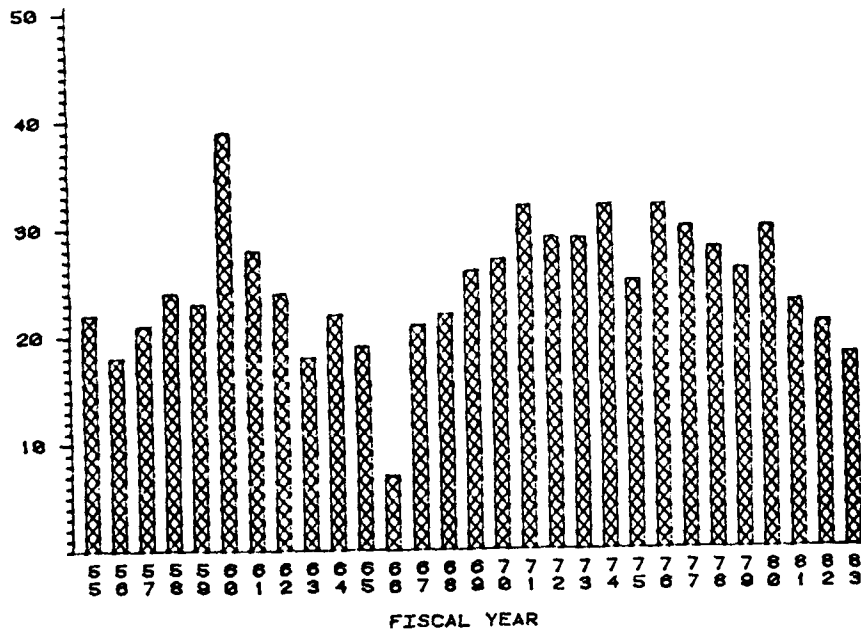


Figure G-8

DOD RETIREMENTS

TYPE=ENLISTED SERVICE=AIR FORCE

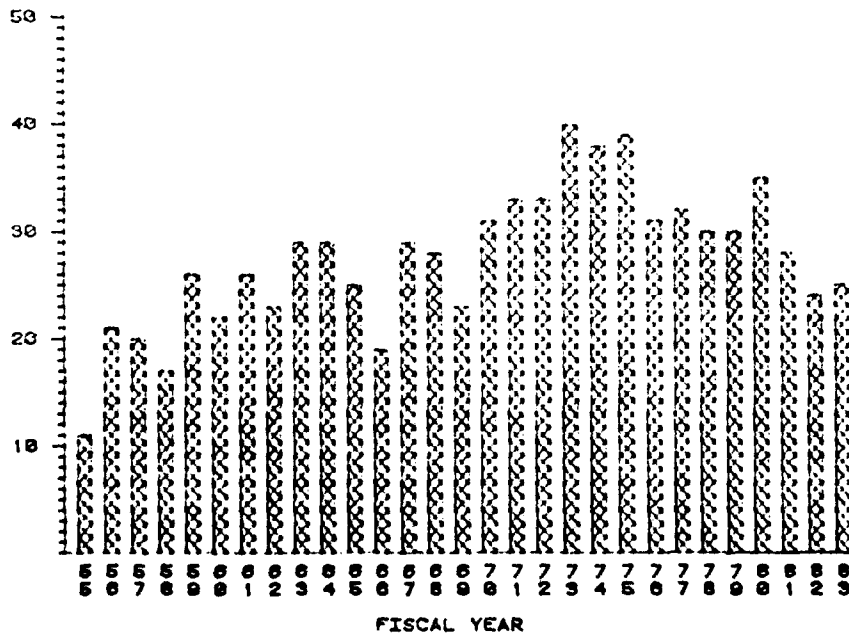


Figure G-9
DOD RETIREMENTS
 TYPE=OFFICER SERVICE=ARMY

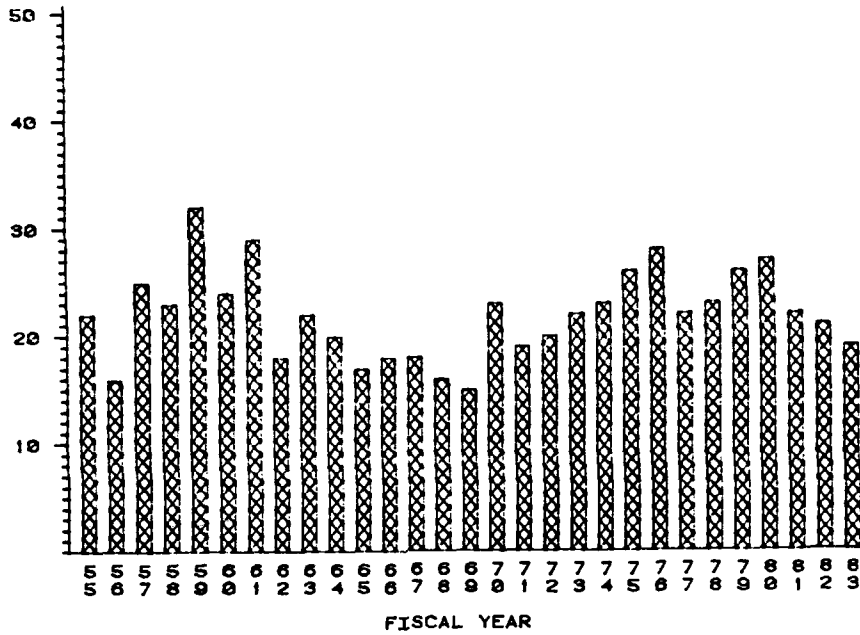


Figure G-10
DOD RETIREMENTS
 TYPE=OFFICER SERVICE=NAVY

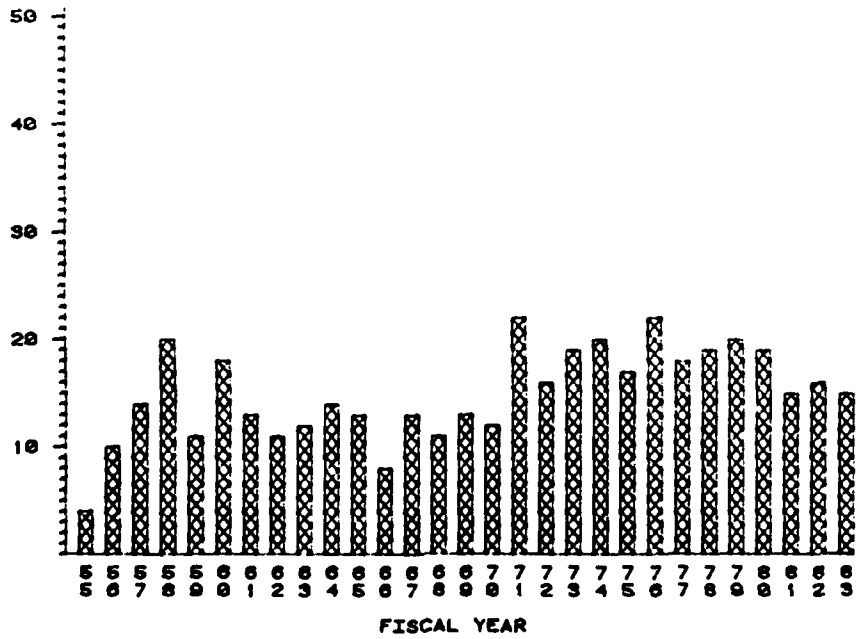


Figure G-11
DOD RETIREMENTS
 TYPE=OFFICER SERVICE=MARINE

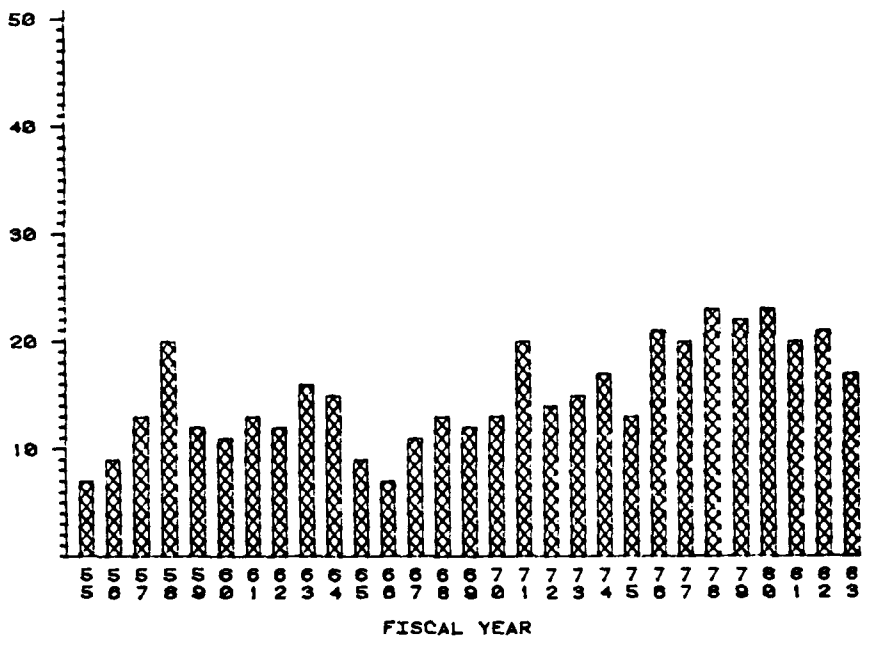


Figure G-12
DOD RETIREMENTS
 TYPE=OFFICER SERVICE=AIR FORCE

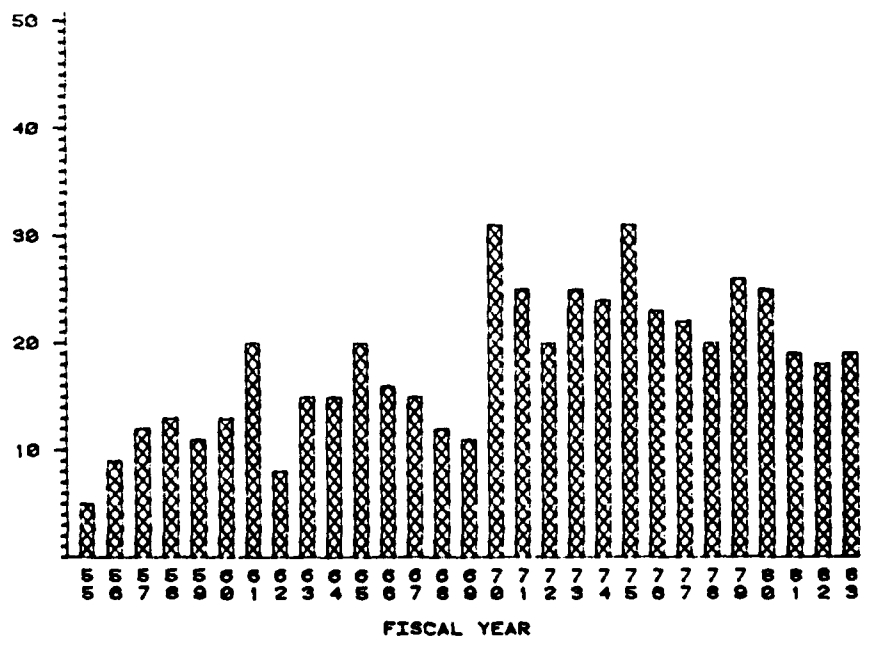


Figure G-13

NEW RETIREES BY FY -- YOS
 DOD WIDE -- ACTIVE NON DISABLED
 01-010

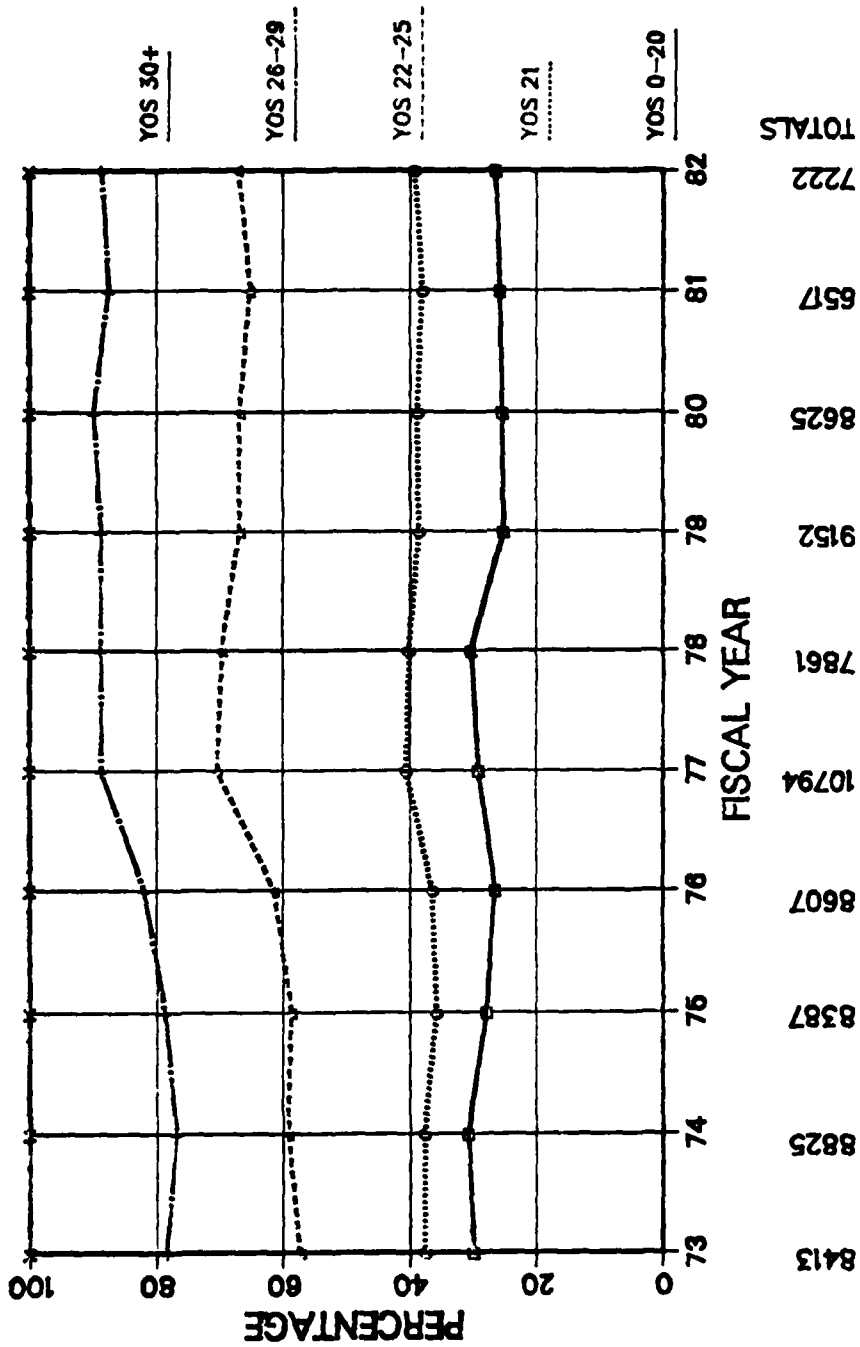


Figure G-14

NEW RETIREES BY FY -- YOS
 DOD WEDEI -- ACTIVE NON DISABLED

05

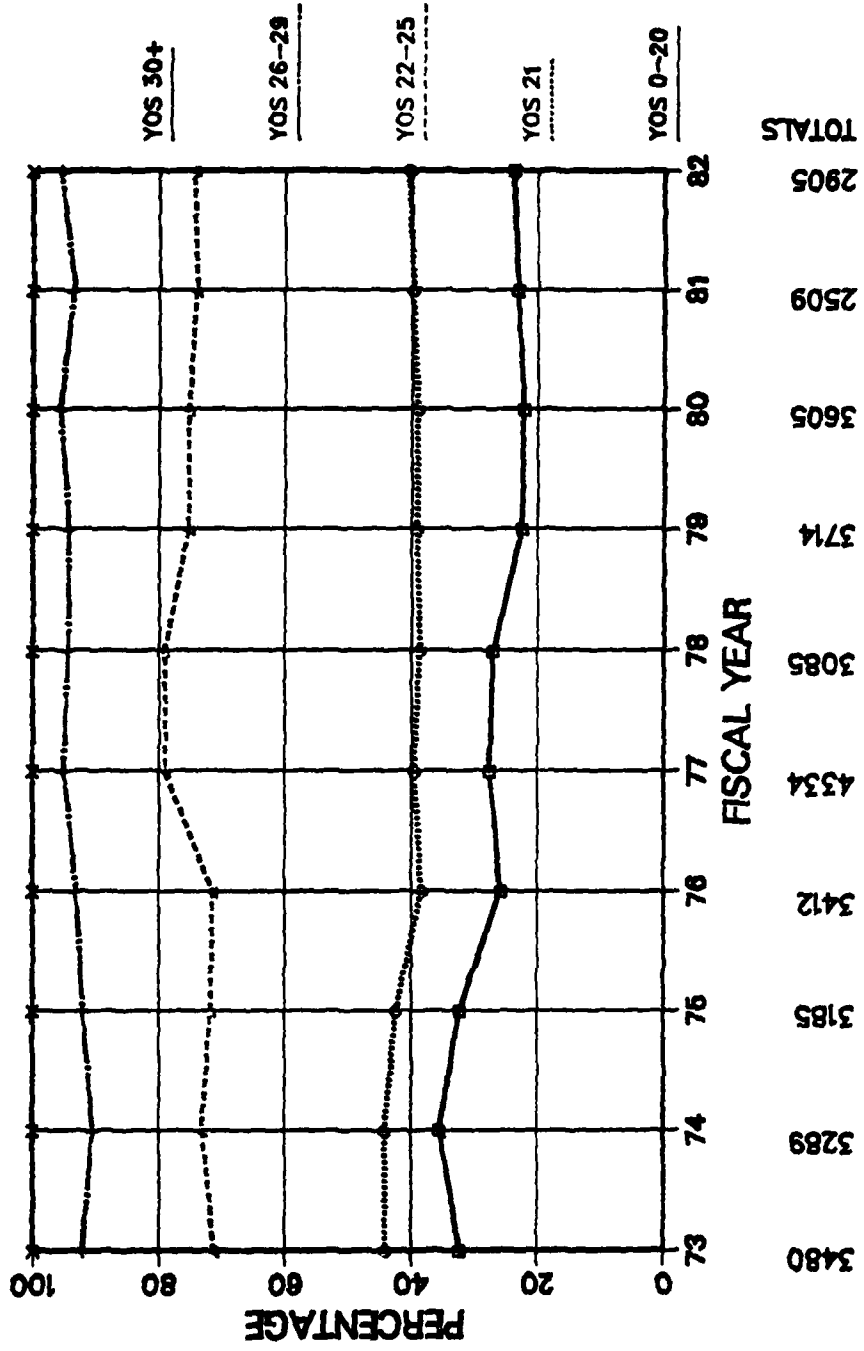


Figure G-15

NEW RETIREES BY FY -- YOS
 DOD WIDE -- ACTIVE/NON DISABLED

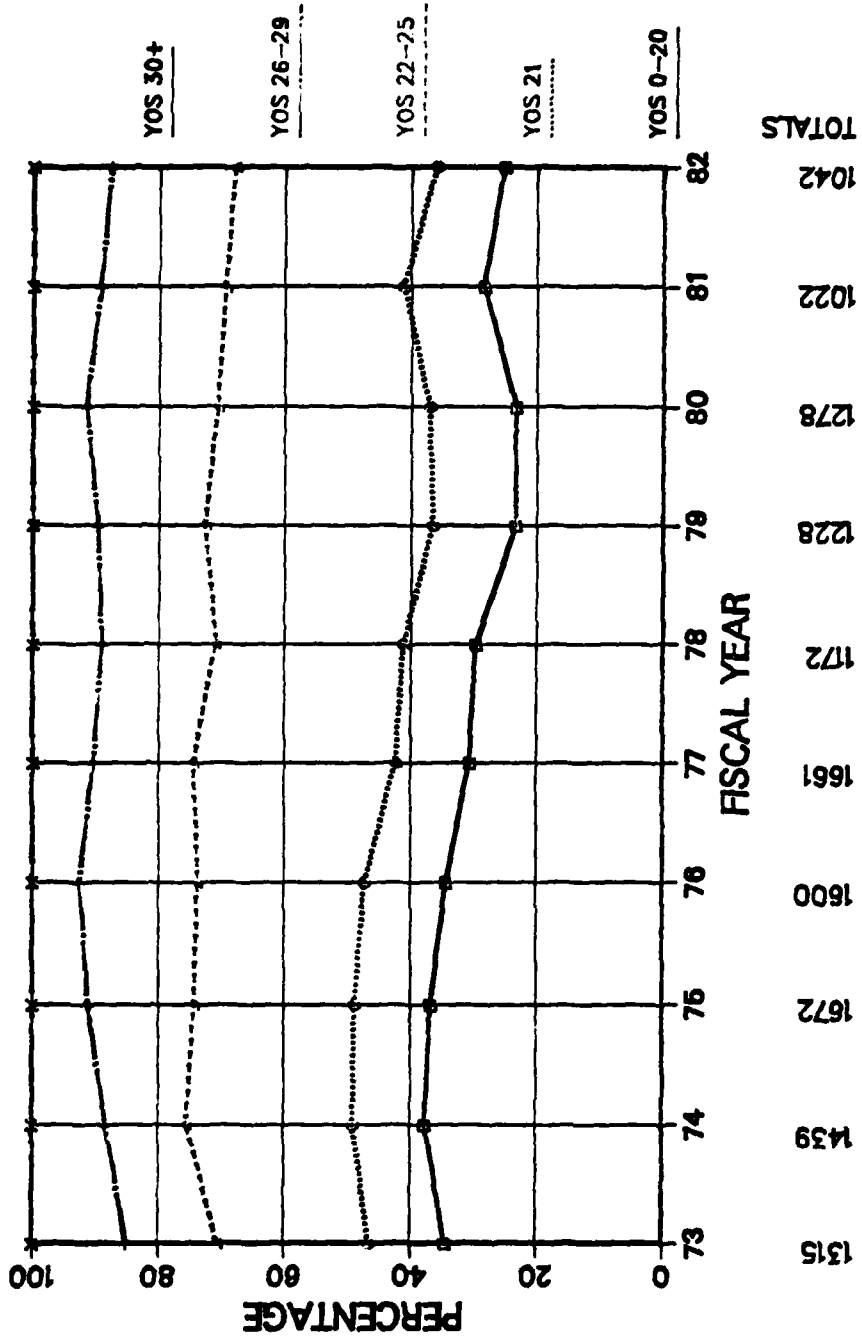


Figure G-16

NEW RETIREES BY FY -- YOS
 DOD WIDE -- ACTIVATION DISABLED
 H1-89

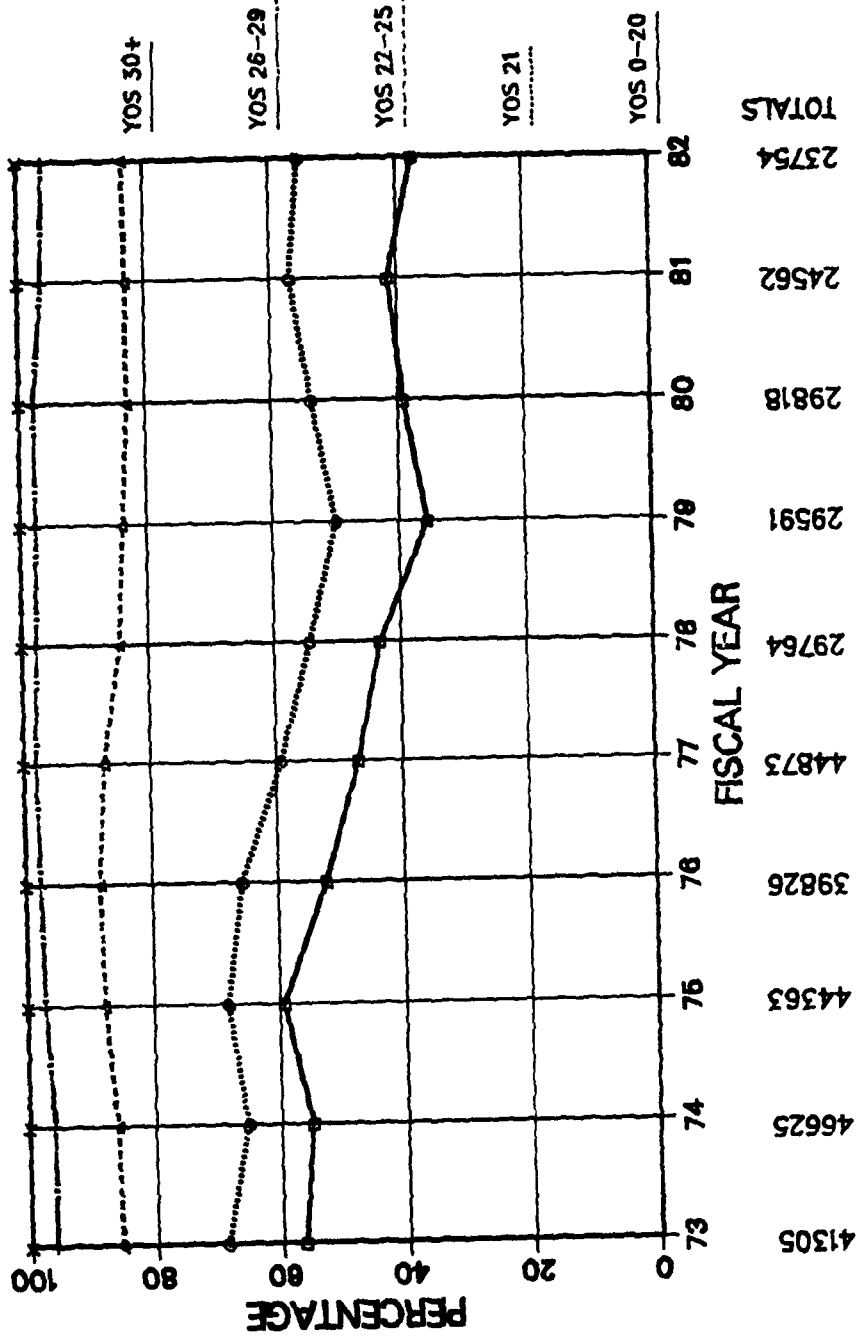


Figure G-17

NEW RETIREES BY FY - YOS
 DOD WIDE - ACTIVE NON-DISABLED

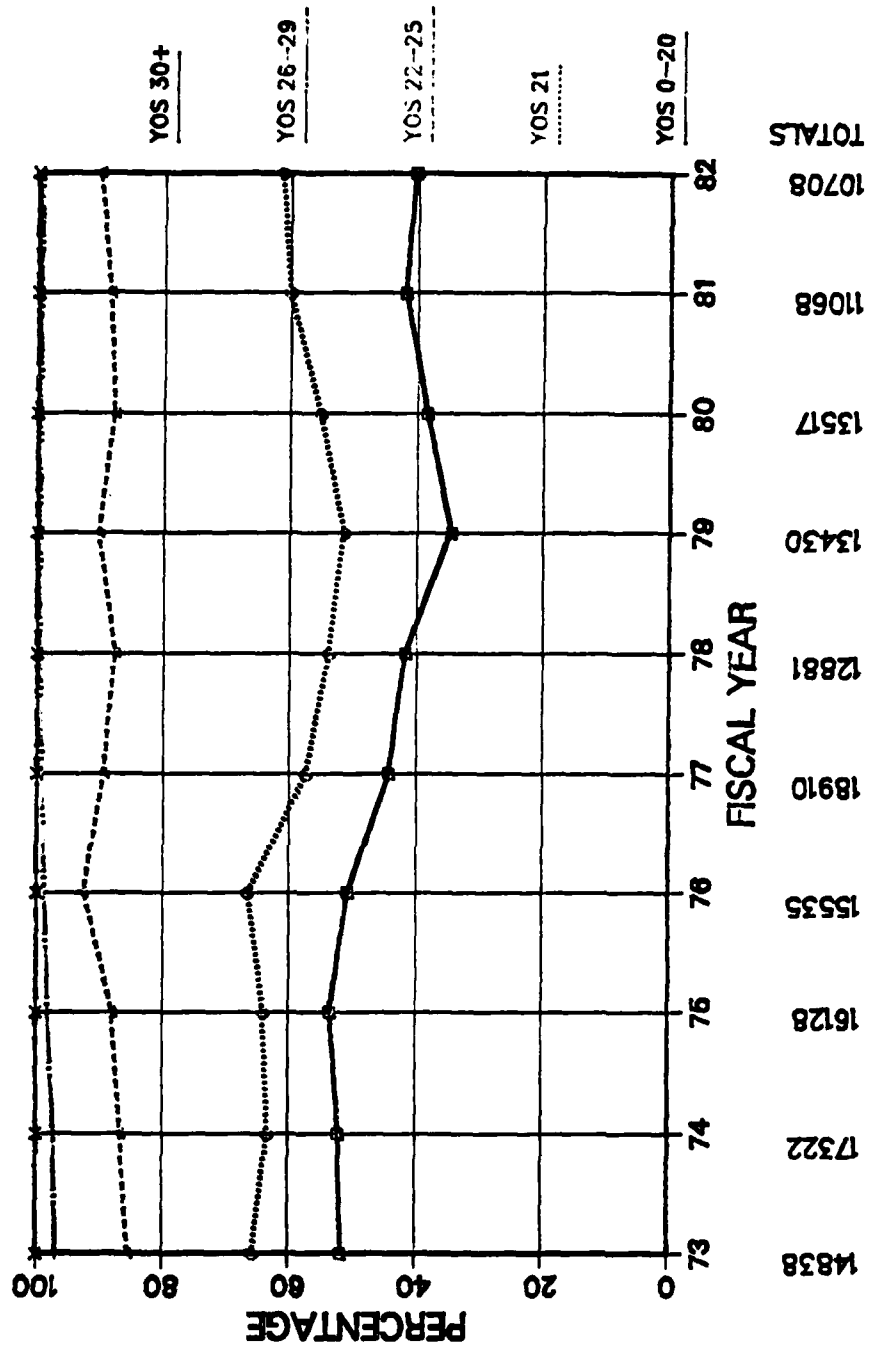


Figure G-18

NEW RETIREES BY FY -- YOS
ACTIVE NON DISABLED
ARMY
01-010

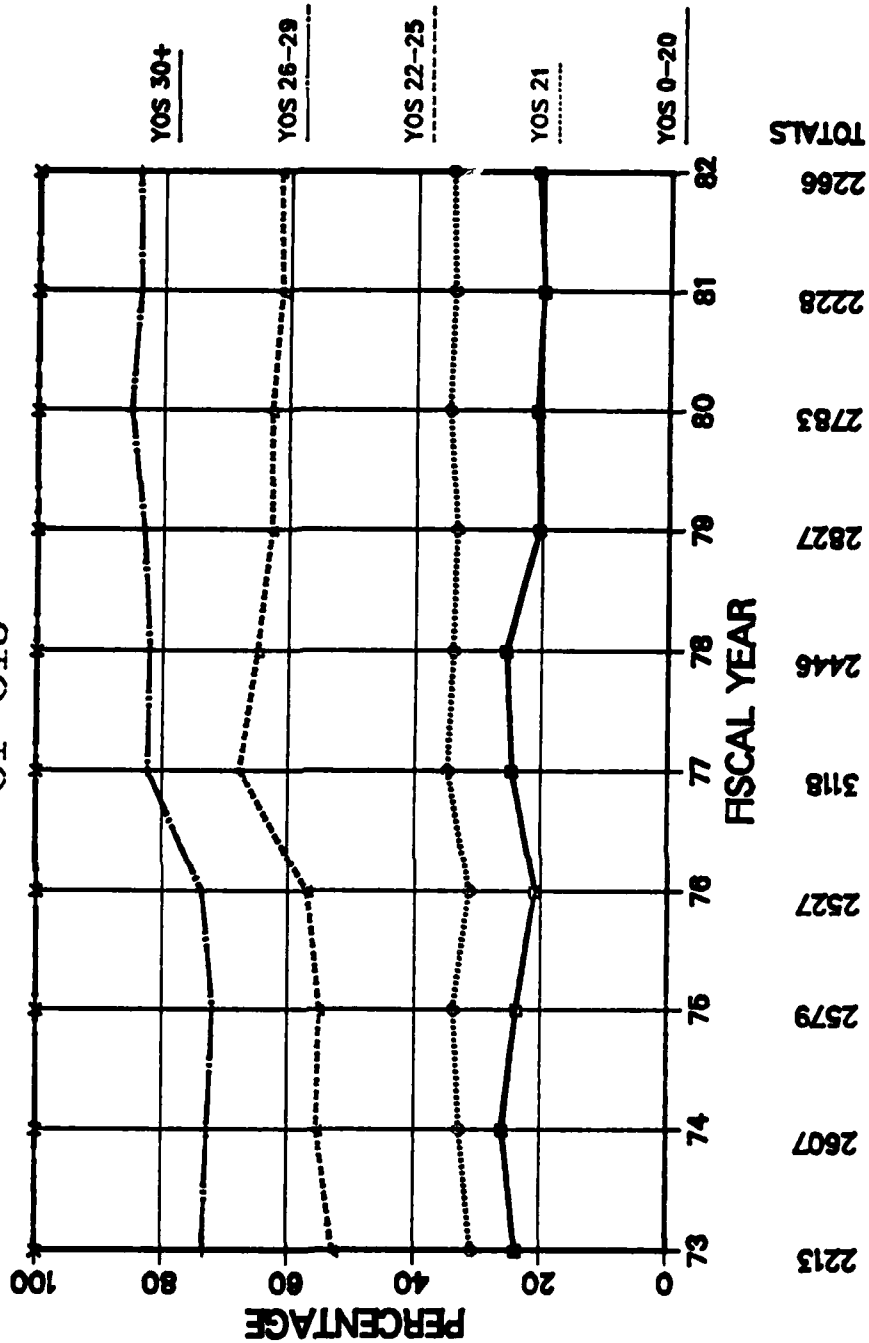


Figure G-19

NEW RETIREES BY FY - YOS
ACTIVATION DISABLED
MAY Y
01-010

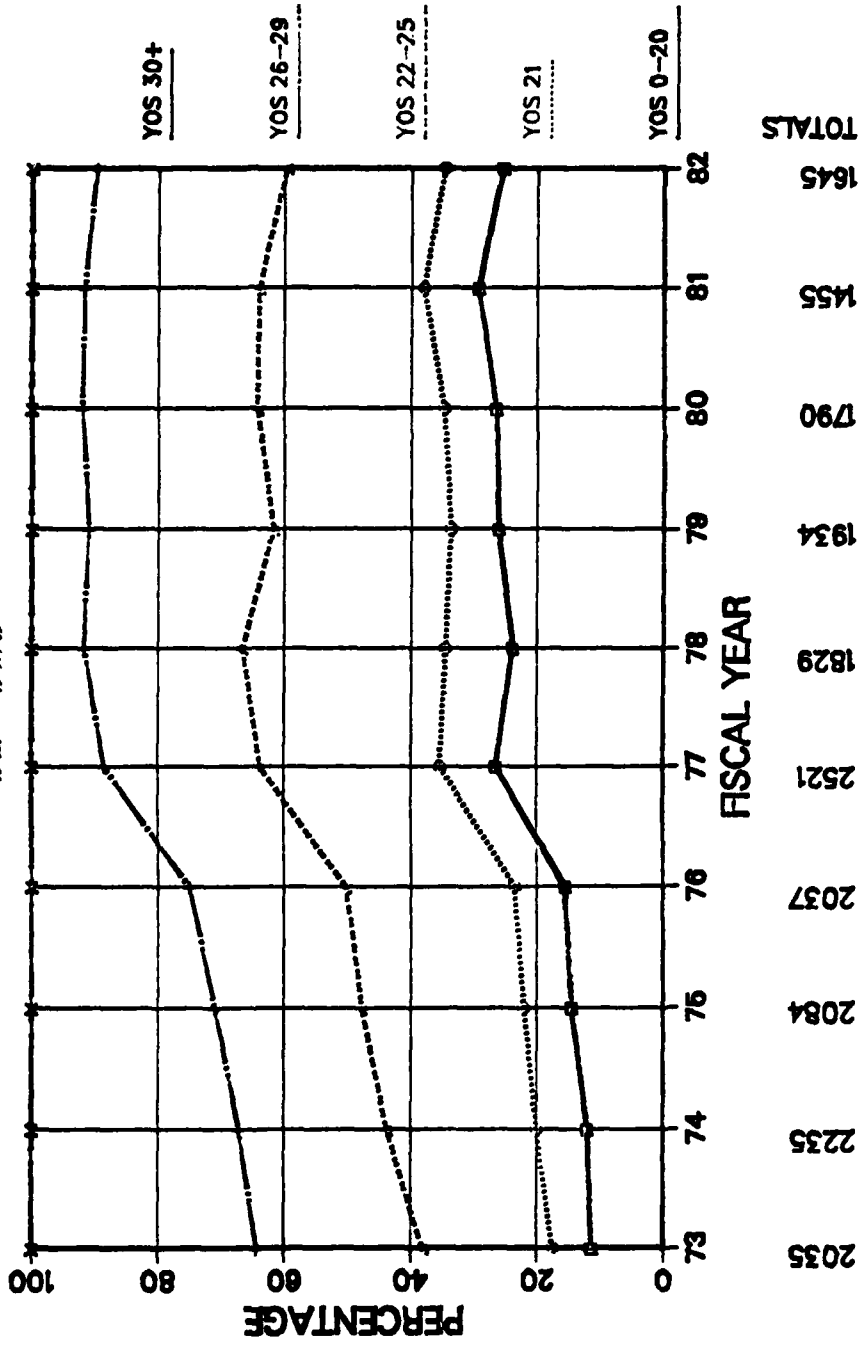


Figure G-20

NEW RETIREES BY FY -- YOS
 ACTIVE NON DISABLED
 MARINE CORPS
 01-010

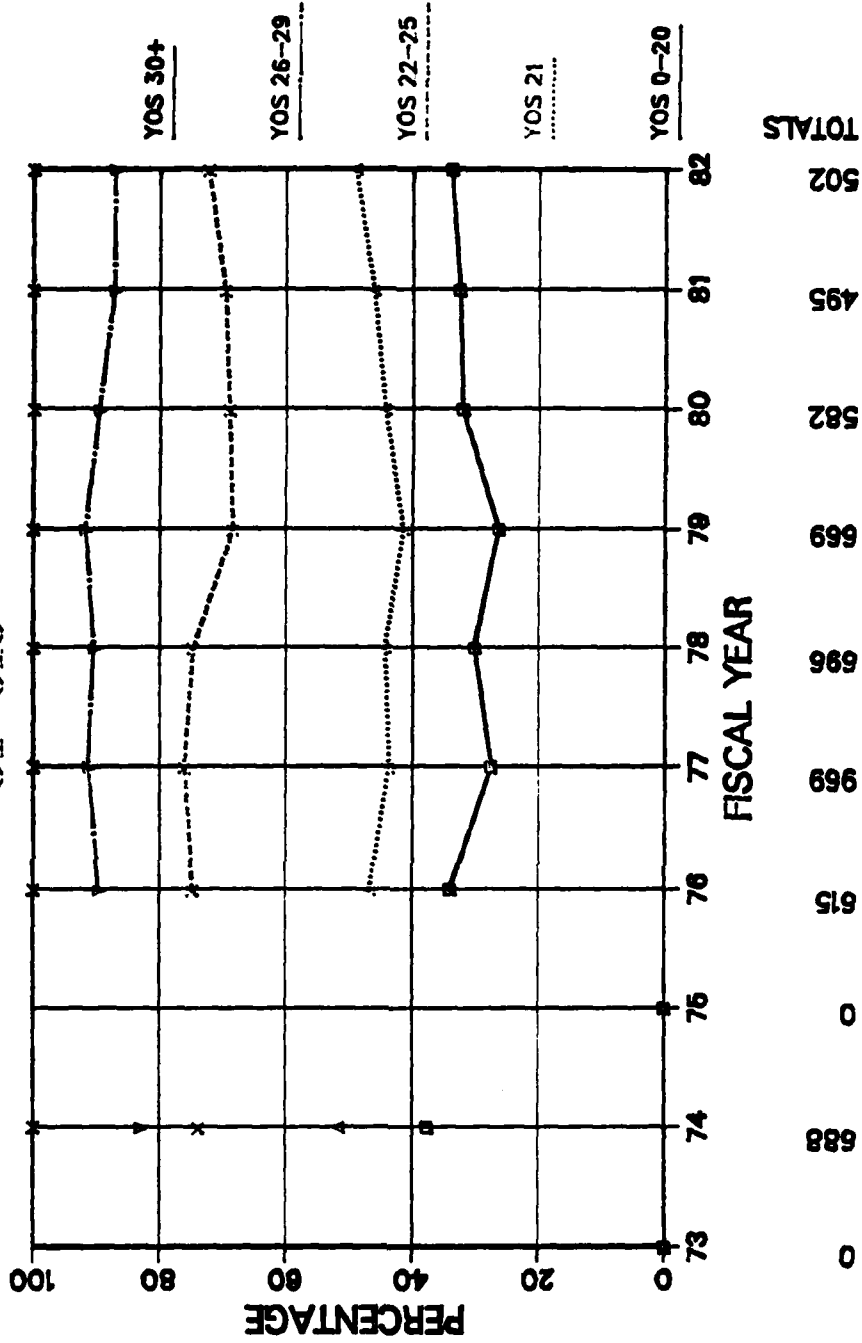


Figure G-21

NEW RETIREES BY FY -- YOS
 ACTIVE NON-DISABLED
 AIR FORCE
 01-010

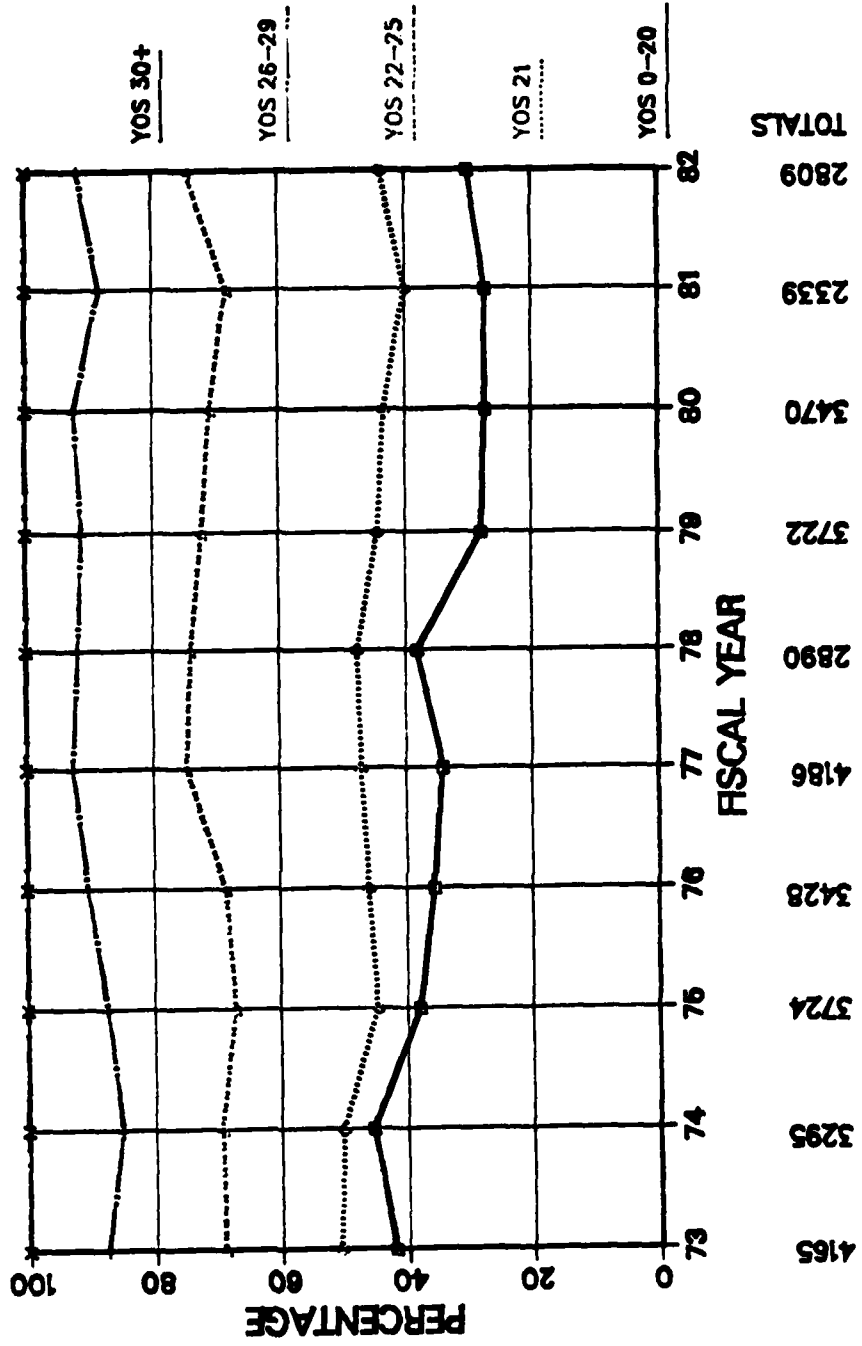


Figure G-22

NEW RETIREES BY FY -- YOS
 ACTIVE NON-DISABLED
 ARMY
 W1-W4

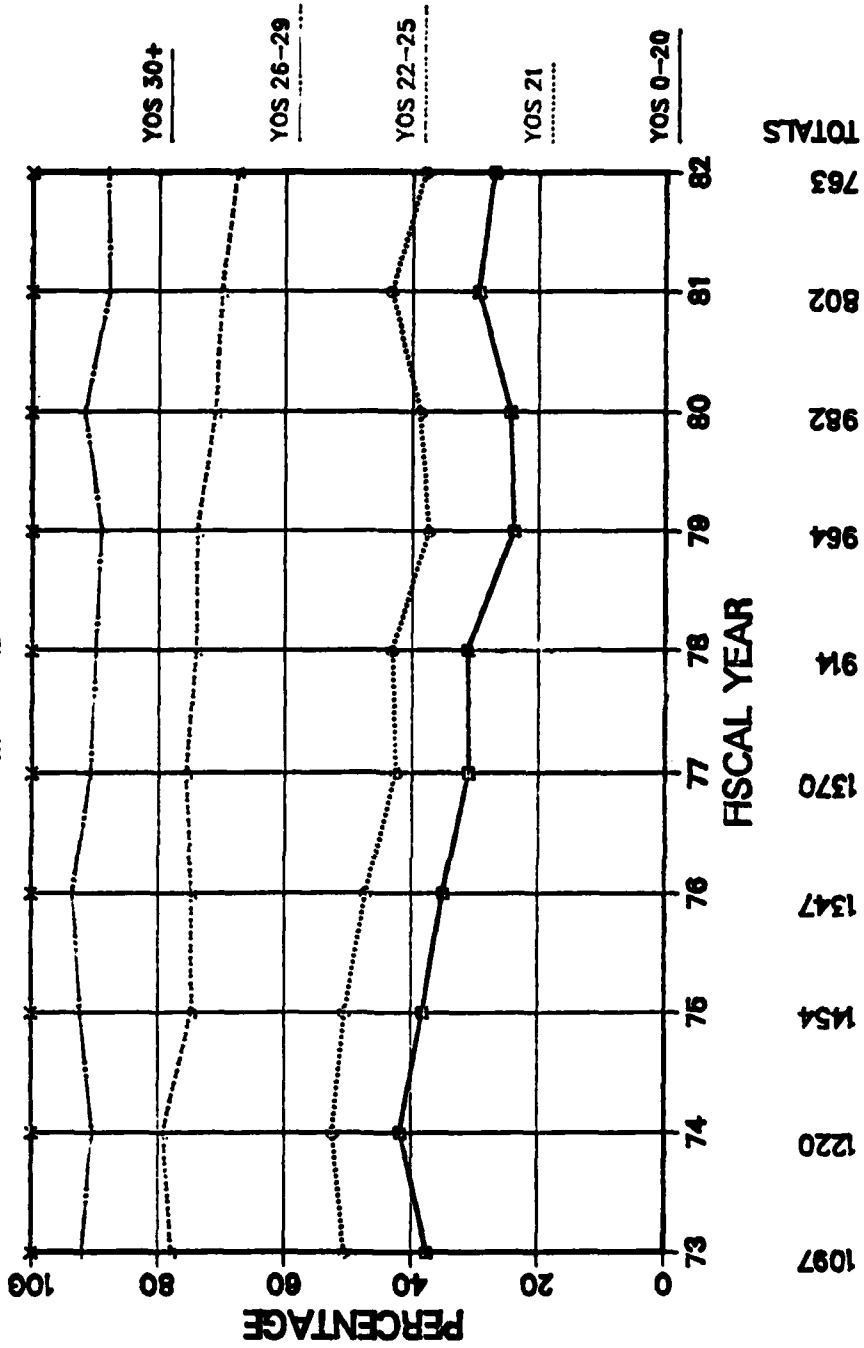


Figure G-23

NEW RETIREES BY FY - YOS
 ACTIVE NON-DISABLED
 NAVY
 W1-W4

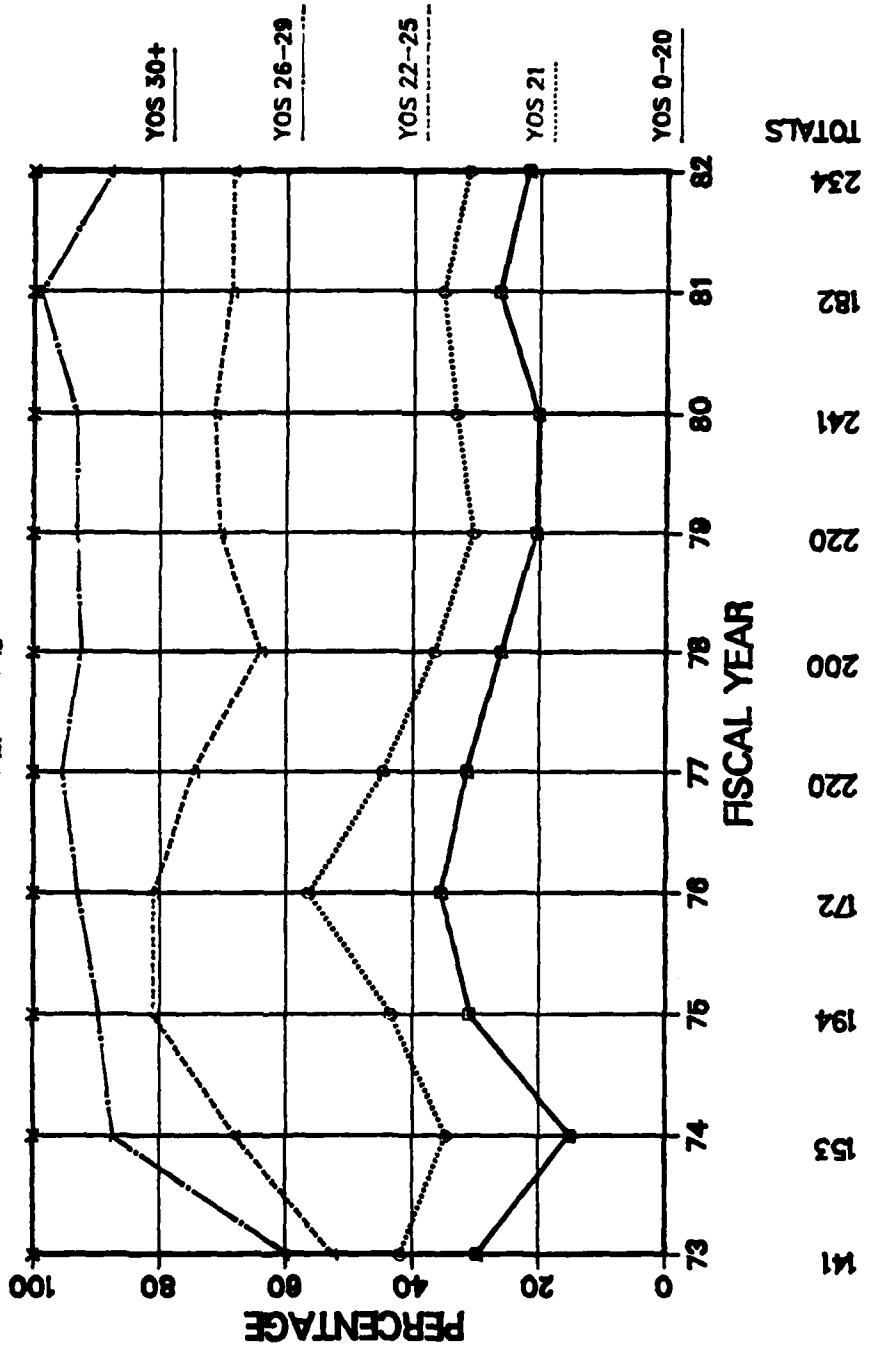


Figure G-24
NEW RETIREES BY FY -- YOS
ACTIVE NON-DISABLED
MARINE CORPS
VI-VII

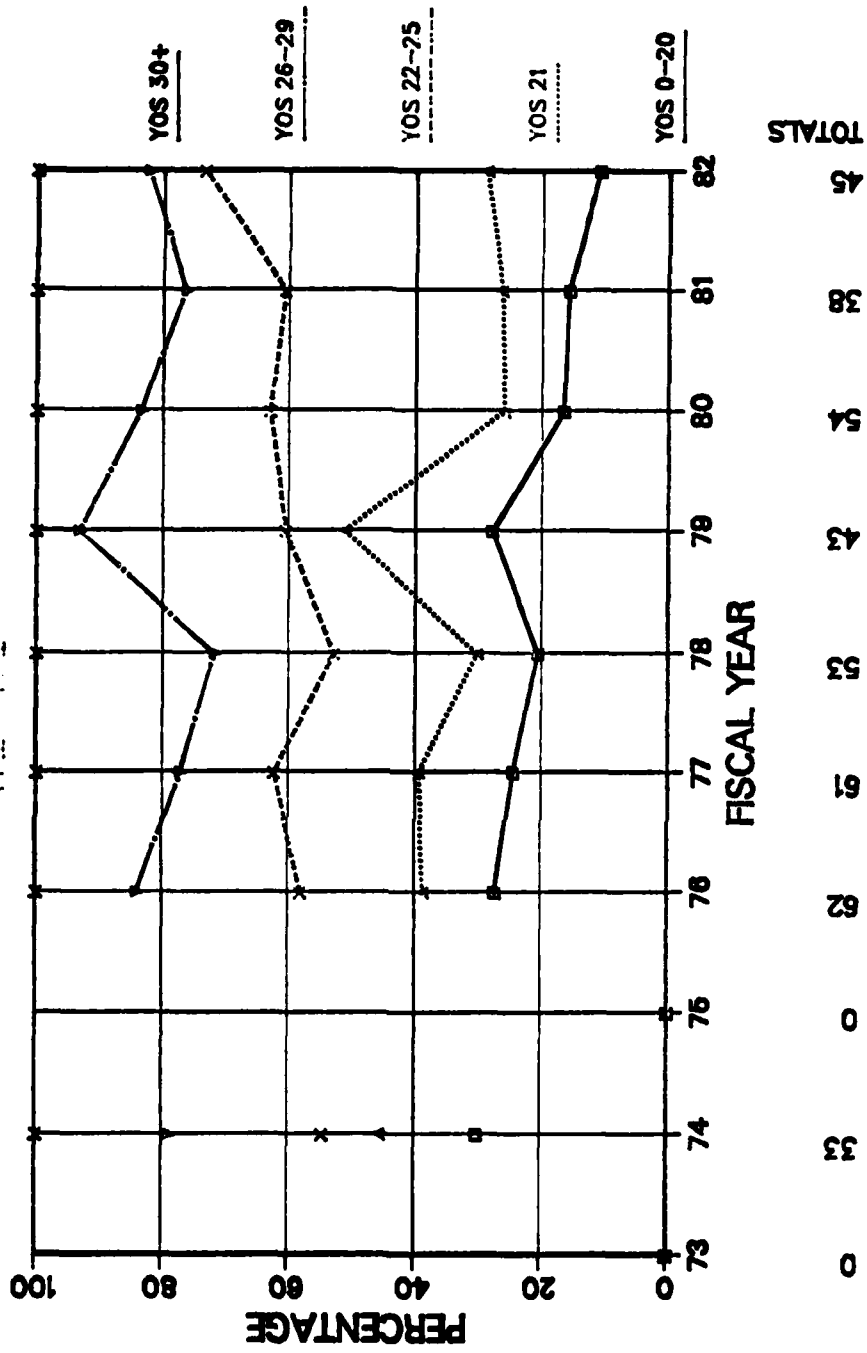


Figure G-25
NEW RETIREES BY FY -- YOS
ACTIVE NON DISABLED
ARMY
E1-E9

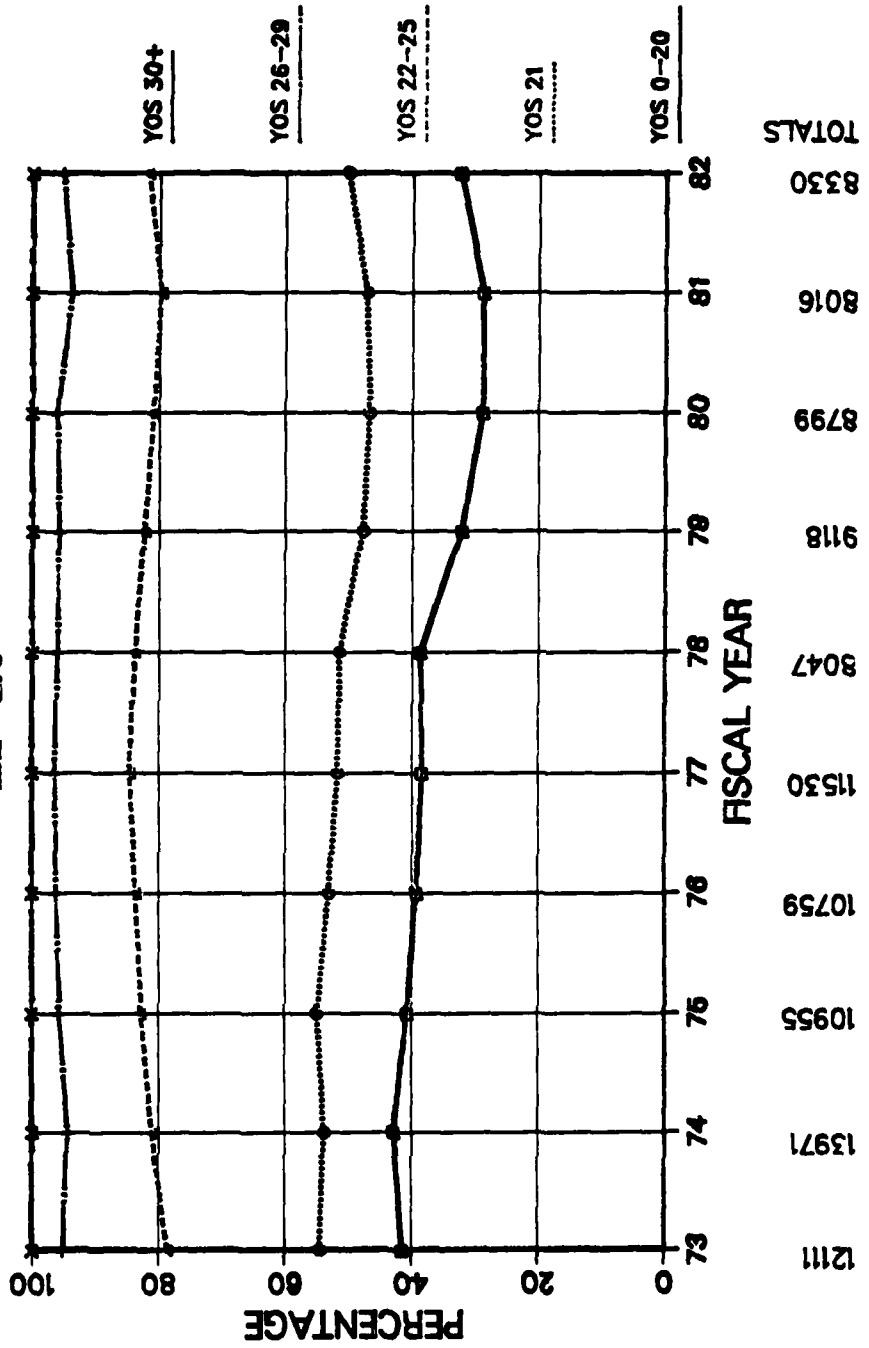


Figure G-26

NEW RETIREES BY FY -- YOS
ACTIVE NON DISABLED
NAVY
E1- E9

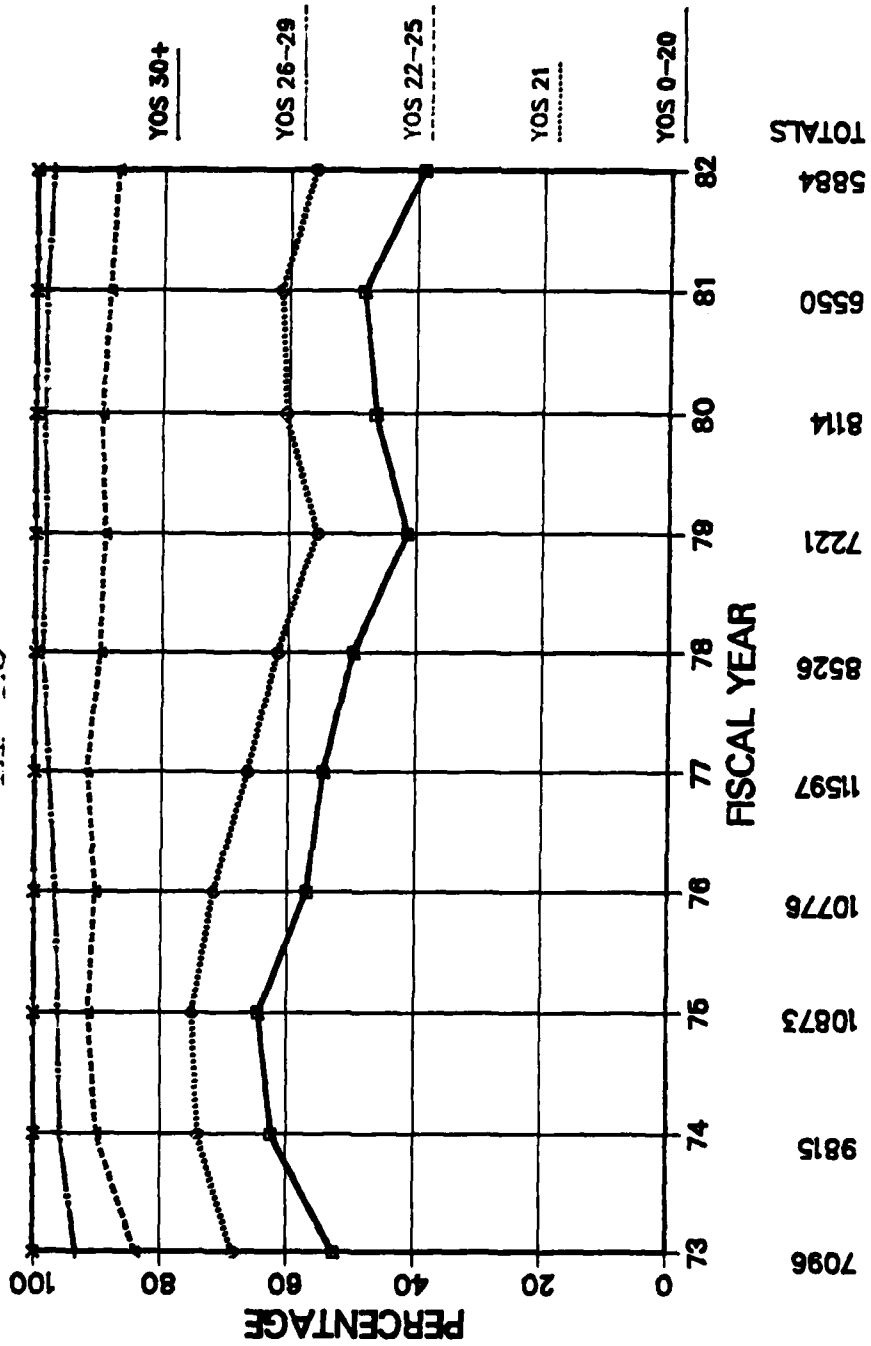


Figure G-27

NEW RETIREES BY FY --- YOS
 ACTIVE NON-DISABLED
 MARINE CORPS
 M1-59

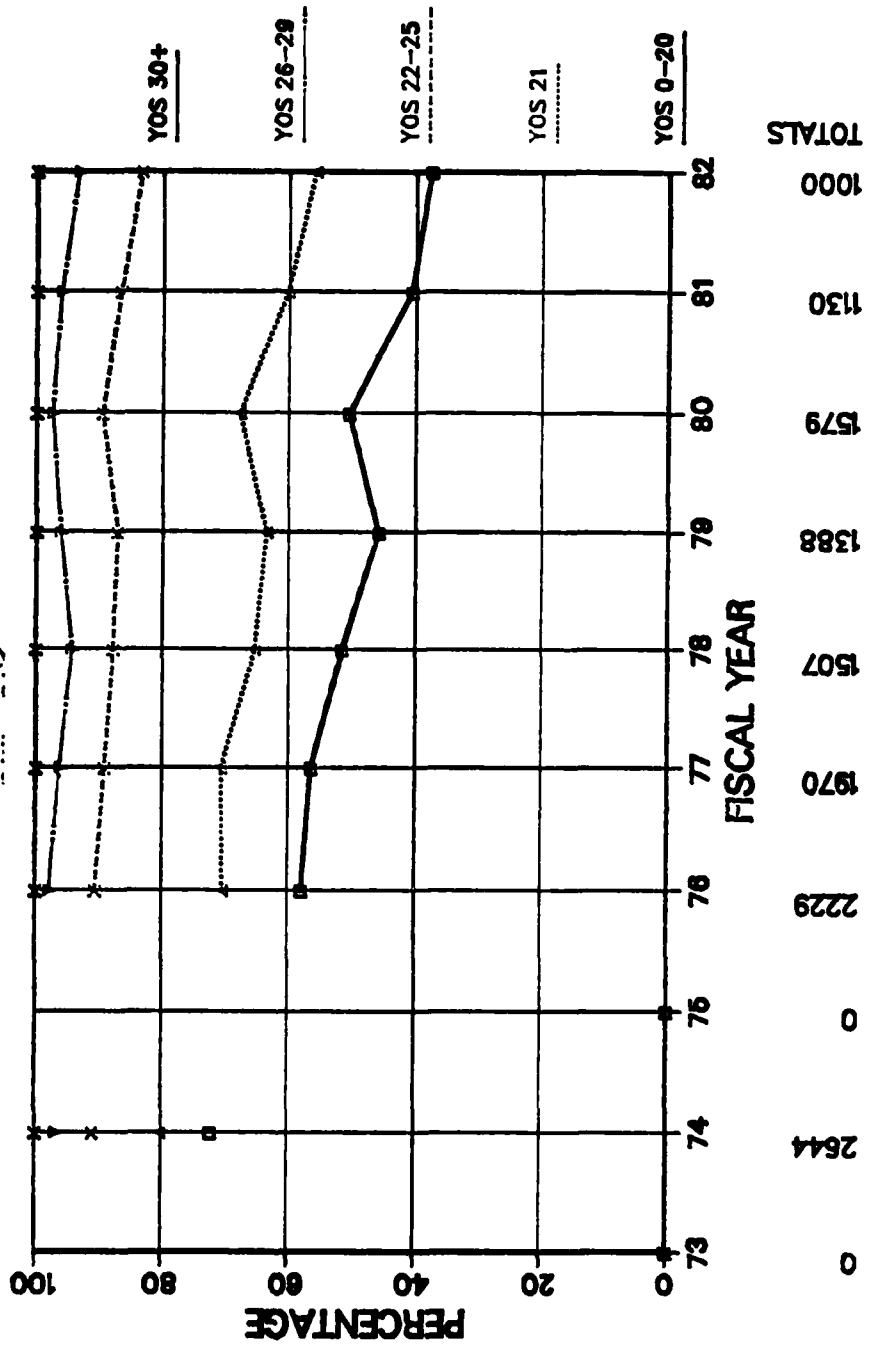


Figure G-28

NEW RETIREES BY FY -- YOS
ACTIVE NON DISABLED
AIR FORCE
E1-E9

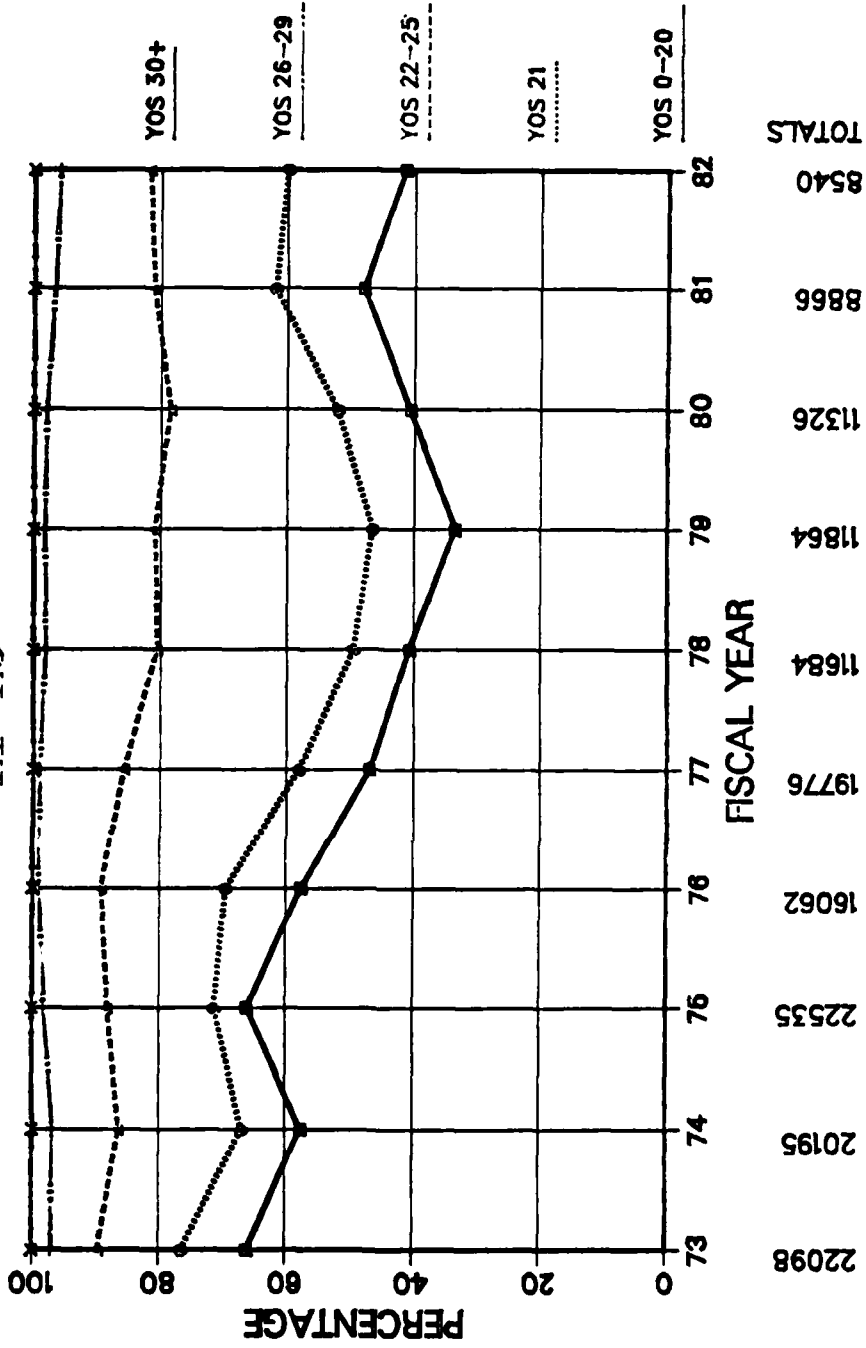


Figure G-29

NEW REVERMS BY FY - AGE

DOD WITH PARTICIPATION DISABLED

01-010

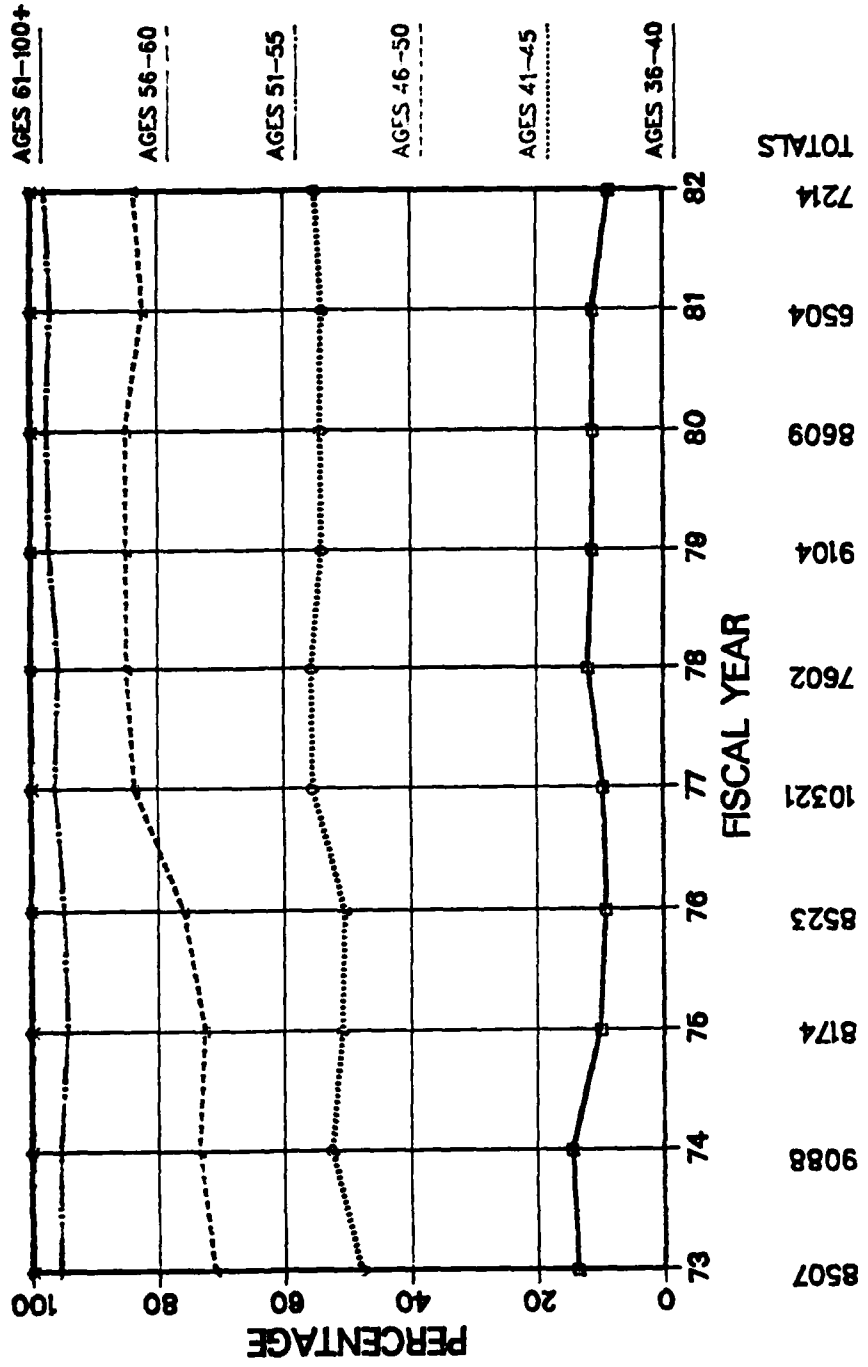


Figure G-30

NEW RECIPIENTS BY AGE
 DOD WIDOWS - ACTIVITY FOR DISABLED
 (C)

