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VALUATION OF THE MILITARY RETIREMENT SYSTEM.(U)
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VALUATION OF THE MILITARY RETIREMENT SYSTEM

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INTRODUCTION

The military retirement system is really three separate but interrelated noncontributory unfunded systems: nondisability retirement from active service, reserve nondisability retirement, and disability retirement. All plans are defined benefit plans which are increased after retirement to fully reflect changes in the Consumer Price Index. A detailed description of the military retirement system is contained in Appendix B.

Currently, the Service Secretaries approve voluntary nondisability retirement for personnel upon credit of at least 20 years of service at any age. The retiree from active service receives an immediate annuity calculated as 2 1/2% of base pay for each year of creditable service, subject to a maximum of 75% of base pay. Base pay is equal to final basic pay if the retiree first became a member of the Armed Services before 8 September 1980. For those new members after that date, base pay equals the average of the highest 36 months of pay. A member has no vested right in the retirement system until the point of retirement eligibility.

Reservists who have served 20 or more years on active duty may be retired under the same criteria and authority as regular personnel. All other drill reservists who complete 20 creditable years for retirement purposes (at least 50 points during an anniversary year must be earned to be a creditable year) may retire at age 60. The annuity at 60 is determined by multiplying (base pay) by (the total number of accumulated points) by (2 1/2%) and dividing by 360.

In disability retirement the member receives base pay multiplied by the larger of (1) 2 1/2% times years of service, or (2) percent of disability. The benefit cannot be more than 75% of base pay.

On 30 September 1980 there were 2 million active duty regular and reserve personnel, .8 million selected drill reservists, 1.1 million retired nondisability annuitants, .2 million disability annuitants, and 67 thousand survivor benefit families in the military retirement system. Fiscal year 1980 retired appropriation outlays totaled \$11.9 billion, which was 56.9% of the amount paid in basic pay and 8.97% of the Department of Defense's military expenditures. Ten years earlier, retirement only totaled 3.7% of military costs. The most common age at retirement from active duty is 43 for officers and 39 for enlistees. Excluding reserve retirees, in September of 1980 the average gross monthly annuity for all nondisabled officers was \$1,676 and nondisabled enlistees averaged \$728 a month.

This is a valuation of the military retirement system as of 30 September 1980. Valuation results show an entry-age normal cost of 46% of basic payroll. Present value of future benefits total \$523 billion resulting in an entry-age normal cost unfunded liability of \$431 billion. The present value of accumulated plan benefits is \$349 billion. The cost of the present pay-as-you-go method will ultimately level out at 54% of basic payroll. All liabilities relate to the Department of Defense retired appropriation only.

HISTORY OF MILITARY RETIREMENT AND RETIRED PAY ADJUSTMENTS

The evolution of the military retirement system has been guided by four principle motivations: (1) to provide for members who are old or disabled, (2) to help maintain a competitive employment position for the military, (3) to keep promotion opportunities open to young and able members, and (4) to avoid excessive costs. Additionally, this retirement system exists primarily to complement the management objectives of the active force. It is a major management tool for the active force and an element of the military compensation system.

Provisions for the maintenance of disabled military members date to colonial days. The Pilgrims at Plymouth provided in 1636 that any man sent forth as a soldier and returned maimed should be maintained by the colony during his life. In order to obtain enlistments in military expeditions against the Indians, the colonies promised to care for those who were disabled and had no means of earning a livelihood as well as providing aid for the indigent families of those fallen in conflict. Some of these precedents were continued in the first national pension law of August 26, 1776, which promised half pay for life, or during disability, to the disabled. After the Revolutionary War, a full disability pension for a noncommissioned officer or private soldier was fixed at five dollars per month, with commissioned officers being paid at one-half of their monthly pay. Initially, the States administered disability pensions. However, in 1790, the Secretary of War became the principal pension administrator. In 1805, disability pensions were extended to those who received wounds in military service which subsequently became disabling.

Pensions based on service by itself were more controversial. Annuities of half pay for life had been promised in 1780 by Congress for officers who served to the end of the War. However, the resulting claims were initially settled for less than full value and with a considerable amount of controversy. As the number of veterans declined, and the treasury increased, Congress became more generous. In 1818, an act was passed providing relief to Revolutionary War veterans in need. By 1832, it became full pay for life, regardless of need. In 1836, widows were included. This same pattern was followed for service pensions for subsequent wars. However, each war was treated separately.

In 1849, the Bureau of Pensions was transferred to the newly established Department of the Interior, where it was to remain until the Veterans Administration was created in 1930. In 1855, authorization was given for involuntary separation with partial pay of Navy officers adjudged incapable but

1/ Sections of this are excerpted from (1) Defense Manpower Commission Staff Studies, Volume V, U.S. Government Printing Office, 1976 and (2) Military Compensation Background Papers, Third Quadrennial Review of Military Compensation, U.S. Government Printing Office, 1976.

2/ For a fuller discussion of the early history of military pensions see History of Military Pension Legislation in the United States, William H. Glasson, ANS Press, New York, N.Y. 1968.

not necessarily disabled. The outbreak of the Civil War brought further changes when it became necessary to retire older officers no longer fit for field duty. The vehicle was the Act of 3 August 1861, the first major non-disability retirement act, which provided for the voluntary retirement of regular officers of all branches of service after 40 years of duty, at the discretion of the President. Subsequent Acts in 1861 and 1862 provided for involuntary retirements for age or years of service.

The 1861 act also established a military disability retirement system that covered the regular officers of all branches of Service. Army and Marine Corps officers were to be paid an amount equal to their "pay proper" plus four rations. Navy officers were paid slightly more. The Act of 2 March 1867 authorized disability retirement for enlisted personnel of the Navy and Marine Corps.

Congress established two enduring retirement principles while reducing forces to a peacetime basis in 1870. The first permitted voluntary retirement of officers after 30 years of service upon approval by the President, and the second fixed retired pay at 75% of pay of the officer's grade. The 75% applied to Army and Marine Corps officers, both disabled and nondisabled, and was extended to Navy officers in 1873.

In 1885, the first nondisability retirement law for Army and Marine Corps enlistees was enacted. Paralleling the officer retirement laws, it provided for voluntary retirement at 30 years of service with 75% of pay of the grade in which retired plus an allowance in lieu of quarters, fuel, and light. The law was extended to the Navy in 1899.

By the middle of World War I, the limit on the number of officers who could be placed on the retired list was causing promotion stagnation problems in the Navy. To alleviate the problem, Congress in 1916 established selection boards for promotion to Rear Admiral, Captain, and Commander on the basis of age-in-grade. (Service-in-grade replaced age-in-grade in 1926.) Those officers not selected for promotion were retired at 2 1/2% of pay per year of service, not to exceed 75% of pay. This was the first recognition of length of service as well as grade in computation of retired pay.

The Act of 1916 also created the Fleet Naval Reserve, to provide a pool of experienced personnel who could be recalled to active duty in an emergency. While technically different than retirement, the practical effect was that it was possible for enlistees of the Navy and Marine Corps to "retire" with as little as 16 years of service (raised to 20 in 1925).

By 1938, the Navy was again experiencing promotion stagnation problems caused by the large influx of officers in the World War I years. Almost all of these officers were in the same age and years of service groups. To remedy the situation, Congress extended the selection board process to all grades above Lieutenant (junior grade), set limits on years of service for Lieutenant Commanders through Captains, and provided for voluntary retirement at 20 years of service at the discretion of the President.

Following World War II, allegations of unfairness, inequity, and inefficiency in the existing disability retirement system became extensive. At this point, compensation for disabled military had evolved into the following:

	<u>Army and Air Force</u>	<u>Navy and Marine Corps</u>
Regular Officers	Military Disability Retired Pay - 75% of Base and Longevity Pay	Military Disability Retired Pay - 75% of Base and Longevity Pay
Nonregular Officers	Veterans Administration "Retirement" Pay - 75% of Base and Longevity Pay	Same as Regular Officers
Enlisted Personnel, 20 or More Years' Service	Military Disability Retired Pay - 75% of 6-months' Average Base and Longevity Pay	Military Disability Retired Pay - 50% of Base and Longevity Pay
Enlisted Personnel, Less Than 20 Years' Service	Veterans Administration Disability Compensation based on degree of disability	Veterans Administration Disability Compensation based on degree of disability

NOTE: Any member entitled to military retired pay could waive all or part of such pay and elect in its place any VA disability compensation based on degree of disability to which he was entitled.