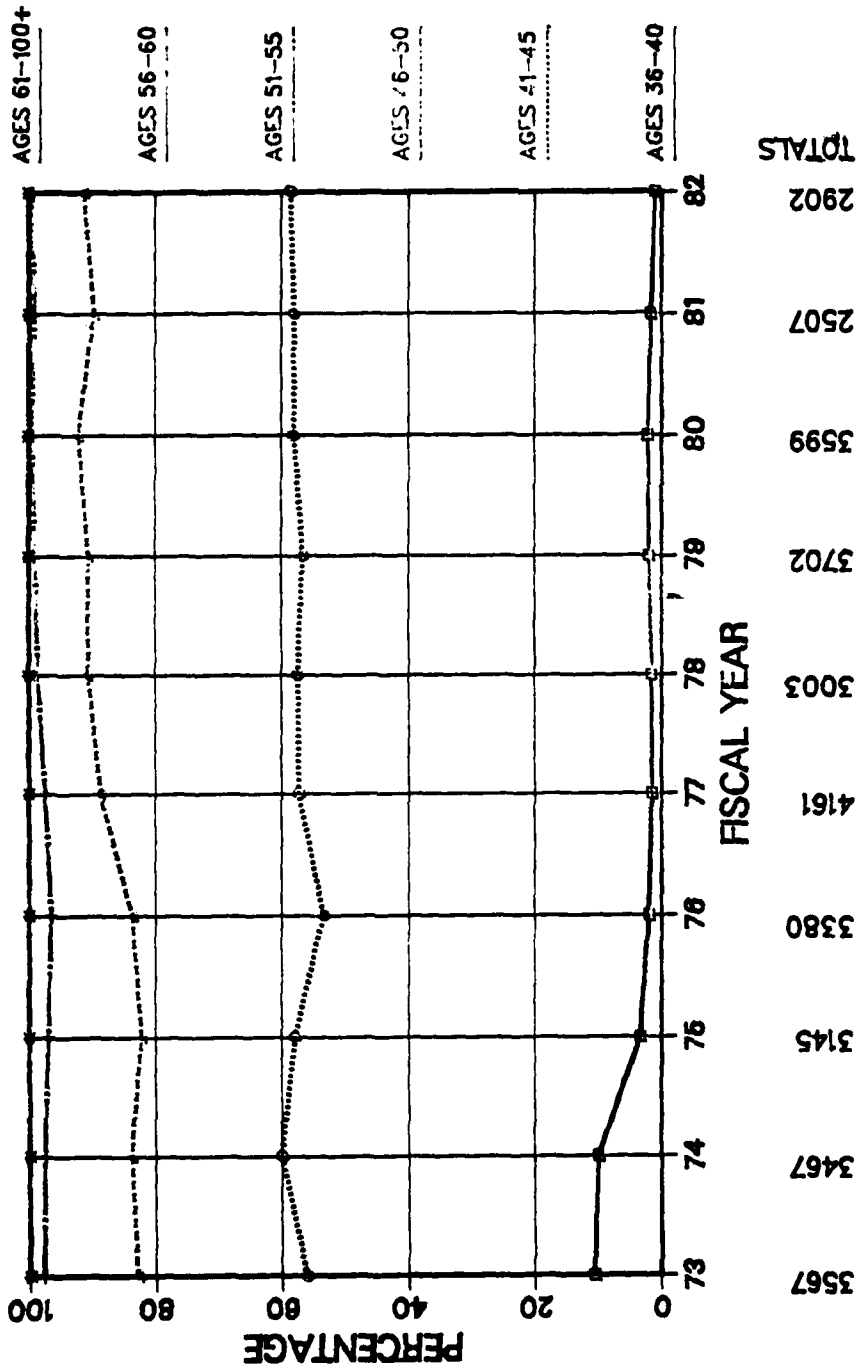


Figure G-31

NEW RETIREES BY FY - AGE
 DOD WIDE - ACTIVE NON-DISABLED
 W1-W4

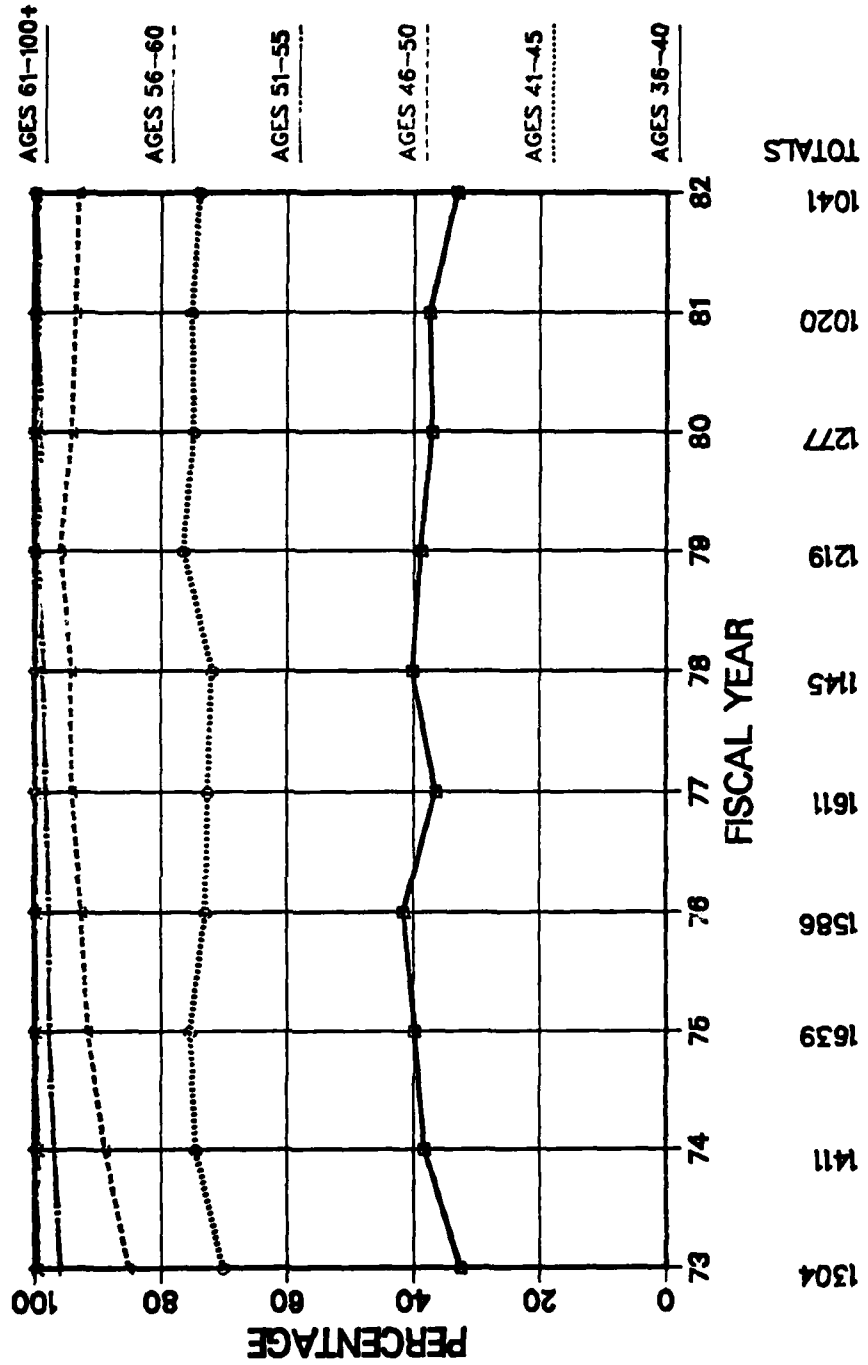


Figure G-32

NEW REFERREES BY FY -- ACM
 DOD WIDE -- ACTIVE NON-DISABLED
 M-FIG

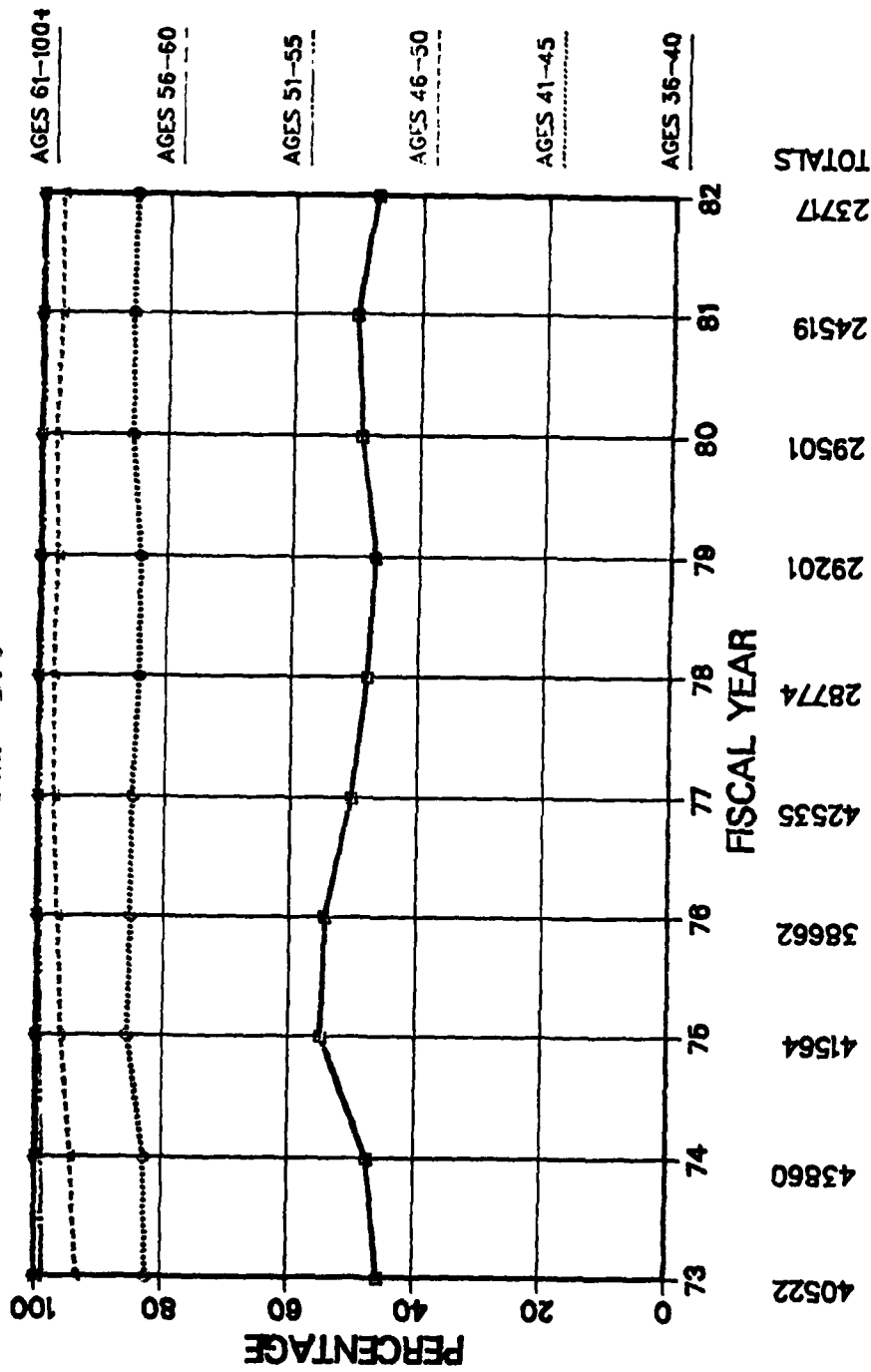


Figure G-33

NEW RETIREES BY FY --- AGE
 DOD WIDE -- ACTIVE NON DISABLED

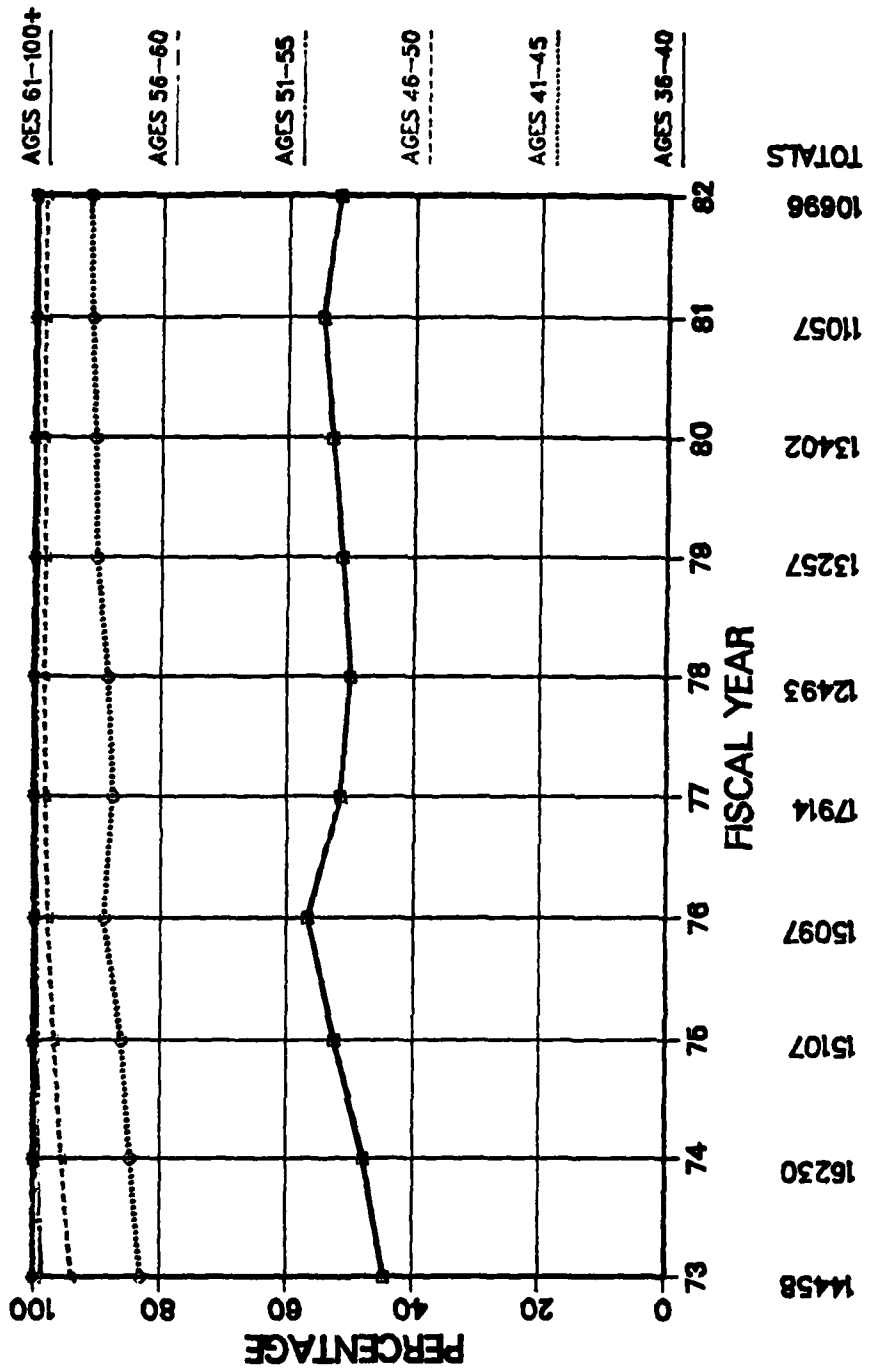


Figure G-34

NEW RETIREES BY FY -- AGE
ACTIVE NON-DISABLED
ARMY
01-010

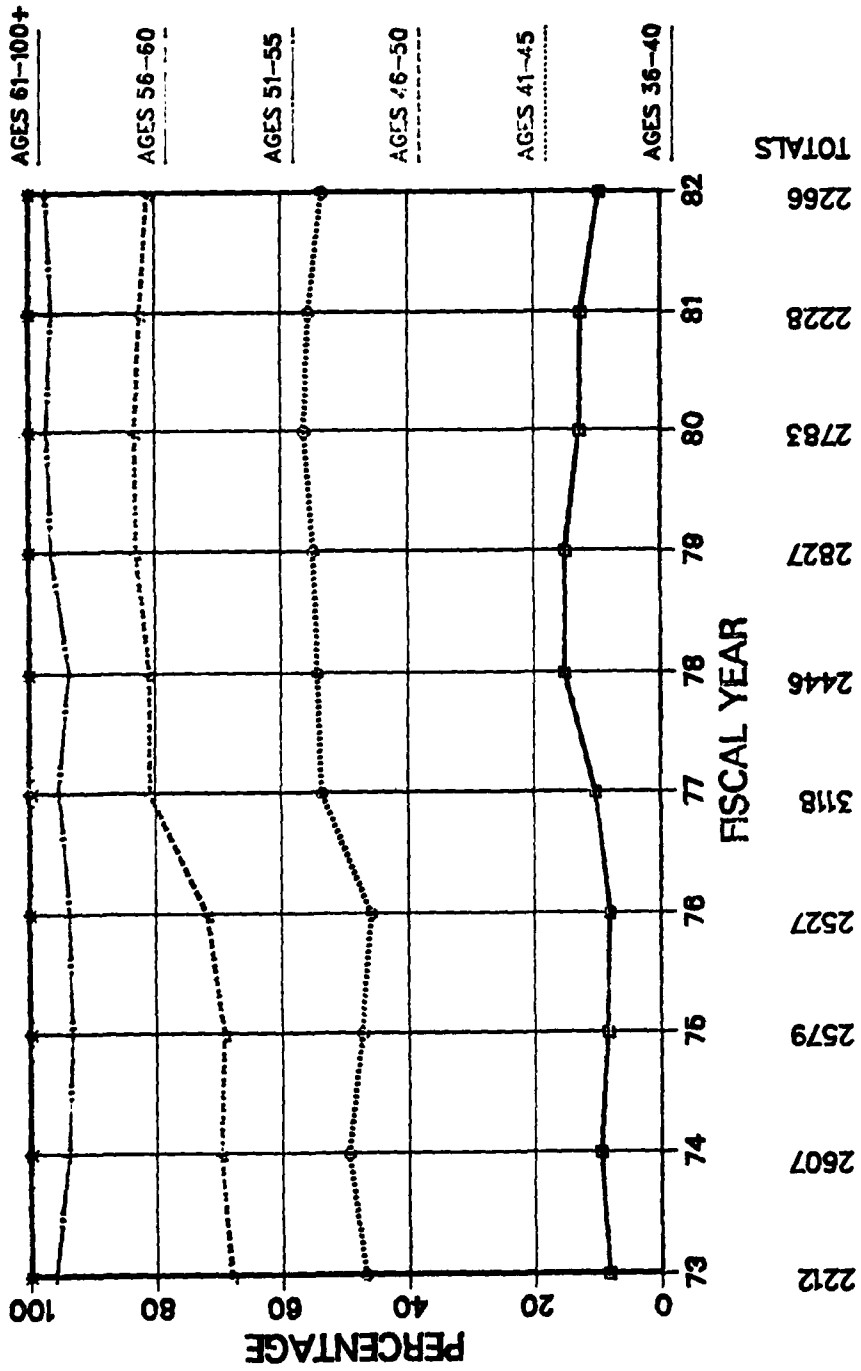


Figure G-35
 NEW RETIREES BY FY -- AGW
 ACTIVE NON-DISABLED
 NAVY
 01-010

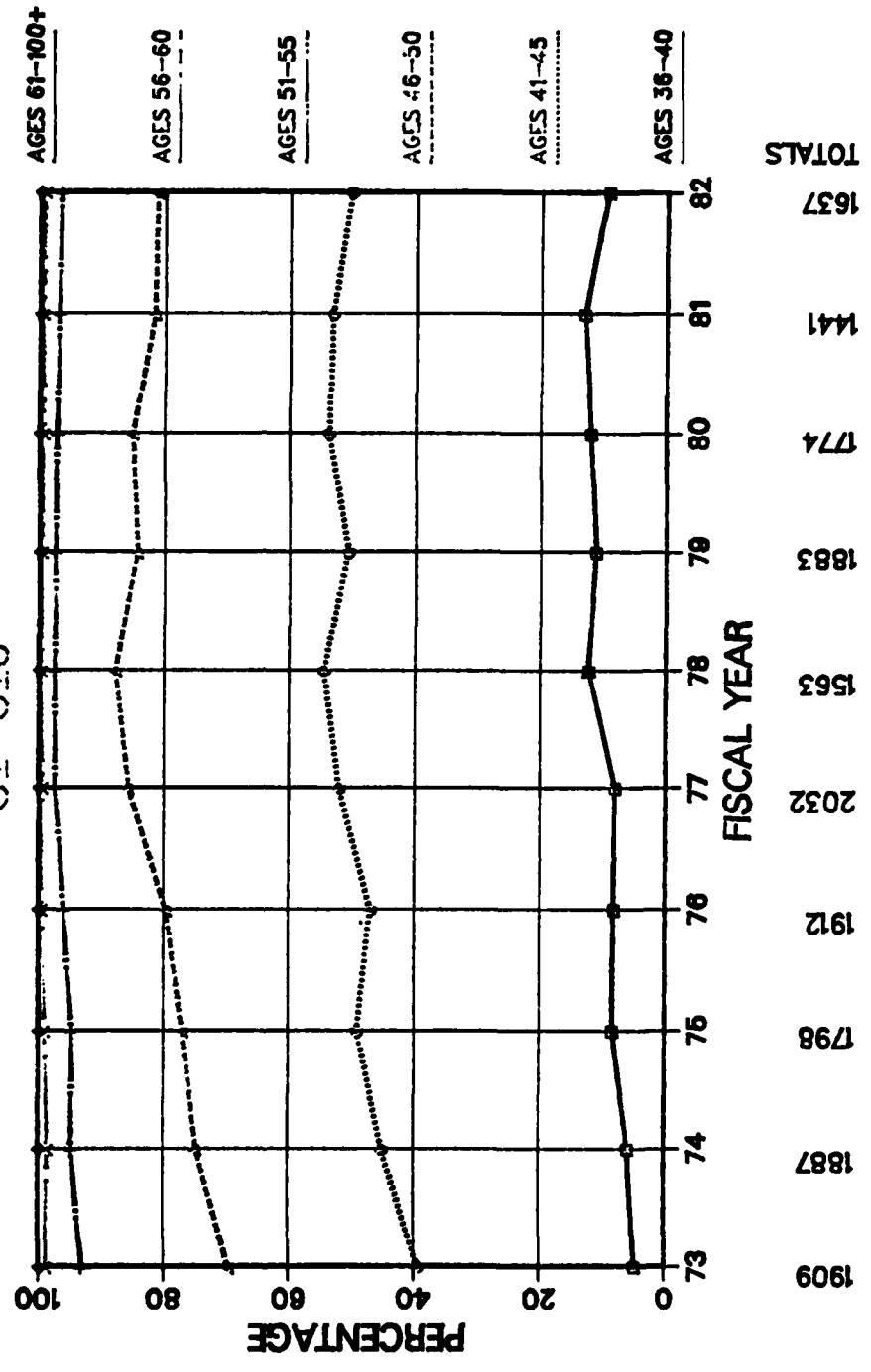


Figure G-36

NEW RETIREES BY FY -- AGE
ACTIVE NON DISABLED
AIR FORCE
01-010

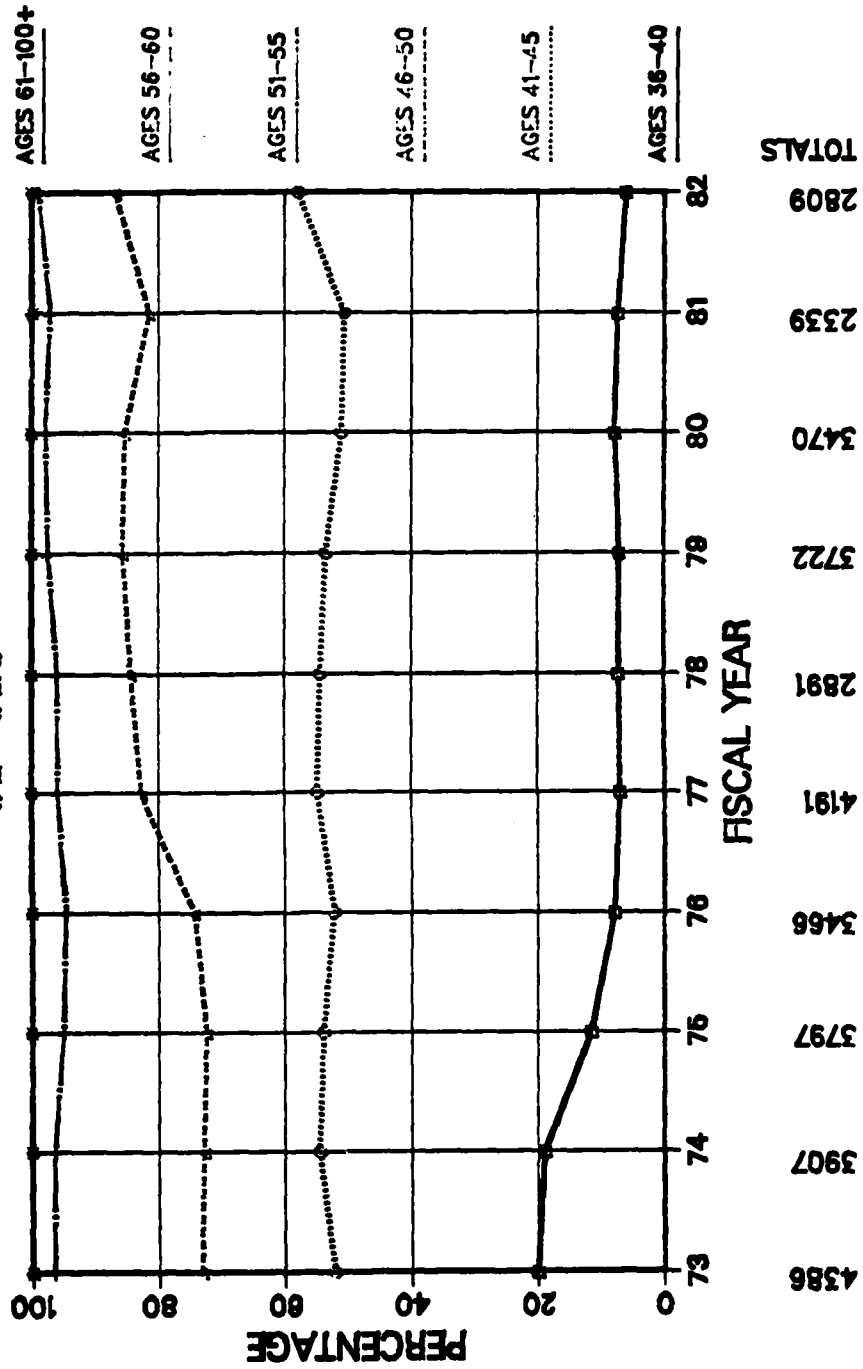


Figure G-37

NEW RETIREES BY FY --- AGE
 ACTIVE NON-DISABLED
 MARINE CORPS
 01-010

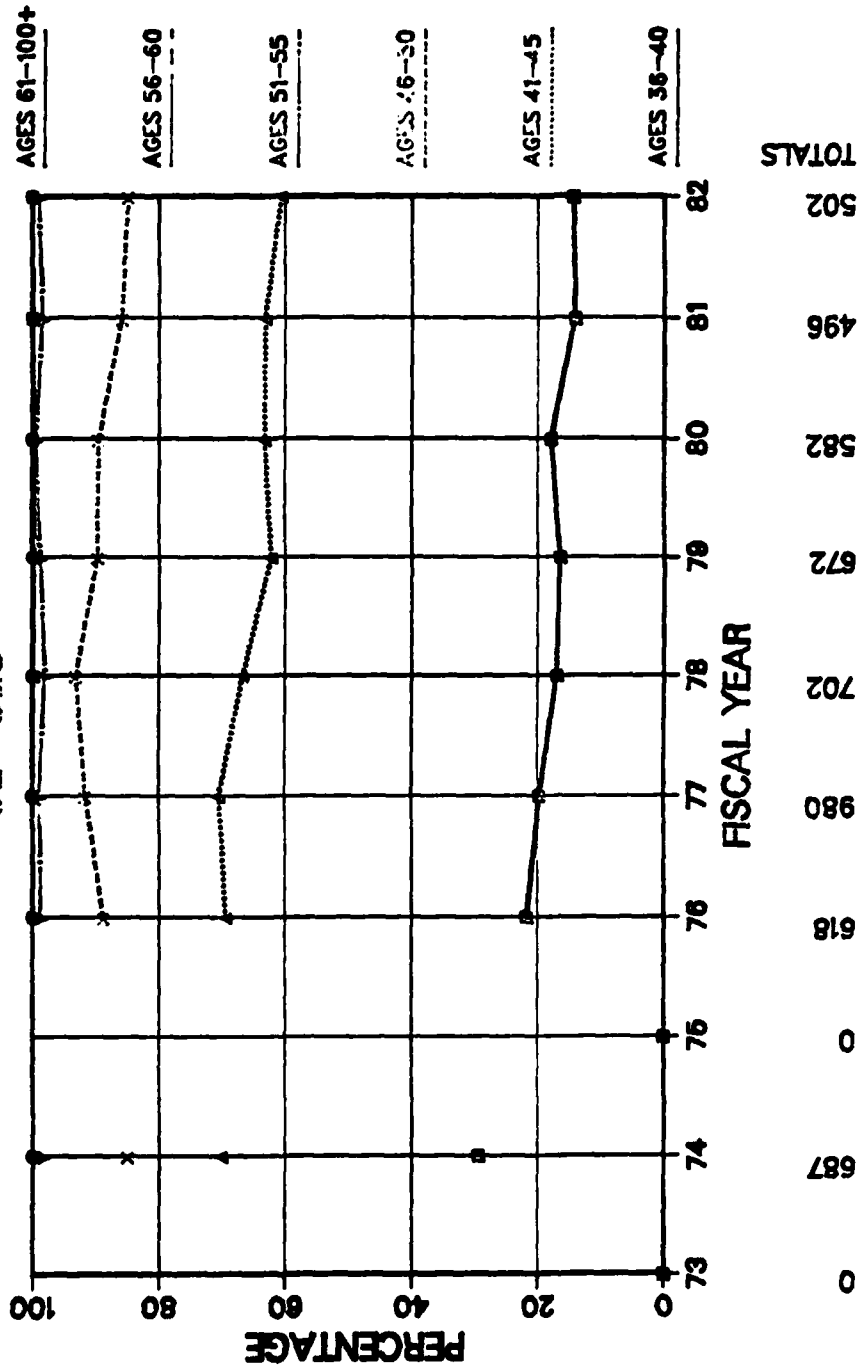
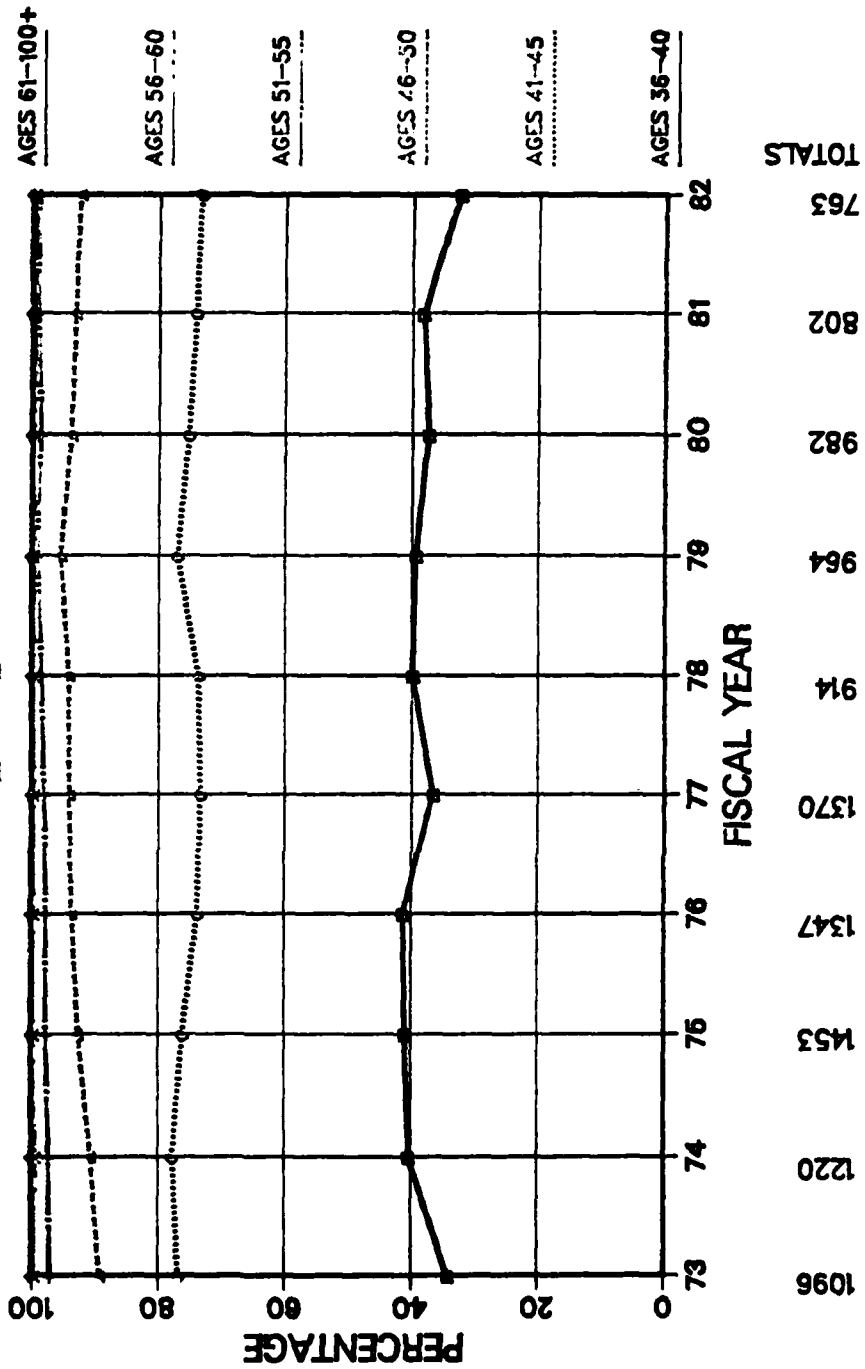