A new system for disability retirement was created by the Career Compensation Act of 1949. Under this system all disabilities had to be rated under the standard schedule of rating disabilities in use by the Veterans Administration, and the resultant ratings became a factor in disability retired pay entitlement and taxability. The new system covered officer and enlisted personnel of both the Regular and Reserve components, and it authorized temporary as well as permanent disability retirements. The disability retirement system remains basically unchanged from the way it was enacted in 1949.

Meanwhile, the Officer Personnel Act of 1947 brought the Army and Air Force under a selection process similar to the Navy system. It also provided that those officers who failed promotion and were not eligible to retire would receive severance pay of two months' pay per year of service, not to exceed two years' pay.

Standardized nondisability retirement laws for all Services were brought about by the Army and Air Force Vitalization Act of 1948. The Act established 20 years as the minimum requirement for voluntary retirement, thereby placing the Army and Air Force on a par with the Navy. It also provided for the removal of substandard officers with severance pay equal to one month's pay per year of service, not to exceed one year's pay.

Prior to 1958, retired pay was generally increased in direct proportion to changes in active duty pay. The practice was discontinued with the Act of May 1958, when it was realized that a single 6% cost-of-living increase would cost only \$35 million, as opposed to \$65 million for linking the retired pay to active duty pay. The 6% approximated the increase in the cost-of-living since 1955 when retired pay was last increased.

In 1963, a permanent system of increasing retired pay, based on a formula geared to increases in the cost-of-living, was adopted. This system granted cost-of-living increases whenever the Consumer Price Index (CPI) went up at least 3% and remained up for three months. The benefit increase was equal to the percentage rise in the CPI plus 1%. The 1% was not added to increases before 1969.

Effective March 1977, cost-of-living adjustments were scheduled to occur every six months, on March 1st and September 1st, to be reflected in checks issued those months. The cost-of-living increase effective 1 March is computed by calculating the percentage increase (adjusted to the nearest 1/10 of 1%) in the CPI from the previous June to the previous December. Similarly, the cost-of-living increase effective 1 September is obtained by calculating the percentage increase in the June CPI over the CPI from the previous December. In August 1981, this was changed to a once-a-year cost-of-living increase by eliminating the September increase. This change will save approximately \$400 million in FY82 in the military retired pay appropriation. Annual cost-of-living increases will be given in March of each year based on the increase in the CPI between the two previous December CPI's. Retired pay increases, from 1958 to the present time, are shown in Table I.

FUNDING METHOD

Prior to 1935 the Navy had a pension fund (on a nonactuarial basis) which provided for payments to persons retired for disability whenever there was a sufficient amount in the fund. Other retired pay was paid directly from appropriations, and when the fund was insufficient, the disability retired pay was also paid from appropriations. The income to the fund consisted of the government's share of the proceeds from the sale of enemy or pirate ships captured by the Navy, and from interest received on fund investments. This fund was abolished in 1935, and since that time the military retirement system has been entirely on an unfunded or 'pay-as-you-go' basis. This valuation will show the unfunded liability under this funding method, which is just the present value of future benefits, as well as the unfunded liability under an entry-age normal cost funding method.

VALUATION DATA AND PROCEDURE

The valuation input data was abstracted from files maintained at the Defense Manpower Data Center (DMDC). Retiree and survivor data came from official files submitted by the Service Finance Centers (Army, Navy, Marines, and Air Force) semiannually. Reserve data was obtained from the Reserve Component Common Personnel Data System (RCCPDS), the official source for all Reserve strengths and statistics. Active duty data came from files provided quarterly by the four military personnel centers.

Table I
Military Retired Pay Increases Since 1 June 1958

<u>Date of Increase</u>	<u>Percentage Increase</u>	<u>Cumulative</u>
6/1/58	6.0	6.0
10/1/63	5.0	11.3
9/1/65	4.4	16.2
12/1/66	3.7	20.5
4/1/68	3.9	25.2
2/1/69	4.0	30.2
11/1/69	5.3	37.1
8/1/70	5.6	44.8
6/1/71	4.5	51.3
7/1/72	4.8	58.6
7/1/73	6.1	68.2
1/1/74	5.5	77.5
7/1/74	6.3	88.7
1/1/75	7.3	102.4
8/1/75	5.1	112.0
3/1/76	5.4	124.3
3/1/77	4.8	135.0
9/1/77	4.3	145.1
3/1/78	2.4	151.0
9/1/78	4.9	163.3
3/1/79	3.9	173.6
9/1/79	6.9	192.4
3/1/80	6.0	210.0
9/1/80	7.7	233.9
3/1/81	4.4	248.6

The files were aggregated and edited, disregarding invalid data. Detailed comptroller totals were used on all specific areas of data to bring the numbers and dollar amounts on the edited file up to actual size. The blow up figure was less than .5% for retirees and .1% for active duty personnel. The only area that could not be matched to official DoD figures is the number of surviving families. This will be resolved in the future. The total of the survivor annuities was matched to actual payments.

Dollars amounts included the September CPI increase for retirees and annuitants as well as the 1 October pay raise for active duty and reserve personnel. These totals are summarized below:

Table II

Initial Accounting Figures as of 30 September 1980

(\$ in millions - basic pay includes October 1st increase)

Total Active Duty Personnel	2,049,526
Total Monthly Basic Pay	\$ 1,821
Total Selected Drill Reservists	838,203
Total Monthly Basic Pay	\$ 140
Total Number of Nondisability Retirees	1,113,429
Total Monthly Retired Pay	\$ 977
Total Number of Disability Retirees	151,196
Total Monthly Retired Pay	\$ 108
Total Number of Surviving Families	67,143
Total Monthly Survivor Annuities	\$ 23

Summaries of active duty and retiree valuation data can be found in Appendix C. Detailed data of all populations in the valuation is available upon request.

The seriatim method was used in all phases of the valuation including active, retired, and survivor segments. A model was developed incorporating all parts of the military retirement system, including the drill reservists. This captured future liabilities for those members who left active duty and later joined the reserves to vest past retirement credits.

An entry-age normal cost percentage was developed by dividing the present value of future benefits by the present value of future salaries of a new entrant group starting their careers on the valuation date. New entrant models were created for drill reservists and active duty personnel using FY80 experience. The models are essentially arrays indicating what percentage of people enter at each age and category. Since there were two separate models, the relative size of the number of new entrants used in each category was carefully set. Appendix A contains the active duty new entrant model.

The unfunded liability was defined as the present value of future benefits minus the present value of future normal costs for all those currently in the system. This includes present active duty personnel, drill reservists, retirees, and survivors, as well as future retirees and future survivors resulting from this group.

ECONOMIC AND OTHER ACTUARIAL ASSUMPTIONS

The present values shown herein have been determined using a 5% rate of inflation assumption set by the Office of Management and Budget. The other economic assumptions, 5.5% for general salary scale increases (not including merit and promotion) and 6% for investment return were selected to be consistent with the 0.5% and 1.0% differentials used by the Board of Actuaries of the Civil Service Retirement System. The Board's differentials were based on a study of real salary growth for Federal employees and real earnings of Federal securities. The following historical table was analyzed by the Board:

Table III

Historic Economic Assumption Analysis (In Percent)

	<u>1950-</u> <u>1959</u>	<u>1960-</u> <u>1969</u>	<u>1970-</u> <u>1978</u>	<u>1960-</u> <u>1978</u>	<u>1950-</u> <u>1978</u>
1. Average annual increase in Consumer Price Index	2.2	2.5	6.6	4.4	3.7
2. Average annual general schedule pay increases	2.8	4.7	5.6	5.1	4.3
3. Average annual yield on long-term US securities	2.6	4.6	7.1	5.8	4.7
4. Real salary growth = (2)-(1)	.6	2.2	(1.0)	.7	.6
5. Real yield = (3)-(1)	.4	2.1	.5	1.4	1.0
6. Yield-salary growth = (5)-(4)	(.2)	(.1)	1.5	.7	.4

The long term nature of pension liabilities caused the Board to hesitate to overreact to current high market yields. The 1950 to 1978 experience was used to moderate the effect of typical short-term trends. Future military salary scale increases and the theoretical return on investments of a military retirement fund will be similar to the experience of the Civil Service System. Since the military retirement system is fully indexed, the liabilities vary only slightly for sets of economic assumptions with the same differentials.

All new military specific death and decrement rates were created in 1980 using current experience. The rate creation process is discussed elsewhere in this text and the rate tables are in Appendix A.