Figure G-38

NEW RETIREES BY FY AND AGE
 ACTIVE NON-DISABLED
 ARMY
 W1-W4



TOTALS
 763
 802
 982
 964
 914
 1370
 1347
 1453
 1220
 1096

Figure G-39

NEW RETIREES BY FY · AGE
ACTIVE NON DISABLED
NAVY
W1-W4

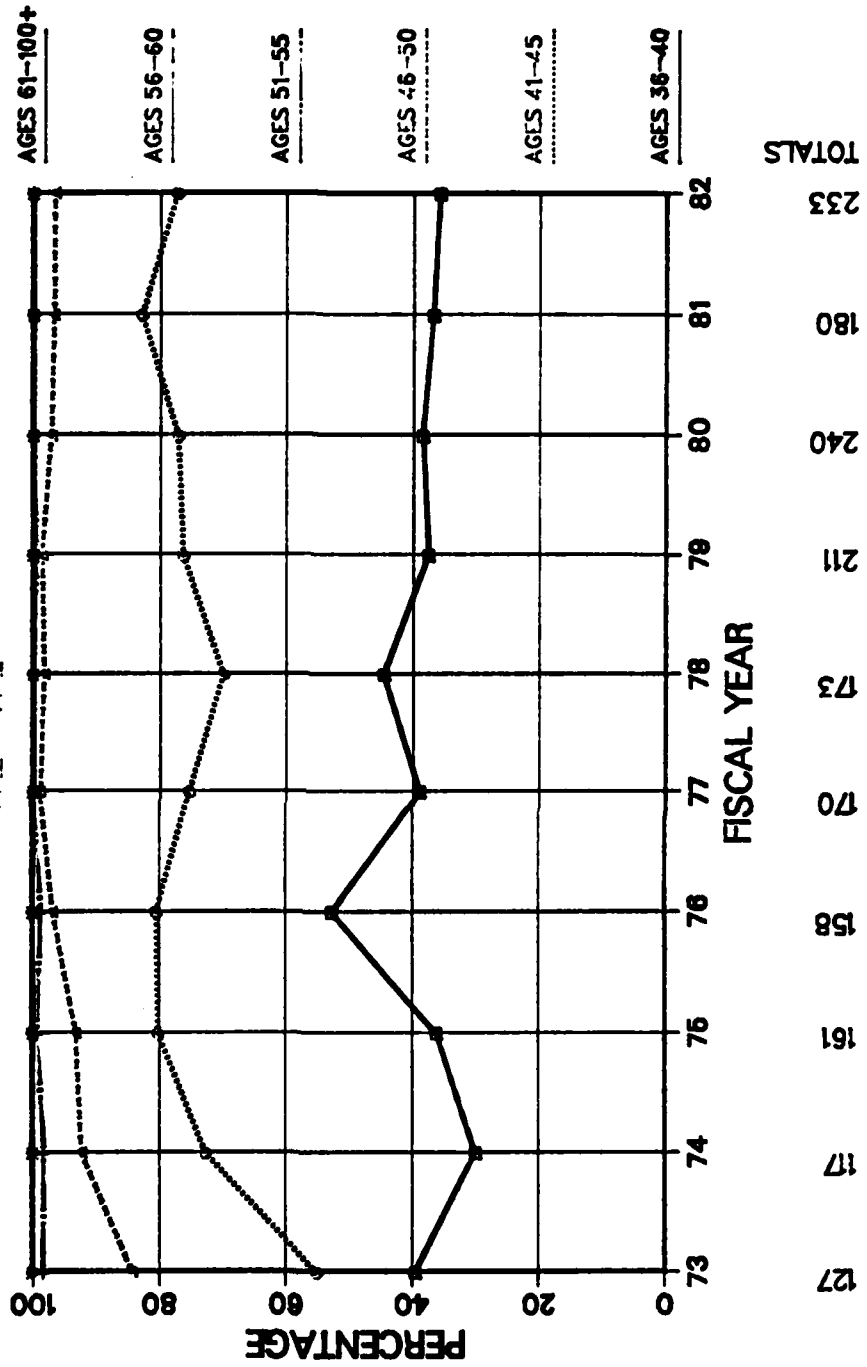


Figure G-40

NEW RETIREES BY FY AND AGE
 ACTIVE NON-DISABLED
 SEAFARING CORPS
 W1-W4

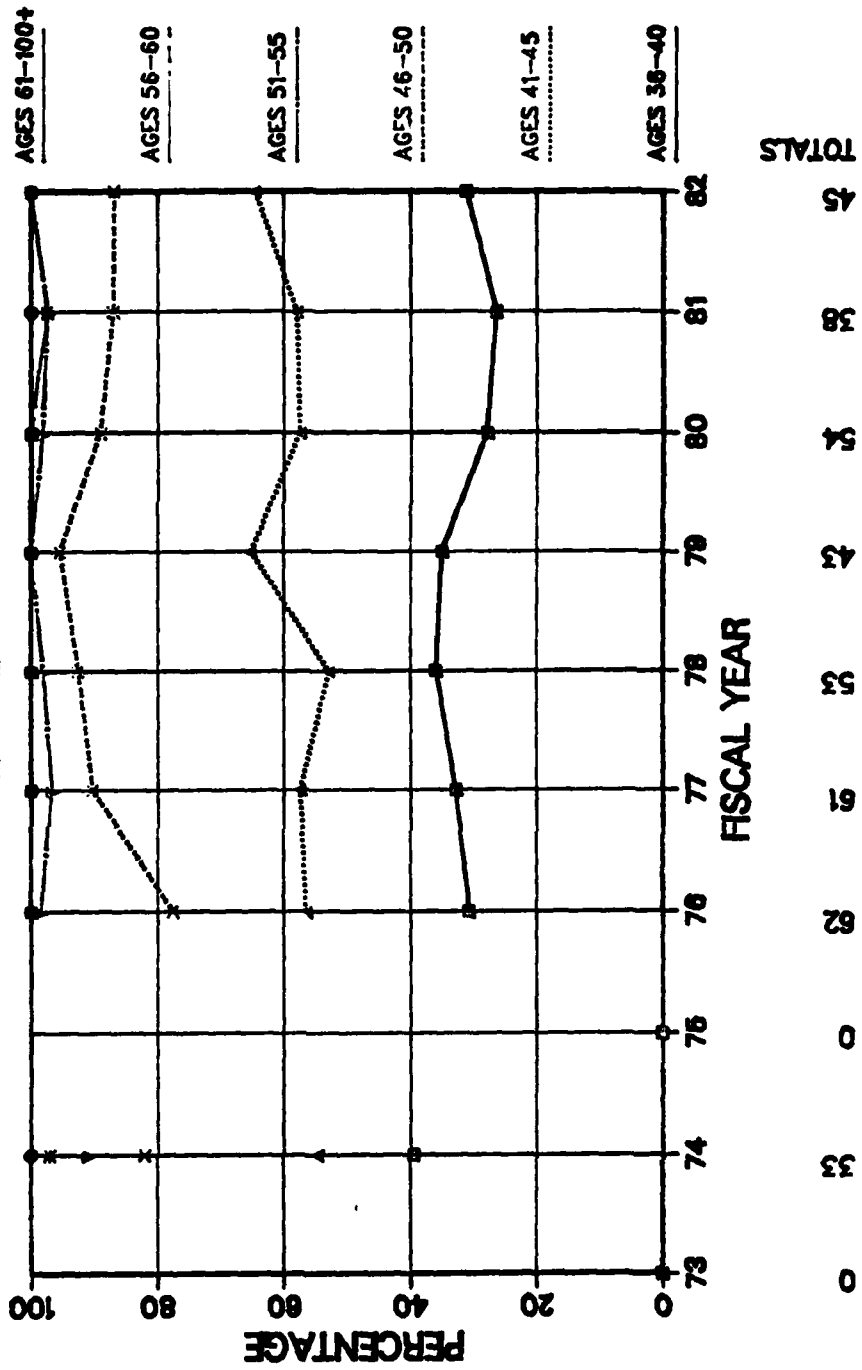


Figure G-41

NEW RETIREES BY FY - AGE
ACTIVE NON-DISABLED
ARMY
M-89

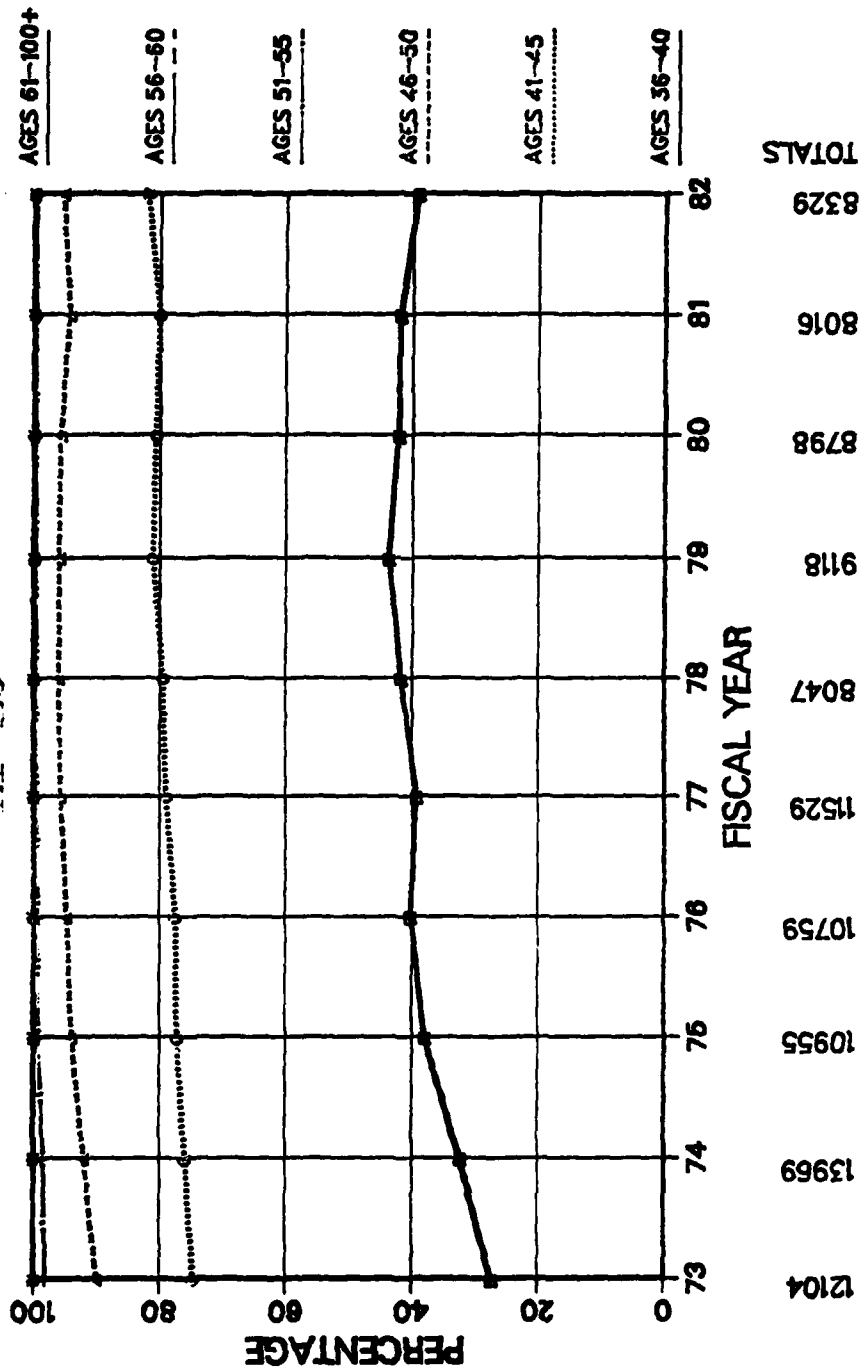


Figure G-42

NEW REQUIRES BY FY -- AGW
 ACTIVE NON-DISABLED
 NAVY
 FY 1969

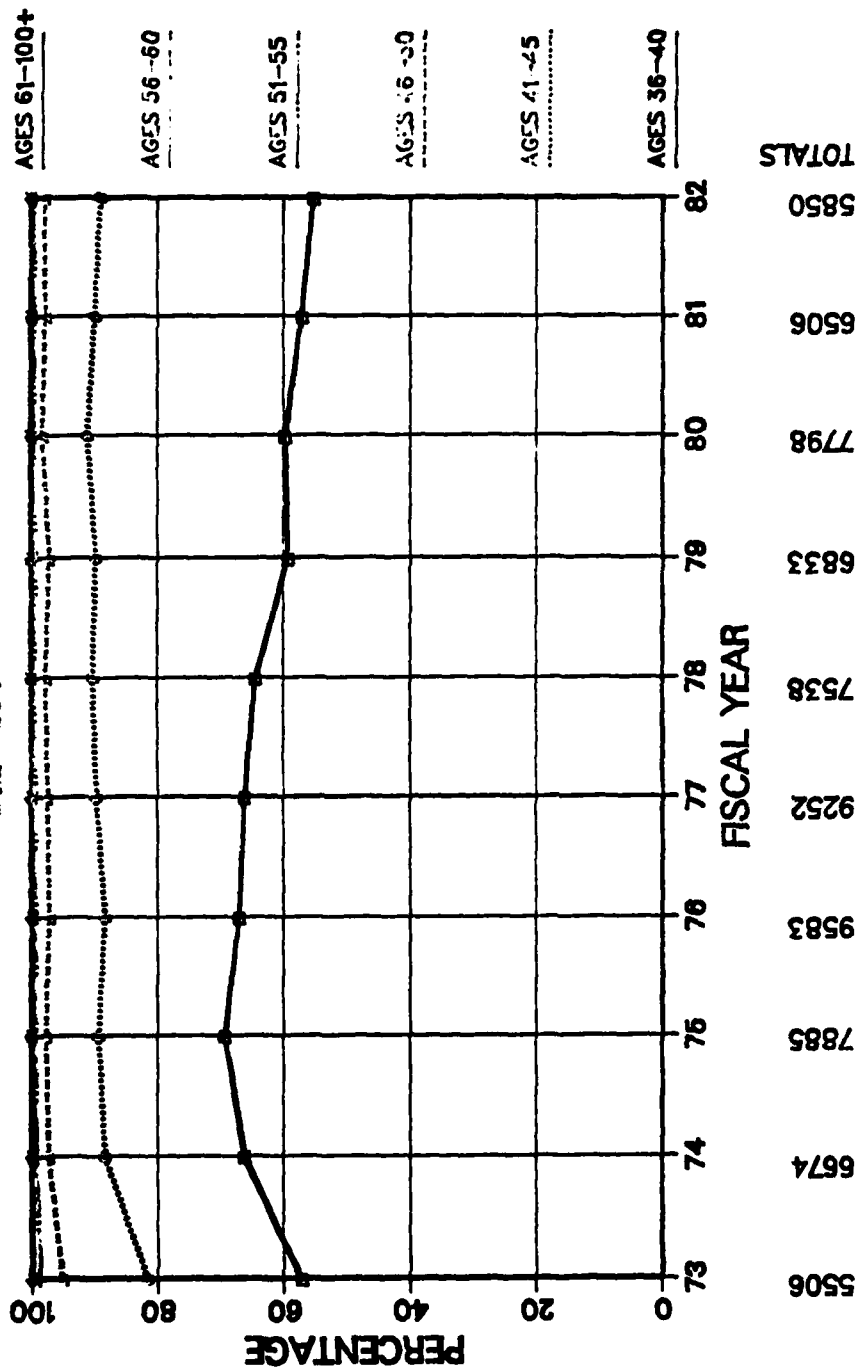


Figure G-43

NEW RETIREES BY FY -- AGE
 ACTIVE NON-DISABLED
 MARINE CORPS
 1973-1982

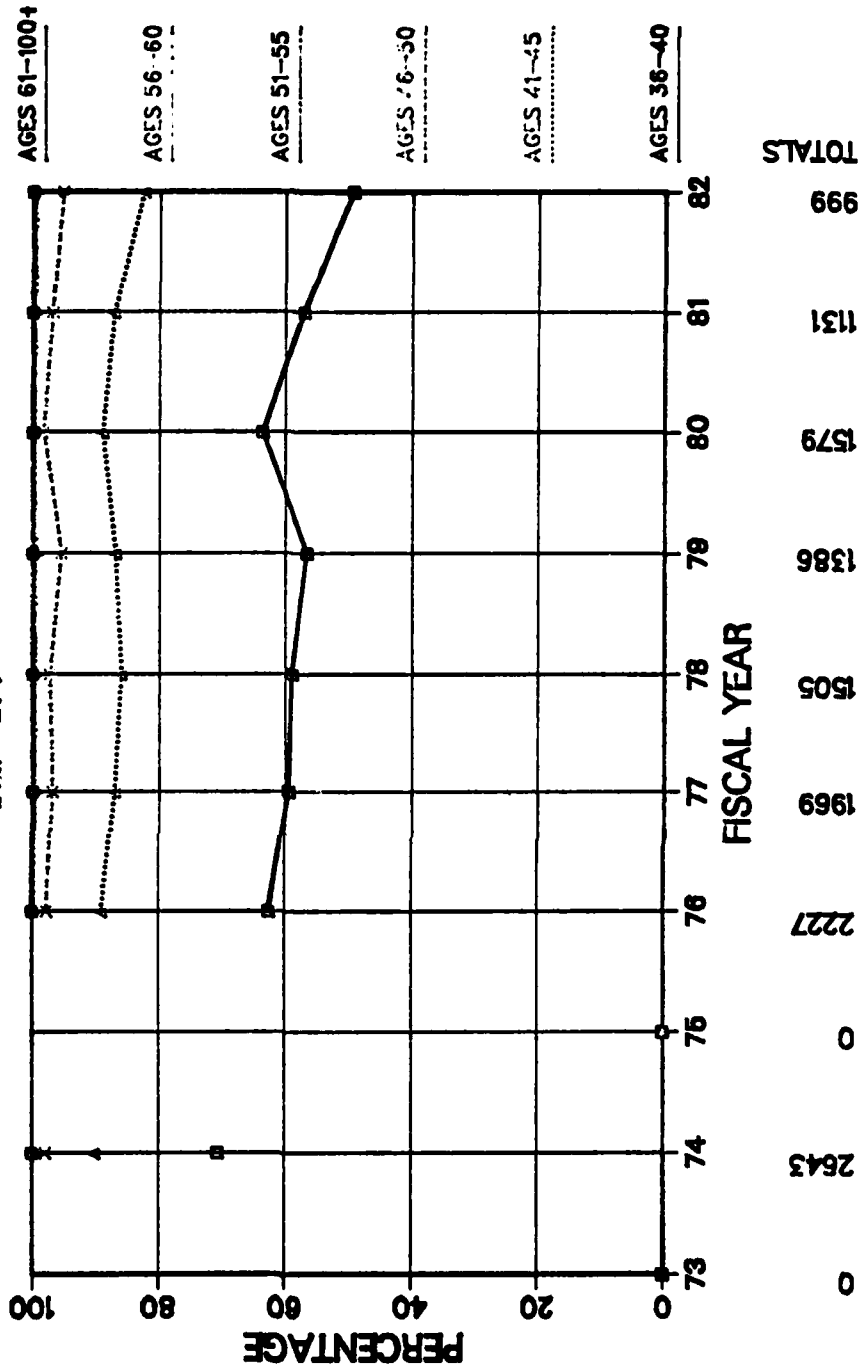


Figure G-44

NEW RETIREES BY FY -- AGE
ACTIVE NON-DISABLED
AIR FORCE
M-79

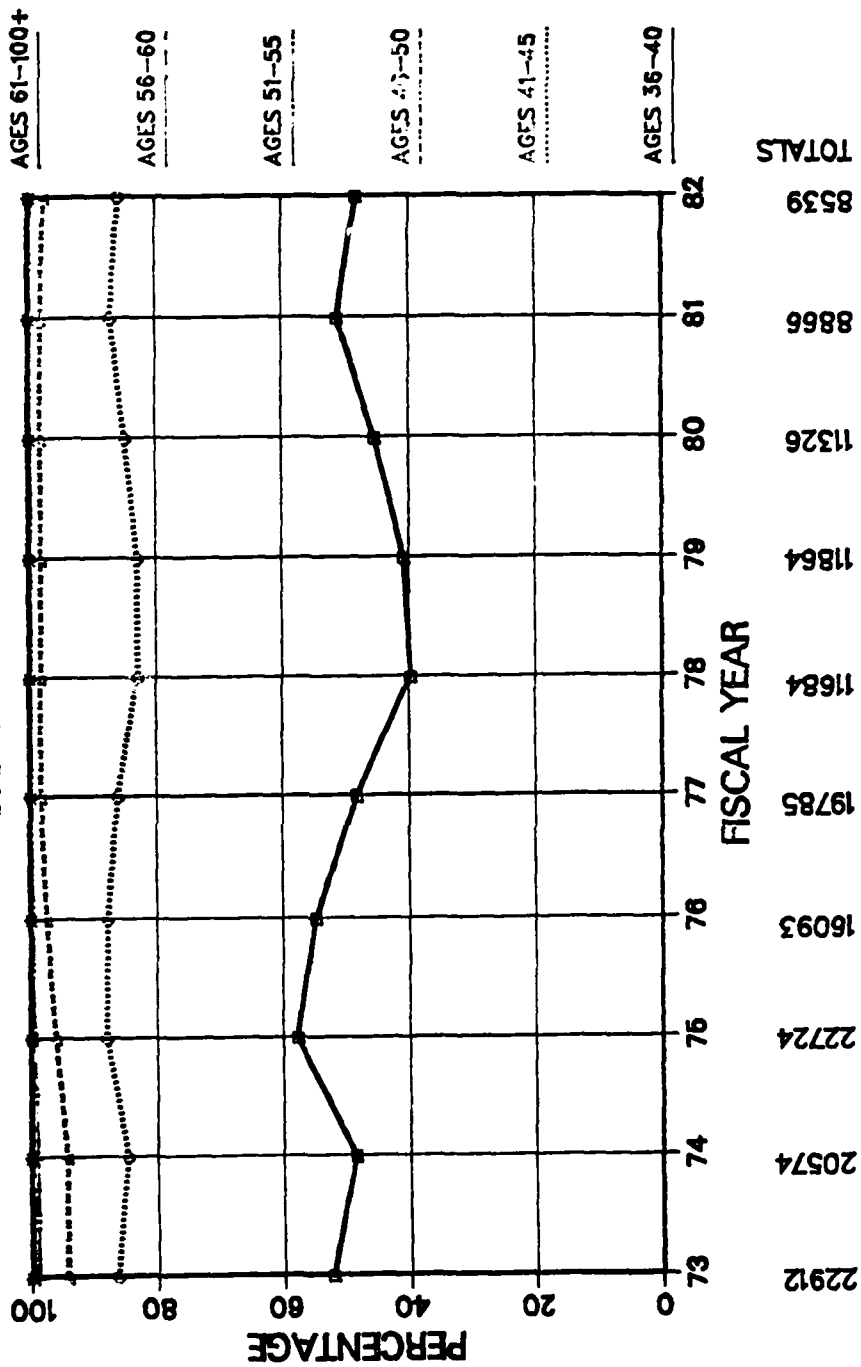


Figure G-45
AGE DISTRIBUTION OF RETIREES (HUNDREDS)
 DISABLED AND NONDISABLED ACTIVE AND RESERVE
 YEAR=1949

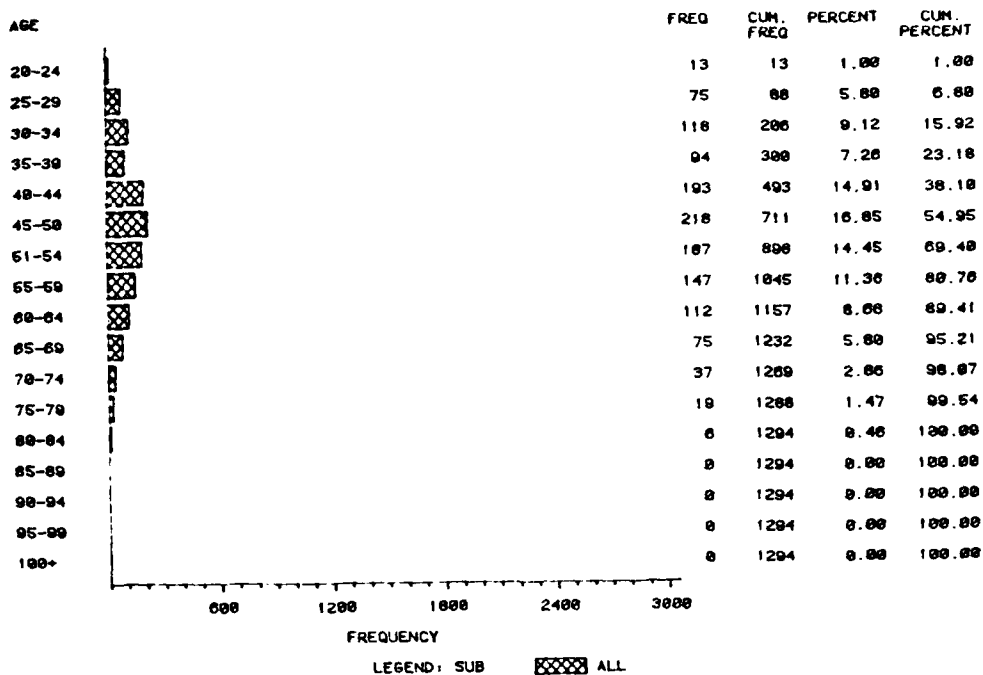


Figure G-46
AGE DISTRIBUTION OF RETIREES (HUNDREDS)
 DISABLED AND NONDISABLED ACTIVE AND RESERVE
 YEAR=1969

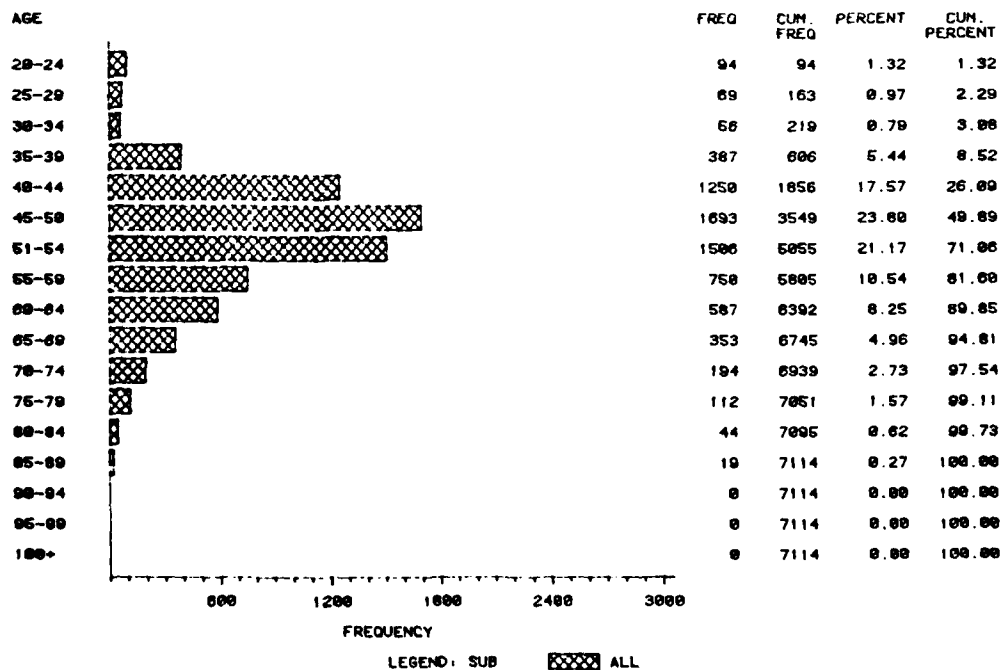


Figure G-5
AGE DISTRIBUTION OF RETIREES (HUNDREDS)
 DISABLED AND NONDISABLED ACTIVE AND RESERVE
 YEAR=1970

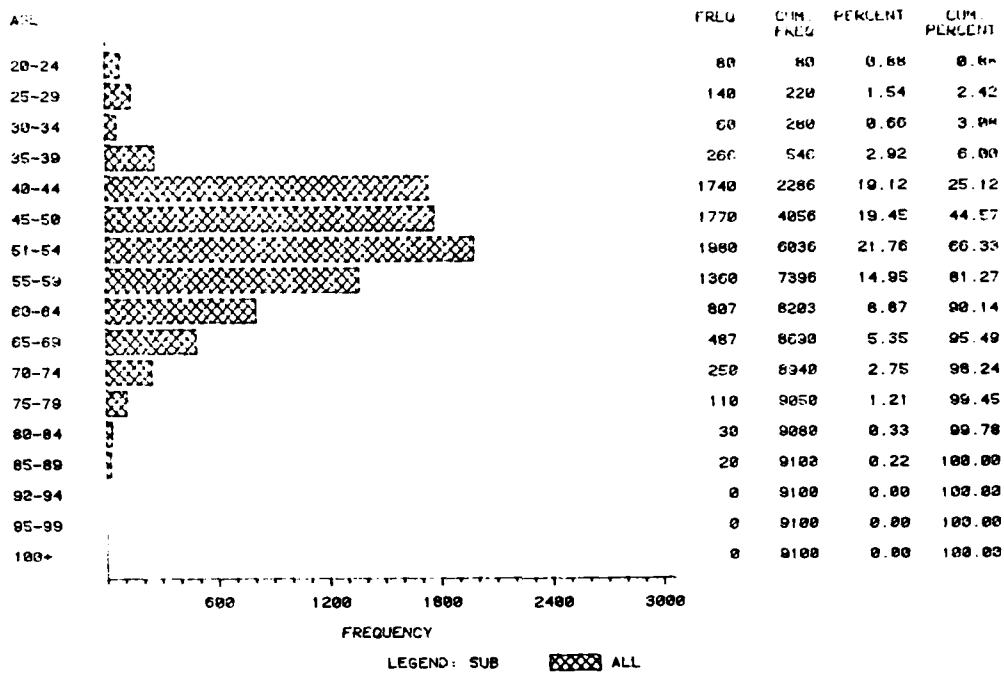


Figure G-6
AGE DISTRIBUTION OF RETIREES (HUNDREDS)
 DISABLED AND NONDISABLED ACTIVE AND RESERVE
 YEAR=1970

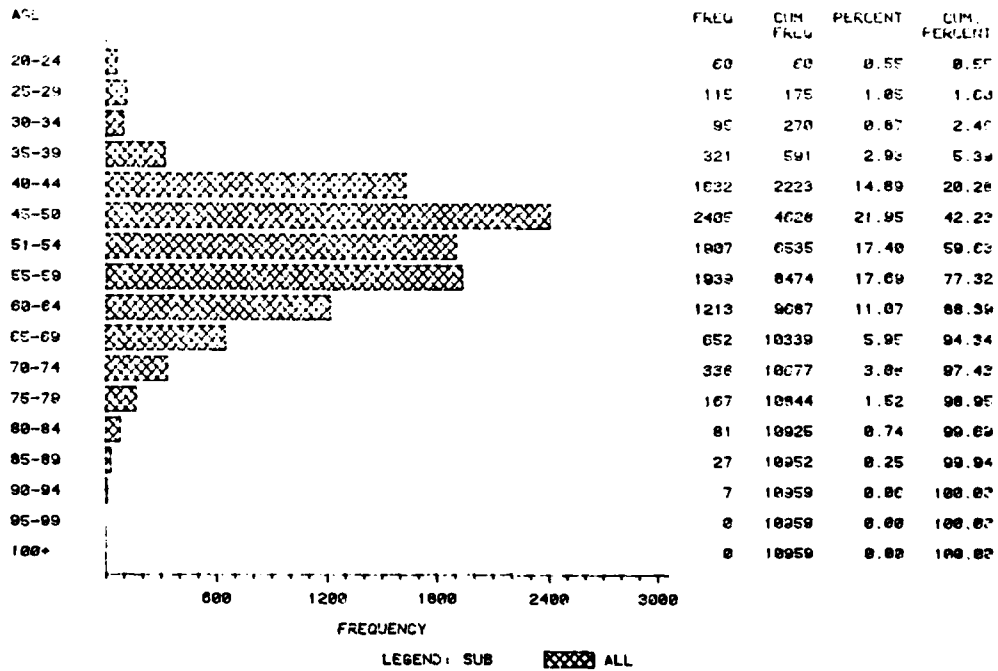


Figure G-49
AGE DISTRIBUTION OF RETIREES (HUNDREDS)
 DISABLED AND NONDISABLED ACTIVE AND RESERVE
 YEAR=1962

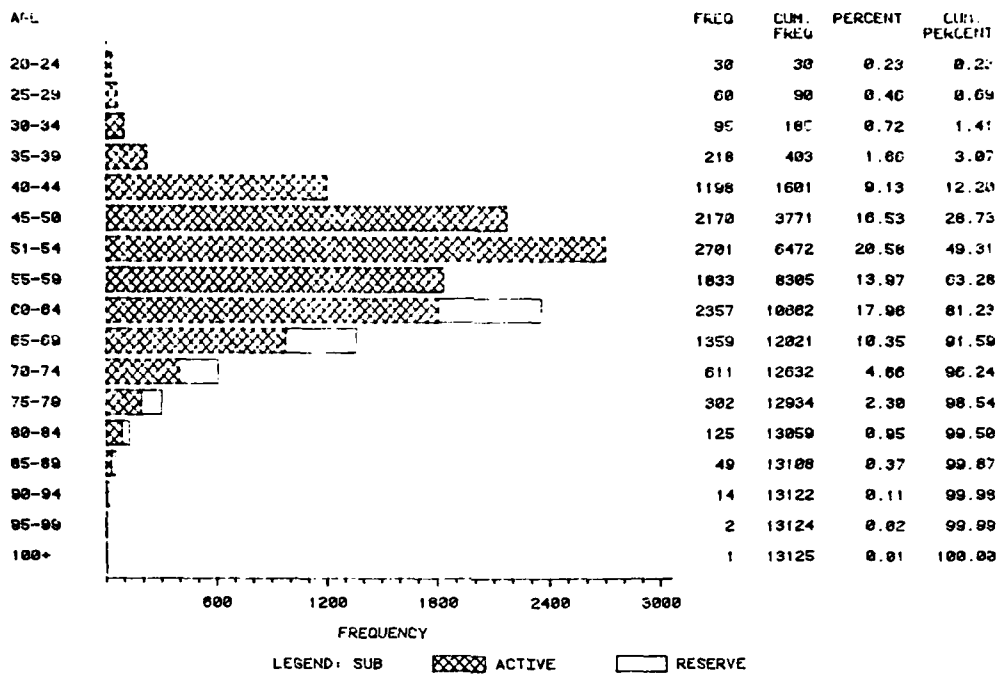


Figure G-50
AGE DISTRIBUTION OF RETIREES (HUNDREDS)
 DISABLED AND NONDISABLED ACTIVE AND RESERVE
 YEAR=2004

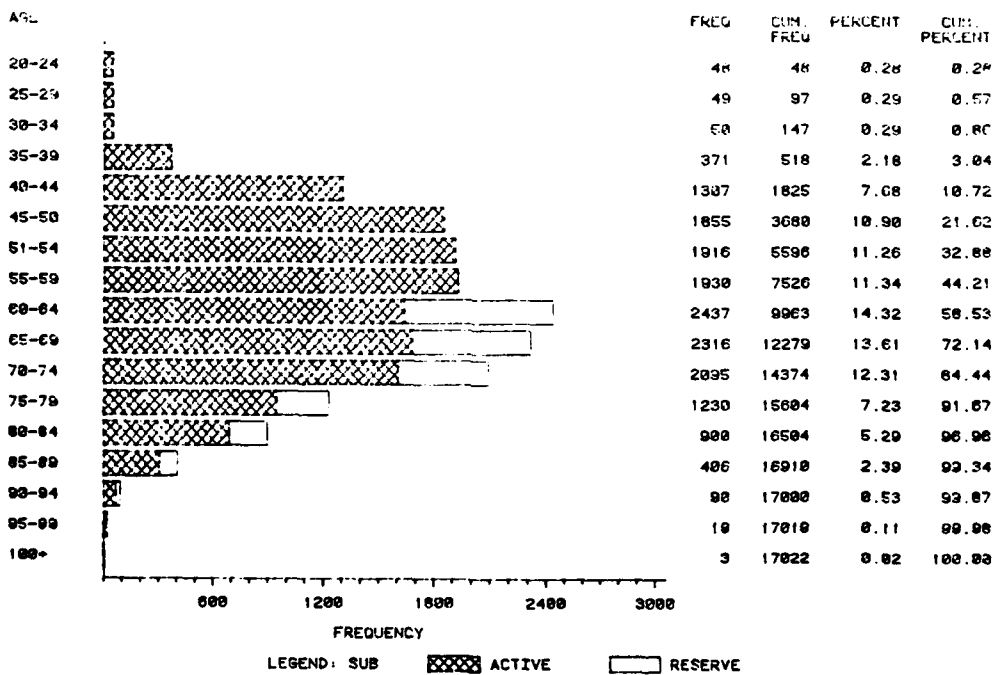


Figure 10-1
AGE DISTRIBUTION OF RETIREES (HUNDREDS)
 OF TABLED AND NOT TABLED ACTIVE AND RESERVE
 YEAR-2001

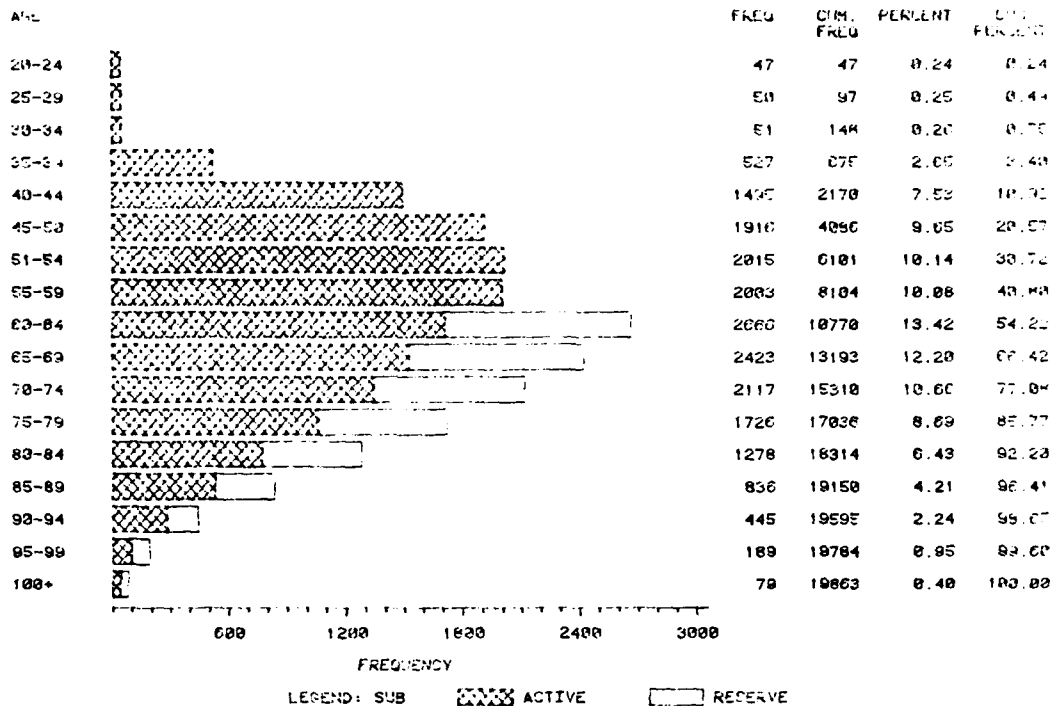


Table G-1
 END FY 1953 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	25172	853669	11993	625504	1605	87242	10572	97745	1002	43178
2	32862	769333	13234	328075	7887	158822	10065	179960	1696	102476
3	32671	603553	11451	162746	7784	185788	11652	220844	1784	34175
4	18207	150555	4823	27669	4540	40801	7436	72674	1408	9411
5	18660	123653	5108	44945	3022	29538	9359	41954	1171	7216
6	21756	115819	6389	36707	3215	37539	11192	34128	960	7445
7	20112	83543	7702	28898	3035	22459	8624	27432	751	4754
8	19013	73012	8556	28261	3093	18483	6756	22470	608	3798
9	15035	66818	6807	25379	2930	20493	4756	17891	542	3055
10	19020	59224	8160	23134	3358	16159	7014	16862	488	3089
11	32022	69984	12358	27554	7170	18474	11210	21502	1284	2454
12	28256	51561	11630	15024	5890	14619	9183	19666	1553	2252
13	27084	42253	12718	12657	4860	15956	8370	11719	1136	1921
14	11761	24367	4939	5666	2653	9784	3524	7584	645	1333
15	7298	15326	3043	3779	2052	6409	1686	4316	517	822
16	5990	10666	2437	3342	1906	3994	1194	2541	453	789
17	5606	12395	2082	3028	1856	6338	1242	2461	426	568
18	6136	8780	2500	2563	2387	3794	868	1977	381	446
19	4220	6639	1756	1598	1614	3163	511	1513	339	365
20	3467	4590	1236	1433	1564	1691	425	1210	242	256
21	2742	3253	1182	1177	966	1262	461	706	133	108
22	2569	1916	892	647	1218	732	347	444	112	93
23	2482	1908	730	943	1153	536	459	323	140	106
24	2395	1776	832	791	1128	648	273	242	162	95
25	2380	1210	770	671	1044	267	435	202	131	70
26	2154	1545	748	680	932	588	339	222	135	55
27	1903	899	573	356	939	254	268	242	123	47
28	1148	837	392	453	484	165	185	182	87	37
29	1307	543	601	296	432	128	187	101	87	18
30	977	477	400	242	446	90	72	121	59	24
>30	2294	897	1243	484	568	159	308	222	175	32
SUM->	376719	3161001	147285	1414702	81731	706375	128973	809456	18730	230488

ESTIMATED FIRST YEAR ACCESSIONS

33000	906801	12500	643655	4000	88050	12100	134325	1400	40771
-------	--------	-------	--------	------	-------	-------	--------	------	-------

Table G-2
 END FY 1954 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER	ENLISTED	OFFICER	ENLISTED	OFFICER	ENLISTED	OFFICER	ENLISTED	OFFICER	ENLISTED
1	26766	603650	9150	292463	5582	88116	10506	128870	1532	94201
2	29627	955848	12481	620386	3707	156043	12042	146032	1397	33387
3	21745	377845	6090	79568	5553	127853	8489	135543	1613	34881
4	21947	249894	4578	35411	7223	57230	8131	146244	2015	11009
5	14726	94224	4058	27474	2899	20711	6902	41340	867	4699
6	14885	79501	4116	34168	2300	16267	7762	25611	707	3455
7	17550	85728	5090	26278	2781	25345	9033	29934	646	4171
8	17266	67445	6695	22144	2304	17330	7743	24759	524	3212
9	16282	66435	7672	23189	1771	17169	6385	22612	454	2835
10	12919	56722	6143	20968	1739	17079	4636	16397	401	2278
11	16654	54559	7226	20068	2394	15494	6681	16743	353	2254
12	29946	64172	11059	23139	7244	17429	10327	21789	1318	1815
13	26702	46980	10179	13399	5638	14012	9302	17905	1583	1664
14	26558	41375	12304	11178	4679	16203	8452	12568	1123	1426
15	10995	22016	4458	5217	2267	9044	3647	6727	623	1028
16	6639	12730	2791	3535	1746	5139	1594	3403	499	653
17	5835	10728	2296	3034	1817	4457	1285	2626	437	611
18	5989	12441	2323	2770	2007	6561	1238	2666	421	444
19	5905	8242	2460	2286	1295	3550	775	2052	375	354
20	3322	4434	1257	1279	1339	1725	400	1176	326	254
21	3747	4886	1393	1410	1618	1906	498	1417	238	153
22	2288	2106	836	908	926	714	404	383	122	101
23	2213	1292	696	453	1084	460	326	301	107	78
24	2107	1443	592	656	1041	415	343	309	131	63
25	2177	1401	712	611	1055	485	253	247	157	58
26	2161	1140	752	525	963	385	327	283	119	50
27	1769	1202	533	521	849	282	270	255	117	41
28	1644	779	470	243	822	245	234	261	118	30
29	967	735	276	365	438	151	166	192	87	27
30	1260	415	574	190	431	138	184	72	71	15
>30	1210	852	247	337	768	110	83	377	112	28
SUM->	353801	2931220	129507	1274173	76280	642048	128418	809094	18593	205275

ESTIMATED FIRST YEAR ACCESSIONS

30000	594159	9200	358698	5600	54917	11500	108126	1700	72418
-------	--------	------	--------	------	-------	-------	--------	------	-------

Table G-3
 END FY 1955 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD			ARMY			NAVY			USAF			USMC		
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	39458	558584	16424	270503	6563	104027	15425	158247	1046	25807					
2	27421	625967	9002	294662	5527	96016	11200	141759	1692	93530					
3	20552	371956	5581	133130	3178	115013	10256	108363	1537	15450					
4	15970	194804	2607	22233	5492	51375	6078	105855	1793	15341					
5	18135	154703	4138	38973	4271	28190	8175	80196	1551	7434					
6	11438	59825	3078	22007	2402	10582	5384	24211	574	3025					
7	12073	61340	3259	26606	2013	11123	6286	21007	515	2604					
8	15328	77558	4419	22706	2204	21500	8199	29527	506	3825					
9	15236	63849	5986	20632	1472	15569	7371	24396	407	3252					
10	14450	62423	6822	22407	1166	15850	6114	21305	348	2861					
11	11526	53836	5391	19718	1391	16198	4394	15677	350	2243					
12	15296	53426	6310	19298	2282	15270	6368	16597	336	2261					
13	28539	63962	9807	23169	7237	17415	10181	21546	1314	1832					
14	25989	46580	9317	13939	5485	13850	9626	17096	1561	1695					
15	25790	40476	11566	11795	4215	15335	8921	11565	1086	1521					
16	10965	21292	4189	5483	1989	8560	3793	6080	594	1129					
17	6485	12613	3568	3642	1680	5054	1623	3219	475	698					
18	5928	11122	2348	3052	1857	4641	1301	2771	422	658					
19	5904	12552	2307	2741	2009	6419	1184	2906	404	486					
20	4571	6329	1692	2263	1926	2083	597	1642	356	341					
21	3514	4830	1309	1445	1449	1883	440	1294	316	208					
22	3209	3352	1039	1197	1442	1128	506	872	222	155					
23	1883	1502	602	745	812	420	327	247	112	90					
24	1920	1046	566	390	992	337	264	266	98	53					
25	1878	1307	514	584	969	342	274	333	121	48					
26	1937	1281	619	563	970	395	205	272	143	51					
27	1857	1079	616	503	866	221	269	311	106	44					
28	1493	1125	395	503	750	309	236	281	112	32					
29	1401	744	329	217	743	226	214	275	115	26					
30	867	592	198	260	437	165	163	137	69	30					
>30	1351	709	299	293	738	168	180	225	134	23					
SUM->	352364	2570704	124297	985659	74527	579864	135584	818478	18415	186753					

ESTIMATED FIRST YEAR ACCESSIONS

40000	655459	16500	334966	6600	121411	16000	171962	1200	27120
-------	--------	-------	--------	------	--------	-------	--------	------	-------

Table G-4
 END FY 1956 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	31059	505312	12602	230859	4538	126529	13352	103313	567	42611
2	38958	566715	15892	277800	5937	119766	15954	145420	1175	23729
3	18936	292776	3744	91977	4784	60212	9244	87575	1164	53012
4	18349	248217	2869	40711	5087	68924	8246	121674	2147	16908
5	12179	114615	2547	27003	2468	24852	5930	53399	1234	7361
6	13635	81263	3028	28237	3281	12410	6211	36118	1115	4498
7	8896	47682	2330	18015	2203	7600	3968	18736	395	3331
8	11596	64977	3247	25446	1554	11911	6345	23936	450	3684
9	14205	80503	4093	22654	1605	20598	8035	32105	472	5146
10	13907	58191	5516	19768	986	14625	7027	20303	378	3495
11	13155	62218	6071	21782	971	16878	5771	20255	342	3303
12	10898	53038	4848	19257	1372	15985	4313	15174	365	2622
13	14646	57706	5684	20480	2187	17090	6447	17263	328	2873
14	28918	64695	9370	23820	7688	17644	10444	21063	1416	2168
15	26025	44238	8891	14434	4784	13385	10768	14366	1562	2053
16	25992	40652	11884	11581	3831	15614	9213	11612	1064	1845
17	10252	20361	3958	5449	1910	8232	3801	5485	583	1195
18	6395	11721	2736	3658	1690	4416	1498	2850	471	797
19	5939	12363	2280	3066	1874	5248	1364	3253	421	796
20	4900	9499	1791	2749	1820	3855	888	2375	401	520
21	4839	6760	1804	2542	2061	2236	615	1710	359	272
22	3024	3093	948	1055	1302	1047	470	760	304	231
23	2765	2395	831	968	1229	709	494	594	211	124
24	1656	1262	484	683	821	320	247	190	104	69
25	1862	1061	566	382	973	325	228	309	95	45
26	1711	1332	483	542	905	321	209	404	114	65
27	1751	1215	519	576	897	289	200	287	137	63
28	1658	1156	545	485	790	220	222	415	101	36
29	1269	1025	231	427	711	240	219	319	108	39
30	1364	707	300	172	743	311	227	190	94	34
>30	1161	1084	127	407	770	204	152	427	112	46
SUM->	351900	2457832	120219	916985	71772	591996	142102	765880	17809	182971

ESTIMATED FIRST YEAR ACCESSIONS

39000	508172	12650	202139	6600	140243	13400	128894	1400	36896
-------	--------	-------	--------	------	--------	-------	--------	------	-------

Table G-5
 END FY 1957 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD			ARMY			NAVY			USAF			USMC		
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	13320	465315	14600	215446	12037	90172	12934	110498	1716	35905					
2	26499	401597	7888	151734	5544	112959	11301	100345	968	36560					
3	23506	394335	9491	152325	5053	96390	11148	125650	1203	19971					
4	16861	196623	3265	58235	3423	35764	7557	70124	968	32501					
5	13149	168418	2751	32557	4135	42703	6691	81468	1626	11690					
6	12109	98764	2433	21744	2770	19549	5184	51020	948	6453					
7	12451	69999	2981	24920	2697	10536	6034	30458	928	4085					
8	7040	46655	2229	14913	1708	6881	3774	21791	373	3070					
9	5735	64128	3267	24078	1572	13264	5895	23420	422	3367					
10	6817	72448	3920	21787	1843	17743	7958	28264	453	4656					
11	5888	55706	5156	19068	1300	13451	7005	19900	371	3288					
12	7021	57975	5871	21030	1239	15290	5495	18509	336	3147					
13	8479	51093	5124	19141	1523	14136	4383	15289	361	2527					
14	21474	66679	5746	20022	2286	15176	6137	18691	329	2791					
15	45358	60633	8816	23330	6941	16426	10666	18775	1353	2103					
16	26145	42819	8256	14159	4539	13326	10519	13295	1553	2039					
17	18266	38101	1159	11455	3907	14769	9099	10067	1045	1810					
18	11043	18459	4026	5152	1981	7002	3697	5129	573	1176					
19	7697	10899	2322	3459	1720	4016	1535	2671	461	754					
20	5884	6874	1590	2748	1811	3499	1280	2709	395	642					
21	5455	5001	1266	2088	1626	2512	946	1858	350	416					
22	4288	2414	673	2045	1803	1482	683	1248	319	226					
23	3773	1736	576	968	1150	727	417	533	263	187					
24	2968	1173	386	712	1074	452	419	476	183	97					
25	2425	842	388	651	712	226	235	237	87	60					
26	2204	1164	350	514	853	228	194	260	79	42					
27	2296	934	355	395	769	245	179	354	93	52					
28	1444	856	343	334	639	187	173	260	108	49					
29	1364	944	272	336	774	269	209	249	105	41					
30	2785	974	220	275	783	271	193	265	102	41					
SUM->	330080	2403155	116973	865934	78968	569882	142114	774118	18152	179777					

ESTIMATED FIRST YEAR ACCESSIONS

50300	482526	14600	248184	17300	80360	16000	123523	2400	30459
-------	--------	-------	--------	-------	-------	-------	--------	------	-------

NOTE: FOR DOD, YOS = LENGTH OF SERVICE FOR PAY PURPOSES.
 DATA INTERPOLATED FROM YEARS 1956/1958 FOR ARMY, NAVY, USMC, AND USAF.

Table G-6

END FY 1958 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	22843	425317	12601	225695	2764	96140	6908	76835	570	26647
2	25373	421514	7612	182708	6773	99984	9867	97472	1121	41350
3	20341	297882	3174	72609	6550	99388	9249	95377	1368	30508
4	14830	221955	3089	26850	4168	73013	6342	105879	1231	16213
5	11487	100470	2785	24492	2061	11316	5869	52672	772	11990
6	12055	88618	2632	24402	3183	16482	5136	41262	1104	6472
7	10489	82913	2319	16484	3072	14245	4437	46640	661	5544
8	11644	58735	2933	21603	2113	8662	5857	24798	741	3672
9	7269	45627	2127	11811	1212	6162	3580	24845	350	2809
10	10716	63278	3287	22710	1590	14616	5445	22903	394	3049
11	14139	64393	3746	20919	2080	14887	7880	24422	433	4165
12	13755	53221	4796	18368	1613	12277	6982	19496	364	3080
13	12726	53732	5671	20278	1507	13701	5219	16762	329	2991
14	11881	49147	5400	19025	1673	12287	4452	15403	356	2432
15	14348	55651	5807	19563	2384	13262	5827	20118	330	2708
16	26633	56570	8262	22839	6193	15208	10888	16486	1290	2037
17	23707	41399	7621	13883	4293	13267	10270	12224	1523	2025
18	24425	35549	10433	11328	3982	13924	8985	8522	1025	1775
19	10300	16556	4094	4854	2051	5772	3592	4773	563	1157
20	5680	10076	1907	3259	1750	3616	1572	2491	451	710
21	4210	6831	899	2429	1748	1749	1195	2165	368	488
22	3474	4248	741	1427	1431	1169	1004	1341	298	311
23	3276	3241	702	1548	1545	727	750	786	279	180
24	1981	1735	398	881	997	406	364	306	222	142
25	1738	1076	321	455	919	194	344	358	154	69
26	1184	1083	288	618	603	131	223	283	70	51
27	1166	622	210	243	733	130	160	210	63	39
28	1068	996	217	486	632	168	148	303	71	39
29	1030	652	191	213	615	173	145	233	79	34
30	812	556	140	183	487	153	125	195	60	25
>30	1451	863	313	245	837	298	199	178	101	42
SUM->	326031	2264506	104716	792408	71559	563507	133014	735738	16741	172754

ESTIMATED FIRST YEAR ACCESSIONS

61400	397630	17800	204764	11900	89751	29100	76424	2600	26681
-------	--------	-------	--------	-------	-------	-------	-------	------	-------

Table G-7
 END FY 1959 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER	ENLISTED	OFFICER	ENLISTED	OFFICER	ENLISTED	OFFICER	ENLISTED	OFFICER	ENLISTED
1	4284	352666	1237	198759	801	75474	1891	107263	359	31170
2	17302	324880	5775	161012	4642	76931	5816	60151	1069	26786
3	22258	251820	6613	60061	6251	78586	7919	86482	1475	26691
4	16041	209024	2773	24819	4329	81818	7868	86898	1073	15489
5	12594	114841	2586	23703	2406	31504	6753	52480	849	7154
6	11703	95313	2952	21760	2451	17611	5707	46496	592	9446
7	12970	81716	3845	22749	3199	16068	5212	37342	814	5557
8	10823	85943	3195	16216	2242	19072	4818	45552	565	5103
9	10782	73156	2823	20986	1801	9465	5503	39333	645	3372
10	5790	37520	2207	11698	1033	5887	2218	17305	328	2630
11	5853	55339	2520	20452	1140	9433	2386	22519	378	2935
12	7024	68382	2632	18594	1456	16647	2477	29186	412	3955
13	5463	47481	2164	15989	1079	10260	1825	18285	365	2947
14	6291	57194	2923	12679	1192	15305	1814	18566	319	2888
15	7387	50808	3593	18531	1501	14438	1852	15502	365	2337
16	10277	52737	3589	18920	2381	15656	4051	15505	327	2665
17	32531	64443	5867	24662	6985	16433	18452	21291	1227	2057
18	34865	44998	10913	15029	4557	12603	17920	15366	1474	2000
19	24829	43371	8451	14081	4050	14791	11313	12641	1017	1858
20	13520	21069	6040	6057	2017	7120	4904	6901	560	991
21	8490	8413	4028	3155	1563	2111	2507	2713	392	434
22	6338	6374	2588	2366	1505	1650	1937	2029	308	329
23	5344	4860	2212	2044	1244	1001	1624	1580	266	235
24	4570	3657	1923	1703	1298	750	1104	1064	245	140
25	3312	2014	1488	988	864	372	764	524	196	130
26	2745	1530	1216	789	792	289	604	398	133	54
27	2239	1023	1121	566	535	146	527	287	56	24
28	2048	838	919	465	608	159	470	177	51	37
29	1774	827	814	466	542	171	362	166	56	24
30	1581	877	685	469	520	187	315	191	61	30
>30	3455	1846	1930	1155	750	279	686	369	89	43
SUM->	314483	2164960	101622	740923	65734	552217	131599	764562	16066	159511
ESTIMATED FIRST YEAR ACCESSIONS										
	39700	420310	11500	224268	11500	86442	14600	72146	2100	37454

NOTE: YOS = LENGTH OF SERVICE FOR PAY PURPOSES

Table C-8

END FY 1960 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	17185	3425559	6637	153332	4756	83052	5387	74798	405	34377
2	22976	388308	9437	220126	4993	79591	7832	57119	714	31472
3	16352	224912	4613	73302	4067	76309	6394	53039	1278	22262
4	13054	169026	4042	21005	3550	58006	4175	80918	1287	9097
5	11464	85674	2709	19005	2365	30719	5448	29239	942	6661
6	12096	92432	3294	19644	2611	26707	5451	41479	740	4602
7	11170	78604	2755	18284	2547	15857	5313	37400	555	7063
8	10807	72723	2542	20054	2528	14408	4958	33320	779	4941
9	8748	83626	1963	15925	1930	17766	4280	45559	575	4376
10	10947	65088	2738	18874	1702	8747	5839	34679	668	2788
11	6651	37929	1866	12386	997	5339	3444	17679	344	2525
12	9686	49717	2811	19464	1216	8837	5279	18360	380	3056
13	12750	65145	3037	19464	1680	16128	7631	25839	402	3714
14	12514	48549	4061	15335	1318	9876	6781	20400	354	2938
15	11818	55391	4979	19464	1522	14822	4999	18360	318	2745
16	10763	50903	4090	18874	2008	14150	4298	15639	367	2240
17	13193	52397	4799	17695	2434	15259	5628	17000	332	2443
18	26483	62309	7914	24183	6820	16147	10528	19719	1221	2260
19	24021	46362	8036	15925	4584	12252	9931	16320	1470	1865
20	24933	41048	11112	15335	4112	12078	8697	12240	1012	1395
21	7613	12666	2180	4024	1881	3391	3059	4760	493	491
22	4197	5160	1259	2176	1412	1290	1200	1409	326	285
23	3428	4118	894	1693	1416	917	849	1311	269	197
24	2954	4315	764	1490	1216	661	745	2037	229	127
25	2703	2572	667	1234	1279	529	536	716	221	93
26	1735	1388	400	386	887	274	280	646	168	82
27	1491	703	327	316	795	216	245	141	124	30
28	1046	529	290	228	531	126	178	135	47	40
29	997	456	240	180	131	102	102	128	43	17
30	906	489	211	190	575	151	80	126	40	22
>30	2006	962	569	469	1215	304	122	151	100	38
SUM->	316687	2149060	101236	770062	69559	544040	129689	680666	16203	154242

ESTIMATED FIRST YEAR ACCESSIONS

30800	4114463	10300	192380	9400	91440	9300	89928	1800	40715
-------	---------	-------	--------	------	-------	------	-------	------	-------

Table G-9
 END FY 1961 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	15782	386423	9278	163762	5369	104278	704	91241	431	27142
2	22350	370687	8952	165055	7461	94281	5050	79084	887	32267
3	18627	252867	4192	92502	5810	74717	7734	55972	891	29676
4	15469	141476	3253	22870	4160	58893	6920	46073	1136	13640
5	11841	73605	3202	19639	3155	19029	4419	29437	1065	5500
6	9947	75292	2804	19730	2461	21895	3884	28380	798	5287
7	10255	87777	2623	19759	2146	21554	4845	42407	641	4057
8	10084	72635	2348	18537	1861	11487	5304	35794	571	6817
9	9999	65677	2233	20423	1789	11300	5211	29309	766	4645
10	9272	72004	2314	14702	1510	13627	4889	39583	559	4092
11	8898	64736	2404	19580	1545	8403	4275	34079	674	2674
12	9278	33941	1836	10984	1408	5117	5692	15514	342	2326
13	8069	52585	2446	19555	1867	9584	3373	20733	383	2713
14	11139	66490	3226	17718	2279	16926	5232	28245	402	3601
15	14054	46357	4383	15338	1770	10142	7593	18064	348	2813
16	14493	54368	5564	19622	1929	14168	6686	17891	314	2687
17	11786	46330	4626	17913	1855	11705	4942	14532	363	2180
18	13697	48307	5688	18124	3513	12179	4166	15567	330	2437
19	18743	59919	7753	24524	4353	14277	5430	18967	1207	2151
20	23789	40485	8034	14671	3788	9597	10524	14459	1443	1758
21	17913	23969	3841	9850	3393	5007	9776	8216	903	896
22	11200	8129	2641	3408	1292	1614	6875	2744	392	363
23	4950	3590	1625	2000	879	478	2157	907	289	205
24	3019	2732	1134	1508	789	386	875	697	221	141
25	2427	2204	846	1218	736	282	645	597	200	107
26	2199	1967	638	1245	807	243	566	397	188	82
27	1565	1048	488	644	543	128	396	200	138	76
28	1145	819	373	524	483	93	189	175	100	27
29	803	557	333	374	252	53	179	106	39	24
30	709	407	251	287	316	60	116	43	26	17
>30	1325	1147	592	866	462	100	186	144	85	37
SUM->	314827	2158530	99921	756932	69981	551603	128793	689557	16132	160438

ESTIMATED FIRST YEAR ACCESSIONS

29300	419817	10600	176345	7600	94178	9200	118775	1900	30519
-------	--------	-------	--------	------	-------	------	--------	------	-------

Table G-10
 END FY 1962 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD					ARMY					NAVY					USAF					USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	
1	26063	534137	14447	262851	7593	123760	3276	118782	747	28744												
2	33047	433878	13219	205438	6211	98532	12640	101136	977	28772												
3	20613	305453	5564	122970	6556	78440	7404	72218	1089	31825												
4	15669	172179	4397	39777	4536	58172	5828	49252	908	24978												
5	12785	76698	3673	25120	3439	23362	4736	22474	937	5742												
6	11918	65394	3594	20315	3088	17344	4307	23131	929	4604												
7	11213	70126	2930	18861	2500	20789	5071	25574	712	4902												
8	10847	82020	2550	17336	2196	20714	5472	40120	629	3850												
9	10521	66443	2747	17602	1902	10934	5261	31630	611	6277												
10	10291	61183	2759	18585	1820	10654	4895	27304	817	4640												
11	9278	67596	2780	14100	1615	12731	4282	36850	601	4640												
12	10422	60328	2448	18369	1642	8040	3350	14363	348	2263												
13	7559	32490	2392	10965	1469	4899	5649	31311	348	2608												
14	10805	50428	3181	18585	2011	9234	5209	20149	404	2460												
15	14600	66489	4239	18740	2472	16526	7471	27652	418	3571												
16	13267	47059	4573	16973	1861	9824	6482	17580	351	2682												
17	13105	53456	5936	19303	2007	13963	4834	17568	328	2622												
18	11209	44676	4821	16816	1931	11434	4085	14157	372	2269												
19	14909	49294	5647	19544	3506	12097	5428	15302	328	2351												
20	23593	55727	7602	23075	4357	11742	10431	19028	1203	1882												
21	19184	26189	5628	9438	3652	5121	8563	10525	1341	1105												
22	13188	15675	3529	6227	3136	3272	5780	5495	743	681												
23	5633	5844	2154	2336	1246	1089	1900	2081	333	338												
24	3196	2603	1377	1412	837	380	741	651	241	160												
25	2394	2006	938	1066	714	293	555	543	187	104												
26	1980	1659	663	857	686	224	467	485	164	93												
27	1777	1242	561	669	736	190	320	321	160	62												
28	1152	714	431	383	453	101	156	176	112	54												
29	965	567	328	318	91	91	131	132	72	26												
30	645	372	302	220	228	46	84	91	31	15												
>30	1293	543	640	346	468	73	100	104	85	20												
SUM->	343121	2452468	116050	948597	75302	584071	134908	746185	16861	173615												

ESTIMATED FIRST YEAR ACCESSIONS

41400	542430	18200	284580	10000	107414	10900	113220	2400	37216
-------	--------	-------	--------	-------	--------	-------	--------	------	-------

Table G-11
 END FY 1963 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD			ARMY			NAVY			USAF			USMC		
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	21300	403419	12454	180630	6370	100135	2109	97992	367	24662					
2	43803	493006	15969	247777	8870	114945	17665	97147	1299	33137					
3	17537	297118	5131	98400	5663	81608	5509	89299	1234	27811					
4	14656	173801	3571	26573	4334	60615	5642	58001	1109	28612					
5	12998	74843	3782	24828	3241	22361	5163	20630	812	7024					
6	10754	59726	3112	17463	2747	20129	4140	18924	755	3210					
7	9967	59877	2913	17859	2640	16364	3723	21833	691	3821					
8	10510	67067	2958	17034	2300	19754	4637	26067	615	4212					
9	10752	77964	2748	18142	2108	19483	5279	36884	617	3455					
10	10184	59902	2600	17282	1832	10350	5117	26502	628	5768					
11	10223	59808	2796	18617	1817	10052	4782	27261	828	3878					
12	8691	65741	2242	13800	1656	12332	4200	36003	593	3606					
13	10537	55018	2493	18122	1719	7703	5645	26772	680	2421					
14	7267	31276	2071	10084	1495	4704	3342	14382	359	2106					
15	11101	52092	3356	18584	2087	9071	5230	21917	428	2520					
16	13902	61609	3642	16918	2603	16045	7216	25311	441	3335					
17	12589	44966	4087	14715	1872	9663	6247	17927	383	2661					
18	12926	51843	5887	18884	2038	13876	4656	16537	345	2546					
19	11509	44994	5208	17290	1930	11359	3990	14241	381	2104					
20	14114	44468	5019	17605	3482	9675	5272	21917	341	2165					
21	16900	35292	3762	16340	4037	6170	8026	11468	1075	1314					
22	15396	16684	4130	6950	3029	3151	7141	5746	1096	837					
23	11431	11439	2967	5147	2714	2207	5151	3489	599	596					
24	4653	4259	1593	1880	1118	774	1678	1368	264	237					
25	2705	2059	1127	1119	747	288	649	502	182	150					
26	1933	1787	640	1060	642	228	502	404	148	95					
27	1643	1449	507	830	583	173	419	368	134	78					
28	1486	1098	461	621	639	162	270	259	116	56					
29	941	662	319	384	412	87	129	131	81	60					
30	835	562	273	311	396	77	109	152	57	22					
>30	1108	702	484	519	420	55	125	86	79	42					
SUM->	334351	2354531	108302	865768	75548	583596	133763	739520	16737	172541					

ESTIMATED FIRST YEAR ACCESSIONS

41000	402132	16000	186133	10100	85265	12900	102317	2000	28417
-------	--------	-------	--------	-------	-------	-------	--------	------	-------

Table G-12
 END FY 1964 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	25255	479251	8983	247822	6924	109133	9050	89256	298	33040
2	29349	364309	10752	164188	7101	93122	10891	81260	605	25039
3	26699	345633	8483	130312	8390	90571	8210	92740	1616	32010
4	14126	185002	4054	28925	4345	61705	4340	70557	1387	23815
5	13173	78951	3331	24211	3245	22107	5517	24684	1080	7949
6	12525	63067	4154	22902	2648	20007	4971	16028	752	4130
7	10732	55586	3699	17013	2416	18856	3948	16934	669	2783
8	9761	54102	3039	14396	2430	15825	3624	20543	668	3338
9	10328	60301	2990	14396	2170	18825	4540	23369	628	3711
10	11155	71347	3298	15704	2017	18549	5210	34038	630	3056
11	11196	54502	3673	13741	1802	9896	5071	25608	650	5257
12	11312	54431	3981	13741	1805	9940	4704	27091	822	3659
13	9218	62934	2763	12433	1721	12039	4137	35016	597	3446
14	11062	53099	3037	16359	1761	7511	5575	26893	689	2336
15	7627	31310	2480	10469	1511	4574	3281	14237	355	2030
16	11206	51574	3465	18976	2153	8945	5174	21195	414	2458
17	13565	59881	3344	15704	2735	15672	7046	25246	440	3259
18	11723	46055	3313	16359	1889	9452	6134	17615	387	2629
19	10955	51816	4017	18976	2037	13685	4561	16639	340	2516
20	10500	42289	4303	17667	1883	9200	3937	13477	377	1945
21	10603	24025	3544	7997	2941	5246	3809	9311	309	1471
22	15821	21426	5184	7885	3215	4222	6543	8325	879	994
23	12451	10925	3011	3465	2658	2329	5874	4514	903	617
24	11342	7822	4153	2593	2434	1784	4249	2987	506	458
25	4552	3043	1968	995	1011	630	1341	1226	232	192
26	2844	1445	1459	618	691	239	529	464	165	124
27	2229	1128	1155	488	566	195	386	364	122	81
28	1875	1050	958	491	512	155	304	333	101	71
29	1709	806	847	385	566	148	203	224	93	49
30	1058	445	549	217	354	79	93	97	62	52
>30	1551	598	883	386	469	59	137	101	62	52
SUM->	337502	2338153	110870	860514	76400	584700	133389	720372	16838	11567

ESTIMATED FIRST YEAR ACCESSIONS

41000	495866	17800	266890	9500	95040	12300	94836	1700	39100
-------	--------	-------	--------	------	-------	-------	-------	------	-------

Table G-13

END FY 1965 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	28403	399258	12316	187173	6874	111945	8757	69530	456	30610
2	34076	454321	15390	243007	7828	102608	10273	75047	585	33659
3	25023	276538	7631	101840	7101	72373	9087	78336	1204	23989
4	20112	206162	5159	29750	6581	68760	6684	81054	1688	26598
5	12941	86844	4097	26032	3485	22170	4076	31275	1283	7367
6	12532	63117	3975	20453	2567	19662	5054	18022	936	4980
7	11669	56178	3803	20453	2415	18497	4664	13531	787	3697
8	10221	49275	3392	16734	2278	17942	3778	12078	2521	2521
9	9688	45812	3175	12396	2300	14851	3483	15674	730	2891
10	9851	53299	2670	13635	2086	17868	4423	18624	672	3172
11	10893	63059	3044	14875	2051	17273	5120	28231	678	2680
12	10377	55607	2816	14255	1771	9568	5006	27026	784	4758
13	10036	51446	2829	14255	1840	9616	4652	24187	715	3388
14	8672	60903	2315	11156	1795	11673	4076	34813	486	3261
15	11105	56360	3122	16734	1811	7293	5513	30120	659	2213
16	7399	32292	2288	11776	1519	4494	3192	14104	400	1918
17	11385	45689	3714	16115	2178	8767	5039	18502	454	2305
18	14098	60812	3877	17354	2752	15369	6911	24952	558	3137
19	13102	42529	4729	14255	1881	9241	6100	16480	392	2553
20	12363	51313	5451	21073	2033	10861	4528	17197	351	2182
21	7420	26932	3045	10158	1612	5045	2560	10323	203	1406
22	8121	22985	2293	10015	2403	3624	3076	8167	349	1179
23	10972	18066	2892	4401	2670	3137	4734	9746	676	782
24	10070	11135	2412	3293	2294	1822	4857	5523	507	497
25	8808	6877	2840	1263	2053	1470	3456	3757	459	387
26	3327	3028	1090	592	879	556	1185	1714	173	166
27	1842	1423	552	468	750	195	453	657	87	103
28	1364	1195	342	471	634	164	316	489	72	71
29	1104	999	291	369	500	141	240	431	73	58
30	937	709	249	208	495	142	150	320	43	39
>30	911	766	321	370	430	56	135	267	25	73
SUM->	338822	2304929	112120	854929	77866	587183	131578	690177	17258	172640

ESTIMATED FIRST YEAR ACCESSIONS

41300	420764	16300	204398	10800	94301	11000	87697	2000	34368
-------	--------	-------	--------	-------	-------	-------	-------	------	-------

Table G-14

END FY 1966 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	32260	898904	13094	482912	7738	168896	10360	156367	1068	90729
2	34028	392767	15981	179343	8262	106859	8970	75584	815	30981
3	26567	291755	9370	101513	7932	82559	8422	73387	843	34296
4	21455	182966	6032	30125	6121	60772	8259	70664	1043	21405
5	16675	94952	5430	27628	4037	28390	5771	26234	1437	12700
6	11698	67366	4252	21229	2581	19564	3648	22638	1217	3935
7	12026	59376	4118	18417	2342	18104	4683	18118	883	4737
8	11206	55179	3969	19690	2212	17724	4403	14313	622	3452
9	9892	45751	3548	13973	2149	16889	3548	12467	647	2422
10	9482	44944	3304	12315	2156	13855	3333	16050	689	2724
11	9832	50487	2777	12057	2132	16451	4253	19012	670	2967
12	10826	63438	3145	13001	2033	16462	4987	31258	661	2717
13	10385	51269	2885	12909	1764	9158	4879	24526	857	4676
14	10429	51588	2897	14783	1974	9108	4525	24425	1033	3272
15	9065	59377	2353	10989	1971	11253	3988	34084	753	3051
16	11475	51990	3171	15584	1982	7004	5398	27423	924	1979
17	7586	28124	2284	8868	1504	4332	3122	13239	676	1685
18	11614	48247	3734	17621	2189	8528	4948	20047	743	2051
19	14272	60370	3833	16356	2746	14930	6804	26285	889	2799
20	13276	42036	4789	15149	1850	7836	5994	16755	643	2296
21	8659	30875	3692	12351	1731	6833	2759	9945	477	1746
22	6253	16857	2347	6830	1393	3716	2151	5016	362	1235
23	6862	12920	1872	4870	2091	2749	2473	4232	426	1069
24	9656	12906	2436	4993	2324	2567	4261	4640	635	706
25	8461	7318	2006	2378	2048	1610	3847	2875	560	455
26	7519	5954	2393	1998	1789	1371	2965	2218	422	367
27	2853	2010	876	547	788	513	970	796	219	154
28	1558	940	458	360	614	166	379	318	107	96
29	1064	794	252	342	512	158	241	232	59	62
30	821	744	203	318	356	136	194	233	68	57
>30	1072	501	335	233	484	82	189	96	64	90
SUM->	348627	2732705	117836	1079682	79805	658635	130724	753477	20512	240911

ESTIMATED FIRST YEAR ACCESSIONS

51100	887969	26100	487622	10300	145729	11000	166126	3600	88492
-------	--------	-------	--------	-------	--------	-------	--------	------	-------

Table G-15
 END FY 1967 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	39915	758723	17686	459186	5420	136831	15509	107398	1300	55308
2	55385	830778	31687	426121	10191	158044	10993	149136	2504	97477
3	25709	271470	8755	87981	7975	82529	7579	71788	1400	29172
4	22830	188438	6795	33233	6283	62949	8013	66216	1739	26040
5	17786	63902	5461	21760	3695	18238	7326	17991	1304	5913
6	13959	71897	5241	27933	3033	19295	4768	20958	917	3711
7	10985	68047	4509	24903	2385	17805	3329	22134	762	3205
8	11668	60918	4430	23525	2313	16392	4333	16759	592	4242
9	11502	46460	4402	16358	2302	15570	4161	11448	637	3084
10	10278	40993	3875	11591	2312	15202	3372	12147	719	2053
11	9746	41548	3593	10963	2248	12408	3193	15874	712	2303
12	10099	47993	3041	10868	2196	15776	4077	18403	785	2946
13	11258	60648	3392	11957	2211	15964	4804	30461	851	2266
14	10818	48032	3155	12020	1898	8866	4663	23025	1102	4121
15	10500	49575	3138	13916	2029	8762	4335	24069	998	2828
16	9216	59144	2549	11513	2032	10934	3838	33957	797	2740
17	11769	51266	3404	15924	2007	6783	5270	26794	1088	1765
18	7795	28112	2456	9196	1566	4171	3063	13160	710	1585
19	11996	47506	3981	17096	2294	8397	4909	20083	812	1930
20	14575	55979	4033	15649	2868	11791	6792	26005	882	2534
21	9503	23103	3395	8839	1680	3589	3922	9064	506	1611
22	7276	19330	3039	7799	1605	4132	2282	6144	350	1255
23	5196	11436	1968	4611	1282	2366	1751	3501	195	958
24	5977	9475	1613	3615	1962	1809	2110	3186	292	865
25	8820	10077	2226	3898	2227	1968	3807	3617	560	594
26	7651	6650	1845	2475	1983	1362	3399	2391	424	422
27	6681	5103	2097	2015	1762	1043	2455	1750	367	295
28	2351	1950	770	758	705	395	771	665	105	132
29	1238	791	411	311	410	143	296	254	61	83
30	895	649	222	290	433	138	184	178	56	43
>30	1119	673	338	299	535	179	181	92	65	103
SUM->	384496	2980666	143507	1296603	81842	663831	135485	758648	23592	261584

ESTIMATED FIRST YEAR ACCESSIONS

72200	782673	37800	489389	11700	101083	17300	120781	5400	71320
-------	--------	-------	--------	-------	--------	-------	--------	------	-------

Table G-16

END FY 1968 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	35169	820231	13997	515236	8346	132818	11600	90081	1226	82096
2	61371	721209	33907	421197	8487	128432	16947	106858	2030	64002
3	48533	512511	28630	169787	6823	129468	10279	153281	2801	59975
4	20336	186944	7016	29810	5114	63928	6874	67981	1332	25225
5	19161	71792	5699	25773	4974	22899	7338	16361	1150	6759
6	15824	52338	5158	19993	3451	15974	6304	13651	911	2720
7	14102	54961	5201	18387	3109	16812	4860	16591	939	3171
8	11832	54292	4621	16651	3109	15846	3295	18899	807	2896
9	12054	48064	4559	15082	2671	14307	4173	14773	651	3902
10	12007	41221	4521	13927	2718	13887	4143	10717	625	2690
11	10484	38704	4028	11859	2374	13829	3428	11235	654	1781
12	9946	39670	3674	10715	2438	11832	3149	14997	685	2126
13	10265	45557	3369	10757	2272	14792	3886	17565	738	2443
14	11209	58299	3686	11708	2275	15706	4445	28793	803	2092
15	11371	47794	3378	11740	2325	9254	4595	23230	1073	3570
16	10718	47994	3435	13986	2027	8275	4161	22863	1095	2870
17	9243	56892	2728	10906	1979	10556	3651	32759	885	2671
18	11943	52010	3550	15281	1853	6858	5513	28154	1027	1717
19	7924	27213	2545	9065	1537	4027	3024	12626	818	1495
20	11727	42954	3960	18436	2374	5817	4576	17093	817	1608
21	11644	35002	3218	6576	2366	5871	5142	20669	918	1886
22	8114	14450	2778	5343	1440	2362	3404	5593	492	1152
23	6292	13233	2605	5367	1357	2774	2011	4104	319	988
24	4507	8728	1692	3463	1069	1743	1561	2747	185	775
25	4719	7551	1370	2756	1387	1374	1788	2728	174	693
26	8393	8353	2021	3219	2287	1659	3553	2965	532	510
27	6611	4723	1616	1415	1667	1042	2936	1899	392	367
28	5387	3853	1721	1354	1507	884	1910	1389	249	226
29	2121	1591	643	524	667	372	713	558	98	137
30	1057	657	382	232	397	126	229	229	49	70
>30	1780	750	465	462	1032	86	203	118	80	84
SUM->	415844	3119541	166173	1401007	85425	673610	139691	761507	24555	282697
ESTIMATED FIRST YEAR ACCESSIONS										
70000	852684	36200	533082	11900	122793	17900	98422	3700	98387	