VALUATION RESULTS

Table IV summarizes the normal cost findings. The normal cost as a percent of payroll for the system as a whole is 46%. Separately, officers have a normal cost of 67% and enlistees 38% of basic pay. These figures contain

Table IV

Normal Cost Analysis and Detail
(As Percent of Payroll)

Nondisability Benefits	42
Disability Benefits	3
Survivor Benefits	1
Total Force	46%

Note: All entries in this table include deductions for survivor benefit premiums.

active duty as well as selected drill reservists in the basic pay figures. The retired pay figures include reserve and active duty retirees as do the surviving family annuities. The detailed projections indicated that for a group of new entrants into the military, only 12% ever become eligible for nondisability retirement. Only 36% of new officers and 11% of new enlistees attain 20 years of service.

Table V summarizes the total present value of future pay and benefits of \$523.3 billion as well as the entry-age normal cost unfunded liability of \$431.1 billion. If an accrual accounting system had been installed as of 30 September 1980, whereby the normal cost would be placed in a fund annually, the fund would also need this \$431.1 billion lump sum payment to pay future benefits. An amortization schedule would be set up to make payments on the \$431.1 billion over 30 or more years.

One measure of the funding of a retirement system is the value of benefits earned to the date of the valuation. As shown in Table VI, the present value of accumulated plan benefits as of 30 September 1980 was \$307 billion.

Accumulated plan benefits are those future periodic payments that are attributable under the Plan's provisions to the service that Armed Service personnel have rendered. Accumulated plan benefits include benefits expected to be paid to (a) retired military or their beneficiaries, (b) current beneficiaries, (c) present active duty personnel and nonretired reservists or their beneficiaries. Benefits payable under all circumstances (retirement, disability, and survivor) are included to the extent they are deemed attributable to service rendered prior to the valuation date. No future salary increases are used but annuities are increased in line with the post-retirement inflation provision.

The actuarial present value of accumulated plan benefits is that amount that results from applying actuarial assumptions to adjust the accumulated plan benefits to reflect the time value of money (through discounts for

Table V

Actuarial Liability
As of September 30, 1980
(\$ in billions)

Present Value of Future Basic Pay	\$ 199.5
Active Duty:	\$ 167.5
Regular Officers	55.6
Nonregular Officers	16.5
Regular Enlisteds	112.8
Nonregular Enlisteds	2.6
Selected Reservists:	\$ 12.0
Officers	3.5
Enlisteds	8.5
Present Value of Future Benefits	\$ 523.3
Retirees:	\$ 495.4
Nondisabled Officers	217.1
Nondisabled Enlisteds	248.0
Disabled Officers	15.4
Disabled Enlisteds	14.9
Surviving Families	\$ 27.9
SBP	26.0
RCSBP	.4
Minimum Income	.1
DIC	.3
RSFPP	1.1
Normal Cost %	46.2
Pay-As-You-Go Liability	\$ 523.3
Present Value of Future Normal Costs	\$ 92.2
Entry Age Normal Cost Liability	\$ 431.1
Fund Balance	0.0
Pay-As-You-Go Unfunded Liability	\$ 523.3
Entry-Age Normal Cost Unfunded Liability	\$ 431.1

interest) and the probability of payment (by means of decrements such as for death, disability, withdrawal, or retirement) between the valuation date and the expected date of payment. The actuarial assumptions are based on the presumption that the Plan will continue. Were the Plan to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated plan benefits.

A nonretired vested participant is defined as an active duty member with over 20 years of service creditable toward retirement. Table VI summarizes these benefits.

Table VI

Accumulated Plan Benefits
As of 30 September 1980
(\$ in billions)

Present Value of Future Benefits	\$348.9
Retirees:	\$325.8
Nondisabled Officers	141.0
Nondisabled Enlisted	160.5
Disabled Officers	12.9
Disabled Enlisteds	11.4
Surviving Families:	\$ 23.1
SBP	21.4
RCSBF	.3
Minimum Income	.1
DIC	.2
RSFPP	1.1
Actuarial Present Value of Vested Benefits	\$307.2
Participants Currently Receiving Payments	\$261.6
Other Vested Participants	45.6
Actuarial Present Value of Non-Vested Benefits	\$ 41.7

Assuming a level active duty force, total basic pay and retired appropriation outlays are projected 75 years into the future in Table VII. The figures are placed into perspective by the outlays over payroll ratios. It should be noted that this ratio peaks at 65% in the year 2000 and then drops to 54% in 2040 where it remains level. This ultimate 54% should be compared to the ultimate 46% under a funded entry-age normal cost method. A good argument for remaining unfunded could be made with only an 8% difference in ultimate budget outlays. The economic assumptions used in the projection are indicated on the bottom of Table VII. Short-term assumptions were smoothed into long-term assumptions after 5 years.

Table VII

Total Past and Projected Basic Pay
and Retired Appropriation Outlays*
(\$ in billions)

<u>Fiscal Year</u>	<u>Total Basic Pay</u>	<u>Total Retired Appropriation Outlays</u>	<u>Outlays/ Payroll</u>
1980	\$ 20.9	\$ 11.9	0.5694
**1981	23.5	13.9	0.5924
1982	26.6	15.6	0.5814
1983	29.3	17.2	0.5888
1984	31.6	18.6	0.5943
1985	33.7	20.2	0.5985
1986	35.8	21.6	0.6020
1987	37.9	22.9	0.6061
1988	40.0	24.4	0.6106
1989	42.2	26.0	0.6157
1990	44.5	27.6	0.6200
1991	47.0	29.4	0.6242
1992	49.6	31.2	0.6286
1993	52.3	33.1	0.6320
1994	55.2	35.0	0.6343
1995	58.3	37.1	0.6362
1996	61.5	39.2	0.6381
1997	64.8	41.5	0.6407
1998	68.3	43.9	0.6430
1999	72.0	46.4	0.6442
2000	75.9	48.9	0.6451
2005	98.8	63.1	0.6391
2010	128.9	80.1	0.6211
2015	168.5	100.7	0.5973
2020	220.4	127.1	0.5769
2025	288.0	161.9	0.5620
2030	376.4	207.9	0.5522
2035	491.9	268.6	0.5461
2040	642.9	348.8	0.5426
2045	840.3	454.5	0.5409
2050	1098.2	593.6	0.5405
2055	1435.4	775.9	0.5406

*Payroll projections include selected reserve and active duty basic pay, outlays include active duty and reserve retirements as well as survivor annuities

**Projected from this year on.

CPI Assumptions (Fiscal Year)

1981: .095 1984: .062
1982: .087 1985: .055
1983: .073 1986 on: .050

Salary Assumptions (Fiscal Year)

1982: .143 1985: .067
1983: .092 1986: .060
1984: .078 1987 on: .055

Table VIII
Military Retirement Appropriation Accrual Costs
(\$ in billions)

40 Year Amortization as % of Payroll

<u>Year</u>	<u>Estimated*</u> <u>Payroll</u>	<u>Normal</u> <u>Cost</u>	<u>Payment on</u> <u>Unfunded</u>	<u>Total</u> <u>Accrual</u> <u>Cost</u>	<u>Total</u> <u>Estimated,</u> <u>Outlays</u>	<u>Added Cost</u> <u>of Accrual</u>
1981	\$ 23.5	\$ 10.9	\$ 11.86	\$ 22.76	\$ 13.9	\$ 8.86
1982	26.8	12.4	12.51	24.91	15.6	9.31
1983	29.3	13.5	13.20	26.70	17.2	9.50
1984	31.6	14.6	13.93	28.53	18.8	9.73
1985	33.7	15.6	14.70	30.30	20.2	10.10
1986	35.8	16.5	15.51	32.01	21.6	10.41

50 Year Amortization as % of Payroll

<u>Year</u>	<u>Estimated*</u> <u>Payroll</u>	<u>Normal</u> <u>Cost</u>	<u>Payment on</u> <u>Unfunded</u>	<u>Total</u> <u>Accrual</u> <u>Cost</u>	<u>Total</u> <u>Estimated</u> <u>Outlays</u>	<u>Added Cost</u> <u>of Accrual</u>
1981	\$ 23.5	\$ 10.9	\$ 9.70	\$ 20.60	\$ 13.9	\$ 6.70
1982	26.8	12.4	10.23	22.63	15.6	7.03
1983	29.3	13.5	10.80	24.30	17.2	7.10
1984	31.6	14.6	11.39	25.99	18.8	7.19
1985	33.7	15.6	12.02	27.62	20.2	7.42
1986	35.8	16.5	12.68	29.18	21.6	7.58

60 Year Amortization as % of Payroll

<u>Year</u>	<u>Estimated*</u> <u>Payroll</u>	<u>Normal</u> <u>Cost</u>	<u>Payment on</u> <u>Unfunded</u>	<u>Total</u> <u>Accrual</u> <u>Cost</u>	<u>Total</u> <u>Estimated</u> <u>Outlays</u>	<u>Added Cost</u> <u>of Accrual</u>
1981	\$ 23.5	\$ 10.9	\$ 8.27	\$ 19.17	\$ 13.9	\$ 5.27
1982	26.8	12.4	8.72	21.12	15.6	5.52
1983	29.3	13.5	9.20	22.70	17.2	5.50
1984	31.6	14.6	9.71	24.31	18.8	5.51
1985	33.7	15.6	10.25	25.85	20.2	5.65
1986	35.8	16.5	10.81	27.31	21.6	5.71

*Includes basic pay to active duty and selected reserves

Unfunded Liability 9/30/80 = \$431.1 billion

Normal Cost = .462

ACCRUAL ACCOUNTING

The Department of Defense is sponsoring a legislative proposal that would essentially place the military retirement system on an entry-age normal cost funding method. The proposal calls for the normal cost, as well as a payment on the unfunded liability, to be placed into a fund each year. The method and length of amortization is not precisely defined.