Table G-17
 END FY 1969 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	56543	793402	35634	428242	9393	162976	10341	112944	975	89240
2	52592	748884	28702	465244	7625	124361	14160	83874	2105	75405
3	40528	393476	16493	160182	7517	89274	14058	98387	2460	45633
4	29046	270109	11961	43608	6089	98864	8032	99595	2964	28042
5	18353	57199	5370	19582	6226	18795	5327	14535	1430	4287
6	15207	50216	4995	17280	4293	16029	5077	13632	842	3275
7	12854	44543	4912	14407	2177	13438	5016	14409	749	2289
8	11160	51581	4535	15869	1866	14777	3978	18130	781	2805
9	9976	44059	4552	12912	1671	13665	3054	14924	699	2558
10	11226	40011	4602	12045	2001	12723	3981	12038	642	3205
11	11036	38640	4233	13368	2241	12501	3926	10646	636	2125
12	10288	35944	4010	10271	2410	12784	3210	11366	658	1523
13	9646	37556	3447	9876	2480	11417	3043	14321	676	1942
14	10640	43914	3511	9958	2551	14763	3801	16917	777	2276
15	11491	57169	3639	11212	2562	15053	4466	28934	824	1970
16	10775	45660	3174	11598	2046	8421	4420	22087	1149	3554
17	10695	48005	3063	13540	2202	10380	4218	23479	1101	2578
18	9925	56149	3340	10035	2243	8408	3781	33146	838	2588
19	11750	48974	2946	14575	2082	6371	5229	26382	1099	1646
20	8245	25735	2275	8369	1517	3073	3015	12887	767	1406
21	8751	26025	2501	9867	1802	3196	3728	11813	720	1149
22	9110	20140	2275	6050	1988	3403	4145	9530	702	1157
23	6441	10974	2154	4065	1166	1606	2744	4528	377	775
24	5029	10879	1872	4288	1191	2083	1703	3843	263	665
25	3877	6896	1374	2720	969	1362	1386	2305	148	509
26	4787	6355	1319	2416	1509	1168	1716	2262	243	509
27	6844	6767	1538	2583	1693	1298	3165	2527	448	359
28	5475	3889	1452	1236	1362	846	2381	1558	280	249
29	3886	3256	971	1058	1238	744	1475	1269	202	185
30	1426	1219	370	318	540	298	445	517	71	86
>30	1361	575	485	273	549	68	255	151	72	83
SUM->	418963	3028201	172590	1337047	85199	684145	135476	722936	25698	284073

ESTIMATED FIRST YEAR ACCESSIONS

60800	819119	30500	455037	13600	147085	12600	122314	4100	94683
-------	--------	-------	--------	-------	--------	-------	--------	------	-------

Table G-18

END FY 1970 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD			ARMY			NAVY			USAF			USMC		
	OFFICER	ENLISTED	OFFICER ENLISTED	OFFICER	ENLISTED	OFFICER ENLISTED	OFFICER	ENLISTED	OFFICER ENLISTED	OFFICER	ENLISTED	OFFICER ENLISTED	OFFICER	ENLISTED	OFFICER ENLISTED
1	47226	523859	22847	310291	5825	98851	17730	61333	824	53384					
2	52301	687663	27208	371712	11120	142794	11980	101397	1993	71760					
3	41758	399702	18463	189042	9480	91903	11287	80985	2528	37772					
4	32408	229608	14091	48213	4886	71062	11206	86055	2225	24278					
5	20910	81710	9660	24662	3606	17081	5624	31741	2020	8226					
6	11337	46292	4351	15671	2336	14944	3584	12347	1066	3330					
7	11434	42794	4520	14069	2112	13345	4086	12636	716	2744					
8	10934	38839	4245	12380	1743	11588	4220	12840	726	2031					
9	11120	42012	4562	13663	1909	12365	3853	13623	796	2361					
10	9974	39419	4334	11480	2106	11939	2828	13892	706	2108					
11	10785	36977	4364	11306	2033	11205	3719	11766	669	2700					
12	11376	36185	4555	12528	2283	11649	3885	10057	653	1951					
13	10264	34274	4018	9914	2347	12536	3209	10356	690	1468					
14	9997	35745	3399	9435	2493	11030	2961	13446	706	1834					
15	10139	41836	3334	9662	2333	13980	3703	16059	769	2135					
16	11256	54720	3773	10827	2358	14987	4328	27035	797	1871					
17	11185	46695	3484	11119	2000	8886	4638	23457	1063	3231					
18	10710	45737	3441	13426	2080	7970	4168	21719	1021	2622					
19	9526	54067	2791	9958	2144	10177	3788	31403	801	2529					
20	10924	48817	2640	14138	1967	5117	4342	28012	975	1560					
21	5102	16356	1836	5297	1305	1466	1397	8626	564	966					
22	5868	14912	2148	5445	1531	1785	1707	6933	482	749					
23	6318	14320	1733	4289	1825	2227	2237	7015	523	789					
24	4637	8130	1592	2951	1124	1105	1659	3539	262	535					
25	4228	8263	1641	3215	1144	1563	1231	3038	212	467					
26	3105	5493	1155	2196	880	1078	948	1839	122	380					
27	3311	4723	953	1833	1075	793	1152	1729	131	368					
28	5767	5130	1404	2027	1627	979	2315	1868	421	256					
29	3631	3226	1019	998	1156	736	1230	1286	226	206					
30	2932	2725	1087	910	1146	653	541	1044	158	118					
>30	1663	881	635	356	685	122	247	326	96	77					
SUM->	402126	2651110	165283	1153013	80659	605916	129803	657402	24941	234806					
ESTIMATED FIRST YEAR ACCESSIONS															
62900	630260	34000	375949	12500	100165	13300	77712	3100	76434						

Table G-19
END FY 1971 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	23928	509528	11445	283505	2872	90457	9119	91984	492	43582
2	45653	484027	24150	275427	8184	93979	11860	63512	1459	51109
3	39001	351785	18402	130066	8493	94595	9915	98481	2191	28643
4	27869	211426	8850	50239	5342	70257	11451	68580	2226	22350
5	23345	64276	9008	25262	3632	15815	9086	17672	1619	5527
6	17027	56226	7741	19505	2676	14847	5154	17233	1456	4641
7	10576	40469	3823	13472	2191	12756	3820	11754	742	2487
8	10738	37764	4137	12039	2085	11330	3964	12032	552	2363
9	10378	32940	3919	11106	1695	9764	4233	10350	1720	1720
10	10667	38505	4387	12524	1974	11029	3669	12844	637	2108
11	9553	37081	4191	10705	1873	11038	2888	13590	601	1748
12	10651	35223	4181	10805	2069	10735	3623	11310	578	2373
13	10977	35183	4399	12141	2160	11400	3827	9719	591	1923
14	9973	33039	3895	9333	2336	11876	3124	10389	618	1441
15	9629	35601	3729	9259	2340	10729	2930	13841	630	1772
16	9874	42041	3220	9440	2322	13992	3648	16488	684	2121
17	10916	55439	3674	10588	2304	14483	4239	28512	699	1856
18	10396	44516	3409	11053	1885	8070	4173	21937	929	3456
19	10205	46718	3356	12940	2054	7953	3943	23341	852	2484
20	9202	51351	2763	9540	2080	6751	3709	32802	650	2258
21	7801	23602	2302	8041	1572	2156	3249	12489	678	916
22	3946	8031	1455	2749	879	752	1249	3929	363	601
23	4968	10183	1718	3839	1231	1173	1670	4670	349	501
24	5264	9547	1426	2957	1424	373	2079	4680	335	537
25	3778	5975	1287	2203	821	765	1501	2590	169	417
26	3486	6434	1348	2557	892	1161	1101	2373	145	343
27	2590	3901	957	1566	695	744	858	1346	80	245
28	3044	3348	755	1320	1019	593	1103	1231	167	204
29	4493	4012	1105	1505	1074	853	2044	1484	270	170
30	2858	2439	806	738	903	612	997	968	152	121
>30	2426	1186	1093	578	595	203	613	375	125	30
SUM->	365212	2321796	146931	967002	71672	541241	125039	622506	21570	190047

ESTIMATED FIRST YEAR ACCESSIONS

42800	552303	20000	313702	9200	78702	11600	101140	2000	58759
-------	--------	-------	--------	------	-------	-------	--------	------	-------

Table G-20

END FY 1972 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD			ARMY			NAVY			USAF			USMC		
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	21175	389320	8963	166724	3143	94202	8686	78952	383	49382					
2	30516	387930	11403	187576	6962	79080	10879	82196	1272	39078					
3	28199	211939	10052	61219	6709	64227	9813	58921	1625	27572					
4	25092	218727	8749	33689	5918	80651	8724	86476	1701	17911					
5	19974	84251	6252	32462	3705	20551	8507	23890	1510	7348					
6	18088	55725	7020	21440	2763	13376	7170	17018	1135	3891					
7	14600	49779	6468	17205	2383	12151	4693	16744	1056	3679					
8	9707	36523	3443	12028	2039	11470	3603	11068	622	1957					
9	10149	33459	3809	10734	2021	10082	3842	10638	477	2005					
10	9936	31024	3636	10293	1645	8894	4146	10349	509	1488					
11	10312	36767	4106	12045	1978	10180	3651	12781	577	1761					
12	9376	35774	4012	10184	1928	10622	2864	13378	572	1590					
13	10442	34072	4028	10305	2147	10372	3722	11091	545	2304					
14	10754	34684	4233	11893	2215	11063	3717	9748	589	1980					
15	9844	32565	3781	9082	2382	11599	3060	10377	621	1507					
16	9469	35287	3624	9188	2337	10535	2895	13792	613	1772					
17	9763	41761	3178	9451	2297	13722	3613	16382	675	2206					
18	10760	55209	3612	10602	2283	14305	4202	28390	663	1912					
19	10343	44393	3421	10998	1863	7841	4157	21831	902	3723					
20	10143	43191	3389	12878	2017	5210	3924	23188	813	1915					
21	6124	24681	1724	5136	1690	3231	2194	15347	516	967					
22	6411	15900	1782	5186	1393	1371	2717	8827	519	516					
23	3270	5744	1150	1897	778	500	1055	3045	287	302					
24	4132	7730	1361	2824	1085	863	1435	3741	251	302					
25	4439	7210	1146	2053	1250	1063	1781	3726	262	368					
26	3098	4688	1006	1676	708	619	1251	2224	133	309					
27	2905	4688	1064	1795	785	850	941	1849	115	194					
28	2178	2639	790	930	611	581	712	1020	65	108					
29	2468	2472	599	844	873	523	863	991	133	114					
30	3513	2911	920	979	887	688	1483	1132	223	112					
>30	2591	1199	1033	478	592	157	798	529	168	35					
SUM->	329771	1972412	119754	683794	69387	510669	121098	599641	19532	178308					
ESTIMATED FIRST YEAR ACCESSIONS															
	36000	423779	12600	187190	10100	89210	11500	91349	1700	56030					

Table G-21

END FY 1973 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER	ENLISTED	OFFICER	ENLISTED	OFFICER	ENLISTED	OFFICER	ENLISTED	OFFICER	ENLISTED
1	19277	423139	8019	190653	2675	100715	7552	85191	1031	46580
2	27598	344007	10340	144899	7009	82252	8953	71570	1296	45286
3	24839	242713	8488	89355	6288	54362	8329	74535	1734	24461
4	22796	153319	7791	27297	5230	55886	8331	52920	1444	17216
5	19927	85280	7216	24916	4436	23593	6991	30267	1284	6504
6	16189	71738	5646	26856	2948	17608	6557	22013	1038	5261
7	15885	47568	6420	17903	2391	10446	4278	16063	796	3156
8	13500	43511	6136	14963	2196	10965	4423	14581	745	3002
9	9303	32072	3325	10337	1988	10357	3483	9541	507	1837
10	9845	31009	3702	9686	1948	9352	3780	10278	415	1693
11	9823	29432	3567	9792	1656	8313	4125	10136	475	1191
12	10230	35464	4037	11487	2004	9816	3629	12514	560	1647
13	9360	34687	3951	9770	1972	10406	2904	13019	533	1492
14	10483	33447	4011	10157	2196	10167	3729	10958	547	2165
15	10748	34096	4189	11755	2259	10732	3705	9678	595	1931
16	9797	32195	3732	9116	2405	11208	3042	10323	618	1548
17	9437	34796	3568	9147	2366	10299	2893	13670	698	2192
18	9794	41621	3156	9501	2328	13596	3612	16332	669	1744
19	10780	54511	3612	10625	2300	13881	4199	28261	669	2911
20	10291	41303	3380	10895	1830	5764	4164	21733	917	769
21	6368	19351	1970	6440	1601	2688	2152	9454	645	527
22	4818	15296	1292	2995	1439	2149	1695	9625	392	346
23	5395	11319	1473	3666	1183	974	2285	6333	228	191
24	2707	4126	932	1321	677	391	870	2223	205	230
25	3433	5654	1107	1915	927	714	1194	2795	220	275
26	3604	5687	923	1544	1034	922	1427	2946	113	184
27	2504	3286	814	1075	571	531	1006	1496	88	143
28	2352	3040	873	1040	643	702	748	1146	57	73
29	1732	1802	648	588	504	496	523	645	110	88
30	1836	1728	452	515	715	444	559	681	230	40
>30	3128	1282	1064	477	699	279	1135	486		
SUM->	31779	1918479	115834	680695	68418	490008	114273	571413	19254	176363
ESTIMATED FIRST YEAR ACCESSIONS										
	30800	463886	10700	215029	7500	99078	10300	97878	2200	51901

Table G-22
 END FY 1974 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	17260	356333	6150	159949	4301	86131	5944	68145	865	42108
2	23965	304590	8887	162716	4997	86515	8496	73396	1585	41963
3	21725	246052	7185	94854	5911	62939	7071	61791	1558	26468
4	21826	152801	7468	35773	5061	46529	7846	53866	1451	16633
5	18111	69077	5462	22250	4251	21080	7276	18789	1122	6958
6	15298	74067	5280	21446	3560	19593	5547	27808	911	5220
7	13807	60427	4688	22509	2553	13204	5751	20312	815	4402
8	14012	41298	5244	15454	2190	9293	5873	13811	705	2740
9	12022	37577	5003	12631	2094	9902	4249	12435	676	2609
10	8765	29291	3039	9134	1872	9493	3394	9130	460	1534
11	9337	28890	3433	8972	1792	8566	3731	9975	381	1377
12	9432	27993	3384	9131	1600	7930	3998	9824	450	1108
13	9879	33903	3760	10864	1987	9440	3552	12074	543	1525
14	9145	33756	3797	9169	1948	10101	2904	12796	533	1390
15	10253	32719	3828	9901	2166	9945	3696	10823	563	2050
16	10415	33401	3921	11473	2248	10476	3646	9601	600	1851
17	9636	31660	3600	9024	2374	10909	3033	10216	629	1511
18	9329	34468	3500	9102	2316	10122	2878	13595	635	1649
19	9723	40630	3129	9364	2293	12827	3606	16274	695	2165
20	10670	49010	3573	10480	2245	8956	4185	28110	667	1464
21	6406	18910	1938	4853	1402	2813	2390	9949	676	1295
22	5208	12534	1501	3841	1331	1756	1887	6459	489	478
23	4021	10923	1070	2062	1157	1479	1455	6999	339	383
24	4553	8128	1218	2522	982	763	1983	4579	370	264
25	2378	2945	801	859	575	305	735	1623	197	158
26	2833	4539	920	1458	754	603	991	2285	168	193
27	2854	3670	753	982	791	691	1133	1774	177	223
28	1954	2058	643	599	442	428	779	888	90	143
29	1891	1975	718	663	508	628	590	580	75	104
30	1276	1303	508	384	382	414	339	414	47	61
>30	2815	820	986	264	743	254	886	263	200	39
SUM->	300729	1845748	105387	672983	66826	474085	109844	528614	18672	170066

ESTIMATED FIRST YEAR ACCESSIONS

24800	391500	8400	185699	5800	83618	8700	75419	1800	46764
-------	--------	------	--------	------	-------	------	-------	------	-------

Table G-23
 END FY 1975 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD			ARMY			NAVY			USAF			USMC			
	OFFICER	ENLISTED	TOTAL	OFFICER	ENLISTED	TOTAL	OFFICER	ENLISTED	TOTAL	OFFICER	ENLISTED	TOTAL	OFFICER	ENLISTED	TOTAL	
1	17638	367486	385124	7115	159700	166815	4361	91457	95818	5254	67430	72684	908	48899	49807	
2	19687	301372	321059	7294	133710	141004	4262	71630	75892	6646	58617	65463	1485	37415	38900	
3	19800	265857	285657	6825	107961	114786	4512	66419	70931	6809	62224	69033	1654	29253	30907	
4	18335	164560	182895	5662	46642	52304	4982	46686	51668	6440	52977	59417	1251	18255	19506	
5	18138	85991	104129	5983	31799	37782	4110	21932	26042	6846	25096	31942	1199	7164	8363	
6	15652	62266	77918	4897	20318	25215	3662	18876	22538	6190	17477	23667	903	5595	6500	
7	13778	64177	77955	4801	19176	23977	3228	15288	18516	4965	25344	30310	784	4369	5153	
8	13094	53415	66509	4476	20073	24549	2474	12035	14509	5367	17559	21926	777	3748	4525	
9	13406	36341	49747	5055	13494	18549	2174	8514	10688	5470	11975	17445	707	2358	3065	
10	11662	34296	45958	4894	11171	16065	2007	9147	11154	4097	11893	16000	664	2085	2649	
11	8402	27466	35868	2995	8465	11460	1710	8843	10553	3248	8893	10141	449	1265	1514	
12	8964	27649	36613	3390	8440	11830	1709	8239	9949	3492	9697	11191	373	1273	1546	
13	9090	26792	35882	3367	8590	11957	1569	7619	9188	3700	9555	11255	454	1028	1302	
14	9848	33061	42909	3785	10517	14302	1971	9215	11186	3532	11906	15442	560	1423	1803	
15	9088	33149	42237	3764	9201	12965	1930	9948	11878	2842	12701	15543	552	1299	1691	
16	9996	32179	42175	3695	9692	13387	2138	9758	11896	3587	10766	14353	576	1963	2539	
17	10277	32902	43179	3879	11347	15226	2234	10199	12433	3561	9572	11744	603	1784	2387	
18	9566	31324	40890	3582	8924	12506	2347	10724	13071	3000	10179	13199	637	1497	1934	
19	9271	33691	42962	3477	8997	12474	2290	9515	11805	2858	13556	16411	646	1623	2269	
20	9608	35382	45000	3079	9276	12355	2239	8029	9268	3589	16191	19780	701	1886	2587	
21	7065	23845	30910	2011	5130	7141	1676	4404	6080	2826	13536	16362	552	775	1050	
22	5122	12384	17506	1434	3118	4552	1151	1730	2881	2005	6665	8446	532	871	1143	
23	4341	9042	13383	1250	2725	3975	1088	1187	1785	1580	4767	6552	423	363	516	
24	3367	7637	11004	889	1510	2399	987	1072	1469	1196	4745	5941	295	310	425	
25	3794	6243	10037	1023	1806	2829	797	626	828	1652	3594	4222	322	217	299	
26	1873	2417	4290	693	684	1377	424	246	370	592	1355	1725	164	132	196	
27	2267	2750	5017	735	992	1727	627	451	578	765	1155	1400	140	152	192	
28	2269	2340	4609	580	627	1207	673	561	628	868	981	1129	148	171	219	
29	1473	1287	2760	487	443	930	358	366	423	556	375	429	72	103	135	
30	1363	1320	2683	522	448	970	407	467	574	378	342	420	56	63	119	
>30	2163	459	2622	834	167	1001	619	222	841	557	42	153	153	28	181	
SUM->	290397	1819080	2109477	102473	675143	777616	64716	465405	501165	104468	501165	18740	177367	2200	55600	57800
ESTIMATED FIRST YEAR ACCESSIONS																
24200	414700	8200	191500	6200	89700	7700	78000	2200	55600	2200	55600	2200	55600	2200	55600	55600

Table G-24

END FY 1976 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	15934	325715	7133	160186	3615	86182	4450	66612	736	42735
2	18124	301530	6724	125074	4374	76758	5006	60457	2020	39241
3	16890	237932	6175	102269	4073	58887	5254	50380	1388	26396
4	16261	158737	5447	47311	3801	43937	5776	48705	1237	18784
5	15815	99090	5157	42756	4054	24935	5461	23920	1143	7479
6	15679	82732	4703	30355	3661	21680	6296	24933	1019	5764
7	14068	53827	4634	18229	3199	15258	5422	15277	813	4763
8	12775	53199	4012	16724	3058	14142	4919	18621	786	3712
9	12494	48986	4123	17605	2605	11496	4986	16529	780	3356
10	12104	34829	4006	12243	2102	8116	5299	12412	697	2058
11	11860	31285	4819	10435	1884	7618	4437	11468	720	1764
12	7866	26913	2998	7910	1609	8933	2803	8878	456	1192
13	8283	25820	3096	7753	1618	7763	3185	9128	384	1176
14	8861	25868	3253	7865	1664	7413	3550	9624	394	966
15	9855	30210	3614	9495	1818	8628	3887	10967	536	1120
16	8969	32607	3619	9354	2018	9372	2825	12581	507	1300
17	9555	32978	3535	9431	2099	9991	3346	11745	575	1811
18	10053	31529	3599	10562	2274	9869	3618	9505	562	1593
19	9781	31689	3545	9739	2431	10456	3157	9785	648	1709
20	9142	28335	3439	8723	2257	5822	2778	12440	668	1350
21	6496	17219	1850	4096	1701	3879	2479	8380	864	498
22	5559	14687	1479	2855	1395	2955	2295	8379	390	484
23	4357	10529	1196	1968	998	1402	1809	6722	354	437
24	3431	5697	1067	1962	882	757	1137	2639	345	339
25	3116	5740	813	1092	848	833	1191	3582	264	233
26	3070	5526	817	1296	669	589	1339	3484	245	157
27	1652	1809	574	599	338	216	573	882	167	112
28	1469	1443	511	457	376	282	493	616	89	88
29	1727	1609	466	520	588	466	554	490	119	133
30	1040	823	341	263	293	268	358	244	48	48
>30	1708	291	636	81	516	145	445	28	111	37
SUM->	277994	1789184	97381	679208	62818	459348	99128	479413	18667	171215

ESTIMATED FIRST YEAR ACCESSIONS

22300	396700	8100	186100	6300	84700	6000	74200	1900	51700
-------	--------	------	--------	------	-------	------	-------	------	-------

Table G-25
END FY 1977 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER	ENLISTED	OFFICER	ENLISTED	OFFICER	ENLISTED	OFFICER	ENLISTED	OFFICER	ENLISTED
1	15958	336759	6772	144082	3990	87851	4670	65467	526	39359
2	18347	305300	7190	133661	4475	73576	4792	59799	1890	38264
3	15459	250367	5874	104251	3739	62431	4032	52047	1814	31638
4	15423	152665	5513	47324	3745	45529	4993	40413	1172	19399
5	14794	94264	4787	36392	3744	22809	5263	27522	1000	7541
6	14180	86878	4662	37582	3328	22703	5198	20587	992	6006
7	14149	70294	4362	25814	3190	16867	5645	22998	952	4615
8	13074	47096	4448	15720	2861	14248	4970	13171	795	3957
9	12177	45723	3955	13808	2831	12423	4611	16288	780	3204
10	12219	43672	4054	15104	2502	10164	4872	15695	791	2709
11	11654	31919	3918	10928	1918	7333	5110	11953	708	1705
12	11334	29299	1782	9465	1782	7261	4125	10976	703	1597
13	7726	25502	2957	7287	1641	8538	2681	8585	447	1092
14	8267	24852	3069	7295	1661	7471	3145	8974	392	1112
15	8792	25119	3241	7489	1751	7166	3418	9546	382	918
16	9697	29591	3517	9193	1912	8426	3740	10884	528	1088
17	8876	32073	3491	9162	2101	9156	2789	12493	495	1262
18	9480	32532	3406	9259	2185	9801	3316	11696	573	1776
19	10062	30839	3557	10463	2348	9347	3605	9462	552	1567
20	9800	27582	3578	9644	2439	6733	3150	9727	641	1478
21	6584	14921	2308	4320	1753	3272	2047	6633	476	696
22	5134	11547	1484	2764	1423	2595	1888	5586	339	602
23	4590	10620	1268	2137	1197	2017	1804	6098	321	368
24	3676	7465	1025	1533	857	1058	1505	4530	289	344
25	2933	4606	913	1564	779	584	952	2184	274	274
26	2682	5002	719	916	746	704	998	3180	289	202
27	2512	3362	694	948	558	458	1065	1834	219	202
28	1352	1220	491	409	274	164	454	557	195	122
29	1169	993	418	357	305	236	375	332	133	90
30	1347	1166	391	377	479	350	380	340	71	68
>30	1734	233	651	43	528	135	451	28	97	99
SUM->	275181	1783461	97437	679291	63042	461406	96044	469585	18666	173179

ESTIMATED FIRST YEAR ACCESSIONS

25200	381300	9000	173000	6500	90300	7900	73000	1900	45300
-------	--------	------	--------	------	-------	------	-------	------	-------

Table G-26

END FY 1978 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER	ENLISTED	OFFICER	ENLISTED	OFFICER	ENLISTED	OFFICER	ENLISTED	OFFICER	ENLISTED
1	16843	285069	7692	114935	4007	73728	4447	61350	697	35056
2	18213	297795	6656	125562	4746	78029	5254	58750	1575	35454
3	16333	273127	6291	120088	4038	66102	4265	53229	1739	33708
4	14189	175831	5210	52724	3542	53783	3974	45139	1463	24185
5	14217	94517	4795	36630	3696	24416	4778	26147	948	7324
6	13144	82605	4371	32230	2863	20362	5067	24110	843	5903
7	12540	72240	4331	31115	2797	17447	4593	18828	819	4850
8	12800	60394	4127	21715	2673	15330	5114	19661	886	3688
9	12144	39396	4254	13398	2528	11721	4603	11112	759	3165
10	11608	41070	3828	12232	2632	10814	4385	15461	763	2563
11	11934	39931	4048	13752	2362	9086	4753	14922	771	2171
12	11371	29993	3855	10119	1830	6954	5014	11392	672	1528
13	11068	27649	4486	8800	1769	6854	4138	10531	675	1464
14	7676	24577	2874	6923	1675	8222	2688	8407	439	1025
15	8355	24143	3089	7047	1725	7214	3155	8822	386	1060
16	8711	24531	3073	7290	1807	6978	3446	9388	385	875
17	9704	29145	3453	9062	1973	8228	3755	10804	523	1051
18	8825	31688	3367	9064	2152	8989	2802	12390	504	1245
19	9451	31932	3319	9213	2236	9360	3320	11614	576	1745
20	10069	27521	3564	10377	2357	6359	3600	9393	548	1392
21	7006	15672	2373	5421	1841	3867	2352	5539	440	845
22	5084	10262	1736	2814	1409	2208	1607	4766	332	474
23	4248	8622	1222	2108	1211	1796	1558	4276	257	442
24	3928	7532	1094	1643	1037	1482	1532	4133	265	274
25	3148	5993	880	1219	729	832	1301	3669	238	273
26	2551	3950	804	1348	687	472	827	1893	233	237
27	2202	3055	618	721	600	510	804	1665	180	159
28	2029	2404	566	655	450	351	861	1302	152	96
29	1082	860	377	318	237	148	357	322	111	72
30	881	699	322	254	240	178	267	211	52	56
>30	1757	297	599	67	574	153	471	46	113	31
SUM->	273111	1772500	97274	668844	62423	461973	95088	469272	18326	172411
ESTIMATED FIRST YEAR ACCESSIONS										
25700	308400	10300	128300	6300	70100	7200	68400	1900	41600	

Table G-27

END FY 1979 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	18701	292436	8008	123301	3581	72159	6505	60940	607	36036
2	18364	252976	6933	101182	4356	65719	5407	54887	1668	31188
3	17607	265998	6332	111401	4523	70379	5257	52332	1495	31886
4	15693	188627	5805	62488	3958	55447	4386	47533	1544	23159
5	13266	95273	4547	35569	3524	28593	4063	22847	1132	8264
6	12915	81136	4357	33096	3000	20027	4722	22248	836	5765
7	11812	67628	4025	27237	2457	16051	4577	19649	753	4691
8	11323	61186	4049	25173	2401	15520	4138	16683	735	3810
9	11846	50389	3913	17883	2437	12713	4657	16918	839	2875
10	11516	34974	4147	11988	2358	10225	4278	10227	733	2534
11	11258	37484	3745	11255	2542	9538	4211	14501	760	2190
12	11526	37268	3902	12865	2268	8579	4594	13862	762	1962
13	10701	28294	3699	9493	1845	6632	4528	10742	629	1427
14	10902	26620	4357	8343	1823	6622	4058	10264	664	1391
15	7753	23838	2855	6696	1768	7913	2690	8245	440	984
16	8236	23567	2956	6838	1818	6982	3072	8719	390	1028
17	8800	24030	3042	7140	1927	6752	3443	9273	368	865
18	9638	28784	3331	8952	2034	8073	3751	10719	522	1040
19	8831	31330	3325	8998	2206	8777	2800	12327	500	1228
20	9437	30120	3290	9095	2257	7768	3321	11552	569	1705
21	7192	15235	2398	5816	1812	3558	2608	5080	374	781
22	5153	10087	1714	3528	1441	2423	1689	3574	309	562
23	4127	7298	1388	2063	1187	1504	1282	3383	270	348
24	3511	5964	1009	1261	852	1148	1277	2805	209	337
25	3246	5766	923	989	623	673	1260	3149	211	208
26	2640	4904	769	989	533	343	1054	3013	194	229
27	1975	2481	657	1015	491	402	617	935	168	188
28	1736	2085	503	490	360	307	609	1063	133	130
29	1520	1574	442	511	187	117	610	676	108	80
30	788	623	289	234	117	117	235	216	77	56
>30	1484	234	521	48	477	118	381	44	105	24
SUM->	273497	1738209	97231	656505	62062	456327	96080	458406	18124	166971

ESTIMATED FIRST YEAR ACCESSIONS

28700	310400	9500	133200	7000	65600	10200	70100	2000	41400
-------	--------	------	--------	------	-------	-------	-------	------	-------

Table G-28

END FY 1980 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	ARMY			NAVY			USAF			USMC		
	OFFICER	ENLISTED	000	OFFICER	ENLISTED	000	OFFICER	ENLISTED	000	OFFICER	ENLISTED	000
1	18188	325394	8232	144249	3689	78322	5544	65561	723	37262	723	
2	20593	261362	7441	108382	4534	65902	7212	54097	1406	32981	1406	
3	18381	229605	6789	90696	4408	60622	5604	49637	1580	28650	1580	
4	16753	196002	5850	62802	4345	60515	5165	48876	1393	23809	1393	
5	14823	103655	5095	42017	3998	28115	4487	24084	1243	9439	1243	
6	12337	80284	4194	31678	2939	22496	4183	19567	1021	6543	1021	
7	11765	66124	3993	27823	2612	15670	4399	17756	761	4875	761	
8	10851	58732	3741	22673	2182	14593	4198	17530	730	3936	730	
9	10806	51818	3872	21346	2226	13193	4003	14031	705	3248	705	
10	11540	45238	3875	16040	2344	11329	4501	15306	820	2563	820	
11	11384	32052	4084	10971	2328	9128	4246	9677	726	2276	726	
12	11133	34975	3653	10430	2495	8991	4229	13510	756	2044	756	
13	11473	35162	3905	12061	2282	8113	4547	13174	739	1814	739	
14	10595	27183	3661	8990	1881	6371	4440	10464	613	1358	613	
15	11020	25785	4343	7996	1917	6388	4100	10071	660	1330	660	
16	7685	23309	2762	6487	1851	7711	2631	8140	441	971	441	
17	8283	23137	2935	6691	1902	6796	3073	8641	373	1009	373	
18	8802	23736	3001	7027	1970	6628	3449	9228	382	853	382	
19	9661	28479	3309	8849	2098	7927	3737	10678	517	1025	517	
20	8816	29613	3298	8896	2229	7240	2791	12282	498	1195	498	
21	6631	16750	2088	5231	1705	4002	2430	6582	408	935	408	
22	5350	9921	1676	3682	1431	2386	1974	3342	269	511	269	
23	4150	7066	1322	2504	1202	1636	1370	2503	256	403	256	
24	3444	5133	1158	1505	984	1089	1078	2272	224	267	224	
25	2878	4549	823	1174	847	941	1032	2150	176	284	176	
26	2703	4704	789	1018	731	915	1001	2586	182	185	182	
27	2045	3052	608	718	484	492	791	1670	152	172	152	
28	1541	1696	564	698	418	260	434	595	125	143	125	
29	1311	1363	376	368	418	340	413	547	104	108	104	
30	1105	1096	316	375	291	211	411	446	87	64	87	
>30	1386	273	496	53	423	111	351	75	116	34	116	
SUM->	277433	1757248	98249	673430	63164	458453	97824	455078	18186	170287	18186	

ESTIMATED FIRST YEAR ACCESSIONS

29200	355600	10900	163100	6700	75100	9700	75500	1800	42000
-------	--------	-------	--------	------	-------	------	-------	------	-------

Table G-29

END FY 1981 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	18440	295581	8806	110019	3950	81731	5088	69098	596	34733
2	19969	289910	7680	123165	4633	72655	6138	59500	1518	34590
3	20267	233287	7146	95146	4599	59516	7166	49270	1356	29355
4	17450	181166	6259	61368	4219	51638	5429	46647	1543	21513
5	15999	119398	5250	46999	4588	34311	5027	27197	1134	10891
6	14050	90115	4742	38215	3536	23641	4660	20984	1112	7275
7	11439	66568	3934	27030	2655	17378	3969	16479	881	5681
8	10954	58719	3834	23870	2334	14339	4059	16408	727	4102
9	10601	52021	3656	19992	2117	12922	4083	15645	745	3462
10	10733	46927	3902	19207	2191	12071	3917	12714	723	2935
11	11420	41834	3884	14861	2288	10268	4436	9330	812	2386
12	11242	30446	4066	10258	2294	8696	4163	14319	719	2162
13	11092	33352	3671	9868	2562	8537	4110	13036	749	1911
14	11474	34079	3931	11549	2375	7891	4430	12892	738	1747
15	10705	26508	3688	8709	1959	6184	4443	10315	615	1300
16	11031	25272	4285	7835	2027	6200	4069	9924	650	1313
17	7766	22986	2771	6358	1926	7556	2636	8100	433	972
18	8315	22843	2911	6582	1957	6678	3074	8571	373	1012
19	8854	23462	2997	6939	2035	6509	3446	9175	376	839
20	9598	27268	3253	8729	2108	6899	3727	10627	510	1013
21	6697	18128	2316	5472	1799	4124	2220	7776	362	756
22	5341	11680	1635	3467	1371	2842	2038	4712	297	659
23	4591	7424	1410	2719	1251	1717	1704	2601	226	387
24	3582	5429	1135	1902	1045	1292	1184	1915	218	320
25	2991	4233	1019	1188	847	907	930	1911	195	227
26	2504	3877	714	969	751	783	889	1881	150	244
27	2276	3318	688	797	609	712	828	1661	151	148
28	1720	2301	530	520	400	412	655	1226	135	143
29	1233	1318	449	558	357	239	324	403	103	118
30	1051	1082	304	292	365	272	301	423	81	95
>30	1505	473	466	46	461	169	450	212	128	46
SUM->	284890	1781005	101332	674629	65609	469089	99593	464952	18356	172335

ESTIMATED FIRST YEAR ACCESSIONS

29100	320700	11200	120700	7700	79100	8300	79900	1900	41000
-------	--------	-------	--------	------	-------	------	-------	------	-------

Table G-30
 END FY 1982 ESTIMATED STRENGTH BY YEAR OF SERVICE

YOS	DOD		ARMY		NAVY		USAF		USMC	
	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED	OFFICER ENLISTED
1	17893	270067	7574	107689	3839	68969	5642	61718	838	31691
2	20856	271295	8124	96542	5395	76973	5861	64424	1476	33356
3	19684	254800	7381	104785	4677	65198	6165	54029	1461	30788
4	19118	180639	6414	63118	4408	50377	6997	45368	1299	21776
5	16290	124765	5693	46192	4097	35861	5233	31334	1267	11378
6	14928	104013	4924	42109	3937	29218	5017	23846	1050	8840
7	13243	76122	4468	32652	3287	18728	4465	18348	1023	6394
8	11107	60056	3813	23308	2522	16114	3897	15624	875	5010
9	10748	54113	3776	21728	2236	13296	3994	15357	742	3732
10	10605	48691	3659	18422	2113	12378	4071	14670	762	3221
11	10815	44198	3988	17865	2187	11476	3879	12117	761	2739
12	11464	39921	3923	13989	2325	9882	4432	13807	784	2243
13	11237	29307	4035	9707	2309	8415	4163	9136	730	2049
14	11197	32459	3680	9456	2620	8328	4137	12839	760	1836
15	11588	33358	3969	11200	2400	7741	4456	12706	763	1711
16	10832	25965	3786	8434	1991	6084	4440	10180	615	1267
17	11090	24982	4310	7706	2054	6122	4073	9853	653	1301
18	7757	22757	2755	6286	1939	7476	2630	8038	433	957
19	8346	22619	2919	6457	1976	6626	3078	8531	373	1005
20	8824	22659	2964	6851	2042	5876	3443	9116	375	816
21	7446	16987	2431	5221	1675	4221	2986	6880	354	665
22	5150	12651	1763	3528	1413	2985	1708	5594	266	544
23	4430	8823	1354	2478	1187	2097	1639	3729	250	519
24	3863	5759	1196	2060	1108	1344	1373	2030	186	325
25	3092	4361	981	1474	914	1050	1010	1572	187	265
26	2552	3595	888	974	771	771	782	1651	163	199
27	2087	2892	616	736	632	638	708	1321	131	197
28	1848	2544	571	559	491	601	659	1265	127	119
29	1352	1740	418	337	337	388	487	834	110	119
30	991	1050	363	429	300	195	245	322	83	104
>30	1624	639	461	61	567	249	462	261	134	68
SUM->	292057	1803827	103197	672415	67697	479677	102132	476500	19031	175234

ESTIMATED FIRST YEAR ACCESSIONS

29000	330000	9417	122800	7028	63900	8858	70000	2109	39700
-------	--------	------	--------	------	-------	------	-------	------	-------

Table G-31a

FY 1923 TO 1982 FY	DOD GAINS	OFFICER STRENGTH BY YEARS OF SERVICE (YOS)														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1923	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	33000	25172	29627	20552	18349	13149	12055	12970	10807	9999	10291	10223	11312	10336	10429	10500
1954	30000	26766	27421	18936	16861	11487	11703	11170	10084	10521	10184	11196	10377	10385	10418	11371
1955	40000	39458	38958	23506	14830	12594	12096	10255	10847	10752	11155	10893	10826	11258	11209	11491
1956	39000	31059	26499	20341	16041	11464	9947	11213	10510	10328	9851	9832	10099	10265	10640	10139
1957	50300	13320	25373	22258	13094	11841	11918	9967	9761	9688	9482	9715	9946	9646	9397	9679
1958	61400	22843	17302	16352	15469	12785	10754	10732	10221	9892	10278	10484	10288	10264	9973	9844
1959	39700	4284	22976	18627	15669	12998	12525	11669	11206	11502	12007	11036	11376	10977	10754	10748
1960	30800	17185	22350	20613	14656	13173	12532	12026	11668	12054	11226	10785	10651	10442	10483	10753
1961	29300	15782	33047	17537	14126	12941	11698	10985	11832	9976	9974	9553	9360	9745	9088	9855
1962	41400	26063	43803	26699	20112	16675	13959	14102	11160	11120	10667	10312	10230	9879	9848	9855
1963	41000	21300	29349	25023	21455	17786	15824	12854	10934	10378	9936	9823	9432	9090	8861	8792
1964	41000	25255	34076	26567	22830	19161	15207	11434	10738	10149	9845	9337	8964	8783	8767	8355
1965	41300	28403	34028	25709	20336	18353	11337	10576	9707	9303	8765	8402	7866	7726	7676	7753
1966	51100	32260	55385	48533	29046	20910	17027	14600	13500	12022	11662	11860	11334	11068	10902	11020
1967	72200	39915	61371	40528	32408	23345	18088	15885	14072	13406	12104	11654	11371	10701	10595	10701
1968	70000	35169	52592	41758	27869	19974	16189	13807	13094	12494	12219	11934	11526	11473	11474	11568
1969	60800	56543	52301	39001	25092	19927	15298	13778	12775	12177	11608	11258	11133	11092	11197	0
1970	62900	47226	45653	28199	22796	18111	15652	14048	13074	12144	11516	11384	11242	11237	0	0
1971	42800	23928	30516	24839	21826	18138	15679	14149	12800	11846	11540	11420	11404	0	0	0
1972	36000	21175	27598	21725	18335	15815	14180	12540	11323	10806	10733	10815	0	0	0	0
1973	30800	19277	23965	19800	16261	14794	13144	11812	10851	10601	10605	0	0	0	0	0
1974	24800	17260	19687	16890	15423	14217	12915	11765	10954	10748	0	0	0	0	0	0
1975	24200	17638	18124	15499	14189	13766	12337	11435	11107	0	0	0	0	0	0	0
1976	22300	15934	18347	16333	15693	14823	14050	13243	0	0	0	0	0	0	0	0
1977	25200	15958	18213	17607	16753	15999	14928	0	0	0	0	0	0	0	0	0
1978	25700	16843	18364	18381	17450	16290	0	0	0	0	0	0	0	0	0	0
1979	24700	18701	20593	20267	19118	0	0	0	0	0	0	0	0	0	0	0
1980	29200	18188	19969	19684	0	0	0	0	0	0	0	0	0	0	0	0
1981	29100	18440	20856	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	29000	17893	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table G-31b

DOD	OFFICER STRENGTH CONTINUED										YEAR						
	16	17	18	19	20	21	22	23	24	25		26	27	28	29	30	> 30
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2294	1923
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	977	1210	1924
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1307	1260	1351	1925
0	0	0	0	0	0	0	0	0	0	0	0	0	1148	967	867	1161	1926
0	0	0	0	0	0	0	0	0	0	0	0	1903	1644	1401	1364	2785	1927
0	0	0	0	0	0	0	0	0	0	0	2154	1769	1493	1269	1364	1451	1928
0	0	0	0	0	0	0	0	0	2380	2161	1857	1658	1444	812	3455	1929	1929
0	0	0	0	0	0	0	0	2395	2177	1937	1751	2296	1030	1581	2006	1930	1930
0	0	0	0	0	0	0	2482	2107	1878	1711	2204	1068	1774	906	1325	1931	1931
0	0	0	0	0	0	2569	2213	1920	1862	2425	1166	2048	997	709	1293	1932	1932
0	0	0	0	0	2742	2288	1883	1656	2968	1184	2239	1046	803	645	1108	1933	1933
0	0	0	0	3467	3747	3209	2765	3713	1738	2745	1491	1145	965	835	1551	1934	1934
0	0	0	4220	3322	3514	3024	4288	1981	3312	1745	1565	1152	941	1058	911	1935	1935
0	6136	5905	4571	4839	5455	3276	4570	2703	2199	1777	1486	1709	937	1072	1936	1936	1936
5990	5606	5989	5904	4900	5884	3474	5344	2954	2427	1980	1643	1875	1104	821	1119	1937	1937
6639	5835	5928	5939	7697	4210	6338	3428	3019	2394	1933	2229	1364	1064	895	1780	1938	1938
10965	6485	6395	11043	5680	8490	4197	4950	3196	2705	2844	1842	1558	1238	1057	1361	1939	1939
25992	10252	18266	10300	13520	7613	11200	5633	4653	3327	2853	2351	2121	1426	1663	1940	1940	1940
45358	26145	24425	24829	24933	1913	13188	11431	11312	8808	7519	6681	5387	3886	2932	2426	1941	1941
26633	23707	34865	24021	23189	19184	15396	12451	10070	8461	7651	6611	5475	3631	2698	2591	1942	1942
10277	12531	26483	18743	23593	16900	15821	10972	9656	8820	8393	6844	5767	4093	3513	3128	1943	1943
10763	11193	13697	14909	14114	10603	8121	6862	5977	4719	4787	3311	3044	2468	1836	2815	1944	1944
14493	11786	11209	11509	10500	7420	6253	5196	4007	3877	3105	2590	2178	1732	1476	2163	1945	1945
13267	13105	12926	10955	12363	8659	7276	6292	5029	4228	3486	2905	2352	1891	1363	1708	1946	1946
13902	12589	11723	13102	13276	9503	8174	6441	4637	3778	3098	2504	1954	1473	1040	1734	1947	1947
11206	11385	14098	14272	14575	11644	9110	6318	5264	4439	3604	2854	2269	1727	1347	1757	1948	1948
7399	7586	11614	11996	11727	8751	5868	4968	4132	3433	2833	2267	1469	1169	881	1484	1949	1949
11475	11769	7795	7924	8245	5102	3946	3270	2707	2308	1873	1652	1352	1082	788	1386	1950	1950
9216	9243	11943	11750	10924	7801	6411	5395	4593	3794	3070	2512	2029	1520	1105	1505	1951	1951
10718	10695	9925	9526	9202	6124	4818	4021	3367	3116	2682	2202	1736	1311	1051	1624	1952	1952
10775	11185	10396	10343	10291	6446	5122	4357	3676	3148	2600	2049	1720	1352	0	0	1953	1953
11296	10916	10760	10780	10670	7065	5559	4590	3928	3246	2703	2276	1848	0	0	0	1954	1954
9874	9763	9794	9723	9608	6446	5134	4248	3511	2878	2504	2087	0	0	0	0	1955	1955
9163	9437	9329	9271	9142	6588	5084	4127	3444	2991	2552	0	0	0	0	0	1956	1956
9797	9636	9566	9781	9800	7006	5153	4150	3582	3092	0	0	0	0	0	0	1957	1957
10415	10277	10053	10062	10069	7192	5350	4591	3863	0	0	0	0	0	0	0	1958	1958
9996	9595	9483	9471	9437	6631	5341	4430	0	0	0	0	0	0	0	0	1959	1959
8909	8876	8825	8831	8816	6697	5190	0	0	0	0	0	0	0	0	0	1960	1960
9697	9704	9638	9661	9598	7446	0	0	0	0	0	0	0	0	0	0	1961	1961
8711	8800	8802	8854	8824	0	0	0	0	0	0	0	0	0	0	0	1962	1962
8236	8283	8315	8346	0	0	0	0	0	0	0	0	0	0	0	0	1963	1963
7685	7766	7757	0	0	0	0	0	0	0	0	0	0	0	0	0	1964	1964
11031	11094	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1965	1965
10832	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1966	1966
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1967	1967
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1968	1968
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1969	1969
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1970	1970
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1971	1971
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1972	1972
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1973	1973
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1974	1974
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1975	1975
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1976	1976
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1977	1977
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1978	1978
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1979	1979
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1980	1980
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1981	1981
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1982	1982

Table G-32a

FY 1923 TO 1982 ARMY FY	OFFICER STRENGTH BY YEARS OF SERVICE (YOS)															
	GAINS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1923	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	12358	11059	9807	9370	8816
1944	0	0	0	0	0	0	0	0	0	0	8160	7226	6310	5684	5746	5807
1945	0	0	0	0	0	0	0	0	0	6807	6143	5391	4848	5724	5400	3593
1946	0	0	0	0	0	0	0	0	8556	7672	6822	6071	5871	5671	2923	4979
1947	0	0	0	0	0	0	0	0	6695	5986	5516	5156	4796	2164	4061	4383
1948	0	0	0	0	0	0	0	0	5389	5090	4419	4093	3920	3746	2632	3037
1949	0	0	0	0	0	0	0	0	5108	4116	3259	3247	3267	3287	2520	2811
1950	0	0	0	0	4823	4058	3078	2229	2127	2207	1866	1836	2392	2071	2480	3122
1951	0	0	0	11451	4578	4138	3028	2981	2933	2823	2738	2404	2448	2493	3037	3122
1952	0	0	13234	6090	2607	2547	2433	2319	3195	1963	2314	2780	2242	2763	2315	2353
1953	12500	11993	12481	5581	2869	2751	2632	3845	2542	2233	2759	2796	3981	2829	2897	3138
1954	9200	9150	9042	3744	3265	2785	2952	2755	2348	2747	2600	3673	2816	2885	3155	3378
1955	16500	16424	17892	9491	3189	2586	3594	2623	2534	2748	3298	3044	3145	3342	3686	3639
1956	12650	12402	7888	3174	2773	2709	2804	2930	2950	2990	2670	2777	3041	3369	3511	3334
1957	14600	14600	7612	6613	4042	3202	3594	2913	3039	3175	3304	3593	3674	3447	3399	3729
1958	17400	12601	5175	4613	3253	3673	3112	3699	3392	3548	3875	4028	4010	4018	3895	3781
1959	11500	1237	9437	4192	4397	3782	4154	3803	3969	4402	4521	4233	4555	4399	4233	4189
1960	10300	6637	8952	5564	3571	333	3975	4118	4430	4559	4602	4364	4181	4028	4011	3874
1961	10600	9278	13219	5131	4054	4097	4252	4509	4621	4552	4334	4191	4012	3951	3760	3764
1962	18200	14447	15969	8483	5159	5430	5241	5201	4935	4567	4387	4106	4037	3797	3785	3674
1963	16000	12454	10752	7631	6032	5461	5158	4912	4245	3919	3636	3567	3384	3167	3253	3241
1964	17800	8983	15390	9370	6795	5699	4995	4520	4137	3809	3702	3433	3390	3096	3069	3089
1965	16300	12316	15981	8755	7016	5370	4351	3823	3443	3325	3039	2995	2998	2957	2874	2855
1966	26100	13094	31687	28630	11961	9660	7741	6468	6136	5003	4894	4819	4724	4586	4357	4343
1967	37800	17686	33907	16493	14091	9008	7020	6420	5244	5055	4006	3918	3855	3699	3661	3688
1968	36200	13997	28702	18463	8850	6252	5646	4658	4476	4123	4054	4048	3902	3905	3931	3969
1969	30500	35634	27208	18402	8749	7216	5280	4801	4012	3955	3828	3745	3633	3671	3620	0
1970	34000	22847	24150	10052	7791	5462	4897	4634	4348	4254	4147	4084	4066	4035	0	0
1971	20000	11445	11403	8488	7468	5983	4703	4362	4127	3913	3875	3884	3923	0	0	0
1972	12000	8963	10340	7185	5662	5157	4662	4331	4049	3872	3902	3988	0	0	0	0
1973	11700	8019	8887	6825	5447	4787	4371	4025	3741	3656	3659	0	0	0	0	0
1974	8400	6150	7294	6175	5513	4795	4357	3991	3834	3776	0	0	0	0	0	0
1975	8100	7115	6724	5874	5210	4547	4194	3934	3813	0	0	0	0	0	0	0
1976	8100	7133	7190	6291	5805	5095	4742	4468	0	0	0	0	0	0	0	0
1977	9000	6772	6656	6332	5850	5250	4924	0	0	0	0	0	0	0	0	0
1978	10300	7692	6933	6789	6259	5693	0	0	0	0	0	0	0	0	0	0
1979	9500	8048	7441	7146	6414	0	0	0	0	0	0	0	0	0	0	0
1980	10900	8232	7680	7381	0	0	0	0	0	0	0	0	0	0	0	0
1981	11200	8806	8124	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	9417	7574	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table G-32b

ARMY OFFICER STRENGTH CONTINUED													YEAR			
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	> 30	YEAR
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1243	1923
0	0	0	0	0	0	0	0	0	0	0	0	0	0	400	247	1924
0	0	0	0	0	0	0	0	0	0	0	0	0	601	574	299	1925
0	0	0	0	0	0	0	0	0	0	0	0	392	276	198	127	1926
0	0	0	0	0	0	0	0	0	0	0	573	470	329	300	220	1927
0	0	0	0	0	0	0	0	0	0	748	533	395	231	272	313	1928
0	0	0	0	0	0	0	0	0	770	752	616	545	343	140	1930	1929
0	0	0	0	0	0	0	0	832	712	619	519	355	191	685	569	1930
0	0	0	0	0	0	730	592	514	483	350	217	814	211	592	1931	1931
0	0	0	0	0	892	696	566	566	388	210	919	240	251	640	1932	1932
0	0	0	0	1182	836	602	484	386	288	112*	290	333	302	484	1933	1933
0	0	0	1236	1393	1039	831	576	321	1216	327	373	328	273	883	1934	1934
0	0	1756	1257	1309	948	673	398	1488	400	488	431	319	549	321	1935	1935
0	2500	2460	1692	1804	1253	702	1923	667	638	561	461	847	249	315	1936	1936
0	2082	2323	2147	1791	1266	711	2212	764	846	663	507	958	291	203	338	1937
2437	2296	2348	2280	1590	899	2588	894	1134	938	640	1155	342	252	222	465	1938
2791	3568	2736	2122	1907	4028	1259	1625	1377	1127	1459	552	458	411	382	485	1939
4189	3958	4026	4094	6040	2180	2641	2154	1593	1908	1090	876	770	643	370	635	1940
11884	11159	10433	8551	11112	3841	3529	2967	4153	2840	2393	2097	1721	971	1087	1093	1941
8256	7621	10913	6136	8034	5628	4130	3011	2412	2006	1845	1616	1452	1019	806	1033	1942
8262	5867	7914	7753	7602	3762	5184	2892	2436	2226	2021	1538	1404	1105	920	1064	1943
3539	4799	5688	5647	5119	3544	2193	1872	1613	1370	1319	953	795	499	452	986	1944
4070	4026	4821	5208	4303	3669	2347	1968	1692	1370	1155	957	790	648	548	834	1945
5564	5936	5887	4017	5451	3692	3039	2605	1872	1641	1348	1064	873	718	522	630	1946
4573	4087	3313	4729	4789	3395	2778	2154	1592	1287	1006	814	643	487	341	651	1947
3642	3344	3877	3833	4033	3218	2275	1733	1426	1146	923	753	580	466	391	599	1948
3465	3714	3734	3981	3960	2501	2148	1718	1361	1107	920	735	511	418	322	521	1949
2288	2804	2456	2545	2946	1836	1455	1150	932	801	693	574	491	377	289	406	1950
3171	3404	3550	3340	2640	2302	1782	1473	1218	1023	817	694	566	442	316	466	1951
2549	2728	3063	2791	2763	1724	1292	1070	889	813	719	618	503	376	304	461	1952
3415	3174	3441	1156	3489	1970	1501	1250	1067	913	804	657	564	449	363	0	1953
3160	3484	3409	3421	3380	1938	1434	1196	1025	880	769	608	530	418	0	0	1954
3773	3674	3612	3672	3573	2011	1479	1268	1094	923	789	688	571	0	0	0	1955
3220	3178	3156	3129	3079	1850	1484	1222	1009	823	714	616	0	0	0	0	1956
3624	3568	3500	3477	3439	2308	1736	1388	1158	1019	888	0	0	0	0	0	1957
3732	3600	3582	3545	3578	2373	1714	1322	1135	981	0	0	0	0	0	0	1958
3921	3879	3599	3557	3564	2398	1676	1410	1196	0	0	0	0	0	0	0	1959
3695	3535	3406	3319	3290	2088	1635	1354	0	0	0	0	0	0	0	0	1960
3819	3691	3367	3325	3298	2316	1763	0	0	0	0	0	0	0	0	0	1961
3517	3453	3331	3309	3253	2431	0	0	0	0	0	0	0	0	0	0	1962
3073	3042	3001	2997	2964	0	0	0	0	0	0	0	0	0	0	0	1963
2956	2935	2911	2919	0	0	0	0	0	0	0	0	0	0	0	0	1964
2762	2771	2755	0	0	0	0	0	0	0	0	0	0	0	0	0	1965
4285	4310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1966
3786	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1967
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1968
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1969
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1970
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1971
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1972
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1973
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1974
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1975
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1976
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1977
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1978
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1979
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1980
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1981
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1982

Table G-33a

FY	OFFICER STRENGTH BY YEARS OF SERVICE (YOS)															
	GAINS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1923	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	4000	1605	3707	3178	5087	4135	3183	3199	2528	1789	1820	1837	1865	1840	1926	2029
1954	5600	5582	5527	4784	3423	2461	2451	2447	1867	1902	1839	1862	1777	1745	1898	2129
1955	6600	6563	5937	5053	4168	2906	2611	2146	2196	2108	2017	2051	2034	2222	2252	2322
1956	6600	4518	5544	6550	4329	2365	2461	2600	2300	2170	2086	2122	2196	2222	2292	2323
1957	17300	12037	6773	6251	3550	3155	3088	2649	2430	2300	2156	2248	2408	2400	2483	2366
1958	11900	2764	4642	4067	4160	3439	2747	2416	2278	2149	2312	2374	2470	2307	2356	2382
1959	11500	801	4993	5810	4536	3241	2648	2415	2212	2302	2178	2247	2283	2307	2275	2299
1960	9400	4756	7461	6556	4334	3245	2567	2342	2113	2671	2001	2031	2069	2107	2166	2116
1961	7600	5369	6211	5663	4345	3485	2981	2385	2109	1671	2106	1873	1928	1922	1948	1920
1962	10000	7593	8870	8390	6581	4437	3033	3102	1866	1909	1976	1978	2000	1980	1977	1880
1963	10100	6370	7101	7101	6121	3695	3451	2171	1743	1695	1645	1656	1600	1604	1640	1625
1964	9500	6924	7828	7932	6283	4974	4293	2112	2085	2021	1948	1792	1709	1678	1687	1620
1965	10300	6874	8262	7975	5174	6226	2336	2191	2039	1988	1872	1770	1699	1647	1675	1648
1966	10300	7738	10191	6823	6089	3606	2676	2383	2196	2094	2007	1884	1747	1607	1623	1617
1967	11700	5420	8487	7517	4886	3632	2763	2391	2190	2174	2102	1918	1830	1801	1807	1669
1968	11900	8346	7625	9480	5342	3705	2948	2553	2474	2605	2502	2362	2268	2282	2245	2401
1969	13600	9393	11170	8493	5918	4436	3560	3228	3058	2831	2632	2562	2405	2502	2620	2620
1970	12500	5825	8184	6709	5230	4251	3662	3199	2867	2528	2398	2328	2294	2240	2240	2100
1971	9200	2872	6962	6288	5061	4110	3661	3190	2673	2437	2304	2288	2320	2240	2240	2100
1972	10100	3143	7009	5911	4982	4054	3328	2797	2401	2226	2191	2184	2100	2100	2100	2100
1973	7500	2675	4997	4512	3801	3744	2863	2457	2182	2117	2113	2100	2100	2100	2100	2100
1974	5800	4301	4262	4073	3745	3696	3000	2612	2334	2236	2100	2100	2100	2100	2100	2100
1975	6200	4361	4374	3739	3542	3524	2939	2655	2522	2100	2100	2100	2100	2100	2100	2100
1976	6300	3615	4475	4038	3958	3998	3536	3287	2100	2100	2100	2100	2100	2100	2100	2100
1977	6500	3990	4746	4523	4345	4588	3937	2100	2100	2100	2100	2100	2100	2100	2100	2100
1978	6300	4007	4355	4408	4219	4097	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
1979	7000	3581	4521	4599	4408	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
1980	6700	3699	4633	4677	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
1981	7700	3950	5395	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
1982	7028	3819	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table G-33b

NAVY OFFICER STRENGTH CONTINUED	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	> 30	YEAR
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1923
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	446	768	1924
0	0	0	0	0	0	0	0	0	0	0	0	0	0	432	431	738	1925
0	0	0	0	0	0	0	0	0	0	0	0	0	484	438	437	770	1926
0	0	0	0	0	0	0	0	0	0	0	0	939	822	741	743	783	1927
0	0	0	0	0	0	0	0	0	0	0	932	849	750	711	774	837	1928
0	0	0	0	0	0	0	0	0	0	1044	963	866	790	639	487	770	1929
0	0	0	0	0	0	0	0	1128	1055	970	897	756	675	520	1215	1930	
0	0	0	0	0	0	0	1153	1041	969	905	769	632	542	575	467	1931	
0	0	0	0	0	0	1218	1084	994	973	853	733	608	612	316	465	1932	
0	0	0	0	0	0	966	926	812	821	712	603	535	531	252	228	420	1933
0	0	0	0	0	1564	1615	1440	1229	1074	919	792	795	483	434	396	469	1934
0	0	0	1614	1339	1404	1302	1150	997	864	887	543	453	412	354	430	1935	
0	0	2387	2295	1926	2067	1813	1545	1298	1279	807	736	639	566	495	484	1936	
0	1856	2097	2409	1820	1726	1417	1244	1276	736	686	583	572	508	256	535	1937	
1906	1877	1857	1834	1811	1788	1765	1742	1719	1696	1673	1650	1627	1604	1581	1558	1535	1938
1740	1680	1620	1560	1500	1440	1380	1320	1260	1200	1140	1080	1020	960	900	840	780	1939
1987	1910	1821	1732	1643	1554	1465	1376	1287	1198	1109	1020	931	842	753	664	575	1940
3831	3907	3982	4057	4132	4207	4282	4357	4432	4507	4582	4657	4732	4807	4882	4957	5032	1941
4539	4293	4047	3801	3555	3309	3063	2817	2571	2325	2079	1833	1587	1341	1095	849	603	1942
6193	6945	6800	6554	6308	6062	5816	5570	5324	5078	4832	4586	4340	4094	3848	3602	3356	1943
2381	2434	3543	3606	3669	3732	3795	3858	3921	3984	4047	4110	4173	4236	4299	4362	4425	1944
2608	1855	1931	1931	1833	1735	1637	1539	1441	1343	1245	1147	1049	951	853	755	657	1945
1929	2637	2038	2127	2216	2305	2394	2483	2572	2661	2750	2839	2928	3017	3106	3195	3284	1946
1851	1872	1893	1914	1935	1956	1977	1998	2019	2040	2061	2082	2103	2124	2145	2166	2187	1947
2613	2735	2752	2769	2786	2803	2820	2837	2854	2871	2888	2905	2922	2939	2956	2973	2990	1948
2193	2178	2163	2148	2133	2118	2103	2088	2073	2058	2043	2028	2013	1998	1983	1968	1953	1949
1949	1504	1525	1546	1567	1588	1609	1630	1651	1672	1693	1714	1735	1756	1777	1798	1819	1950
1982	2003	1853	1904	1955	2006	2057	2108	2159	2210	2261	2312	2363	2414	2465	2516	2567	1951
2632	1949	2213	2144	2075	2006	1937	1868	1799	1730	1661	1592	1523	1454	1385	1316	1247	1952
2627	2202	2039	2077	2115	2153	2191	2229	2267	2305	2343	2381	2419	2457	2495	2533	2571	1953
2646	2600	1885	1833	1830	1827	1824	1821	1818	1815	1812	1809	1806	1803	1800	1797	1794	1954
2338	2304	2283	2262	2241	2220	2199	2178	2157	2136	2115	2094	2073	2052	2031	2010	1989	1955
2322	2277	2328	2379	2430	2481	2532	2583	2634	2685	2736	2787	2838	2889	2940	2991	3042	1956
2337	2366	2316	2266	2216	2166	2116	2066	2016	1966	1916	1866	1816	1766	1716	1666	1616	1957
2405	2374	2343	2312	2281	2250	2219	2188	2157	2126	2095	2064	2033	2002	1971	1940	1909	1958
2148	2234	2274	2314	2354	2394	2434	2474	2514	2554	2594	2634	2674	2714	2754	2794	2834	1959
2138	2099	2185	2236	2287	2338	2389	2440	2491	2542	2593	2644	2695	2746	2797	2848	2899	1960
2018	2101	2152	2203	2254	2305	2356	2407	2458	2509	2560	2611	2662	2713	2764	2815	2866	1961
1917	1973	2034	2095	2156	2217	2278	2339	2400	2461	2522	2583	2644	2705	2766	2827	2888	1962
1897	1927	1970	2035	2100	2165	2230	2295	2360	2425	2490	2555	2620	2685	2750	2815	2880	1963
1818	1902	1957	2012	2067	2122	2177	2232	2287	2342	2397	2452	2507	2562	2617	2672	2727	1964
1851	1826	1939	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1965
2027	2094	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1966
1921	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1967
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1968
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1969
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1970
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1971
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1972
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1973
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1974
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1975
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1976
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1977
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1978
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1979
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1980
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1981
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1982
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1983
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1984
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1985
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1986
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1987

Table G-34a

FY 1923 TO 1982 USMC OFFICER STRENGTH BY YEARS OF SERVICE (YOS)																
FY	GAINS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1923	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0	1136	1123	1086
1942	0	0	0	0	0	0	0	0	0	0	0	0	1553	1583	1561	1582
1943	0	0	0	0	0	0	0	0	0	0	0	1284	1318	1314	1416	1353
1944	0	0	0	0	0	0	0	0	0	0	488	353	336	328	329	330
1945	0	0	0	0	0	0	0	0	0	542	401	354	365	361	356	365
1946	0	0	0	0	0	0	0	0	608	454	348	342	336	329	319	318
1947	0	0	0	0	0	0	0	751	524	407	378	371	364	365	354	348
1948	0	0	0	0	0	0	960	666	506	472	453	433	412	402	402	418
1949	0	0	0	0	0	1171	707	515	450	422	394	378	380	383	404	428
1950	0	0	0	0	1408	867	574	395	373	350	328	344	342	348	359	355
1951	0	0	0	1784	2015	1551	1115	928	741	645	668	674	683	680	689	659
1952	0	0	1696	1613	1793	1234	948	661	565	575	559	601	593	597	486	753
1953	1400	1002	1397	1537	2147	1676	1304	814	779	766	817	828	822	715	1033	998
1954	1700	1532	1692	1164	968	772	592	555	571	611	628	650	704	857	1102	1073
1955	1200	1046	1175	1203	1231	842	750	641	629	617	630	678	661	851	803	824
1956	1400	567	968	1368	1073	942	198	712	615	628	672	670	785	738	777	769
1957	2400	1716	1121	1475	1287	1065	929	691	668	730	689	712	685	676	706	630
1958	2600	570	1069	1278	1136	937	755	669	713	647	719	654	658	690	678	621
1959	2100	359	714	891	908	812	752	787	672	637	625	636	653	591	589	595
1960	1800	405	887	1089	1109	1080	936	883	592	651	642	669	578	545	547	563
1961	1900	431	977	1235	1387	1283	1217	762	807	699	706	601	572	533	533	552
1962	2400	747	1299	1616	1688	1437	917	939	781	796	637	577	560	543	560	536
1963	2000	367	605	1204	1043	1304	911	749	726	537	549	475	450	454	394	382
1964	1700	298	585	843	739	1150	842	716	552	477	415	381	373	384	392	386
1965	2000	456	815	1400	1332	1430	1056	742	672	567	460	449	456	447	439	440
1966	3600	1108	2504	2801	2964	2020	1456	1056	745	676	664	420	743	675	664	660
1967	5400	1330	2030	2460	2225	1619	1135	796	745	707	697	708	672	629	613	615
1968	3700	1276	2105	2528	2226	1510	1038	815	777	780	751	771	762	739	738	763
1969	4100	975	1993	2191	1701	1284	911	784	786	780	763	760	756	749	760	0
1970	3100	824	1459	1625	1444	1122	903	813	795	759	733	726	719	730	0	0
1971	2000	492	1272	1734	1451	1199	1019	952	886	839	820	812	784	0	0	0
1972	1700	383	1246	1558	1251	1143	992	819	735	705	723	761	0	0	0	0
1973	2700	1031	1585	1654	1237	1000	843	753	730	745	740	0	0	0	0	0
1974	1800	865	1485	1388	1172	978	836	761	727	742	0	0	0	0	0	0
1975	2200	748	2120	1814	1463	1132	1021	881	815	0	0	0	0	0	0	0
1976	1900	736	1870	1739	1544	1243	1112	1023	0	0	0	0	0	0	0	0
1977	1900	526	1557	1555	1393	1134	1050	0	0	0	0	0	0	0	0	0
1978	1900	697	1668	1580	1513	1267	0	0	0	0	0	0	0	0	0	0
1979	2100	607	1506	1376	1299	0	0	0	0	0	0	0	0	0	0	0
1980	1300	723	1518	1461	0	0	0	0	0	0	0	0	0	0	0	0
1981	1900	596	1476	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	2109	838	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table G-34b

USMC	OFFICER STRENGTH CONTINUED														YEAR		
	16	17	18	19	20	21	22	23	24	25	26	27	28	29		30	> 30
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	175	1923
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	1924
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	71	1925
0	0	0	0	0	0	0	0	0	0	0	0	0	87	87	69	112	1926
0	0	0	0	0	0	0	0	0	0	0	0	123	118	115	94	102	1927
0	0	0	0	0	0	0	0	0	0	0	135	117	112	108	105	101	1928
0	0	0	0	0	0	0	0	0	0	131	119	106	101	81	60	89	1929
0	0	0	0	0	0	0	0	0	162	157	143	137	108	79	61	100	1930
0	0	0	0	0	0	0	0	140	131	121	114	93	71	56	40	85	1931
0	0	0	0	0	0	112	107	98	95	79	63	51	43	26	8	1932	
0	0	0	0	242	133	122	112	104	87	70	56	47	39	31	7	1933	
0	0	0	339	326	316	304	263	222	196	168	138	112	81	62	29	1934	
0	0	381	375	356	359	319	279	265	221	188	160	116	93	43	64	1935	
0	426	421	404	401	350	298	266	229	200	164	134	101	73	48	69	1937	
453	437	422	421	395	368	309	269	221	187	148	122	72	59	56	85	1938	
499	475	471	461	451	392	326	289	241	182	165	87	107	67	49	77	1939	
594	583	573	563	560	493	392	333	264	232	173	219	105	98	73	96	1940	
1064	1045	1025	1017	1012	903	743	599	506	459	422	367	249	202	158	125	1941	
1553	1523	1474	1470	1443	1341	1096	903	507	560	424	392	280	226	192	168	1942	
1290	1227	1221	1207	1203	1075	879	676	635	560	532	448	421	270	223	230	1943	
327	312	310	308	341	309	349	426	292	174	243	131	167	133	115	100	1944	
367	363	372	381	377	202	362	195	185	148	122	80	65	57	47	53	1945	
314	328	345	340	351	477	350	319	263	212	145	115	88	75	56	111	1946	
351	383	387	392	643	506	492	377	262	169	133	113	90	72	48	104	1947	
411	440	558	889	882	918	702	523	315	262	220	177	148	119	97	113	1948	
414	454	743	812	817	720	482	349	251	205	168	140	89	71	52	105	1949	
440	676	710	818	767	564	363	287	228	197	161	167	133	105	77	116	1950	
544	1088	1027	1099	975	678	519	454	374	322	245	195	152	108	87	128	1951	
797	835	838	801	650	516	392	339	295	264	219	180	133	104	81	134	1952	
1095	1111	1021	852	813	645	489	423	345	289	233	168	125	113	83	0	1953	
1149	1063	929	902	917	676	532	354	289	238	194	152	135	113	0	0	1954	
797	699	663	669	667	552	390	321	265	211	182	151	127	0	0	0	1955	
694	675	698	695	701	466	339	257	209	176	150	131	0	0	0	0	1956	
613	610	635	646	668	476	332	270	224	195	163	0	0	0	0	0	1957	
618	629	637	648	641	440	309	256	218	187	0	0	0	0	0	0	1958	
600	603	562	552	548	374	269	226	186	0	0	0	0	0	0	0	1959	
576	575	573	576	569	408	297	250	0	0	0	0	0	0	0	0	1960	
507	495	504	500	498	362	266	0	0	0	0	0	0	0	0	0	1961	
528	523	522	517	510	354	0	0	0	0	0	0	0	0	0	0	1962	
385	388	382	376	375	0	0	0	0	0	0	0	0	0	0	0	1963	
341	373	373	373	0	0	0	0	0	0	0	0	0	0	0	0	1964	
441	433	433	0	0	0	0	0	0	0	0	0	0	0	0	0	1965	
659	653	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1966	
615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1967	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1968	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1969	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1970	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1971	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1972	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1973	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1974	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1975	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1976	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1977	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1978	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1979	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1980	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1981	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1982	

Table G-35a

FY 1923 TO 1982 USAF FY GAINS	OFFICER STRENGTH BY YEARS OF SERVICE (YOS)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1923	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1686
1940	0	0	0	0	0	0	0	0	0	0	0	0	0	352	3647
1941	0	0	0	0	0	0	0	0	0	0	0	0	8370	8452	8921
1942	0	0	0	0	0	0	0	0	0	0	0	9183	9302	9626	10766
1943	0	0	0	0	0	0	0	0	0	0	11210	10327	10181	10464	10766
1944	0	0	0	0	0	0	0	0	0	7014	6681	6368	6447	6137	5827
1945	0	0	0	0	0	0	0	0	4756	4636	4394	4313	4383	4452	4852
1946	0	0	0	0	0	0	0	6796	6385	6144	5771	5695	5259	4874	4699
1947	0	0	0	0	0	0	8624	7743	7371	7027	7005	6947	7825	6781	6593
1948	0	0	0	0	0	11192	9033	8199	8035	7958	7880	2477	7637	5252	5251
1949	0	0	0	0	9359	7762	6286	6305	5895	5445	2386	5279	3333	5259	5259
1950	0	0	0	7434	6902	5384	3928	3774	3580	2218	3444	5692	3350	3302	3287
1951	0	0	11652	8131	8175	6211	6034	5857	5503	5839	4275	5649	5645	5545	5573
1952	0	10065	8489	6078	5930	5184	4637	4818	4280	4889	4282	4244	4137	4076	3949
1953	12100	10572	12042	10256	8246	6691	5136	2532	4998	5211	4895	4782	4744	4652	4359
1954	11500	10506	11204	9244	7557	5869	5707	5313	5304	5263	5117	5071	5066	4879	4643
1955	16000	15425	15954	11148	6342	6793	5491	4845	5472	5279	5210	5129	4984	4645	4464
1956	13400	13352	11301	9249	7868	5448	3884	5071	4637	4540	4423	4253	4077	3854	3743
1957	16000	12934	9867	7919	4175	4419	4307	3723	3624	3483	3333	3193	3149	2961	2930
1958	29100	6908	5816	6394	6920	4736	4140	3948	3778	3548	3372	3428	3270	3249	3124
1959	14600	1891	7832	7734	5828	5163	4971	4664	4403	4161	4143	3926	3885	3827	3709
1960	9300	5387	5050	7404	5642	5517	5054	4683	4333	4173	3981	3719	3823	3752	3599
1961	9200	704	12640	5509	4340	4076	3648	3349	3295	3054	2828	2888	2864	2904	2842
1962	10900	3276	17665	8210	6684	5771	4768	4860	3978	3853	3609	3657	3649	3522	3483
1963	12900	2109	10891	9487	8259	7326	6304	5016	4224	4233	4146	4125	3998	3743	3544
1964	12300	9050	10273	8422	8013	7338	5077	4086	3964	3842	3781	3731	3492	3195	3155
1965	11000	8757	8970	7579	6874	5327	3584	3820	3603	3483	3394	3248	2813	2681	2699
1966	11000	10360	10993	10279	8032	5624	5154	4693	4423	4249	4097	4437	4125	4118	4028
1967	17300	15509	16947	14058	11206	9096	7170	6278	5873	5470	5299	5110	5074	4858	4643
1968	17900	11600	14160	11287	11451	8507	6557	5751	5367	4986	4872	4753	4594	4547	4433
1969	12600	10541	11980	9915	8724	6991	5547	4965	4919	4611	4385	4211	4229	4170	4133
1970	13300	1730	11860	9813	8331	7276	6190	5422	4970	4603	4278	4246	4163	4163	4133
1971	11600	9119	10879	8329	7846	6846	6296	5645	5174	4657	4501	4436	4432	4432	4432
1972	11500	8686	8953	7071	6440	5461	5198	4593	4138	4003	3917	3879	0	0	0
1973	10300	7552	8496	6809	5776	5264	5067	4577	4198	4003	4071	0	0	0	0
1974	8700	5944	6646	5254	4993	4778	4722	4399	4059	3994	0	0	0	0	0
1975	7700	5254	5006	4032	3974	4063	4183	3969	3897	0	0	0	0	0	0
1976	6000	4450	4792	4265	4386	4487	4600	4465	0	0	0	0	0	0	0
1977	7900	4670	5254	5257	5165	5027	5017	0	0	0	0	0	0	0	0
1978	7200	4447	5407	5604	5429	5233	0	0	0	0	0	0	0	0	0
1979	10200	6505	7212	7166	6997	0	0	0	0	0	0	0	0	0	0
1980	9700	5544	6138	6165	0	0	0	0	0	0	0	0	0	0	0
1981	8300	5088	5861	0	0	0	0	0	0	0	0	0	0	0	0
1982	8858	5642	0	0	0	0	0	0	0	0	0	0	0	0	0

Table G-35b

USAF	OFFICER STRENGTH CONTINUED															YEAR		
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	> 30		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	308	1923
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	1924
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	187	184	1925
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	185	166	1926
0	0	0	0	0	0	0	0	0	0	0	0	0	268	234	214	227	193	1927
0	0	0	0	0	0	0	0	0	0	0	0	0	339	270	236	219	209	1928
0	0	0	0	0	0	0	0	0	0	435	327	269	222	174	125	686	1929	
0	0	0	0	0	0	0	0	0	273	253	205	200	173	145	315	122	1930	
0	0	0	0	0	0	0	0	459	343	274	209	179	148	362	80	186	1931	
0	0	0	0	0	0	0	347	326	264	228	194	160	470	102	116	100	1932	
0	0	0	0	0	0	461	404	357	247	235	223	527	178	179	84	125	1933	
0	0	0	0	425	498	506	494	439	344	604	245	189	131	109	137	1934		
0	0	0	517	400	440	474	474	364	764	280	396	156	129	93	135	1935		
0	0	865	775	597	615	683	750	844	536	566	320	270	203	150	189	1936		
1194	1285	1301	1364	888	946	1034	1624	742	645	467	419	304	304	194	181	1937		
1594	1623	1498	1535	1572	2507	3210	2157	741	649	529	453	379	296	229	255	1938		
3793	3501	3697	3592	4904	3059	6275	1960	1678	1341	1185	970	777	713	445	247	1940		
9213	9099	8985	11313	8697	9776	5780	5151	4069	3456	2965	2455	1910	1475	541	613	1941		
10519	10270	17920	9931	10524	8563	7441	5874	4857	3847	3399	2936	2381	1230	997	798	1942		
10883	18452	10528	5430	10331	8026	6543	4734	4267	3807	3553	3165	2315	2044	1483	1135	1943		
4454	5628	4166	5628	5272	3809	3076	2473	2110	1788	1716	1152	1103	863	559	886	1944		
4498	4942	4085	3990	3937	2960	2157	1751	1561	1386	948	828	712	523	339	557	1945		
6686	4834	4656	4654	4528	2759	2282	2011	1704	1231	1101	941	748	590	378	445	1946		
6432	6247	6134	6140	5994	3922	3044	2444	1659	1501	1251	1006	779	556	358	451	1947		
7216	7046	6911	6804	6492	5142	4445	3237	2449	1781	1427	1133	868	554	380	471	1948		
5175	5039	4948	4909	4576	3728	3107	1670	1435	1194	991	765	493	312	267	381	1949		
3192	3122	3063	3024	3075	1397	1249	1055	840	739	592	573	454	357	235	351	1950		
5398	5270	5513	5229	4342	3249	2717	2285	1983	1652	1339	1065	861	610	411	450	1951		
3838	3651	3781	3788	3709	2194	1695	1395	1196	1191	998	804	609	413	301	462	1952		
4161	4218	4168	3943	3924	2752	1887	1580	1317	952	827	617	434	324	245	0	1953		
4420	4638	4173	4157	4164	2490	2005	1809	1505	1303	1054	791	655	487	0	0	1954		
4328	4239	4092	4199	4185	2826	2255	1804	1532	1260	1001	828	659	0	0	0	1955		
3644	3613	3612	3614	3589	2479	1808	1558	1277	1032	889	708	0	0	0	0	1956		
2435	2593	2878	2850	2778	2047	1607	1282	1078	930	782	0	0	0	0	0	1957		
3042	3133	3100	3157	3150	2452	1689	1374	1184	1010	0	0	0	0	0	0	1958		
3646	3561	3618	3605	3600	2608	1975	1704	1373	0	0	0	0	0	0	0	1959		
3587	3346	3316	3324	3321	2430	2038	1639	0	0	0	0	0	0	0	0	1960		
2825	2739	2802	2800	2791	2220	1708	0	0	0	0	0	0	0	0	0	1961		
3740	3755	3751	3737	3727	2986	0	0	0	0	0	0	0	0	0	0	1962		
3446	3443	3449	3446	3443	0	0	0	0	0	0	0	0	0	0	0	1963		
3072	3073	3074	3078	0	0	0	0	0	0	0	0	0	0	0	0	1964		
2631	2636	2630	0	0	0	0	0	0	0	0	0	0	0	0	0	1965		
4069	4073	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1966		
4440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1967		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1968		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1969		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1970		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1971		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1972		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1973		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1974		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1975		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1976		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1977		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1978		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1979		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1980		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1981		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1982		

Table G-36a

FY	1923 to 1982 CA:AS	DOD ENLISTED STRENGTH BY YEARS OF SERVICE (YOS)														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1923	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	906801	853669	955848	371956	248217	168418	88618	81716	12723	65677	61183	59808	54431	51446	51588	49575
1954	594159	603650	625967	292776	196623	100470	95313	78604	72635	66443	59902	54502	55607	52629	48032	47794
1955	655459	598584	566715	394335	221955	114841	92432	87777	82020	77964	71347	63059	60648	58299	57169	57169
1956	508722	505312	401597	297882	209024	85674	75292	70126	67067	60301	53299	50487	47993	45547	43914	48136
1957	482526	465315	421514	251820	169026	73605	65394	59877	54102	45812	44944	41508	39670	37556	35745	35601
1958	397630	425317	324880	224932	141476	76698	59726	55586	49275	45751	40993	38704	35944	34274	33039	32665
1959	420310	352666	388308	252867	172179	74813	63067	56178	55179	48460	41221	38684	38185	35183	34684	34096
1960	414463	345759	370687	305453	173801	78951	63117	59376	60978	48864	40011	36971	35223	34022	33447	32719
1961	419417	386433	433878	297118	185002	84044	67366	68047	54292	44059	39419	37081	35774	34687	33756	33149
1962	540440	514117	493106	345633	246162	94952	71897	54961	51541	42012	38505	36767	35464	33903	33061	32010
1963	402132	443419	364309	276338	182966	63902	52338	44543	38539	32940	31024	29432	27993	26792	25866	25119
1964	495866	479251	454321	291755	188438	71792	50216	42794	37764	33459	31009	28890	27449	25804	24452	24143
1965	420764	399258	392767	271470	186944	57199	46292	40469	36523	32072	29291	27466	26913	25502	24577	23838
1966	837969	898904	830778	512511	270109	81710	56226	49779	43511	37577	34296	31285	29299	27609	26620	25785
1967	782673	758723	721209	393476	229608	64276	55725	47568	41298	36341	34829	31919	29993	28294	27183	26548
1968	852684	820231	748884	399702	211426	84251	71738	60427	53415	48986	43672	39931	37268	35162	34079	33358
1969	819119	793402	687663	351785	218727	85280	74067	64177	53199	45723	41070	37484	34975	33452	32459	31900
1970	630260	523859	484027	211939	153319	69977	62266	53827	47096	39396	34974	32052	30446	29107	0	0
1971	552303	509528	387930	242713	152801	85991	82732	70294	60394	50389	45238	41834	39921	0	0	0
1972	423779	389320	344007	246052	164560	99090	86878	72200	61186	51818	46927	44198	0	0	0	0
1973	463886	423139	364590	265857	158737	94264	82605	67628	58732	52021	48691	0	0	0	0	0
1974	391500	356333	301372	237932	152665	94517	81136	66124	58719	54113	0	0	0	0	0	0
1975	414700	367486	301530	250367	175831	95273	80284	66568	60056	0	0	0	0	0	0	0
1976	396700	355715	304400	233227	188627	103655	90115	76122	0	0	0	0	0	0	0	0
1977	381300	336759	297795	265998	196002	119398	104013	0	0	0	0	0	0	0	0	0
1978	308400	285069	252976	229605	181166	124765	0	0	0	0	0	0	0	0	0	0
1979	310400	292436	261362	233287	180639	0	0	0	0	0	0	0	0	0	0	0
1980	355600	325394	289910	254800	0	0	0	0	0	0	0	0	0	0	0	0
1981	320700	295581	271295	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	330000	270067	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table G-36b

DOO ENLISTED STRENGTH CONTINUED														YEAR		
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	> 30	YEAR
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	897	1923
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	477	1924
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	415	1925
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	543	1926
0	0	0	0	0	0	0	0	0	0	0	0	837	735	592	1084	1926
0	0	0	0	0	0	0	0	0	0	0	899	779	744	707	974	1927
0	0	0	0	0	0	0	0	0	1545	1202	1125	1025	944	863	1928	1928
0	0	0	0	0	0	0	0	1210	1140	1079	1156	856	556	1846	1929	1929
0	0	0	0	0	0	0	0	1776	1401	1281	1215	934	652	877	962	1930
0	0	0	0	0	0	0	1908	1443	1307	1332	1164	996	827	489	1147	1931
0	0	0	0	0	0	1916	1292	1046	1061	842	622	838	456	407	543	1932
0	0	0	0	0	3253	2106	1502	2667	1173	1083	1023	529	557	372	702	1933
0	0	0	0	4590	4886	3352	2395	1736	1076	1530	703	819	567	562	598	1934
0	0	0	6639	4434	4830	3093	2414	1735	2014	1388	1048	714	662	445	766	1935
0	0	8780	6329	6760	5001	3241	3657	2572	1967	1242	1098	806	709	501	1936	1936
0	12395	12441	12552	9499	6874	4248	4860	4315	2204	1659	1449	1050	999	744	673	1937
10666	10728	11122	12363	9597	6831	6374	4118	2732	2006	1787	1128	1195	794	649	750	1938
12733	12611	11721	10859	10076	8413	5160	3590	2603	2059	1445	1423	940	791	657	575	1939
21292	20361	18459	16556	21069	12666	8129	5844	4259	3043	3028	2010	1950	1591	1219	881	1940
40652	38101	35549	41371	41048	23969	15675	11459	7827	6817	5954	5103	3853	3256	2725	1186	1941
42819	41304	44928	46162	40485	26189	16684	10925	11335	7318	6650	4723	3889	3226	2439	1199	1942
56570	64443	62302	59219	55727	35292	21476	18066	12906	10077	8353	6767	5130	4012	2911	1282	1943
52737	52397	48107	49294	44468	24025	22985	12920	9475	7551	6355	4723	3348	2472	1720	820	1944
50903	46330	44676	44994	42289	26932	16857	11436	8728	6896	5493	3901	2639	1802	1303	459	1945
54368	53456	51843	51816	51313	30875	19330	13233	10879	8263	6434	4688	3040	1975	1320	291	1946
47059	44966	46055	42529	42036	23103	14450	10974	8130	5975	4858	3286	2058	1287	823	233	1947
61609	59281	60812	60370	59279	35007	20140	14320	9567	7210	5687	3670	2340	1609	1166	297	1948
51574	45689	48447	47560	42974	26029	14972	10183	7730	5694	4539	2750	1443	993	690	234	1949
12522	28124	28112	27213	25735	16356	8031	5704	4126	2985	2417	1809	1220	860	623	273	1950
51990	51266	52010	48974	48817	23622	15900	11319	8123	6283	5526	3362	2404	1774	1096	473	1951
59144	56892	56149	55067	51351	24681	15296	10923	7637	5780	5002	3055	2085	1363	1082	639	1952
47974	48005	45737	46778	43191	19351	12534	9042	5697	4606	3950	2481	1696	1318	1050	0	1953
45680	46695	44516	40395	41303	18910	12384	10529	7065	5993	4904	3052	2301	1740	0	0	1954
54720	55439	55209	54511	49010	23845	14687	10770	7542	5766	4704	3118	2544	0	0	0	1955
42041	41761	41621	40630	35382	17219	11547	8622	5964	4519	3877	2892	0	0	0	0	1956
35287	44726	30468	33691	28315	14921	10262	2988	5153	4233	3595	0	0	0	0	0	1957
32105	31660	31324	31689	27582	15672	10087	7666	5079	4361	0	0	0	0	0	0	1958
33401	32902	32529	30839	27521	15235	9921	7674	5759	0	0	0	0	0	0	0	1959
32179	32978	32532	31932	30120	16750	1540	8823	0	0	0	0	0	0	0	0	1960
32607	32073	31688	31350	29613	18128	12471	0	0	0	0	0	0	0	0	0	1961
29591	29145	28784	28472	27268	16987	0	0	0	0	0	0	0	0	0	0	1962
24537	24030	23736	23662	22659	0	0	0	0	0	0	0	0	0	0	0	1963
23187	23137	22843	22619	0	0	0	0	0	0	0	0	0	0	0	0	1964
23309	22986	22757	0	0	0	0	0	0	0	0	0	0	0	0	0	1965
24272	24982	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1966
25565	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1967
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1968
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1969
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1970
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1971
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1972
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1973
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1974
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1975
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1976
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1977
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1978
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1979
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1980
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1981
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1982

Table G-37a

FY 1923 TO 1982 ARMY ENLISTED STRENGTH BY YEARS OF SERVICE (YOS)																
FY	GAINS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1923	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3779
1940	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5666	5217
1941	0	0	0	0	0	0	0	0	0	0	0	0	0	12657	11178	11195
1942	0	0	0	0	0	0	0	0	0	0	0	15024	13399	13939	14434	
1943	0	0	0	0	0	0	0	0	0	0	0	27554	23139	21169	23820	23330
1944	0	0	0	0	0	0	0	0	0	0	23134	20068	19298	20080	20022	19563
1945	0	0	0	0	0	0	0	0	25179	20968	19718	19257	19471	19125	18531	
1946	0	0	0	0	0	0	0	28261	23189	22407	21782	21030	20278	19464	18664	
1947	0	0	0	0	0	0	28898	22104	20632	19768	19068	18368	17689	16935	16338	
1948	0	0	0	0	0	36707	26278	22706	22654	21787	20919	19984	19464	18718	18140	
1949	0	0	0	0	44945	34168	26606	25406	24078	22770	20452	19464	18955	18585	18581	
1950	0	0	0	27669	27475	22067	18015	14913	11811	11698	12366	10984	10265	10834	10469	
1951	0	0	162746	35411	38973	28237	24920	21603	20986	18874	19580	18369	18122	16359	16734	
1952	0	328075	79568	22233	27603	21744	16485	16216	15925	14702	14100	13800	12433	11156	10989	
1953	643655	625500	620386	133110	50711	32557	26412	22740	20054	20423	18585	18617	13741	14255	14783	13916
1954	158698	292463	294665	91977	58235	26402	21760	18284	18317	17602	17282	13741	14255	14909	12640	11740
1955	112960	270503	277800	152325	26850	23713	19644	19755	17326	18742	15704	14875	13001	11957	11108	10752
1956	202139	231859	151734	12669	24819	19605	19730	18804	17034	14356	11635	12057	14868	10757	9958	9662
1957	248184	215446	182708	60061	21005	19639	20315	17829	14396	12496	12315	10963	10775	9876	9135	9159
1958	204764	275695	161012	73302	22870	25120	17463	17013	16734	13973	11591	11859	10271	9974	9333	9082
1959	224263	198759	220126	92502	39777	24828	22902	20553	19690	16358	13927	13368	12528	12141	11893	11755
1960	192330	153332	165055	122970	26573	20311	20453	18417	23525	15082	12045	11306	10805	10305	10157	9901
1961	176345	163764	205434	98400	28925	26042	21559	20903	16651	12912	11480	10705	10184	9770	9469	9203
1962	284530	262851	247777	130312	29750	21628	21933	18387	15869	13663	12524	12045	11487	10864	10517	9495
1963	186133	180630	164888	101840	30125	21760	19293	16607	12380	11106	10291	9792	9131	8590	7865	7489
1964	264890	247822	243107	101513	33233	25773	17280	14669	12039	10734	10686	8972	8440	7753	7295	7047
1965	204198	187173	179343	87981	29810	19582	15671	13472	12028	11337	9724	8465	7910	7287	6923	6696
1966	487622	462912	426121	169787	43608	26662	19505	17205	14963	12631	11171	10435	9465	8840	8343	7956
1967	439389	459186	421197	160182	46213	25262	21440	17913	15254	13494	11743	10928	10119	9493	8900	8709
1968	533082	515236	465244	189042	50239	32462	26826	22509	20073	17605	15704	13752	12865	12067	11405	11200
1969	455037	429242	371772	130006	33489	26916	21846	19176	16774	13808	12132	11255	10630	9868	9200	0
1970	375949	310291	275427	61219	27297	22250	20318	18229	15720	13398	11988	10971	10258	9707	9107	0
1971	313702	283505	187576	89355	35773	31799	30355	25874	21715	17883	16040	14861	13989	0	0	0
1972	187190	166724	144899	94854	46642	42756	37582	31115	25743	21546	19207	17465	0	0	0	0
1973	215029	190653	162716	107961	47311	36392	32230	27257	22673	19992	18422	0	0	0	0	0
1974	185699	159940	133710	102269	47324	36630	33096	27823	23870	21728	0	0	0	0	0	0
1975	191500	159700	125074	104251	52724	35569	31678	27030	23308	0	0	0	0	0	0	0
1976	186100	160186	133661	120088	67488	42017	38215	32652	0	0	0	0	0	0	0	0
1977	173000	144082	125562	111401	67802	46999	42109	0	0	0	0	0	0	0	0	0
1978	128300	114935	101182	90696	61368	46192	0	0	0	0	0	0	0	0	0	0
1979	133200	123301	108352	95146	63118	0	0	0	0	0	0	0	0	0	0	0
1980	163100	144249	123105	104785	0	0	0	0	0	0	0	0	0	0	0	0
1981	124100	110019	96542	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	122800	107689	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table G-37b

ARMY ENLISTED STRENGTH CONTINUED														YEAR		
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	> 30	YEAR
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	484	1923
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	242	1924
0	0	0	0	0	0	0	0	0	0	0	0	0	0	190	293	1925
0	0	0	0	0	0	0	0	0	0	0	0	453	365	260	407	1926
0	0	0	0	0	0	0	0	0	0	0	356	243	217	172	275	1927
0	0	0	0	0	0	0	0	0	0	689	521	503	427	336	245	1928
0	0	0	0	0	0	0	0	0	671	525	503	485	334	183	1155	1929
0	0	0	0	0	0	0	0	791	611	563	576	395	213	469	469	1930
0	0	0	0	0	0	0	943	656	584	542	514	486	466	190	866	1931
0	0	0	0	0	0	647	453	390	382	313	243	465	180	287	346	1932
0	0	0	0	0	1177	908	745	683	651	618	566	228	374	220	519	1933
0	0	0	0	1433	1470	1197	968	712	455	789	316	524	318	311	386	1934
0	0	1598	1279	1445	1055	968	881	988	386	644	383	384	217	370	1935	1935
0	0	2563	2286	2263	2512	2045	1518	1703	1234	1245	669	621	385	208	233	1936
0	3028	2770	2741	2749	2088	1427	2044	1491	1218	857	830	491	369	318	299	1937
3342	3034	3052	3066	2748	2429	2366	1693	1518	1066	1060	488	471	342	290	462	1938
3535	3642	3658	3459	3259	3155	2176	2000	1412	1119	618	468	360	311	232	273	1939
5483	5449	5152	4854	6057	4024	3408	2336	1880	995	592	547	758	524	318	356	1940
11531	11455	11328	14081	15335	9850	6227	5147	2593	1263	1998	2015	1354	1058	910	578	1941
14159	13883	15029	15925	14671	9438	6950	3465	3293	2378	2475	1415	1236	998	738	478	1942
22839	24662	24183	24524	23175	16340	7885	4401	4093	3898	3219	2583	2027	1505	979	477	1943
18920	17695	18124	19544	17605	7997	10075	4870	3675	2756	2416	1833	1320	844	515	264	1944
18874	17913	16816	17299	17667	10158	6840	4611	3463	2720	2196	1566	930	588	384	167	1945
17622	19303	18884	18976	21173	12357	7799	5367	4288	3215	2557	1795	1049	663	448	81	1946
16973	14715	16359	14255	15149	8829	5343	4065	2951	2203	1676	1075	599	443	263	43	1947
14918	15704	17354	16356	15649	6576	6050	4289	2957	2053	1544	982	627	520	377	67	1948
18975	16115	17621	17096	18436	9467	5445	3839	2824	1915	1458	992	457	357	254	48	1949
11776	8868	9196	9065	8169	5297	2709	1897	1321	859	684	599	409	318	234	53	1950
15584	15924	15281	14575	14118	8041	5186	3666	2522	1806	1296	948	655	511	375	46	1951
11513	10906	10035	9958	9540	5136	2995	2062	1510	1092	916	721	490	368	292	61	1952
13986	13540	13426	12940	12878	6440	3841	2725	1962	1564	1348	1015	698	558	429	0	1953
11598	11119	11053	10998	10895	4853	3118	1968	1533	1219	989	718	520	399	0	0	1954
10827	10588	10602	10625	10480	5130	2855	2137	1643	1261	1018	797	559	0	0	0	1955
9440	9451	9501	9364	9276	4096	2764	2108	1557	1174	969	736	0	0	0	0	1956
9148	9147	9102	8997	8723	4320	2874	2063	1505	1188	974	0	0	0	0	0	1957
9116	9024	8924	8739	8644	5421	3528	2504	1902	1474	0	0	0	0	0	0	1958
11473	11347	10562	10463	10377	5816	3682	2719	2060	0	0	0	0	0	0	0	1959
9692	9433	9259	9213	9095	5231	3467	2478	0	0	0	0	0	0	0	0	1960
9354	9162	9064	8948	8896	5472	3528	0	0	0	0	0	0	0	0	0	1961
9193	9062	8952	8849	8729	5221	0	0	0	0	0	0	0	0	0	0	1962
7290	7140	7027	6939	6851	0	0	0	0	0	0	0	0	0	0	0	1963
6454	6691	6582	6457	0	0	0	0	0	0	0	0	0	0	0	0	1964
6487	6358	6286	0	0	0	0	0	0	0	0	0	0	0	0	0	1965
7835	7706	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1966
8434	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1967
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1968
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1969
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1970
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1971
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1972
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1973
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1974
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1975
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1976
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1977
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1978
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1979
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1980
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1981
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1982