Under an entry-age normal method, when salaries are assumed to increase, the normal cost is defined not as a level dollar amount payable each year, but as a level percentage of salary. This spreads the payments out so that the financial impact is a uniform percentage of salary in all years. Likewise, using level dollar amortization of the unfunded liability when annuities are tied to CPI and salary increases creates an early year financial burden and misunderstandings of the true cost of the system. Amortization of the unfunded liability as a level percent of payroll is a more defensible approach. Table VIII shows the accrual cost associated with the normal cost of 46% and the unfunded liability of \$431.1 billion for three different amortization periods, all as a level percent of payroll. The Fiscal Year 1981 costs range from \$19 to \$23 billion or \$5 to \$9 billion more than the current cost.

If the unfunded liability had been amortized over 40 years in equal dollar payments, the level annual payment would be \$27 billion. This would have resulted in a total 1981 accrual cost of \$37.9 billion or \$24 billion over the actual outlays of \$14 billion. This level of funding is not only unnecessary but misleading since the cost would drop rapidly to 46% of pay. The following table shows the cost of retirement as a percent of basic payroll under three scenarios; accrual costs with 40 year level amortization, accrual costs with 40 year amortization as a level percent of payroll, and the present pay-as-you-go unfunded method.

Table IX

Total Costs as a Percent of Basic Payroll

	Actual Cost With Level Amortization	Accrual Cost With Level % of Payroll Amortization	Present Pay-As-You-Go Cost
1981	161	97	50
1982	147	93	58
1983	138	91	59
1984	132	90	59
1985	126	90	60
1986	122	89	60
1990	107	89	62
1995	92	89	64
2000	82	89	65
2010	67	90	62
2020	46	46	58
2030	46	46	55
2040+	46	46	54

Column two varies slightly in the early years, since variable annual salary scale assumptions were used in the projection for the first five years, and level assumptions were used in amortization.

FY77-79 ACTIVE FORCE DECREMENT RATES

The active force decrement rates are based on experience from 1 July 1976 through 30 September 1979. Death rates were developed by age nearest birthday (16-60) for officers and enlistees separately. All other active decrement rates were developed by completed years of service (0-34) for each of four categories: regular officers, nonregular officers, regular enlisteds and nonregular enlisteds. These include rates for withdrawal, reentrance, nondisability retirement, temporary disability retirement, permanent disability retirement, and rates of transferring to each of the other three categories. Appendix A contains all rates.

The data were taken from Defense Manpower Data Center Active Force Master Files as of 30 September 1976, 1977, 1978 and 1979, and the associated Loss Transaction Files for FY77, FY78, FY79, and the transition quarter July - September 1976. The Active Master Files are created by each of the four Services at the end of the fiscal year and are sent to the Defense Manpower Data Center (DMDC) where they are maintained after a series of quality tests are passed. The data agree well with other published strength figures, as shown in Appendix B, Table 1, and are believed to be of high quality. The Active Master Files exclude service academy cadets, reservists on active duty for training, Navy personnel attending Officer Candidate School, and Army personnel in certain classified occupations. The Loss Master Files also begin with magnetic tape submissions from the four Services. These are consolidated into fiscal year files by regrouping the loss transactions by fiscal year of the transaction dates.

In a few cases individuals are found on a year end file even though there is a loss record indicating they had left the Service before the year end. This carry over problem, 2900 cases in FY79, is caused by the Active Master File being "cut" at the end of the fiscal year before all transactions have been applied. A second problem in the Loss Master File is that some individuals are dropped from the Active Master File from one year to the next, even though no loss record appears. As shown in the Table X below, this problem is also small and is handled by an allocation procedure.

Table X

Summary of Losses* by Type of Loss and Fiscal Year

Type of Loss**	Fiscal Number	1977 %	Fiscal Number	1978 %	Fiscal Number	1979 %
Temporary Disability Retirement	5,609	1.4	5,326	1.6	4,526	1.2
Permanent Disability Retirement	1,961	0.5	1,548	0.5	1,295	0.3
Nondisability Retirement	43,437	11.1	40,266	11.8	40,334	10.9
Death	2,290	0.6	2,495	0.7	2,197	0.7
Other	330,597	84.5	287,730	84.2	317,805	85.6
Unknown (no loss record)	7,518	1.9	4,206	1.2	4,920	1.3
TOTAL	391,412	100.0	341,571	100.0	371,077	100.0

*A loss is defined as someone who is on the Active Master File at the end of one fiscal year but not the next.

**Type of loss is determined by linking an Active Master File loss to a loss record using Social Security Number.

The reasonableness of the loss codes on the Loss Master File was confirmed by following up FY77 losses with the Retired Master Files for FY77 and FY78. On the Retired Master Files, 99.9% of new nondisability retirees show up as do 98.4% of temporary disability retirements and 98.0% of permanent disability retirements. Only 72 Loss File deaths appeared on the Retiree File. These, however, are transaction entries and all but two of them have "death" given as a reason for termination of retired pay. The date of death, where given, corresponds to that given on the Loss Master File record.

Due to the above lag problems, the procedure was to define as a loss anyone who was on the Active Master File at the beginning of one fiscal year and not at the end of the year. The type of loss was then determined by a Social Security Number match with the Loss Master File.

In the event that no matching loss record could be found, the loss was prorated in proportion to other losses for persons in the same category. The categories are defined by officers/enlistees, and regular/nonregular, and by length of service or age, depending upon the rate being calculated. The cases not finding matching loss records amounted to 1.9% of all losses in FY77, 1.2% in FY78, and 1.3% in FY79. Examination of these cases uncovered no consistent pattern that would not adequately be dealt with by the allocation procedure utilized.

Because 92% of "other" losses with 20 years of service showed up on the Retiree File, it was decided to allocate these as if they were losses of an unknown type. Similarly, cases whose matching loss record indicated a nondisability retirement were treated using the unknown loss procedure if they had under 16 years of service at the beginning of the fiscal year. There were 765 such cases in FY77, 603 in FY78, and 338 in FY79.

Two types of active rates did not involve losses: the reentrance and transfer rates. Reentrants were defined as cases present on the Active Master File at the end of the fiscal year, but not the beginning, and which were not new entrants. Transfers were those cases which changed categories during the year and were still on active duty at year end.

Crude rates were created using combined data from the three fiscal years. The formulas used are given in Appendix D, Table II. These ungraduated rates were then smoothed using a Whittaker-Renderson type B graduation technique. In some cases, the smoothing was based upon second differences and in some cases third differences were used. Where there were discontinuities in the rates, the smoothing was broken between two segments. In places where graduation of the rates would not be likely to improve prediction, the ungraduated rates were used. A summary of where each technique was employed is given in Appendix D, Table III.

FY79-80 RETIREE DECUREMENT RATES

The military retiree decement rates are based upon experience from 1 October 1978 through 30 September 1980. These rates were created by age nearest birthday for officers and enlistees separately, and can be further subdivided by three types of retirement: nondisability, temporary disability, and permanent disability. Death rates were developed as well as rates for "other" losses. The "other" losses are primarily due to switches to Civil Service annuities and return to military service. For temporary disability retirees there is also a rate of transfer to permanent disability. Select temporary disability rates were created for each of the first five years of retirement. After the five year period it is no longer possible to be a temporary disability retiree so ultimate rates were unnecessary. Appendix A contains the individual rates.

The data for the rates were taken from Defense Manpower Data Center Retiree Files as of September 30 for the years 1978 through 1980. These files are created semiannually by the Finance Centers of the military Services, which have responsibility for sending monthly retired paychecks to military retirees. As indicated in Appendix E, Table 1, the number of retirees in current pay status at the end of a fiscal year is practically equal to accounting figures supplied to the Office of the Assistant Secretary of Defense (Comptroller) by the Services. Minor differences exist due to different treatment of unknowns and different transactions having been applied to the basic records at the points when the DMDC and Comptroller submissions are created.

Any retiree who terminates from paid status during a fiscal year should be on the retiree file at the end of that fiscal year with a termination code indicating the type of termination. The rate development process started by matching two consecutive fiscal year end files by Social Security Number or, in the case of older retirees, by member Service number. As shown in Table XI, there were some cases with no follow-up record and others with no valid termination code indicating the type of termination. It was also possible for there to be an unknown grouping variable. All rates are specific for age, type of retirement, whether officer or enlisted, and, in the case of temporary disability retirees, years retired.

For rate development, if any of these needed grouping variables were unknown, the case was eliminated. As shown in Appendix E, Table II, age was the only grouping variable which was unknown in a substantial number of cases. This caused no serious problems since the outcomes for retirees with unknown age are very much like those of retirees with known age, as shown in Appendix E, Table III.

Where outcome was not ascertainable other procedures were needed. An independent source of the number of retiree deaths in a year was available from a monthly report sent to the Office of the Assistant Secretary of Defense (Comptroller). Treating unknown outcomes as deaths improved the fit between the DMDC and Comptroller death totals. With two exceptions, the unknown outcomes were treated as deaths for nondisability and permanent disability retirees. The resulting totals are compared in Appendix E, Table IV.

For the Army, allocations using a "hot deck" procedure yielded a better fit between the DMDC and Comptroller figures for deaths. The "hot deck" procedure has a result similar to prorating, but has the added advantage that distributional properties as well as means are preserved. The "hot deck" procedure treated an

Table XI

Summary of Cases With No Follow-up Record or an Invalid Termination
Code for Retirees on File at the Beginning of Fiscal 1979 and 1980

Item	Temporarily Disabled Retirees		Permanently Disabled Retirees		Nondisability Retirees	
	FY79	FY80	FY79	FY80	FY79	FY80
<u>Officers</u>						
Cases on File at Beginning of FY's	1,175	1,064	57,803	56,650	317,251	332,266
Cases with No Follow-up Record	13	4	172	32	429	141
% Without Follow-up	1.1%	0.4%	0.3%	0.1%	1.3%	0.0%
Cases with Invalid Code	15	16	12	0	31	2
% with Invalid Codes	1.3%	1.5%	0.0%	0.0%	0.0%	0.0%
Cases with No Follow-up or Having Invalid Termi- nations Code as a % of All Terminations	5.7%	4.7%	10.0%	1.8%	7.9%	2.3%
<u>Enlistees</u>						
Cases on File at Beginning of FY's	11,262	10,237	83,638	84,343	721,490	743,862
Cases with No Follow-up Record	115	39	211	108	908	336
% Without Follow-up	1.0%	0.4%	0.3%	1.3%	1.3%	0.0%
Cases with Invalid Code	220	274	111	0	148	0
% with Invalid Codes	2.0%	2.7%	0.1%	0.0%	0.0%	0.0%
Cases with No Follow-up or Having Invalid Termi- nations Code as a % of All Terminations	6.7%	6.8%	7.8%	2.9%	8.9%	2.6%

unknown outcome identically to the preceding similar army case of a retiree with a known termination. A case was considered similar if it had a termination other than death and had the same age, type of retirement, and officer/enlisted status.

The second exception where unknown outcomes were not treated as deaths was for FY79 Navy cases with a follow-up record but an invalid termination code. These cases were classified as "other losses" to remedy a known idiosyncrasy in the file.

With one exception, the unknown outcomes for temporary disability retirees were prorated to known outcomes within cells defined by age, years retired, and officer/enlisted status. Prior to allocation, data were first pooled for the two fiscal years. The exception was again for FY79 Navy retirees having a valid follow-up record, but an invalid termination code. These were treated as "other terminations," a category which includes return to active duty and Civil Service retirement. This procedure circumvented an idiosyncrasy of the FY79 file.

After allocation of unknowns, crude rates were created using the formulas shown in Appendix E, Table V. The decrement rates for nondisability and permanent disability retirees were developed using a Whittaker-Henderson graduation technique. For all rates, third order differences were used. Where death data were sparse, a linear projection of the logarithms of the graduated rates were used. The age ranges where projections were used are indicated in Appendix E, Table VI.

Besides death rates, a second retiree decrement rate was created which includes all losses other than deaths or Veterans Administration waivers. This rate was set to zero outside of certain age ranges.

For temporary disability retirees select decrement rates were needed. A rate was needed for transfer to permanent disability as well as rates for death and other losses. Although cell exposure was small it was still possible to use Whittaker-Henderson graduation in the age ranges where most losses occurred when developing transfer and loss rates. To provide rates outside these age ranges, the final graduation was extended or a reasonable value was substituted. The age ranges where Whittaker-Henderson graduation was performed are given in Appendix E, Table VII. Death rates for temporarily disabled were provided, basically by rescaling the permanent disability death rates, so that they yielded the observed number of deaths for each officer/enlisted, years retired combination. For enlistees who had been on the disability retired roles for less than three years, and officers who had been on the disability retired roles for less than two years, the rescaled death rates were ultimately used. For enlistees retired three or four years, the death rates were obtained by interpolating between rescaled rates for enlistees on the temporary disability retired roles for two years and for permanently disabled enlisted rates. For officers on the temporary disability retired roles for two, three, and four years, the following modifications were made. Death rates for officers disabled for three years was created by averaging the two, three and four year death rates. Death rates for officers temporarily disabled for two years were set midway between the rescaled one year rates and the newly created three year rates. Finally, death rates for officers temporarily disabled for four years were set midway between the newly created three year rate for officers and the death rate for permanently disabled officers.

ACTIVE AND RESERVE SCALES OF CAREER PAY INCREASES

The scale of career pay increases is used to indicate pay increases that may be expected in a typical serviceman's career. These are based upon cross-sectional data in two 30 September 1980 files. The active force scales utilized data taken from the Active Master File. The reserve scales used RCPBS (Reserve Component Common Personnel Data System).

The active force Master File was first screened by age, length of active service, grade, branch of service, and regular/nonregular. Extensive editing resulted in a file 99.9% of the original size.

Basic pay was added to the data elements, using a table look-up by grade, years of service for pay, and for officers, whether or not they had completed four years as an enlistee. The 1 October 1980 pay table was used. Tabulations of persons and total pay were then created by branch of service, age nearest birthday, grade, and regular or nonregular status. Average pay was computed by collapsing the branch of service dimension entirely and collapsing the grade dimension to an officer/enlistee dichotomy. During this collapsing, weights were modified so that they summed to control totals by grade, branch of service, and regular/nonregular. An average pay grid by age and length of active service resulted for four categories of personnel; regular officers, nonregular officers, regular enlistees, and nonregular enlistees. For each of the four groups, average pay was then smoothed along diagonal elements, where age and length of service were increasing. The smoothing was done using a Whittaker-Henderson type B graduation, with either second or third differences, depending on the series. Due to the small number of cases below the diagonal, beginning with age 26 and length of service, 0 (i.e., age at entry over 26), the cases below this diagonal were moved up to that element in the diagonal having the same years of active service. This consolidation was accomplished prior to smoothing. After smoothing the smooth average pay on the diagonal was moved to elements below the diagonal. Also after the smoothing, all diagonals were rescaled so that the average pay along a diagonal was not affected by the smoothing. The result is the active force scale of career pay increases.

For the Reserves, pay data were not available. They were estimated using average grade in cells defined by officer/enlisted, age, and years of active service. Pay rates were looked-up, using the 1 October 1980 pay scale, and annual pay was estimated assuming 78 reserve points were earned per year. A point is earned for attending a drill or a day of summer camp, with 15 additional points per year being credited for membership in a reserve component.

The result of the preceding was a grid giving annual pay by officer/enlisted by age by years of active service. For each combination of officer/enlisted by years of active service the above results were smoothed along the dimension of increasing age. This smoothing was performed using a Whittaker-Henderson type B graduation with second differences. Where data were sparse, the results of the Whittaker-Henderson were subsequently smoothed using three-point moving averages along a dimension of increasing years of active service for a particular age and officer/enlisted combination. The result is the Reserve Force scale of career pay increases.