Table G-38a

FY	1923 TO 1982 NAVY ENLISTED STRENGTH BY YEARS OF SERVICE (YOS)															
	GAINS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1923	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6409
1940	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9784
1941	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16203
1942	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15939
1943	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13850
1944	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13385
1945	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16426
1946	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16438
1947	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16572
1948	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16572
1949	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16572
1950	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16572
1951	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16572
1952	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16572
1953	88165	87267	156943	115111	68924	42543	16442	16422	16422	16422	16422	16422	16422	16422	16422	16422
1954	50717	86115	156943	115111	68924	42543	16442	16422	16422	16422	16422	16422	16422	16422	16422	16422
1955	127411	164027	119766	96390	73613	53506	26737	21504	20774	19483	18559	17773	16667	15966	15766	15071
1956	160253	126529	112959	69388	81818	30719	21895	20759	19754	18855	17868	16651	15776	14792	14763	13989
1957	20360	90372	99985	18586	58006	39629	25328	16364	15225	14083	12895	11830	10835	9838	8834	7829
1958	21751	96390	10931	53309	58893	26359	18237	12992	12092	11092	10092	9092	8092	7092	6092	5092
1959	24642	75476	10591	10712	58175	25251	20097	15224	15224	15224	15224	15224	15224	15224	15224	15224
1960	27640	81072	96251	28000	66619	20122	18642	16314	16314	16314	16314	16314	16314	16314	16314	16314
1961	29729	105278	58532	81602	61705	22770	19568	18755	18755	18755	18755	18755	18755	18755	18755	18755
1962	107474	123766	113965	10571	68765	28399	19225	16812	16812	16812	16812	16812	16812	16812	16812	16812
1963	87669	160135	91352	12772	60727	18228	15974	15974	15974	15974	15974	15974	15974	15974	15974	15974
1964	59843	169133	162608	82559	67949	21899	16029	15565	15565	15565	15565	15565	15565	15565	15565	15565
1965	94311	111965	166859	82559	63928	21899	16029	15565	15565	15565	15565	15565	15565	15565	15565	15565
1966	147231	168896	156906	129428	98855	21899	16029	15565	15565	15565	15565	15565	15565	15565	15565	15565
1967	101485	136631	128435	10474	73662	19419	15376	15376	15376	15376	15376	15376	15376	15376	15376	15376
1968	122793	132878	124263	10012	70297	20993	15138	15138	15138	15138	15138	15138	15138	15138	15138	15138
1969	147025	162976	142596	99995	81667	23593	18293	18293	18293	18293	18293	18293	18293	18293	18293	18293
1970	167065	98857	93979	67507	95886	27380	18276	18276	18276	18276	18276	18276	18276	18276	18276	18276
1971	187025	99657	79081	13362	66529	27380	21280	21280	21280	21280	21280	21280	21280	21280	21280	21280
1972	19210	94262	82252	62939	6686	20932	20932	20932	20932	20932	20932	20932	20932	20932	20932	20932
1973	10078	160715	85515	66679	43977	20932	20932	20932	20932	20932	20932	20932	20932	20932	20932	20932
1974	87628	86131	15670	97587	45299	25742	20932	20932	20932	20932	20932	20932	20932	20932	20932	20932
1975	11400	91657	76797	67225	57825	25742	20932	20932	20932	20932	20932	20932	20932	20932	20932	20932
1976	24000	86282	72971	67192	56622	25742	20932	20932	20932	20932	20932	20932	20932	20932	20932	20932
1977	10000	87851	78221	67379	60125	25742	20932	20932	20932	20932	20932	20932	20932	20932	20932	20932
1978	10000	73728	67379	60627	57637	25742	20932	20932	20932	20932	20932	20932	20932	20932	20932	20932
1979	6000	72159	67379	60627	50337	25742	20932	20932	20932	20932	20932	20932	20932	20932	20932	20932
1980	10000	78322	67379	60627	57637	25742	20932	20932	20932	20932	20932	20932	20932	20932	20932	20932
1981	10000	81731	67379	60627	57637	25742	20932	20932	20932	20932	20932	20932	20932	20932	20932	20932
1982	67970	83969	67379	60627	57637	25742	20932	20932	20932	20932	20932	20932	20932	20932	20932	20932

Table G-38b

NAVY ENLISTED STRENGTH CONTINUED														YEAR		
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	> 30	YEAR
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1923
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	1924
0	0	0	0	0	0	0	0	0	0	0	0	0	0	128	138	1925
0	0	0	0	0	0	0	0	0	0	0	0	165	151	165	204	1926
0	0	0	0	0	0	0	0	0	0	0	254	245	226	311	271	1927
0	0	0	0	0	0	0	0	0	0	588	385	309	240	269	298	1928
0	0	0	0	0	0	0	0	267	282	221	220	187	153	279	299	1929
0	0	0	0	0	0	0	648	485	395	289	231	173	187	304	1930	1930
0	0	0	0	0	0	732	460	337	325	228	130	159	131	60	73	1932
0	0	0	0	0	1262	716	420	324	226	131	146	126	53	46	55	1933
0	0	0	0	1691	1945	1124	709	442	194	289	216	93	91	77	59	1934
0	0	0	3163	1725	1883	1047	727	406	372	274	128	101	87	79	56	1935
0	0	3794	3550	2083	2236	1487	727	750	529	243	190	162	148	142	82	1936
0	6338	6561	6619	3855	2512	1769	1001	661	282	224	173	155	141	136	179	1937
3994	4457	4641	5248	3499	1749	1650	917	386	293	228	195	164	158	138	86	1938
5139	5054	4416	4016	3616	2131	1290	478	380	288	239	195	166	143	126	68	1939
8560	8232	7602	5777	7120	3397	1678	1089	774	639	556	513	375	372	298	127	1940
15614	14769	13924	14791	12075	5007	3472	2207	1785	1470	1377	1043	884	704	653	203	1941
13326	13267	12603	12252	9597	5121	3151	2129	1842	1610	1362	1042	846	736	612	157	1942
15204	16431	16147	14277	11742	6170	4222	3137	2567	1928	1659	1298	979	851	688	279	1943
15229	15229	12179	12097	9675	5266	3624	2749	1849	1574	1168	793	593	523	444	254	1944
14150	11705	11434	11359	9200	5045	3776	2366	1743	1362	1078	744	587	496	414	222	1945
14168	13963	13876	13685	10861	6833	4732	2774	2043	1563	1161	850	702	628	467	155	1946
9824	9663	9452	9241	7836	3589	2362	1606	1105	765	649	531	478	366	268	152	1947
16005	15672	15369	14930	11791	5871	3403	2227	1713	1063	922	691	561	466	350	153	1948
8945	8767	8528	8397	5817	3196	1785	1173	863	774	603	431	282	236	178	118	1949
4494	4332	4171	4027	3073	1466	752	500	395	246	216	164	148	117	111	1950	
1404	6783	6848	6373	5117	2126	1371	974	763	626	589	448	351	307	211	149	1951
10934	10506	10380	10777	6751	3231	2149	1479	1072	813	704	510	402	340	272	219	1952
8075	8008	7970	7951	5210	2638	1766	1187	777	594	477	341	260	239	195	0	1953
2427	2286	2070	1841	5764	2813	1730	1402	1058	812	673	492	412	388	0	0	1954
15087	15081	14305	13881	8926	4004	2955	2017	1582	1148	925	712	601	0	0	0	1955
15027	13707	12506	12407	8029	3879	2595	1796	1265	941	781	638	0	0	0	0	1956
16535	16099	16122	9535	5822	3472	2508	1504	1089	907	771	0	0	0	0	0	1957
11208	10909	10724	10556	6733	3867	2423	1656	1292	1050	0	0	0	0	0	0	1958
10476	10199	9869	9347	6355	3528	2386	1717	1344	0	0	0	0	0	0	0	1959
9754	9991	9211	9140	7168	4402	2882	2097	0	0	0	0	0	0	0	0	1960
9172	9156	8989	8777	7210	4124	2985	0	0	0	0	0	0	0	0	0	1961
8000	8208	8073	7927	6899	4221	0	0	0	0	0	0	0	0	0	0	1962
6978	6752	6628	6509	5876	0	0	0	0	0	0	0	0	0	0	0	1963
6562	6796	6675	6626	0	0	0	0	0	0	0	0	0	0	0	0	1964
7711	7556	7476	0	0	0	0	0	0	0	0	0	0	0	0	0	1965
6200	6122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1966
6084	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1967
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1968
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1969
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1970
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1971
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1972
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1973
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1974
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1975
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1976
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1977
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1978
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1979
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1980
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1981
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1982

Table G-39a

FY	USMC ENLISTED STRENGTH BY YEARS OF SERVICE (YOS)														
1923 TO 1982	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1923	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	40771	43178	33387	15450	16908	11690	6472	5557	4941	4645	4640	3878	3659	3388	3272
1954	72418	94201	93533	53012	32501	11990	9446	7063	6817	6277	5768	5257	4758	4676	4421
1955	27120	25807	23729	19971	16213	7154	4602	4097	3850	3455	3056	2680	2717	2766	2092
1956	36896	42611	36560	30508	15489	6661	5287	4902	4212	3711	3172	2967	2946	2443	2276
1957	33459	35905	41350	26691	9097	5500	4604	3821	3338	2891	2724	2303	2126	1942	1834
1958	26681	26647	26786	22262	13640	5742	3210	2783	2521	2422	2053	1781	1523	1468	1441
1959	37454	31170	31472	29676	24978	1024	4130	3697	3452	3084	2690	2125	1951	1923	1980
1960	40715	34377	32267	31825	28612	7949	4980	4737	4242	3902	3205	2700	2373	2304	2165
1961	30519	27142	28772	27811	23815	7367	3935	3205	2896	2558	2108	1748	1590	1492	1390
1962	37216	28744	33137	32040	26598	12700	3711	3171	2805	2361	2108	1761	1647	1525	1423
1963	28417	24662	25019	23989	21405	5913	2720	2289	2031	1720	1488	1191	1108	1028	964
1964	39100	33040	33659	34296	26040	6759	3275	2744	2363	2005	1693	1377	1273	1176	1112
1965	34368	30610	30981	29172	25225	4287	3330	2487	1957	1837	1534	1265	1192	1092	1025
1966	88492	90729	97477	59975	28042	8226	4641	3679	3002	2609	2085	1764	1597	1464	1391
1967	71320	55308	64002	45633	24278	5527	3891	3156	2740	2358	2058	1705	1528	1427	1358
1968	98387	82096	75405	37772	22350	7348	5261	4402	3748	3356	2709	2171	1967	1814	1747
1969	94683	89240	71760	28643	17911	6504	5220	4369	3712	3204	2563	2190	2044	1911	1836
1970	76434	53384	51109	27572	17216	6958	5595	4763	3957	3165	2534	2276	2162	2049	0
1971	58759	43582	39078	24461	16633	7164	5764	4615	3688	2875	2366	2243	0	0	0
1972	56030	49382	45286	26468	18255	7479	6006	4850	3810	3248	2935	2739	0	0	0
1973	51901	46580	41963	29253	18784	7541	5903	4691	3936	3462	3221	0	0	0	0
1974	46764	42108	37415	26396	19399	7324	5765	4875	4102	3732	0	0	0	0	0
1975	55600	48899	39241	31638	24185	8264	6543	5681	5010	0	0	0	0	0	0
1976	51700	42735	38264	33708	23159	9439	7275	6394	0	0	0	0	0	0	0
1977	45300	39359	35454	31886	23809	10891	8840	0	0	0	0	0	0	0	0
1978	41600	35056	31188	28650	21513	11378	0	0	0	0	0	0	0	0	0
1979	41400	36036	32981	29375	21776	0	0	0	0	0	0	0	0	0	0
1980	42000	37242	34500	30788	0	0	0	0	0	0	0	0	0	0	0
1981	41000	34733	33356	0	0	0	0	0	0	0	0	0	0	0	0
1982	39700	31691	0	0	0	0	0	0	0	0	0	0	0	0	0

Table C-39b

USMC ENLISTED STRENGTH CONTINUED																YEAR
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	> 30	YEAR
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	1923
0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	28	1924
0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	23	1925
0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	30	1926
0	0	0	0	0	0	0	0	0	0	0	47	30	26	34	41	1927
0	0	0	0	0	0	0	0	0	0	5	41	32	39	41	42	1928
0	0	0	0	0	0	0	0	0	70	50	44	36	31	25	43	1929
0	0	0	0	0	0	0	0	95	58	51	63	49	34	30	38	1930
0	0	0	0	0	0	0	106	63	48	65	52	39	24	22	37	1931
0	0	0	0	0	0	93	78	53	45	42	39	37	17	17	20	1932
0	0	0	0	0	108	167	90	69	60	53	24	40	24	15	42	1933
0	0	0	0	256	193	155	121	97	69	54	30	27	26	22	52	1934
0	0	0	365	254	208	231	187	142	130	82	76	54	60	52	73	1935
0	446	354	341	272	226	180	140	93	82	62	56	49	39	90	1936	
0	568	444	486	520	416	311	235	127	107	93	78	71	58	57	103	1937
789	611	658	796	642	488	329	197	141	104	95	81	71	62	43	84	1938
653	698	797	754	710	434	285	205	160	150	124	102	96	82	70	83	1939
1129	1195	1176	1157	991	491	363	338	237	192	166	154	132	137	86	77	1940
1845	1810	1775	1858	1395	896	681	596	458	387	347	295	226	185	118	30	1941
2439	2425	2400	1867	1758	1109	837	617	497	455	422	367	249	206	121	35	1942
2937	2957	2260	2151	1882	1314	994	782	706	594	510	359	256	170	112	40	1943
2665	2443	2437	2351	2165	1471	1179	1069	865	693	509	368	204	174	88	39	1944
2240	2180	2269	2104	1945	1406	1225	958	775	509	380	245	108	73	61	28	1945
2687	2622	2546	2516	2182	1746	1255	988	665	467	343	194	143	104	63	37	1946
2682	2661	2629	2553	2396	1611	1152	775	535	417	309	184	143	101	48	27	1947
3135	3259	3137	2799	2534	1886	1157	789	537	368	275	223	171	131	99	31	1948
2458	2305	2051	1930	1608	1149	749	591	362	230	193	152	88	68	56	24	1949
1919	1685	1585	1495	1406	966	601	302	191	158	132	112	90	72	56	34	1950
1979	1765	1717	1646	1560	916	516	346	204	217	157	122	96	80	64	46	1951
2740	2671	2588	2529	2258	967	527	383	310	233	202	159	130	108	95	68	1952
2870	2578	2622	2484	1915	69	478	363	349	274	237	188	143	118	104	0	1953
3554	3231	3456	3723	2911	295	871	437	344	273	229	172	143	119	0	0	1954
1871	1856	1912	1744	1464	775	498	368	244	204	185	148	119	0	0	0	1955
2121	2206	2192	2165	1886	864	602	442	337	284	244	197	0	0	0	0	1956
1772	1680	1649	1623	1354	696	474	348	267	227	199	0	0	0	0	0	1957
1948	1511	1497	1409	14	845	562	403	320	265	0	0	0	0	0	0	1958
1851	1784	1593	1567	12	781	511	387	325	0	0	0	0	0	0	0	1959
1963	1811	1776	1745	15	935	659	519	0	0	0	0	0	0	0	0	1960
1300	1262	1245	1228	95	756	544	0	0	0	0	0	0	0	0	0	1961
1088	1051	1044	1025	1013	665	0	0	0	0	0	0	0	0	0	0	1962
875	865	853	839	816	0	0	0	0	0	0	0	0	0	0	0	1963
1028	1009	1012	1005	0	0	0	0	0	0	0	0	0	0	0	0	1964
971	972	957	0	0	0	0	0	0	0	0	0	0	0	0	0	1965
1313	1301	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1966
1267	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1967
C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1968
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1969
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1970
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1971
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1972
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1973
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1974
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1975
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1976
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1977
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1978
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1979
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1980
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1981
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1982

Table G-40a

FY 1923 TO 1982 USAF ENLISTED STRENGTH BY YEARS OF SERVICE (YOS)		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
FY	GAINS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1923	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0	11719	12568	11565
1942	0	0	0	0	0	0	0	0	0	0	0	0	0	19666	17905	17096
1943	0	0	0	0	0	0	0	0	0	0	0	0	0	21789	21546	21063
1944	0	0	0	0	0	0	0	0	0	0	0	0	0	21502	16867	16743
1945	0	0	0	0	0	0	0	0	0	0	0	0	0	16597	17263	18691
1946	0	0	0	0	0	0	0	0	0	0	0	0	0	15174	15589	15403
1947	0	0	0	0	0	0	0	0	0	0	0	0	0	18509	16787	18566
1948	0	0	0	0	0	0	0	0	0	0	0	0	0	19406	18285	20400
1949	0	0	0	0	0	0	0	0	0	0	0	0	0	24422	29186	28445
1950	0	0	0	0	0	0	0	0	0	0	0	0	0	29186	24839	28445
1951	0	0	0	0	0	0	0	0	0	0	0	0	0	20149	21012	21917
1952	0	0	0	0	0	0	0	0	0	0	0	0	0	18364	24733	20149
1953	134325	97745	146032	108363	121674	81468	41262	37342	33320	29309	21304	27261	27091	24187	24425	24009
1954	108124	128870	141759	87575	70124	52672	46496	37400	35794	31630	26502	25608	27026	24524	24055	23211
1955	171962	158247	145420	125650	105879	52480	41479	42407	40120	36884	34038	28231	31258	34467	28793	28924
1956	128494	105313	100345	95377	86898	29239	28180	25574	26067	23369	18624	19012	18403	17565	16917	16059
1957	123573	110498	97472	86482	80918	29437	23131	21833	20543	15674	16050	15874	14997	14321	13446	13841
1958	76424	76835	60151	53039	46073	22474	18924	16934	12078	12467	12147	11235	11366	11356	10389	10377
1959	72146	107263	57119	55972	49252	20630	16028	13531	14313	11448	10717	10646	10057	9719	9748	9648
1960	84928	74798	79084	72218	58001	24684	18022	18118	16759	14713	12038	11766	11310	11091	10948	10823
1961	118775	91241	101136	89299	70557	31275	22638	22134	18694	14624	13892	13590	13378	13074	12796	12701
1962	114220	118782	97147	92740	81054	26234	20958	16591	18130	13623	12844	12781	12514	12074	11916	10967
1963	102317	97992	81260	78336	70664	17991	13651	14409	12840	10350	10349	10116	9824	9555	9674	9566
1964	94836	89256	75047	73387	66216	16361	13632	12636	12032	10638	10278	9975	9697	9128	8974	8822
1965	87597	69530	75584	71788	67981	14535	12347	11254	11068	9541	9130	8893	8878	8585	8447	8245
1966	146126	156367	149136	153281	99595	31741	17233	16744	14581	12435	11893	11468	10976	10531	10264	10171
1967	120781	107398	106858	98387	86055	74672	70718	68463	33811	11975	12412	11953	11392	10782	10464	10315
1968	94412	94081	83874	80985	68580	23090	22013	20312	17559	16529	15629	14922	13862	13174	12852	12706
1969	122315	112944	101397	98481	86476	30267	27808	25344	18621	16288	15461	14501	13510	13436	12839	0
1970	71712	61313	63512	56921	52920	18789	17477	15277	13171	11112	10227	9677	9330	9136	0	0
1971	101140	91984	82196	74535	53866	25096	24933	22998	19661	16918	15306	14319	13807	0	0	0
1972	91349	78952	71570	61791	52977	23920	20587	18828	16683	14031	12714	12117	0	0	0	0
1973	97878	85191	73396	62224	48705	27522	24110	19449	17330	15645	14670	0	0	0	0	0
1974	75419	68145	58617	50380	40413	26147	22248	17756	16408	15357	0	0	0	0	0	0
1975	78009	67430	60457	52047	45139	22847	19567	16479	15624	0	0	0	0	0	0	0
1976	74203	68612	59799	53229	47533	24084	20944	18348	0	0	0	0	0	0	0	0
1977	71000	65467	58750	52332	48876	27197	23846	0	0	0	0	0	0	0	0	0
1978	68400	61350	54887	49637	46647	31334	0	0	0	0	0	0	0	0	0	0
1979	70100	60940	54097	49270	45368	0	0	0	0	0	0	0	0	0	0	0
1980	75500	65561	59500	54029	0	0	0	0	0	0	0	0	0	0	0	0
1981	79000	69098	64424	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	70000	61716	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table G-41

DOD YEAR	OFFICER POPULATION		POPULATION >4 YOS		POPULATION >10 YOS		POPULATION >20 YOS	
	#	%	#	%	#	%	#	%
1953	376719.	100.00	267787.	71.08	154197.	40.93	22351.	5.93
1954	353801.	100.00	253716.	71.71	160088.	45.25	21543.	6.09
1955	352364.	100.00	248963.	70.66	162303.	46.06	21310.	6.05
1956	351900.	100.00	244598.	69.51	170180.	48.36	23060.	6.55
1957	330080.	100.00	249894.	75.16	192593.	58.35	34886.	10.57
1958	326031.	100.00	242644.	74.42	178984.	54.90	21390.	6.56
1959	314483.	100.00	254598.	80.96	189936.	60.40	41896.	13.32
1960	316687.	100.00	247120.	78.03	181888.	57.43	29076.	9.18
1961	314827.	100.00	242599.	77.06	181201.	57.56	47255.	15.01
1962	343121.	100.00	247729.	72.20	180154.	52.50	51407.	14.98
1963	334351.	100.00	237055.	70.90	171890.	51.41	59031.	17.66
1964	337502.	100.00	242073.	71.72	174399.	51.67	51407.	14.98
1965	338822.	100.00	231208.	68.24	164306.	48.49	66035.	19.57
1966	348827.	100.00	234517.	67.23	163538.	46.88	54778.	16.20
1967	384496.	100.00	240657.	62.59	164479.	42.78	56707.	15.70
1968	415844.	100.00	250435.	60.22	165455.	39.79	60625.	14.58
1969	418963.	100.00	240254.	57.34	161478.	38.54	56987.	13.60
1970	402126.	100.00	228433.	56.81	152724.	37.98	46562.	11.58
1971	365212.	100.00	228761.	62.64	146030.	39.98	44654.	12.23
1972	329771.	100.00	224789.	68.17	142335.	43.16	41129.	12.47
1973	317779.	100.00	223269.	70.26	138620.	43.62	37877.	11.92
1974	300729.	100.00	215953.	71.81	133938.	44.54	36119.	12.01
1975	290397.	100.00	214937.	74.01	129207.	44.49	35097.	12.09
1976	277994.	100.00	210785.	75.82	127850.	45.99	33625.	12.10
1977	275181.	100.00	209994.	76.31	129401.	47.02	33713.	12.25
1978	273111.	100.00	207533.	75.99	131080.	48.00	33916.	12.42
1979	273497.	100.00	203132.	74.27	130454.	47.70	33372.	12.20
1980	277433.	100.00	203518.	73.36	131396.	47.36	32544.	11.73
1981	284890.	100.00	208764.	73.28	134988.	47.38	33491.	11.76
1982	292057.	100.00	214506.	73.45	137585.	47.11	34435.	11.79

Table G-42

ARMY YEAR	OFFICER POPULATION			POPULATION >4 YOS			POPULATION >10 YOS			POPULATION >20 YOS				
	#	%	ESL	#	%	ESL	#	%	ESL	#	%	ESL		
1953	147285	100.00	8.8	105784	71.82	11.6	63062	42.82	14.5	15.1	8363	5.68	25.1	27.1
1954	129507	100.00	9.5	97208	75.06	12.1	63434	48.98	14.6	18.8	7081	5.47	24.3	25.1
1955	124297	100.00	9.6	90683	72.96	12.7	62981	50.67	15.0	21.7	6486	5.22	24.0	25.0
1956	120219	100.00	9.9	85112	70.80	13.4	64351	53.53	15.3	20.6	6838	5.69	23.6	23.8
1957	116973	100.00	10.0	81729	69.87	13.7	64148	54.84	15.5	22.4	6082	5.20	23.8	24.8
1958	104716	100.00	10.8	78240	74.72	13.9	62157	59.36	15.7	26.6	4420	4.22	23.8	24.9
1959	101622	100.00	13.9	85224	83.86	16.1	67616	66.54	18.5	36.8	18924	18.62	24.2	24.7
1960	101236	100.00	11.9	76507	75.57	15.1	60506	59.77	17.3	42.4	7801	7.71	23.5	23.6
1961	99921	100.00	11.9	74246	74.30	15.4	58722	58.77	17.7	34.4	12762	12.77	23.0	23.6
1962	116050	100.00	10.8	78423	67.58	15.3	60170	51.85	17.8	31.6	16551	14.26	22.7	22.9
1963	108302	100.00	10.5	71177	65.72	15.2	53064	49.00	18.0	29.0	16263	15.02	22.9	24.3
1964	110870	100.00	11.5	78598	70.89	15.5	58987	52.39	18.6	25.8	23711	21.39	23.6	26.7
1965	112120	100.00	10.0	71624	63.88	14.8	50512	45.05	18.1	26.6	16327	14.56	23.4	24.6
1966	117836	100.00	9.6	73359	62.26	14.3	48738	41.36	18.2	27.6	16870	14.32	23.4	24.6
1967	143507	100.00	8.4	78584	54.76	14.1	50666	35.31	18.1	24.1	17924	12.49	23.7	25.3
1968	166173	100.00	7.9	82623	49.72	14.0	52864	31.81	18.0	23.1	18511	11.14	23.9	25.8
1969	172590	100.00	7.2	79800	46.24	13.8	50834	29.45	17.7	22.0	16311	9.45	24.2	26.5
1970	165283	100.00	7.6	82674	50.02	13.4	51002	30.86	17.6	21.7	15203	9.20	24.6	28.3
1971	146931	100.00	8.3	84084	57.23	13.1	51069	34.76	17.4	22.2	14252	9.70	24.6	26.2
1972	119754	100.00	9.5	80587	67.29	13.2	49959	41.72	17.3	22.2	12575	10.50	24.7	27.3
1973	115834	100.00	9.7	81196	70.10	12.9	48751	42.09	17.2	23.7	11548	9.97	24.6	25.9
1974	105387	100.00	10.1	75697	71.83	13.3	46981	44.58	17.2	23.7	11056	10.49	24.5	25.7
1975	102473	100.00	10.1	75577	73.75	13.1	45471	44.37	17.2	25.2	10458	10.21	24.3	25.2
1976	97381	100.00	10.2	71902	73.84	13.2	45267	46.48	16.9	19.4	9750	10.01	24.0	25.3
1977	97437	100.00	10.3	72088	73.98	13.3	44820	47.03	16.9	21.7	10362	10.63	23.9	24.5
1978	97274	100.00	10.3	71425	73.43	13.3	45719	47.00	16.9	21.3	10591	10.89	23.8	24.5
1979	97231	100.00	10.1	70193	72.15	13.3	45115	46.40	16.9	22.0	10613	10.92	23.7	24.4
1980	98249	100.00	10.0	69937	71.18	13.3	45167	45.97	16.8	21.1	10216	10.40	23.8	24.9
1981	101332	100.00	9.9	71441	70.50	13.3	46123	45.52	16.8	21.9	10666	10.53	23.7	24.6
1982	103197	100.00	10.0	73704	71.42	13.2	47371	45.90	16.8	21.9	11042	10.70	23.7	24.5

Table G-43

NAVY YEAR	OFFICER POPULATION			POPULATION >4 YOS			POPULATION >10 YOS			POPULATION >20 YOS		
	#	%	ESL	#	%	ESL	#	%	ESL	#	%	ESL
1953	81731	100.00	10.3	59915	73.31	23.8	41262	50.49	16.0	9310	11.39	29.6
1954	76280	100.00	10.5	54215	71.07	22.7	40421	52.99	16.4	9995	13.10	24.6
1955	74527	100.00	10.8	53767	72.14	14.3	40239	53.99	17.0	10168	13.64	27.0
1956	71772	100.00	11.3	51426	71.65	15.0	39329	54.80	17.6	11202	15.61	25.4
1957	78968	100.00	10.4	52911	67.00	14.7	38186	48.36	17.9	10939	13.85	26.7
1958	71559	100.00	11.4	51304	71.69	15.0	38073	53.21	17.9	10547	14.74	26.0
1959	65734	100.00	12.2	49711	75.62	24.7	36579	55.65	18.5	10221	15.55	26.5
1960	69559	100.00	12.3	52193	75.03	19.0	38510	55.36	19.0	11819	16.99	26.3
1961	69981	100.00	10.7	47181	67.42	15.0	34259	48.95	18.1	9952	14.22	23.9
1962	75302	100.00	10.6	50406	66.94	14.9	35461	47.09	18.4	12590	16.72	23.4
1963	75548	100.00	10.7	50311	66.59	15.1	35436	46.91	18.6	14737	19.51	23.7
1964	76400	100.00	10.5	49640	64.97	19.3	34714	45.44	18.8	15417	20.18	23.2
1965	77866	100.00	10.4	49482	63.55	15.2	34351	44.12	18.9	14720	18.90	23.8
1966	79805	100.00	10.1	49752	62.34	15.0	34275	42.95	18.8	14130	17.71	24.1
1967	81842	100.00	10.3	51973	63.50	15.1	35933	43.91	18.9	14584	17.82	28.7
1968	85425	100.00	10.3	56655	66.32	14.6	36630	42.88	18.9	15176	17.77	26.4
1969	85199	100.00	9.9	54575	64.06	14.5	36341	42.65	18.6	14007	16.44	27.8
1970	80659	100.00	10.2	49348	61.18	15.4	35536	44.06	18.8	13498	16.73	30.3
1971	71672	100.00	10.4	46781	65.27	14.8	32528	45.38	18.4	11105	15.49	27.1
1972	69387	100.00	10.5	46655	67.24	14.6	32099	46.26	18.2	10652	15.35	26.3
1973	68418	100.00	10.5	47216	69.01	14.2	31309	45.76	18.1	9993	14.61	24.5
1974	66826	100.00	10.3	46556	69.67	13.9	30036	44.95	18.0	9067	13.57	24.4
1975	64716	100.00	10.4	46599	72.01	13.7	28944	44.72	18.0	8807	13.61	25.3
1976	62818	100.00	10.6	46955	74.75	15.6	28276	45.01	18.0	8604	13.70	24.0
1977	63042	100.00	10.7	47093	74.70	13.5	28637	45.43	18.0	8899	14.12	23.9
1978	62423	100.00	10.6	46090	73.83	13.7	28901	46.30	17.8	9015	14.44	24.9
1979	62062	100.00	10.7	45644	73.55	13.8	29467	47.48	17.6	8979	14.47	23.8
1980	63164	100.00	10.6	46188	73.12	13.7	29887	47.32	17.6	8934	14.14	23.8
1981	65609	100.00	10.5	48208	73.48	13.6	30787	46.92	17.5	9256	14.11	25.2
1982	67697	100.00	10.4	49378	72.94	13.5	31186	46.07	17.6	9343	13.80	24.0

Table G-44

USMC YEAR	OFFICER POPULATION			POPULATION >4 YOS			POPULATION >10 YOS			POPULATION >20 YOS		
	#	%	ESL	#	%	ESL	#	%	ESL	#	%	ESL
1953	18730	100.00	9.0	12840	68.55	12.2	8320	44.42	15.3	1344	7.18	25.3
1954	18593	100.00	9.2	12036	64.73	13.0	8437	45.38	15.7	1379	7.42	24.8
1955	18415	100.00	9.5	12347	67.05	13.1	8446	45.86	16.3	1548	8.41	24.9
1956	17809	100.00	10.3	12756	71.63	13.4	8712	48.92	16.7	1739	9.76	24.8
1957	18152	100.00	10.1	13297	73.25	13.2	8547	47.09	17.1	1770	9.75	25.1
1958	16741	100.00	10.9	12451	74.37	13.9	8429	50.35	17.4	1765	10.54	24.8
1959	16066	100.00	11.3	12090	75.25	14.3	8297	51.64	17.8	1853	11.53	24.7
1960	16203	100.00	11.6	12519	77.26	14.3	8260	50.98	18.2	2060	12.71	23.4
1961	16132	100.00	11.8	12787	79.26	14.2	8387	51.99	18.2	2581	16.00	22.9
1962	16861	100.00	11.5	13140	77.93	14.2	8505	50.44	18.2	3469	20.57	22.6
1963	16737	100.00	11.5	12932	76.05	14.4	8610	51.44	18.0	3831	22.89	22.6
1964	16838	100.00	11.4	12932	76.80	14.0	8505	50.51	17.9	3434	20.39	23.2
1965	17258	100.00	10.8	13325	77.21	13.2	8144	47.19	17.4	2667	15.45	23.6
1966	20512	100.00	11.8	16743	81.63	14.0	11248	54.84	17.7	3399	16.57	23.8
1967	23592	100.00	10.6	16649	70.57	14.2	11718	49.67	17.3	2981	12.64	24.0
1968	24555	100.00	10.7	17166	69.91	14.4	12083	49.21	17.7	3488	14.20	23.7
1969	25698	100.00	10.5	17194	66.91	14.5	12051	46.89	17.8	3526	13.72	23.8
1970	24941	100.00	10.4	17371	69.65	13.9	11341	45.47	17.9	3197	12.82	24.2
1971	21570	100.00	10.3	15202	70.48	13.6	9665	44.81	17.9	2833	13.13	24.0
1972	19532	100.00	10.8	14551	74.50	13.7	9242	47.32	17.9	2672	13.68	24.0
1973	19254	100.00	10.6	13749	71.41	14.0	8964	46.56	18.0	2742	14.24	23.8
1974	18672	100.00	10.6	13213	70.76	14.0	8524	45.65	18.1	2828	15.15	23.5
1975	18740	100.00	10.6	13442	71.73	13.9	8408	44.87	18.2	2857	15.25	23.6
1976	18667	100.00	10.2	13286	71.17	13.5	8018	43.11	18.0	2998	13.92	23.8
1977	18666	100.00	10.2	13264	71.06	13.4	7954	42.61	17.8	2373	13.57	23.9
1978	18326	100.00	10.1	12870	70.23	13.4	7852	42.85	17.5	2373	12.95	24.0
1979	18124	100.00	9.9	12810	70.68	13.1	7782	42.94	17.2	2158	11.91	24.1
1980	18186	100.00	9.9	13084	71.95	12.9	7804	42.91	17.0	2099	11.54	24.1
1981	18356	100.00	9.9	13343	72.69	12.8	8021	43.70	16.9	2046	11.15	24.2
1982	19031	100.00	9.8	13957	73.34	12.6	8238	43.29	16.7	1991	10.46	24.3

Table G-45

USAF YEAR	OFFICER POPULATION			POPULATION > 4 YOS			POPULATION > 10 YOS			POPULATION > 20 YOS		
	#	%	ESL	#	%	ESL	#	%	ESL	#	%	ESL
1953	128973.	100.00	7.3	89248.	69.20	9.8	41547.	32.21	13.3	259	2.59	27.2
1954	128418.	100.00	7.8	89250.	69.50	10.4	46789.	36.43	13.6	3088.	2.40	24.3
1955	135584.	100.00	8.0	92625.	68.32	10.9	51096.	37.69	14.2	3108.	2.29	24.5
1956	142102.	100.00	8.4	95306.	67.07	11.7	57790.	40.67	14.6	3283.	2.31	24.2
1957	142114.	100.00	9.0	99174.	69.78	12.1	63638.	44.78	14.9	3822.	2.69	23.7
1958	133014.	100.00	10.1	100648.	75.67	12.7	70324.	52.87	15.3	4657.	3.50	23.2
1959	131599.	100.00	12.4	108105.	82.15	14.5	77894.	59.19	17.6	10900.	8.28	23.6
1960	129689.	100.00	11.4	105901.	81.66	13.6	74612.	57.53	16.3	7396.	5.70	22.4
1961	128793.	100.00	12.6	108385.	84.15	14.6	79833.	61.99	17.2	21960.	17.05	21.7
1962	134908.	100.00	11.6	105760.	78.39	14.2	76018.	56.35	17.0	18797.	13.93	21.7
1963	133763.	100.00	10.4	102838.	76.88	14.5	74779.	55.90	17.3	24199.	18.09	22.0
1964	133389.	100.00	11.4	108998.	81.75	14.7	73088.	54.79	17.4	23468.	17.59	22.5
1965	131578.	100.00	11.3	96777.	73.55	14.7	71299.	54.19	17.5	21162.	16.08	23.2
1966	130724.	100.00	11.2	94713.	72.45	14.8	69321.	53.03	17.7	20429.	15.63	27.4
1967	135485.	100.00	10.7	93391.	68.93	14.7	66102.	48.79	18.1	21158.	15.62	23.8
1968	139691.	100.00	10.5	82996.	67.28	14.6	63878.	45.73	18.4	23450.	16.79	21.6
1969	135476.	100.00	10.5	88685.	65.46	15.0	62252.	45.95	18.5	23143.	17.08	24.1
1970	129803.	100.00	9.3	77600.	59.78	14.3	53405.	41.14	17.8	14664.	11.30	24.5
1971	125039.	100.00	9.9	82694.	66.13	13.9	52768.	42.20	18.1	16464.	13.17	24.5
1972	121098.	100.00	9.9	82996.	68.54	13.6	51035.	42.14	18.0	15230.	12.58	24.4
1973	114273.	100.00	10.0	81108.	70.98	13.3	49596.	43.40	17.6	13594.	11.90	24.4
1974	109844.	100.00	10.2	80487.	73.27	13.1	48397.	44.06	17.5	13168.	11.99	24.1
1975	104468.	100.00	10.4	79319.	75.93	13.0	46384.	44.40	17.4	12975.	12.42	23.8
1976	99128.	100.00	10.7	78642.	79.33	13.0	46259.	46.67	17.2	12673.	12.78	23.6
1977	96044.	100.00	10.9	77557.	80.75	13.1	46998.	48.93	17.0	11919.	12.41	23.8
1978	95088.	100.00	11.1	77148.	81.13	13.2	48608.	51.12	16.9	11937.	12.55	23.8
1979	96080.	100.00	10.8	74525.	77.57	13.3	48090.	50.05	16.8	11622.	12.10	23.7
1980	97824.	100.00	10.6	74299.	75.95	13.3	48528.	49.61	16.7	11285.	11.54	23.6
1981	99593.	100.00	10.7	75772.	76.08	13.4	50057.	50.26	16.8	11523.	11.57	23.7
1982	102132.	100.00	10.6	77467.	75.85	13.4	50790.	49.73	16.8	12059.	11.81	23.5

Table G-46

YEAR	DOD ENLISTED POPULATION			POPULATION >4 YOS			POPULATION >10 YOS			POPULATION >20 YOS		
	#	%	ESL	#	%	ESL	#	%	ESL	#	%	ESL
1953	3161001	100.00	3.3	783891	24.80	8.8	261822	8.28	13.4	15261	0.48	24.7
1954	2931220	100.00	3.6	743983	25.38	9.4	293928	10.03	13.6	16251	0.55	23.6
1955	2570704	100.00	4.1	819393	31.87	9.6	339695	13.21	13.8	17567	0.68	23.6
1956	2457832	100.00	4.6	844812	34.37	10.2	397581	16.18	14.0	21090	0.86	23.5
1957	2403155	100.00	5.0	945285	39.34	10.2	424873	17.68	14.3	22912	0.95	23.3
1958	2264506	100.00	5.3	897838	39.65	10.6	458197	20.23	14.4	21903	0.97	23.2
1959	2164960	100.00	6.2	1026570	47.42	11.0	538081	24.85	15.1	32259	1.55	22.6
1960	2149060	100.00	6.3	1021255	47.52	11.4	543108	25.27	15.5	33358	1.55	22.6
1961	2158530	100.00	6.3	1007077	46.66	11.7	560087	25.95	15.5	46569	2.16	22.1
1962	2452468	100.00	5.8	1006821	41.05	11.9	584957	23.85	15.6	57414	2.34	21.8
1963	2354531	100.00	6.1	987187	41.93	12.2	587808	24.96	15.7	75993	3.23	21.9
1964	2338153	100.00	6.0	963958	41.23	12.2	580604	24.83	15.7	72713	3.11	22.1
1965	2304929	100.00	6.3	968650	42.03	12.6	614125	26.64	15.9	94115	4.08	22.3
1966	2732705	100.00	5.3	931257	35.36	12.4	598745	21.91	16.0	91819	3.36	22.4
1967	2980666	100.00	4.9	931257	31.24	12.6	579040	19.43	16.2	89237	2.99	22.8
1968	3119541	100.00	4.7	878646	28.17	12.8	555978	17.82	16.4	98891	3.17	22.7
1969	3026201	100.00	4.7	822330	27.16	13.1	534721	17.66	16.5	96975	3.20	23.0
1970	2651110	100.00	5.2	810278	30.56	13.1	519212	19.58	16.7	84159	3.17	23.5
1971	2321796	100.00	5.4	765030	32.95	13.1	494850	21.31	16.7	78658	3.39	23.4
1972	1972412	100.00	6.0	764496	38.76	12.7	473735	24.02	16.6	80032	4.06	23.1
1973	1918479	100.00	5.9	753301	39.37	12.4	444123	23.15	16.6	72571	3.78	23.1
1974	1845748	100.00	5.8	725972	39.33	12.3	414235	22.44	16.6	67805	3.67	22.9
1975	1819080	100.00	5.7	719805	39.57	11.9	383319	21.07	16.6	69724	3.83	22.7
1976	1789184	100.00	5.7	732270	41.10	11.4	362607	20.27	16.5	65373	3.65	22.8
1977	1783461	100.00	5.6	738370	41.40	11.2	350443	19.65	16.4	61135	3.43	22.9
1978	1772500	100.00	5.7	740678	41.79	11.1	350456	19.77	16.3	59346	3.35	22.9
1979	1738209	100.00	5.7	738172	42.47	11.0	347586	20.00	16.1	56251	3.24	23.0
1980	1757248	100.00	5.6	744885	42.39	10.9	339034	19.29	16.1	55603	3.16	22.9
1981	1781005	100.00	5.7	781061	43.86	10.7	347313	19.50	16.0	59263	3.33	22.9
1982	1803827	100.00	5.8	827026	45.85	10.5	359266	19.92	15.8	61041	3.38	22.9

Table G-47

YEAR	ARMY ENLISTED POPULATION			POPULATION >4 YOS			POPULATION >10 YOS			POPULATION >20 YOS		
	#	%	ESL	#	%	ESL	#	%	ESL	#	%	ESL
1953	1414702	100.00	2.6	270708	19.14	8.7	83384	5.89	13.4	6740	0.48	24.3
1954	1274173	100.00	2.9	246345	19.33	9.3	92124	7.23	13.5	6219	0.49	24.0
1955	985659	100.00	3.6	265131	26.90	9.7	111800	11.34	13.7	6700	0.68	23.9
1956	916985	100.00	4.1	275638	30.06	10.3	134515	14.67	13.9	8239	0.90	23.6
1957	865934	100.00	4.6	288194	33.28	10.6	148195	17.11	14.2	8631	1.00	23.3
1958	792408	100.00	4.9	284546	35.91	11.2	163044	20.58	14.5	8728	1.10	23.1
1959	740923	100.00	5.5	296272	39.99	11.9	179160	24.18	15.3	14166	1.91	23.7
1960	770062	100.00	6.1	312743	41.32	12.7	190511	24.74	15.6	12386	1.61	22.8
1961	756932	100.00	6.1	312743	41.32	12.7	199953	26.42	15.9	21924	2.90	22.5
1962	948597	100.00	5.2	317561	33.48	12.7	199742	21.06	16.1	23272	2.45	22.1
1963	865768	100.00	5.6	312388	36.08	12.9	199780	23.08	16.3	35161	4.06	22.0
1964	860514	100.00	5.2	32388	33.53	12.7	179945	20.91	16.3	25520	2.97	22.3
1965	854929	100.00	5.3	293159	34.29	12.8	183456	21.46	16.4	31608	3.70	22.1
1966	1079882	100.00	4.2	285789	26.47	12.7	172537	15.98	16.7	35220	3.26	22.3
1967	1296603	100.00	3.7	290082	22.37	12.5	164012	12.65	16.9	34910	2.69	22.8
1968	1401007	100.00	3.4	264977	18.91	12.6	155164	11.08	16.8	30711	2.19	23.2
1969	1337047	100.00	3.4	239771	17.93	13.0	147676	11.04	16.9	34874	2.61	23.0
1970	1153013	100.00	3.8	233755	20.27	12.8	141830	12.30	16.9	29517	2.56	23.6
1971	967002	100.00	4.0	227765	23.55	12.6	133857	13.84	16.8	28053	2.90	23.5
1972	683794	100.00	5.1	234586	34.31	12.0	130424	19.07	16.6	23798	3.48	23.5
1973	680695	100.00	4.9	228491	33.57	11.8	123830	18.19	16.4	21585	3.17	23.2
1974	672983	100.00	4.8	219691	32.64	11.7	116267	17.28	16.3	18487	2.75	23.8
1975	675143	100.00	4.9	227130	33.64	11.3	111099	16.46	16.3	17650	2.61	23.0
1976	679208	100.00	4.8	244368	35.98	10.6	106456	15.67	16.2	15189	2.24	23.0
1977	679291	100.00	4.9	249973	36.80	10.5	105553	15.54	16.2	15368	2.26	23.0
1978	668844	100.00	5.1	255335	38.21	10.5	108215	16.18	16.1	16568	2.48	22.8
1979	656505	100.00	5.2	258133	39.32	10.4	107187	16.33	16.0	17512	2.67	23.0
1980	673430	100.00	5.1	267301	39.69	10.2	105724	15.70	16.0	17326	2.57	22.8
1981	674629	100.00	5.3	284931	42.24	10.0	109618	16.25	15.8	17930	2.66	22.7
1982	672415	100.00	5.4	300281	44.66	9.9	115870	17.23	15.4	17919	2.66	22.8