MISCELLANEOUS RATES

Besides the rates mentioned in the preceding sections, there were several additional rates needed for the valuation. Divorce rates are based upon census Report P-20, No. 297, which utilized data from the Current Population Survey of June 1975.

Remarriage rates, child termination rates, and survivor death rates were developed by the Office of Personnel Management, based upon the experience of Civil Service annuitants and their survivors. Because of the similarity of the program features, these were a reasonably good proxy for rates currently not available from Department of Defense data.

Reserve decrement rates are created for the selected reservists using the Reserve Component Common Personnel Data System (RCCPDS). Only one decrement rate was needed, the reserve total loss rate. However, separate rates were needed by officer/enlisted for a set of cells defined by age and years of active service. The denominator for each rate was the selected reservist as of 30 September 1979; for a numerator, those reservists no longer present on 30 September 1980. The quotient was the crude loss rate. The crude loss rates were then smoothed, using a Whittaker-Henderson type B graduation with second or third differences. The smoothing was performed along a dimension of increasing age, for persons who had completed a particular number of years of active service. Where data were sparse, the rates were also subsequently smoothed using 3-point moving averages along a dimension of increasing years of active service, for a particular age and officer/enlisted combination.

APPENDIX A

PERCENTAGE DISTRIBUTION OF NEW ENTRANTS (BY OLDEST BIRTHDAY)

AGE	REGULAR OFFICERS	NONREGULAR OFFICERS	REGULAR ENLISTED	NONREGULAR ENLISTED	TOTAL
1	0.0	0.0	0.01027	0.00024	0.01121
2	0.0	0.0	0.13027	0.01047	0.13074
3	0.0	0.0	0.26030	0.01344	0.27302
4	0.00001	0.00002	0.17134	0.00746	0.18003
5	0.00015	0.00026	0.09298	0.00546	0.09885
6	0.00023	0.00038	0.05605	0.00346	0.07179
7	0.00057	0.00032	0.03770	0.00215	0.05565
8	0.00115	0.00065	0.02529	0.00147	0.03556
9	0.00037	0.00044	0.01799	0.00105	0.02354
10	0.00015	0.00038	0.01192	0.00059	0.01644
11	0.00007	0.00025	0.00818	0.00044	0.01144
12	0.00002	0.00177	0.00583	0.00033	0.00798
13	0.00004	0.00119	0.00352	0.00020	0.00495
14	0.00001	0.00094	0.00219	0.00017	0.00326
15	0.00001	0.00039	0.00143	0.00011	0.00193
16	0.0	0.00053	0.00108	0.00004	0.00165
17	0.0	0.00042	0.00065	0.00002	0.00109
18	0.0	0.00031	0.00055	0.00001	0.00087
19	0.0	0.00020	0.00041	0.00001	0.00062
20	0.0	0.00015	0.00009	0.00002	0.00026
21	0.0	0.00011	0.00001	0.0	0.00012
22	0.0	0.00009	0.0	0.0	0.00009
23	0.0	0.00007	0.0	0.0	0.00007
24	0.0	0.00006	0.0	0.0	0.00006
25	0.0	0.00005	0.0	0.0	0.00005
26	0.0	0.00004	0.0	0.0	0.00004
27	0.0	0.00002	0.0	0.0	0.00002
28	0.0	0.00002	0.0	0.0	0.00002
29	0.0	0.00002	0.0	0.0	0.00002
30	0.0	0.00001	0.0	0.0	0.00001
31	0.0	0.00001	0.0	0.0	0.00001
32	0.0	0.00001	0.0	0.0	0.00001
33	0.0	0.00001	0.0	0.0	0.00001
34	0.0	0.00001	0.0	0.0	0.00001
35	0.0	0.00001	0.0	0.0	0.00001
36	0.0	0.00001	0.0	0.0	0.00001
37	0.0	0.00001	0.0	0.0	0.00001
38	0.0	0.00001	0.0	0.0	0.00001
39	0.0	0.00001	0.0	0.0	0.00001
40	0.0	0.00001	0.0	0.0	0.00001
41	0.0	0.00001	0.0	0.0	0.00001
42	0.0	0.00001	0.0	0.0	0.00001
43	0.0	0.00001	0.0	0.0	0.00001
44	0.0	0.00001	0.0	0.0	0.00001
45	0.0	0.00001	0.0	0.0	0.00001
46	0.0	0.00001	0.0	0.0	0.00001
47	0.0	0.00001	0.0	0.0	0.00001
48	0.0	0.00001	0.0	0.0	0.00001
49	0.0	0.00001	0.0	0.0	0.00001
50	0.0	0.00001	0.0	0.0	0.00001
51	0.0	0.00001	0.0	0.0	0.00001
52	0.0	0.00001	0.0	0.0	0.00001
53	0.0	0.00001	0.0	0.0	0.00001
54	0.0	0.00001	0.0	0.0	0.00001
55	0.0	0.0	0.0	0.0	0.0
	0.01510	0.03290	0.89600	0.05000	1.00000

OFFICE OF THE ACTUARY - DMDC 1981

NONDISABILITY, TEMPORARY DISABILITY & PERMANENT DISABILITY RETIREMENT RATES

OFFICERS (BY COMPLETED YEARS OF SERVICE)

REGULAR OFFICERS				NONREGULAR OFFICERS			
SER- VICE	NON DISA- BILITY	TEMP DISA- BILITY	PERM DISA- BILITY	SER- VICE	NON DISA- BILITY	TEMP DISA- BILITY	PERM DISA- BILITY
0	0.0	0.00024	0.00015	0	0.0	0.00106	0.00016
1	0.0	0.00089	0.00016	1	0.0	0.00114	0.00018
2	0.0	0.00085	0.00016	2	0.0	0.00118	0.00020
3	0.0	0.00083	0.00017	3	0.0	0.00121	0.00022
4	0.0	0.00082	0.00018	4	0.0	0.00124	0.00026
5	0.0	0.00083	0.00020	5	0.0	0.00129	0.00031
6	0.0	0.00083	0.00022	6	0.0	0.00135	0.00037
7	0.0	0.00081	0.00026	7	0.0	0.00142	0.00047
8	0.0	0.00079	0.00029	8	0.0	0.00151	0.00057
9	0.0	0.00078	0.00035	9	0.0	0.00160	0.00069
10	0.0	0.00078	0.00041	10	0.0	0.00166	0.00080
11	0.0	0.00080	0.00046	11	0.0	0.00172	0.00091
12	0.0	0.00082	0.00049	12	0.0	0.00175	0.00102
13	0.0	0.00085	0.00049	13	0.0	0.00178	0.00112
14	0.0	0.00086	0.00045	14	0.0	0.00182	0.00123
15	0.0	0.00087	0.00041	15	0.0	0.00186	0.00134
16	0.0	0.00090	0.00037	16	0.0	0.00189	0.00146
17	0.0	0.00090	0.00090	17	0.0	0.00309	0.00309
18	0.00464	0.00086	0.00072	18	0.00727	0.00308	0.00289
19	0.21046	0.00232	0.00214	19	0.57059	0.00680	0.00781
20	0.20830	0.00283	0.00208	20	0.43296	0.00776	0.01009
21	0.16712	0.00301	0.00208	21	0.29829	0.00243	0.00398
22	0.14788	0.00314	0.00228	22	0.23592	0.00323	0.00233
23	0.14051	0.00311	0.00288	23	0.22997	0.00315	0.00383
24	0.13462	0.00313	0.00331	24	0.22543	0.00402	0.00543
25	0.18382	0.00333	0.00369	25	0.21295	0.00511	0.00702
26	0.18768	0.00398	0.00364	26	0.19879	0.00583	0.00898
27	0.20917	0.00463	0.00518	27	0.22840	0.00658	0.01142
28	0.23341	0.00551	0.00715	28	0.24823	0.00817	0.01500
29	0.41974	0.00664	0.01060	29	0.62818	0.01014	0.01983
30	0.39444	0.00763	0.01159	30	0.50818	0.01152	0.02570
31	0.36017	0.00844	0.00960	31	0.52398	0.01170	0.02954
32	0.36110	0.00921	0.00810	32	0.48598	0.01119	0.02898
33	0.33219	0.00986	0.00747	33	0.39144	0.01026	0.02462
34	1.00000	0.01046	0.00707	34	1.00000	0.00908	0.01786

EXAMPLE: NINE COMPLETED YEARS OF SERVICE COULD INCLUDE ANYTHING FROM 9.0 TO 9.999 YEARS OF SERVICE. THE ASSOCIATED RATE APPLIED TO THE NUMBER OF PEOPLE AT THE BEGINNING OF THE YEAR IN THE CATEGORY WILL PRODUCE THE EXPECTED NUMBER OF OCCURANCES DURING THE FOLLOWING YEAR.

NONREGULARITY, TEMPORARY DISABILITY & PERMANENT DISABILITY RETIREMENT RATES

ENLISTED (BY COMPLETED YEARS OF SERVICE)

REGULAR ENLISTED				NONREGULAR ENLISTED			
SEP- VICE	NON- DISA- BILITY	TEMP- DISA- BILITY	PERM- DISA- BILITY	SEP- VICE	NON- DISA- BILITY	TEMP- DISA- BILITY	PERM- DISA- BILITY
0	0.0	0.000131	0.00019	0	0.0	0.00021	0.00019
1	0.0	0.00022	0.00027	1	0.0	0.00035	0.00027
2	0.0	0.00031	0.00039	2	0.0	0.00041	0.00039
3	0.0	0.00034	0.00048	3	0.0	0.00041	0.00048
4	0.0	0.00037	0.00051	4	0.0	0.00037	0.00053
5	0.0	0.00050	0.00052	5	0.0	0.00037	0.00052
6	0.0	0.00036	0.00060	6	0.0	0.00031	0.00060
7	0.0	0.00035	0.00065	7	0.0	0.00030	0.00065
8	0.0	0.00034	0.00073	8	0.0	0.00030	0.00072
9	0.0	0.00033	0.00083	9	0.0	0.00029	0.00083
10	0.0	0.00031	0.00090	10	0.0	0.00038	0.00090
11	0.0	0.00031	0.00096	11	0.0	0.00040	0.00096
12	0.0	0.00020	0.00101	12	0.0	0.00044	0.00101
13	0.0	0.00031	0.00110	13	0.0	0.00038	0.00110
14	0.0	0.00029	0.00121	14	0.0	0.00033	0.00111
15	0.0	0.00030	0.00134	15	0.0	0.00033	0.00134
16	0.0	0.00036	0.00147	16	0.0	0.00024	0.00147
17	0.0	0.00040	0.00150	17	0.0	0.01730	0.00302
18	0.00736	0.00024	0.00184	18	0.32403	0.00270	0.00184
19	0.42710	0.01447	0.01131	19	0.58611	0.01447	0.01131
20	0.31528	0.01048	0.00705	20	0.51732	0.01048	0.00705
21	0.26144	0.00649	0.00486	21	0.44792	0.00649	0.00486
22	0.23250	0.00666	0.00485	22	0.39494	0.00666	0.00485
23	0.19764	0.00614	0.00471	23	0.19764	0.00614	0.00471
24	0.14142	0.00583	0.00507	24	0.14142	0.00583	0.00507
25	0.37065	0.00809	0.00687	25	0.37065	0.00809	0.00687
26	0.28566	0.01102	0.00877	26	0.28566	0.01102	0.00877
27	0.30325	0.01175	0.01038	27	0.30325	0.01175	0.01038
28	0.26810	0.01558	0.01351	28	0.26810	0.01558	0.01351
29	0.80602	0.02291	0.01285	29	0.80602	0.02291	0.01285
30	0.64363	0.02918	0.02717	30	0.64363	0.02918	0.02717
31	0.42377	0.03323	0.03273	31	0.42377	0.03323	0.03273
32	0.41221	0.03508	0.03707	32	0.41221	0.03508	0.03707
33	0.41689	0.03567	0.04074	33	0.41689	0.03567	0.04074
34	1.00000	0.03580	0.04302	34	1.00000	0.03580	0.04302

EXAMPLE: NINE COMPLETED YEARS OF SERVICE COULD INCLUDE ANYTHING FROM 0.0 TO 9.999 YEARS OF SERVICE. THE ASSOCIATED RATE APPLIED TO THE NUMBER OF PEOPLE AT THE BEGINNING OF THE YEAR IN THE CATEGORY WILL PRODUCE THE EXPECTED NUMBER OF OCCURRENCES DURING THE FOLLOWING YEAR.

OFFICE OF THE ACTUARY - DMD 1281

WITHDRAWAL, REENTRANT AND NET LOSS RATES FOR ACTIVE DUTY PERSONNEL

OFFICERS (BY COMPLETED YEARS OF SERVICE)

REGULAR OFFICERS				NONREGULAR OFFICERS			
SER- VICE	WITH- DRAWAL	RE- ENTRANT	NET LOSS	SER- VICE	WITH- DRAWAL	RE- ENTRANT	NET LOSS
0	0.00704	0.07379	-0.06675	0	0.03407	0.10550	0.0714
1	0.00560	0.01469	-0.00909	1	0.16136	0.03228	0.12908
2	0.02358	0.00546	0.01812	2	0.14558	0.03891	0.10667
3	0.08289	0.00349	0.07940	3	0.17803	0.08257	0.09547
4	0.11718	0.00163	0.11555	4	0.12800	0.03665	0.09135
5	0.12104	0.00130	0.11974	5	0.14978	0.03017	0.11961
6	0.10413	0.00083	0.10330	6	0.13365	0.02250	0.11115
7	0.08586	0.00056	0.08530	7	0.10063	0.01853	0.08210
8	0.06126	0.00066	0.06060	8	0.08364	0.01978	0.06386
9	0.05600	0.00056	0.05544	9	0.06721	0.01733	0.04988
10	0.05263	0.00045	0.05218	10	0.07924	0.01470	0.06454
11	0.03578	0.00040	0.03538	11	0.11041	0.01410	0.09631
12	0.01976	0.00040	0.01936	12	0.06854	0.01579	0.05275
13	0.01678	0.00035	0.01643	13	0.03140	0.01027	0.02113
14	0.03243	0.00021	0.03222	14	0.02494	0.00917	0.01577
15	0.01050	0.00024	0.01026	15	0.03177	0.00917	0.02260
16	0.00446	0.00031	0.00415	16	0.05671	0.00744	0.04927
17	0.00296	0.00031	0.00265	17	0.02249	0.00784	0.01465
18	0.00134	0.00026	0.00108	18	0.00224	0.00652	-0.00428
19	0.0	0.00026	-0.00026	19	0.0	0.00389	-0.00389
20	0.0	0.00039	-0.00039	20	0.0	0.01421	-0.01421
21	0.0	0.00033	-0.00033	21	0.0	0.02151	-0.02151
22	0.0	0.00028	-0.00028	22	0.0	0.02870	-0.02870
23	0.0	0.00025	-0.00025	23	0.0	0.03402	-0.03402
24	0.0	0.00025	-0.00025	24	0.0	0.03696	-0.03696
25	0.0	0.00030	-0.00030	25	0.0	0.03482	-0.03482
26	0.0	0.00042	-0.00042	26	0.0	0.03125	-0.03125
27	0.0	0.00060	-0.00060	27	0.0	0.03063	-0.03063
28	0.0	0.00085	-0.00085	28	0.0	0.03844	-0.03844
29	0.0	0.00118	-0.00118	29	0.0	0.06591	-0.06591
30	0.0	0.00157	-0.00157	30	0.0	0.12048	-0.12048
31	0.0	0.00201	-0.00201	31	0.0	0.19597	-0.19597
32	0.0	0.00249	-0.00249	32	0.0	0.19700	-0.19700
33	0.0	0.00300	-0.00300	33	0.0	0.19800	-0.19800
34	0.0	0.0	0.0	34	0.0	0.0	0.0

EXAMPLE: NINE COMPLETED YEARS OF SERVICE COULD INCLUDE ANYTHING FROM 9.0 TO 9.999 YEARS OF SERVICE. THE ASSOCIATED RATE APPLIED TO THE NUMBER OF PEOPLE AT THE BEGINNING OF THE YEAR IN THE CATEGORY WILL PRODUCE THE EXPECTED NUMBER OF OCCURANCES DURING THE FOLLOWING YEAR.