Table G-48

YEAR	NAVY ENLISTED POPULATION		POPULATION >4 YOS		POPULATION >10 YOS		POPULATION >20 YOS		ESL
	#	%	#	%	#	%	#	%	
1953	706375	100.00	233722	33.09	89051	12.61	4829	0.68	23.4
1954	642048	100.00	212806	33.14	98905	15.40	5291	0.82	23.8
1955	579864	100.00	213433	36.81	110619	19.08	5594	0.96	23.1
1956	591996	100.00	216565	36.58	124569	21.04	6222	1.05	23.1
1957	569882	100.00	234597	41.17	123921	21.75	6830	1.20	22.8
1958	563507	100.00	194982	34.60	123499	21.92	5298	0.94	23.0
1959	552217	100.00	239408	43.35	139601	25.32	7115	1.29	22.8
1960	544040	100.00	247082	45.42	120542	24.42	7990	1.47	22.4
1961	551603	100.00	219434	39.78	120542	21.85	8444	1.53	21.6
1962	584071	100.00	225167	38.55	121370	20.78	10880	1.86	21.7
1963	583596	100.00	226293	38.78	117852	20.19	13372	2.29	21.7
1964	584700	100.00	230169	39.37	116000	19.84	15086	2.58	22.0
1965	587183	100.00	231497	39.43	120507	20.52	16352	2.78	23.2
1966	658635	100.00	239549	36.37	125023	18.98	19961	3.03	22.4
1967	663831	100.00	223478	33.66	120976	18.22	17124	2.58	23.0
1968	673610	100.00	218964	32.51	119239	17.70	18293	2.72	22.9
1969	684145	100.00	208670	30.50	119243	17.43	16072	2.35	23.1
1970	605916	100.00	201306	33.22	120044	19.81	12507	2.06	24.2
1971	541241	100.00	191953	35.47	116412	21.51	9385	1.73	24.3
1972	510669	100.00	192449	37.69	115925	22.70	10176	2.05	23.7
1973	490008	100.00	196793	40.16	114472	23.36	10290	2.10	23.6
1974	474085	100.00	191971	40.49	109406	23.08	10134	2.14	23.4
1975	465405	100.00	189213	40.66	103421	22.22	11332	2.43	22.6
1976	459348	100.00	193584	42.14	97657	21.26	11792	2.57	22.6
1977	461406	100.00	192019	41.62	92805	20.11	11573	2.51	22.7
1978	461973	100.00	190331	41.20	90241	19.53	11997	2.60	23.1
1979	456327	100.00	192623	42.21	89494	19.61	11858	2.60	23.3
1980	458453	100.00	193092	42.12	87696	19.13	12403	2.71	23.1
1981	469089	100.00	203549	43.39	88887	18.95	13469	2.87	22.8
1982	479677	100.00	218160	45.48	92565	19.30	14539	3.03	22.9

Table G-49

YEAR	USMC ENLISTED POPULATION		POPULATION >4 YOS		POPULATION >10 YOS		POPULATION >20 YOS	
	YEAR	ESL	POPULATION #	%	POPULATION #	%	POPULATION #	%
1953	230486	5.7	41248	17.90	11891	5.16	685	0.30
1954	205275	2.8	31797	15.49	11147	5.43	644	0.31
1955	186753	6.9	36625	19.61	13624	7.30	760	0.41
1956	182971	5.0	46711	25.53	19196	10.49	1024	0.56
1957	179777	4.2	54840	30.50	21519	11.97	1242	0.69
1958	172754	6.5	58036	33.59	24500	14.18	1420	0.82
1959	159511	4.3	59375	37.22	26113	16.37	1480	0.93
1960	154242	4.9	57034	36.98	26603	17.25	1422	0.92
1961	160438	5.3	57713	35.97	27315	17.03	1975	1.23
1962	173615	4.7	59296	34.15	29281	16.87	2658	1.53
1963	172541	6.1	58319	33.80	30829	17.87	3487	2.02
1964	172567	4.4	58663	33.99	33696	19.53	4161	2.41
1965	172640	5.0	57784	33.47	33156	19.21	4761	2.76
1966	240911	2.7	63500	26.36	33530	13.92	6037	2.51
1967	261584	3.7	53587	20.49	31379	12.00	6361	2.44
1968	282697	2.9	51399	18.18	29261	10.35	6888	2.44
1969	284073	3.0	45753	16.11	27334	9.62	5726	2.02
1970	234806	3.1	47612	20.28	26812	11.42	4911	2.09
1971	190047	3.2	44363	23.34	25517	13.43	4085	2.15
1972	178308	4.1	44365	24.88	23997	13.46	3327	1.87
1973	176363	3.4	42820	24.28	21367	12.12	2866	1.63
1974	170066	3.6	42894	25.22	19431	11.43	3341	1.96
1975	177367	3.2	43545	24.55	18226	10.28	3185	1.80
1976	171215	3.3	44059	25.71	16927	9.89	2906	1.72
1977	173179	3.8	44519	25.71	16487	9.52	2892	1.67
1978	172411	4.1	44008	25.53	16515	9.58	2959	1.72
1979	166971	4.0	44702	26.77	16763	10.04	2943	1.76
1980	170287	4.0	47585	27.94	16981	9.97	3106	1.82
1981	172335	4.1	52144	30.26	17798	10.33	3103	1.82
1982	175234	4.3	57623	32.88	19048	10.87	3124	1.78

Table G-50

YEAR	USAF ENLISTED POPULATION			POPULATION >4 YOS			POPULATION >10 YOS			POPULATION >20 YOS		
	#	%	ESL	#	%	ESL	#	%	ESL	#	%	ESL
1953	809456	100.00	3.9	238233	29.43	8.6	77496	9.57	12.9	3007	0.37	24.0
1954	809094	100.00	4.2	252405	31.20	9.0	91752	11.34	13.3	4097	0.51	23.8
1955	818478	100.00	4.4	304254	37.17	8.8	103612	12.66	13.6	4513	0.55	23.5
1956	765880	100.00	4.9	305898	39.94	9.4	119301	15.58	13.9	5605	0.73	23.9
1957	774118	100.00	5.3	367501	47.47	9.0	131080	16.93	14.1	6045	0.78	23.4
1958	735738	100.00	5.8	360175	48.95	9.6	147035	19.99	14.1	6358	0.86	22.9
1959	764562	100.00	6.5	423768	55.43	10.1	185260	24.23	14.7	9498	1.24	22.8
1960	680666	100.00	7.4	414792	60.94	10.8	193116	28.37	15.2	11560	1.70	22.4
1961	685557	100.00	7.4	417187	60.50	11.1	212277	30.78	14.9	14226	2.06	21.6
1962	746185	100.00	7.1	404797	54.25	11.7	234564	31.44	15.0	20604	2.76	21.6
1963	739520	100.00	7.4	397081	53.69	12.2	246241	33.30	15.2	23973	3.24	21.7
1964	720372	100.00	7.6	386559	53.66	12.4	250963	34.84	15.2	27946	3.88	22.0
1965	690177	100.00	8.3	386210	55.96	13.1	277006	40.74	15.7	41394	6.00	22.5
1966	753477	100.00	7.3	377475	50.10	13.0	267655	35.52	15.6	30601	4.06	22.5
1967	758648	100.00	7.3	364110	47.99	13.4	262673	34.62	16.0	30842	4.07	22.7
1968	761507	100.00	7.4	343306	45.08	13.9	252314	33.13	16.4	42999	5.65	22.3
1969	725936	100.00	7.5	328136	45.39	14.2	240468	33.26	16.8	40303	5.57	22.8
1970	657402	100.00	8.0	327632	49.84	14.3	230523	35.07	17.2	37243	5.67	22.9
1971	622506	100.00	7.9	299949	48.18	14.0	218064	35.03	17.2	36135	5.80	23.0
1972	595641	100.00	7.8	293096	48.88	14.0	203389	33.92	17.3	42431	7.08	22.7
1973	571413	100.00	7.6	287197	50.26	13.3	184454	32.28	17.3	37830	6.62	22.8
1974	528614	100.00	7.7	271416	51.34	13.2	169131	32.00	17.3	35843	6.78	23.0
1975	501165	100.00	7.5	259917	51.86	12.7	150573	30.04	17.1	37557	7.49	22.8
1976	479413	100.00	7.4	253259	52.83	12.4	141567	29.53	17.0	35446	7.39	22.7
1977	469585	100.00	7.3	251859	53.63	12.1	135598	28.88	16.8	31302	6.67	23.0
1978	469272	100.00	7.2	250804	53.45	12.0	135485	28.87	16.6	27822	5.93	23.2
1979	458406	100.00	7.2	242714	52.95	12.0	134142	29.26	16.3	23938	5.22	23.3
1980	455078	100.00	7.1	236907	52.06	11.9	128633	28.27	16.3	22768	5.00	23.1
1981	464952	100.00	7.0	240437	51.71	11.8	131010	28.18	16.2	24721	5.32	22.9
1982	476500	100.00	7.0	250961	52.67	11.6	131782	27.66	16.2	25459	5.34	23.0

Table G-51

YOS	DOD OFFICER CONTINUATION RATES FOR FY 74-82												
	74	75	76	77	78	79	80	81	82	10 YR	9 YR	7 YR	5 YR
1	9284	9504	9350	9670	9702	9653	9756	9691	9577	9507	9576	9632	9675
2	7657	8172	8243	8532	8729	9404	9672	9774	9710	8657	8844	9181	9481
3	8058	8148	8380	8810	8920	8948	8940	8996	9173	8578	8687	8886	9006
4	7939	8250	8468	8624	8704	8600	8757	8801	8906	8457	8528	8696	8761
5	7903	8660	8621	8748	8870	8857	8891	9018	9175	8644	8718	8879	8967
6	8446	8991	8704	8804	8609	8574	8622	8782	9030	8748	8722	8730	8720
7	8581	9199	8981	9097	8874	8763	8883	9081	9249	8979	8953	8987	8961
8	9250	9222	8886	9193	9093	8994	9109	9352	9446	9180	9160	9135	9186
9	9453	9456	9055	9371	9281	9160	9328	9485	9572	9350	9332	9302	9352
10	9313	9257	9282	9217	9170	8988	9195	9294	9480	9263	9235	9222	9212
11	9329	9219	8799	8859	9115	8959	9179	9314	9465	9168	9135	9100	9195
12	9437	9360	9309	9289	9202	8959	9250	9327	9450	9303	9277	9244	9227
13	9680	9624	9621	9575	9534	9261	9435	9491	9640	9547	9533	9502	9468
14	9650	9515	9498	9470	9644	9490	9460	9613	9639	9573	9565	9548	9573
15	9563	9444	9370	9357	9401	9296	9299	9454	9614	9442	9429	9410	9428
16	9684	9691	9714	9541	9490	9559	9640	9673	9634	9610	9622	9603	9594
17	9523	9582	9557	9468	9468	9423	9486	9627	9632	9536	9526	9519	9521
18	9449	9360	9550	9570	9383	9461	9336	9568	9601	9421	9472	9493	9467
19	8595	9246	9391	9350	9375	9071	9057	9423	9391	9101	9195	9299	9270
20	7668	7472	7605	7687	7608	7472	7387	7866	7837	7645	7623	7641	7640
21	8219	8112	8059	8091	8076	7598	7688	8487	7969	8046	8041	7997	7960
22	8246	8210	8267	8361	8484	8277	8215	8428	8404	8289	8344	8385	8419
23	8041	8315	8408	8586	8518	8281	8549	8820	8606	8431	8417	8527	8544
24	8537	7646	8249	8507	8685	8301	8151	8683	8483	8283	8307	8434	8459
25	7913	8292	7337	8426	8306	8079	8029	8636	8532	8079	8127	8138	8306
26	7317	7527	7758	7499	7954	7501	7581	8279	8131	7695	7729	7804	7881
27	7437	7440	7253	7868	7233	7579	7691	8290	7933	7690	7640	7683	7729
28	7823	7001	7386	6841	6760	5995	6690	7013	7302	7055	6967	6837	6750
29	7316	7199	6458	7427	7337	7103	6757	7608	7579	7204	7222	7202	7298
30	5202	5146	5021	6636	5366	5012	5256	5195	5199	5152	5267	5329	5205

Table G-52

YOS	ARMY OFFICER CONTINUATION RATES FOR FY 74-82												
	74	75	76	77	78	79	80	81	82	10 YR	9 YR	7 YR	5 YR
1	.8892	.9554	.9674	.9615	.9640	.9675	.9570	.9493	.9292	.9392	.9473	.9557	.9527
2	.6723	.7681	.7864	.8316	.8555	.9260	.9547	.9664	.9545	.8276	.8530	.8991	.9322
3	.7672	.7987	.8123	.8227	.8396	.8569	.8572	.8613	.8712	.8285	.8316	.8477	.8588
4	.7533	.8165	.8265	.8470	.8341	.8301	.8486	.8680	.8807	.8299	.8300	.8500	.8549
5	.8038	.9070	.8818	.8588	.8817	.8707	.8895	.8985	.9106	.8755	.8765	.8854	.8914
6	.8044	.9166	.8407	.8937	.8864	.8888	.8912	.8958	.9105	.8822	.8753	.8835	.8949
7	.8006	.9296	.8603	.9302	.9137	.9038	.8914	.9227	.9289	.8925	.8880	.9056	.9116
8	.9168	.9179	.8348	.9181	.9314	.9139	.9080	.9367	.9448	.9137	.9110	.9085	.9270
9	.9398	.9525	.8568	.9145	.9382	.9456	.9430	.9533	.9436	.9285	.9263	.9212	.9442
10	.9104	.9353	.9426	.9246	.9220	.9113	.9212	.9461	.9550	.9292	.9283	.9299	.9287
11	.9325	.9469	.8812	.8781	.8832	.8816	.9115	.9494	.9621	.9156	.9122	.9058	.9151
12	.9516	.9526	.9410	.9432	.9382	.9099	.9373	.9609	.9617	.9458	.9435	.9413	.9411
13	.9613	.9553	.9337	.9567	.9488	.9264	.9202	.9458	.9703	.9475	.9459	.9430	.9426
14	.9258	.9124	.8957	.9112	.8807	.8941	.8846	.9046	.9352	.9088	.9070	.9040	.9038
15	.9464	.9566	.9633	.9184	.9298	.9443	.9441	.9539	.9337	.9399	.9426	.9402	.9400
16	.9201	.9263	.9249	.9291	.9067	.9172	.9265	.9367	.9538	.9272	.9262	.9271	.9272
17	.9422	.9324	.9419	.9479	.9279	.9238	.9080	.9289	.9330	.9325	.9312	.9296	.9238
18	.9205	.9177	.9333	.9419	.9477	.9416	.9356	.9348	.9306	.9245	.9340	.9378	.9380
19	.7265	.7140	.7446	.7720	.7806	.7863	.7349	.8022	.8233	.7661	.7666	.7794	.7870
20	.7853	.7854	.8324	.8523	.8300	.7869	.7751	.8302	.8374	.8067	.8119	.8193	.8113
21	.8351	.8645	.8370	.8706	.8327	.8336	.7778	.8528	.8441	.8322	.8381	.8351	.8284
22	.8429	.8413	.8585	.8624	.8321	.8397	.8651	.8824	.8673	.8574	.8558	.8612	.8578
23	.8289	.8396	.7770	.8451	.8886	.8925	.8526	.8617	.8575	.8489	.8507	.8618	.8609
24	.8289	.8396	.7689	.8532	.8602	.8473	.8456	.8786	.8844	.8373	.8421	.8444	.8638
25	.7171	.7456	.8304	.8106	.8338	.8185	.7892	.8569	.9040	.8043	.8159	.8330	.8393
26	.7404	.7389	.6823	.8392	.7564	.7838	.8222	.8861	.8186	.7914	.7874	.7951	.8085
27	.8237	.6421	.6767	.6531	.6342	.6159	.6585	.7472	.7429	.7030	.6856	.6738	.6766
28	.7788	.7078	.5690	.7407	.7188	.7220	.6691	.7932	.8015	.7345	.7303	.7234	.7433
29	.6142	.5480	.4714	.7500	.4706	.4552	.5119	.5185	.4559	.5246	.5353	.5108	.4819
30													

Table G-53

YOS	NAVY OFFICER CONTINUATION RATES FOR FY 74-82													
	74	75	76	77	78	79	80	81	82	10 YR	9 YR	7 YR	5 YR	
1	.9267	.9246	.9032	.9661	.9681	.9344	.9881	.9846	.9753	.9507	.9543	.9615	.9703	
2	.8172	.8910	.8843	.8733	.8840	.9354	.9709	.9758	.9753	.8965	.9084	.9308	.9505	
3	.7399	.7814	.8022	.9168	.9255	.9245	.9256	.9197	.9256	.8669	.8669	.9063	.9242	
4	.8243	.8311	.8447	.8591	.8906	.8794	.8904	.8901	.8977	.8555	.8657	.8779	.8897	
5	.8016	.8699	.8332	.8455	.8439	.8291	.8362	.8692	.8884	.8442	.8472	.8502	.8545	
6	.8589	.8822	.8837	.8653	.8210	.8295	.8480	.8647	.8774	.8588	.8600	.8570	.8482	
7	.8695	.9042	.8934	.8731	.8483	.8418	.8615	.8706	.8985	.8744	.8741	.8700	.8641	
8	.9083	.9333	.8926	.9050	.8673	.9043	.8991	.9280	.9293	.9059	.9049	.9018	.9032	
9	.9152	.9308	.9119	.9302	.9025	.8985	.9209	.9342	.9549	.9211	.9213	.9210	.9200	
10	.8939	.8888	.8781	.8502	.8742	.8648	.9034	.8984	.9442	.8913	.8879	.8872	.8947	
11	.9433	.9417	.8914	.9185	.8730	.8793	.8968	.9016	.9457	.9111	.9080	.9012	.8995	
12	.9684	.9624	.9537	.9370	.9471	.9210	.8932	.9371	.9388	.9380	.9373	.9310	.9264	
13	.9603	.9676	.9806	.9649	.9357	.9541	.9455	.9205	.9461	.9227	.9507	.9472	.9396	
14	.9688	.9707	.9840	.9571	.9671	.9639	.9738	.9597	.9457	.9663	.9653	.9640	.9613	
15	.9806	.9824	.9719	.9724	.9561	.9718	.9725	.9802	.9795	.9756	.9745	.9722	.9722	
16	.9829	.9849	.9833	.9810	.9554	.9677	.9771	.9624	.9813	.9766	.9755	.9726	.9685	
17	.9735	.9852	.9853	.9514	.9601	.9678	.9553	.9736	.9624	.9711	.9692	.9654	.9639	
18	.9834	.9862	.9877	.9814	.9199	.9678	.9599	.9767	.9799	.9742	.9724	.9677	.9593	
19	.9781	.9846	.9834	.9384	.9474	.9187	.9321	.9477	.9356	.9380	.9556	.9454	.9364	
20	.7630	.7421	.7799	.7727	.7405	.7290	.7251	.7598	.7396	.7564	.7519	.7520	.7386	
21	.8333	.8197	.7966	.8509	.8471	.8182	.8127	.8702	.8070	.8310	.8278	.8281	.8316	
22	.8036	.8225	.8464	.8910	.8581	.8466	.8602	.8856	.8690	.8498	.8499	.8641	.8625	
23	.8336	.8512	.8612	.8659	.8475	.8370	.8576	.8766	.8672	.8553	.8541	.8583	.8562	
24	.8445	.8450	.8362	.8643	.8608	.8230	.8316	.8680	.8367	.8459	.8457	.8460	.8444	
25	.8135	.8259	.8444	.8793	.8697	.8449	.8122	.8680	.8417	.8401	.8435	.8512	.8478	
26	.7683	.8188	.7980	.7757	.7327	.7187	.7349	.8209	.7616	.7727	.7699	.7605	.7524	
27	.7670	.7954	.8030	.7970	.7788	.7585	.7753	.8307	.7799	.7913	.7876	.7895	.7843	
28	.7893	.7685	.7974	.8100	.7803	.8241	.8438	.8534	.8245	.8101	.8062	.8174	.8272	
29	.7633	.7653	.7204	.8281	.8156	.7654	.7923	.8293	.7748	.7868	.7755	.7822	.7951	
30	.5329	.5513	.5325	.6372	.5969	.5455	.5824	.5668	.5910	.5473	.5587	.5715	.5769	

Table G-54

YOS	MARINE OFFICER CONTINUATION RATES FOR FY 74-82												
	74	75	76	77	78	79	80	81	82	10 YR	9 YR	7 YR	5 YR
1	.9770	.9751	.9800	.9781	.9836	.9819	.9804	.9791	.9812	.9783	.9796	.9805	.9812
2	.9836	.9051	.9291	.9133	.9258	.9805	.9842	.9916	.9795	.9533	.9515	.9553	.9702
3	.7678	.6860	.8206	.8249	.8366	.8502	.8788	.9035	.9138	.8044	.8308	.8599	.8750
4	.7676	.8127	.8351	.8658	.8658	.8473	.8731	.8706	.8841	.8387	.8456	.8643	.8685
5	.7285	.7837	.8047	.8439	.8616	.8673	.8872	.8834	.9319	.8227	.8404	.8707	.8871
6	.8338	.8654	.8759	.8656	.8257	.8544	.8605	.8549	.8990	.8575	.8607	.8638	.8610
7	.8903	.8776	.9216	.9053	.8723	.8714	.9013	.9094	.9322	.8990	.8989	.9036	.8989
8	.8983	.9368	.9304	.9038	.8882	.8588	.8957	.9269	.9463	.9096	.9104	.9076	.9039
9	.8895	.9180	.9180	.9426	.9180	.9189	.9168	.9299	.9298	.9260	.9254	.9303	.9315
10	.8465	.8780	.8718	.9573	.9163	.9083	.9383	.9388	.9298	.9119	.9119	.9201	.9277
11	.8450	.8150	.8087	.7755	.9021	.9217	.8971	.8782	.8608	.8608	.8589	.8591	.8944
12	.8791	.8950	.8876	.9510	.7924	.8511	.8505	.8841	.9533	.8739	.8697	.8662	.8564
13	.9800	.9786	.9301	.9503	.9559	.8355	.9440	.9558	.9533	.9350	.9342	.9238	.9203
14	.9785	.9769	.9429	.9429	.9403	.9464	.8939	.9766	.9575	.9485	.9486	.9412	.9406
15	.9813	.9796	.9708	.9644	.9539	.9390	.9365	.9218	.9869	.9604	.9593	.9538	.9482
16	.9719	.9827	.9850	.9756	.9544	.9509	.9600	.9648	.9509	.9647	.9661	.9629	.9552
17	.9766	.9700	.9690	.9724	.9701	.9733	.9531	.9597	.9436	.9665	.9667	.9644	.9615
18	.9451	.9524	.9604	.9538	.9505	.9323	.9512	.9764	.9435	.9516	.9514	.9523	.9500
19	.8862	.9363	.9275	.9296	.9126	.9112	.9305	.9424	.9283	.9185	.9221	.9261	.9249
20	.8329	.8680	.7681	.6426	.5969	.6444	.7006	.6458	.6739	.7330	.7114	.6675	.6514
21	.7976	.8245	.6946	.8402	.7979	.7888	.8000	.8304	.7581	.7907	.7910	.7824	.7953
22	.8632	.8714	.8549	.8367	.8111	.8194	.8859	.8904	.8396	.8550	.8544	.8480	.8486
23	.8170	.8674	.8398	.9006	.8571	.8414	.8740	.9245	.8438	.8596	.8591	.8659	.8693
24	.8154	.8168	.8848	.8769	.8494	.8333	.8197	.8938	.8836	.8541	.8557	.8647	.8553
25	.8222	.8824	.8302	.7919	.7824	.7929	.8417	.8614	.7822	.8122	.8118	.8077	.8060
26	.8947	.8919	.7333	.7662	.7541	.7204	.7232	.7157	.7471	.7516	.7477	.7376	.7307
27	.7826	.7059	.8182	.8571	.7563	.7391	.8222	.7805	.7808	.7833	.7849	.7873	.7784
28	.7674	.7895	.7692	.8889	.9048	.7363	.7206	.7568	.8125	.7795	.7754	.7764	.7713
29	.6220	.7121	.6250	.7857	.6875	.7895	.7941	.7200	.7176	.7099	.7149	.7422	.7471
30	.5507	.5427	.5324	.6000	.4815	.5789	.5200	.5185	.4872	.5404	.5365	.5287	.5116

Table G-55

AIR FORCE		OFFICER CONTINUATION RATES FOR FY 74-82											
YOS	74	75	76	77	78	79	80	81	82	10 YR	9 YR	7 YR	5 YR
1	9667	9564	9069	9729	9786	9842	9854	9795	9790	9596	9683	9705	9815
2	7920	8078	8056	8431	8715	9562	9776	9809	9840	8699	8886	9227	9609
3	9115	8877	8920	9335	9491	9452	9225	9316	9548	9103	9238	9322	9418
4	8288	8324	8679	8787	8924	8808	9022	8896	8994	8576	8703	8863	8930
5	7816	8333	8710	9152	9262	9432	9423	9429	9523	8760	8923	9244	9406
6	8855	8965	8960	8808	8723	8459	8472	8782	9168	8804	8794	8957	8693
7	9342	9242	9437	9113	8909	8759	8977	9185	9172	9172	9151	9097	9022
8	9505	9213	9379	9341	9139	8901	9231	9395	9534	9306	9285	9268	9225
9	9713	9522	9637	9602	9363	8898	9331	9262	9683	9506	9482	9448	9360
10	9748	9394	9501	9420	9385	9049	9243	9282	9474	9431	9392	9341	9289
11	9382	8995	8830	9140	9566	9122	9436	9361	9458	9297	9263	9283	9390
12	9525	9244	9350	9376	9754	8799	9451	9274	9711	9393	9359	9354	9352
13	9829	9677	9757	9669	9777	9515	9491	9536	9803	9665	9662	9638	9606
14	9642	9599	9509	9365	9782	9607	9696	9757	9690	9627	9628	9631	9712
15	9657	9458	9469	9374	9777	9395	9430	9723	9782	9572	9569	9574	9638
16	9756	9680	9695	9665	9608	9597	9738	9813	9832	9691	9704	9701	9708
17	9617	9623	9613	9538	9680	9471	9604	9773	9731	9619	9623	9624	9642
18	9248	9002	9397	9500	9549	9531	9387	9653	9718	9301	9442	9537	9567
19	7677	8914	9100	9281	9260	8757	8661	9451	9467	8733	8893	9158	9147
20	7841	7551	7552	7802	7879	7395	7557	8125	7881	7727	7725	7737	7773
21	8379	8188	8127	7563	7584	6964	7314	8527	7649	7880	7861	7697	7610
22	8290	7913	8063	7933	8561	8062	8217	8804	8210	8110	8189	8230	8371
23	7730	8008	8198	8365	8637	8134	8404	8791	8517	8238	8228	8414	8488
24	8289	7204	7866	8168	8613	8224	7879	8719	8437	7984	8042	8261	8356
25	7132	8166	6531	8189	7983	7658	7719	8504	8438	7617	7702	7715	8011
26	6520	6467	6998	6957	8100	7367	7563	8283	7957	7410	7462	7614	7853
27	6645	6157	6254	7036	6662	7369	7163	7946	7873	7229	7188	7281	7396
28	6909	5644	5723	5952	5748	4623	5634	5324	6501	5757	5682	5605	5556
29	6667	5614	4561	6196	6600	6027	5419	6679	7029	6146	6308	6275	6377
30	3778	3657	4222	5893	5285	4573	4294	4301	5116	4067	4276	4733	4717

Table G-56

YOS	DOD ENLISTED CONTINUATION RATES 73-82													
	73	74	75	76	77	78	79	80	81	82	10YR	9YR	7YR	5YR
1	85.31	84.10	81.79	82.92	83.96	86.38	86.65	86.73	86.32	88.11	85.073	85.043	85.733	86.817
2	60.39	69.72	70.48	74.80	81.33	88.34	88.48	89.63	88.10	87.07	78.678	81.287	85.227	88.295
3	68.61	60.87	64.08	61.10	62.16	68.50	67.47	71.33	75.14	74.70	67.299	67.175	68.480	71.248
4	35.39	41.88	52.30	54.17	56.57	59.46	51.97	51.90	56.56	63.03	51.971	54.351	56.179	56.480
5	82.37	84.51	86.63	87.53	86.42	86.28	84.59	82.67	84.78	85.11	85.062	85.329	85.301	84.704
6	83.25	83.13	84.46	83.23	84.05	82.30	80.85	80.05	80.79	82.80	82.425	82.361	81.989	81.400
7	86.14	86.15	87.21	86.91	86.69	85.19	83.93	85.61	87.16	88.65	86.328	86.344	86.251	86.059
8	85.46	85.82	86.77	85.91	85.31	82.74	82.59	83.43	86.51	90.10	85.448	85.448	85.267	85.140
9	90.70	90.48	90.62	90.23	88.56	89.30	88.05	88.89	89.30	92.00	89.773	89.694	89.509	89.594
10	93.08	92.41	92.91	92.82	91.12	91.03	90.71	90.66	91.48	93.04	91.874	91.765	91.574	91.448
11	95.22	94.41	94.54	94.07	93.18	93.52	92.99	92.87	93.80	94.72	93.924	93.765	93.594	93.594
12	95.49	94.81	94.73	94.67	94.20	94.13	93.82	93.89	94.57	95.26	94.566	94.448	94.353	94.324
13	96.94	96.80	96.63	96.34	95.82	96.14	95.85	95.70	96.56	96.73	96.395	96.326	96.194	96.233
14	97.27	97.18	97.16	97.16	96.69	96.81	96.80	96.63	97.08	97.54	97.099	97.076	96.991	97.007
15	97.80	97.42	97.46	97.71	97.51	97.50	97.50	97.42	97.55	97.83	97.573	97.544	97.581	97.564
16	98.15	97.70	97.66	97.78	97.96	98.07	97.74	97.94	98.26	98.45	97.957	97.931	98.017	98.092
17	98.50	98.38	98.15	98.01	98.14	98.43	98.53	98.48	98.47	98.83	98.374	98.355	98.383	98.538
18	98.15	97.32	97.18	96.76	97.31	97.81	98.59	98.77	98.71	98.83	97.884	97.832	98.048	98.505
19	92.15	89.66	86.62	87.21	86.75	89.01	94.16	94.40	95.49	96.28	90.816	90.623	91.640	93.723
20	44.89	45.77	48.80	49.25	52.66	56.67	55.32	55.49	61.01	61.96	52.188	53.252	55.814	58.077
21	62.15	64.85	65.58	65.93	66.75	68.83	64.21	65.05	69.40	69.48	66.031	66.629	67.075	67.483
22	70.91	71.36	72.46	70.94	72.38	74.71	71.08	69.91	74.76	75.32	72.305	72.510	72.737	73.251
23	72.37	72.07	70.03	69.70	71.04	70.93	69.25	70.40	76.65	77.41	71.737	71.693	71.923	72.640
24	73.09	71.18	76.86	79.14	80.95	80.40	76.23	75.99	82.29	80.01	77.624	78.238	79.137	78.809
25	78.83	80.10	82.14	84.53	87.18	85.67	81.86	81.51	85.25	84.86	82.991	83.647	84.306	83.595
26	67.68	64.62	60.30	58.25	60.95	61.06	62.73	62.34	70.41	74.41	64.363	63.966	64.391	65.900
27	64.91	62.45	63.73	68.80	67.44	71.36	68.41	68.28	75.36	76.52	68.532	69.166	71.286	72.190
28	69.42	64.31	62.15	63.38	68.68	70.49	65.35	65.42	77.30	75.49	67.762	67.527	69.072	70.503
29	69.58	72.25	67.19	59.83	72.22	70.09	72.56	69.82	79.02	79.36	70.956	71.222	71.901	74.361
30	31.68	26.84	22.19	18.27	21.63	21.30	23.90	31.86	34.77	41.29	27.709	26.560	27.490	31.203

Table G-57

YOS	ARMY ENLISTED CONTINUATION RATES FOR FY 74-82													
	73	74	75	76	77	78	79	80	81	82	10YR	9 YR	7 YR	5 YR
1	.8376	.8334	.8055	.8062	.8110	.8475	.8499	.8425	.8329	.8596	.8308	.8299	.8333	.8457
2	.4492	.6232	.6256	.7028	.8081	.8824	.8751	.8846	.8655	.8445	.7330	.7789	.8348	.8703
3	.3686	.3592	.4373	.4553	.4364	.4825	.4982	.5311	.6171	.6359	.4868	.4947	.5187	.5479
4	.6813	.7572	.8225	.7945	.7326	.7477	.6526	.6506	.7153	.7294	.7224	.7255	.7141	.6980
5	.7988	.8204	.8741	.8704	.8660	.8714	.8920	.8293	.8964	.8686	.8686	.8757	.8809	.8858
6	.8091	.8229	.8488	.8621	.8386	.8206	.8345	.8293	.8359	.8474	.8344	.8364	.8369	.8336
7	.8542	.8596	.8775	.8776	.8553	.8344	.8018	.8237	.8469	.8538	.8452	.8445	.8388	.8313
8	.8390	.8441	.8608	.8381	.8208	.8419	.8177	.8413	.8695	.8502	.8495	.8502	.8497	.8563
9	.8745	.8733	.8823	.8651	.8512	.8818	.8914	.8922	.8939	.9151	.8839	.8846	.8858	.8961
10	.9196	.9172	.9205	.9123	.8912	.9081	.9170	.9098	.9213	.9266	.9148	.9144	.9136	.9174
11	.9328	.9235	.9272	.9141	.9069	.9228	.9334	.9263	.9300	.9375	.9265	.9257	.9258	.9306
12	.9298	.9311	.9339	.9210	.9159	.9302	.9344	.9351	.9427	.9437	.9324	.9327	.9328	.9372
13	.9560	.9531	.9546	.9407	.9363	.9479	.9445	.9466	.9549	.9528	.9494	.9486	.9469	.9498
14	.9591	.9617	.9574	.9527	.9484	.9605	.9630	.9595	.9661	.9677	.9598	.9599	.9599	.9638
15	.9644	.9638	.9632	.9648	.9632	.9686	.9729	.9655	.9747	.9682	.9666	.9668	.9681	.9701
16	.9708	.9715	.9762	.9698	.9712	.9785	.9801	.9766	.9797	.9816	.9752	.9757	.9763	.9793
17	.9746	.9784	.9778	.9759	.9730	.9814	.9852	.9793	.9806	.9833	.9786	.9791	.9794	.9821
18	.9775	.9788	.9814	.9818	.9823	.9862	.9864	.9866	.9851	.9821	.9827	.9834	.9844	.9855
19	.9698	.9788	.9798	.9791	.9827	.9858	.9856	.9856	.9861	.9843	.9815	.9830	.9842	.9855
20	.4984	.4473	.4990	.4530	.4990	.5623	.5596	.5737	.6157	.5986	.5276	.5319	.5515	.5809
21	.5931	.6005	.6511	.5828	.6687	.6528	.6499	.6329	.6609	.6435	.6319	.6361	.6406	.6474
22	.6998	.6875	.7222	.6754	.7541	.7656	.7335	.7072	.7395	.7153	.7182	.7215	.7260	.7307
23	.7037	.6972	.7507	.7189	.7851	.7702	.7396	.7344	.7584	.7569	.7388	.7418	.7508	.7525
24	.6813	.6518	.7240	.7093	.7956	.8017	.7638	.7521	.7880	.7750	.7417	.7528	.7705	.7758
25	.7477	.7608	.7974	.8151	.8471	.8613	.8130	.8097	.8262	.8241	.8055	.8153	.8281	.8286
26	.6402	.6418	.6804	.6944	.7353	.7882	.7537	.7250	.7809	.7534	.7114	.7230	.7490	.7595
27	.5838	.5553	.6466	.6290	.6861	.6909	.6852	.6867	.7242	.7014	.6472	.6617	.6839	.6966
28	.6280	.6263	.7312	.7241	.7790	.7800	.7786	.7531	.7937	.7692	.7213	.7371	.7682	.7763
29	.6066	.6582	.6863	.5959	.7212	.7003	.7453	.7378	.7826	.7616	.6905	.7069	.7207	.7467
30	.3404	.2611	.2762	.1837	.1424	.1643	.1526	.1950	.1075	.1805	.2354	.2005	.1608	.1565

Table G-58

YOS	73	74	75	76	77	78	79	80	81	82	10YR	9 YR	7 YR	5 YR
1	.8487	.8380	.8023	.8447	.8421	.8702	.8817	.8920	.8867	.8920	.8580	.8592	.8715	.8842
2	.6748	.7592	.7537	.7846	.7978	.8889	.8941	.9061	.8844	.8823	.8184	.8353	.8617	.8910
3	.8555	.8434	.7268	.6622	.7482	.8394	.8188	.8342	.8149	.8105	.7948	.7879	.7897	.8239
4	.2661	.3420	.4182	.4542	.4714	.4997	.4949	.4599	.5008	.5978	.4402	.4708	.4977	.5097
5	.8339	.8135	.8556	.8917	.8914	.8695	.8027	.7669	.8094	.8231	.8329	.8328	.8327	.8128
6	.7617	.7398	.7591	.7573	.7637	.7538	.7698	.7565	.7424	.7635	.7568	.7564	.7580	.7578
7	.8847	.8758	.8921	.9141	.9025	.8941	.8769	.8865	.8882	.9041	.8925	.8932	.8949	.8900
8	.8820	.8898	.8926	.8846	.8652	.8100	.8127	.8259	.8497	.8879	.8565	.8540	.8466	.8368
9	.9101	.9055	.9051	.9141	.8717	.8577	.8570	.8708	.8904	.9267	.8896	.8876	.8833	.8812
10	.9175	.9025	.9144	.9195	.8870	.8829	.8698	.8741	.8871	.9261	.8979	.8960	.8927	.8891
11	.9578	.9438	.9428	.9484	.9379	.9374	.9342	.9343	.9358	.9515	.9428	.9409	.9402	.9390
12	.9686	.9563	.9473	.9591	.9488	.9354	.9408	.9379	.9376	.9522	.9493	.9465	.9448	.9409
13	.9755	.9696	.9643	.9665	.9558	.9598	.9568	.9537	.9662	.9665	.9643	.9627	.9611	.9611
14	.9784	.9734	.9772	.9749	.9624	.9608	.9608	.9573	.9622	.9740	.9693	.9680	.9652	.9633
15	.9809	.9756	.9734	.9753	.9710	.9701	.9662	.9711	.9642	.9788	.9733	.9721	.9711	.9700
16	.9807	.9718	.9659	.9740	.9736	.9735	.9659	.9712	.9765	.9806	.9733	.9723	.9736	.9735
17	.9853	.9797	.9741	.9729	.9774	.9786	.9792	.9784	.9791	.9874	.9792	.9782	.9787	.9805
18	.9616	.9424	.9320	.9290	.9414	.9525	.9741	.9791	.9787	.9868	.9549	.9538	.9599	.9727
19	.7164	.6434	.6238	.6037	.6429	.6789	.8274	.8247	.8644	.8946	.7157	.7156	.7508	.8111
20	.5050	.4863	.4883	.5094	.5589	.5703	.5592	.5133	.5604	.5981	.5338	.5362	.5509	.5590
21	.6506	.6492	.6068	.6294	.6646	.6748	.6245	.6669	.7014	.7136	.6599	.6608	.6676	.6772
22	.7221	.6882	.6691	.6601	.6822	.6917	.6748	.6806	.7014	.7280	.6922	.6902	.6926	.6996
23	.7580	.7741	.7187	.7279	.7496	.7313	.7060	.7234	.7736	.7764	.7417	.7411	.7412	.7417
24	.8146	.7775	.8087	.7836	.7807	.7854	.7665	.7407	.8274	.8026	.7872	.7846	.7827	.7827
25	.8692	.8375	.8131	.8371	.8427	.8082	.8077	.7962	.8289	.8434	.8297	.8237	.8225	.8166
26	.8120	.7505	.7347	.7276	.7793	.7244	.7246	.7370	.7749	.8097	.7613	.7557	.7597	.7587
27	.8271	.8098	.8003	.8182	.7500	.7620	.7882	.7580	.8374	.8441	.8072	.8034	.8030	.8048
28	.8985	.8832	.8435	.8396	.8227	.9024	.8718	.8383	.9115	.9320	.8733	.8692	.8697	.8886
29	.8375	.8266	.7325	.6311	.7532	.7500	.7905	.6840	.8000	.8159	.7631	.7511	.7388	.7646
30	.3290	.3472	.3323	.2467	.3245	.3134	.3625	.4681	.5280	.5714	.3608	.3671	.3800	.4432

Table G-59

YOS	MARINE ENLISTED CONTINUATION RATES FOR FY 74-82													
	73	74	75	76	77	78	79	80	81	82	10YR	9 YR	7 YR	5 YR
1	.8408	.8447	.8381	.8123	.8618	.8611	.8623	.8922	.8876	.8909	.8565	.8586	.8641	.8786
2	.5787	.5630	.6627	.6623	.7898	.8703	.8915	.9056	.8815	.8817	.7575	.7783	.8369	.8855
3	.5780	.6546	.6687	.6419	.7211	.7546	.6816	.7345	.7313	.7150	.6900	.7018	.7114	.7228
4	.3050	.3751	.4033	.3988	.3843	.3661	.3302	.3841	.4247	.4794	.3860	.3939	.3951	.3963
5	.6422	.7637	.7768	.7896	.7826	.7739	.7717	.7672	.7469	.7912	.7616	.7738	.7746	.7707
6	.7530	.8050	.8151	.8154	.7939	.7950	.7821	.8196	.8543	.8543	.8112	.8155	.8168	.8212
7	.7877	.8403	.8389	.8405	.8253	.7946	.7779	.8246	.8246	.8567	.8217	.8247	.8214	.8172
8	.8559	.8464	.8500	.8615	.8026	.7956	.7671	.8349	.8592	.8940	.8422	.8414	.8399	.8314
9	.8070	.8318	.7999	.8206	.8063	.7971	.7937	.8730	.8907	.9214	.8369	.8392	.8446	.8561
10	.7823	.8057	.8194	.8134	.8217	.7948	.8412	.8875	.9142	.9257	.8478	.8526	.8600	.8733
11	.8819	.9118	.9099	.8941	.9008	.8985	.9037	.9251	.9407	.9388	.9130	.9164	.9174	.9229
12	.9157	.9126	.9197	.9089	.9153	.9130	.9326	.9174	.9291	.9403	.9216	.9223	.9239	.9270
13	.9314	.9269	.9357	.9387	.9379	.9332	.9481	.9460	.9620	.9555	.9422	.9441	.9479	.9507
14	.9409	.9349	.9489	.9410	.9534	.9487	.9629	.9547	.9573	.9674	.9498	.9512	.9554	.9588
15	.9429	.9539	.9546	.9492	.9661	.9564	.9670	.9756	.9850	.9792	.9616	.9640	.9688	.9739
16	.9577	.9612	.9633	.9608	.9700	.9706	.9749	.9825	.9876	.9779	.9685	.9701	.9732	.9786
17	.9606	.9595	.9742	.9624	.9757	.9778	.9838	.9838	.9921	.9907	.9731	.9754	.9786	.9853
18	.9566	.9745	.9721	.9699	.9787	.9797	.9815	.9856	.9918	.9921	.9761	.9790	.9814	.9850
19	.7902	.8303	.8564	.8435	.8602	.8864	.9731	.9682	.9746	.9785	.8740	.8968	.9177	.9519
20	.4548	.4449	.5335	.4560	.5141	.5697	.5568	.5472	.6343	.6505	.5192	.5278	.5511	.5848
21	.5957	.6229	.6764	.5755	.6910	.6810	.6639	.6556	.7005	.7090	.6578	.6656	.6690	.6823
22	.6318	.7230	.7678	.6200	.7329	.7326	.7426	.7206	.7573	.7860	.7164	.7248	.7201	.7489
23	.7252	.7746	.7963	.7218	.7986	.7582	.7602	.7586	.7965	.8424	.7751	.7794	.7777	.7834
24	.7616	.7801	.8068	.7581	.8171	.7907	.7591	.8249	.8464	.8156	.7968	.8008	.8019	.8074
25	.7582	.8522	.8671	.8111	.8584	.8577	.8425	.8750	.8627	.8767	.8410	.8555	.8549	.8618
26	.6278	.7782	.7668	.6970	.7707	.7772	.7848	.7555	.7946	.8115	.7536	.7745	.7749	.7849
27	.7474	.7446	.7534	.7171	.8214	.7623	.8302	.7553	.8256	.7770	.7709	.7740	.7835	.7909
28	.7407	.6923	.7413	.6784	.7841	.7889	.7889	.8125	.8182	.8322	.7689	.7716	.7938	.8223
29	.7982	.8082	.6731	.6408	.7218	.8676	.7778	.8250	.8704	.8814	.7821	.7800	.7933	.8498
30	.2789	.2813	.2800	.2857	.3529	.2381	.2759	.4250	.4898	.4823	.3370	.3462	.3672	.3835

Table G-60
ENLISTED CONTINUATION RATES FOR FY 74-82

YOS	73	74	75	76	77	78	79	80	81	82	10YR	9 YR	7 YR	5 YR
1	8988	8595	8544	8748	8911	8928	8816	8737	8878	8975	8809	8786	8858	8870
2	9007	8606	8469	8607	8591	8874	8891	9008	9077	9044	8609	8779	8866	8877
3	8821	7217	8537	8120	7974	8631	8894	9256	9310	9039	8517	8481	8727	9023
4	3184	3394	4516	4456	5585	6317	4957	4806	5222	6055	4682	4979	5308	5447
5	9046	9077	9022	8915	8584	8702	8426	8406	8472	8482	8712	8677	8572	8502
6	9358	9211	9071	8843	9203	9120	8130	7923	8255	8560	8764	8713	8573	8383
7	8681	8584	8603	8406	8576	8522	8824	8838	9088	9320	8724	8728	8764	8889
8	8431	8513	8621	8652	8711	8384	8563	8314	8734	9096	8614	8628	8643	8626
9	9556	9522	9537	9519	9478	9482	9168	9016	8944	9204	9326	9307	9259	9168
10	9749	9698	9715	9700	9616	9502	9364	9399	9287	9412	9223	9503	9461	9392
11	9757	9679	9688	9650	9553	9504	9280	9274	9484	9555	9526	9498	9454	9410
12	9676	9619	9628	9636	9620	9589	9407	9460	9560	9657	9581	9568	9552	9528
13	9840	9825	9823	9839	9814	9781	9727	9696	9754	9804	9790	9785	9772	9754
14	9893	9869	9882	9894	9870	9827	9797	9792	9817	9843	9851	9846	9837	9817
15	9916	9895	9900	9903	9894	9854	9849	9840	9820	9864	9876	9871	9864	9846
16	9922	9898	9914	9916	9912	9891	9840	9878	9900	9901	9899	9896	9893	9882
17	9940	9936	9936	9960	9924	9912	9902	9937	9913	9927	9929	9927	9924	9917
18	9947	9954	9950	9953	9949	9930	9945	9954	9943	9937	9947	9947	9944	9942
19	9933	9941	9932	9930	9941	9936	9941	9963	9943	9935	9939	9940	9941	9944
20	4084	4571	4814	5111	5321	5681	5415	5693	6331	6478	5132	5317	5686	5944
21	6266	6831	6693	7029	6658	7188	6434	6583	7150	7197	6775	6882	6926	6953
22	7170	7269	7379	7497	7277	7653	7109	7003	7771	7916	7375	7409	7451	7504
23	7304	7232	6762	6748	6747	6778	6567	6713	7651	7805	6944	6919	6889	6976
24	7466	7301	7842	8215	8272	8102	7605	7651	8411	8209	7900	7954	8040	7948
25	7907	8150	8312	8639	8869	8663	8212	8203	8758	8629	8412	8488	8549	8436
26	6718	6035	5050	4886	5267	5236	4934	5446	6423	7033	5706	5606	5607	5779
27	6203	5936	5541	6840	6293	7099	6378	6364	7341	7610	6576	6629	6931	7017
28	6333	5052	4212	4506	5422	5781	5200	5155	6773	6803	5492	5389	5615	5870
29	6852	6915	5897	5573	6939	6325	6646	6598	6733	7990	6773	6755	6881	7083
30	2932	2245	0594	0417	1029	1277	1751	2846	4069	4110	2365	2159	2532	3131