OFFICE OF THE ACTUARY - DMDC 1981

WITHDRAWAL, REENTRANT AND NET LOSS RATES FOR ACTIVE DUTY PERSONNEL

ENLISTED (BY COMPLETED YEARS OF SERVICE)

REGULAR ENLISTED				NONREGULAR ENLISTED			
SER- VICE	WITH- DRAWAL	RE- ENTRANT	NET LOSS	SER- VICE	WITH- DRAWAL	RE- ENTRANT	NET LOSS
0	0.13600	0.01962	0.11638	0	0.18825	0.08523	0.10302
1	0.12562	0.01378	0.11184	1	0.32323	0.02059	0.30264
2	0.32484	0.01985	0.30499	2	0.67740	0.03451	0.64289
3	0.43697	0.02378	0.41319	3	0.34275	0.18497	0.15778
4	0.13473	0.00988	0.12485	4	0.20916	0.18543	0.02373
5	0.16858	0.00745	0.16113	5	0.18648	0.09599	0.09049
6	0.13950	0.00650	0.13300	6	0.18339	0.06859	0.11480
7	0.15469	0.00723	0.14746	7	0.14888	0.08436	0.06452
8	0.10294	0.00604	0.09690	8	0.11090	0.08648	0.02442
9	0.07812	0.00465	0.07347	9	0.07982	0.07806	0.00176
10	0.05532	0.00368	0.05164	10	0.06676	0.05808	0.00868
11	0.04683	0.00371	0.04312	11	0.05392	0.05373	0.00019
12	0.02856	0.00256	0.02600	12	0.04022	0.04419	-0.00397
13	0.01871	0.00187	0.01684	13	0.03246	0.03265	-0.00019
14	0.01293	0.00132	0.01161	14	0.02223	0.02655	-0.00432
15	0.00940	0.00106	0.00834	15	0.02084	0.02044	0.00040
16	0.00629	0.00107	0.00522	16	0.01644	0.01746	-0.00102
17	0.00720	0.00104	0.00616	17	0.03168	0.00778	0.02390
18	0.00192	0.00086	0.00106	18	0.01157	0.00610	0.00547
19	0.0	0.00069	-0.00069	19	0.0	0.01717	-0.01717
20	0.0	0.00066	-0.00066	20	0.0	0.03708	-0.03708
21	0.0	0.00067	-0.00067	21	0.0	0.08597	-0.08597
22	0.0	0.00063	-0.00063	22	0.0	0.08109	-0.08109
23	0.0	0.00056	-0.00056	23	0.0	0.07621	-0.07621
24	0.0	0.00047	-0.00047	24	0.0	0.07133	-0.07133
25	0.0	0.00038	-0.00038	25	0.0	0.06645	-0.06645
26	0.0	0.00037	-0.00037	26	0.0	0.06157	-0.06157
27	0.0	0.00043	-0.00043	27	0.0	0.05669	-0.05669
28	0.0	0.00051	-0.00051	28	0.0	0.05181	-0.05181
29	0.0	0.00061	-0.00061	29	0.0	0.04693	-0.04693
30	0.0	0.00075	-0.00075	30	0.0	0.04205	-0.04205
31	0.0	0.00092	-0.00092	31	0.0	0.03717	-0.03717
32	0.0	0.00110	-0.00110	32	0.0	0.03229	-0.03229
33	0.0	0.00127	-0.00127	33	0.0	0.02741	-0.02741
34	0.0	0.0	0.0	34	0.0	0.0	0.0

EXAMPLE: NINE COMPLETED YEARS OF SERVICE COULD INCLUDE ANYTHING FROM 9.0 TO 9.999 YEARS OF SERVICE. THE ASSOCIATED RATE APPLIED TO THE NUMBER OF PEOPLE AT THE BEGINNING OF THE YEAR IN THE CATEGORY WILL PRODUCE THE EXPECTED NUMBER OF OCCURRENCES DURING THE FOLLOWING YEAR.

OFFICE OF THE ACTUARY - DMDC 1981

DEATH RATES FOR NONRETIRED MILITARY
AGE NEAREST BIRTHDAY

AGE	OFFICER	ENLISTED	AGE	OFFICER	ENLISTED
16	0.00149	0.00184	39	0.00105	0.00141
17	0.00149	0.00184	40	0.00110	0.00149
18	0.00149	0.00173	41	0.00117	0.00158
19	0.00149	0.00161	42	0.00127	0.00169
20	0.00145	0.00151	43	0.00138	0.00182
21	0.00142	0.00139	44	0.00150	0.00197
22	0.00139	0.00126	45	0.00162	0.00214
23	0.00136	0.00116	46	0.00176	0.00234
24	0.00133	0.00106	47	0.00189	0.00256
25	0.00131	0.00098	48	0.00203	0.00279
26	0.00129	0.00093	49	0.00215	0.00304
27	0.00127	0.00089	50	0.00227	0.00329
28	0.00124	0.00086	51	0.00237	0.00353
29	0.00121	0.00084	52	0.00246	0.00376
30	0.00118	0.00084	53	0.00254	0.00400
31	0.00115	0.00087	54	0.00261	0.00425
32	0.00112	0.00091	55	0.00267	0.00449
33	0.00109	0.00097	56	0.00273	0.00475
34	0.00107	0.00104	57	0.00278	0.00501
35	0.00106	0.00111	58	0.00284	0.00527
36	0.00104	0.00119	59	0.00289	0.00553
37	0.00103	0.00127	60	0.00294	0.00579
38	0.00103	0.00134			

OFFICE OF THE ACTUARY - DMDC 1981

NOTE: THESE DEATH RATES SHOULD NOT BE COMPARED TO OTHER PUBLISHED
RATES OR USED FOR OTHER PURPOSES WITHOUT EXAMINING THE
EXPOSURE FORMULA USED IN DERIVATION. THESE RATES WILL APPEAR
LOWER.

TRANSFER RATES OF OFFICERS (BY COMPLETED YEARS OF SERVICE)

ORIGINAL STATUS				STATUS AFTER TRANSFER			
REGULAR OFFICERS		NONREGULAR OFFICERS		REGULAR OFFICERS		NONREGULAR OFFICERS	
SER- VICE	NONREGULAR OFFICER	REGULAR ENLISTED	NONREGULAR ENLISTED	SER- VICE	REGULAR OFFICER	REGULAR ENLISTED	NONREGULAR ENLISTED
0	0.01504	0.00037	0.00025	0	0.01059	0.00030	0.00006
1	0.00484	0.00014	0.00016	1	0.02073	0.00022	0.00005
2	0.00162	0.00007	0.00009	2	0.08267	0.00032	0.00004
3	0.00142	0.00006	0.00006	3	0.13693	0.00026	0.00003
4	0.00141	0.00005	0.0	4	0.07667	0.00023	0.00002
5	0.00092	0.00004	0.0	5	0.09836	0.00021	0.00001
6	0.00091	0.00006	0.0	6	0.11902	0.00011	0.00001
7	0.00067	0.00022	0.0	7	0.08386	0.00030	0.00002
8	0.00051	0.00011	0.0	8	0.08844	0.00019	0.00005
9	0.00044	0.00013	0.0	9	0.05154	0.00042	0.00010
10	0.00042	0.00007	0.0	10	0.04434	0.00211	0.00017
11	0.00044	0.00020	0.0	11	0.04747	0.00405	0.00026
12	0.00057	0.00035	0.0	12	0.04571	0.00574	0.00035
13	0.00081	0.00221	0.0	13	0.04753	0.00579	0.00044
14	0.00096	0.00556	0.0	14	0.05696	0.00741	0.00048
15	0.00088	0.00276	0.0	15	0.06201	0.01138	0.00048
16	0.00076	0.00173	0.0	16	0.06097	0.01410	0.00044
17	0.00076	0.00117	0.0	17	0.04963	0.01187	0.00038
18	0.00107	0.00047	0.0	18	0.03311	0.00423	0.00031
19	0.00029	0.00040	0.0	19	0.03450	0.00083	0.00023
20	0.00019	0.00026	0.0	20	0.04554	0.0	0.0
21	0.00015	0.00022	0.0	21	0.05162	0.0	0.0
22	0.00015	0.00017	0.0	22	0.04802	0.0	0.0
23	0.00019	0.00010	0.0	23	0.03702	0.0	0.0
24	0.00018	0.00012	0.0	24	0.02651	0.0	0.0
25	0.00013	0.0	0.0	25	0.01929	0.0	0.0
26	0.00009	0.0	0.0	26	0.01325	0.0	0.0
27	0.00007	0.0	0.0	27	0.00770	0.0	0.0
28	0.00008	0.0	0.0	28	0.00456	0.0	0.0
29	0.00016	0.0	0.0	29	0.00432	0.0	0.0
30	0.00038	0.0	0.0	30	0.00559	0.0	0.0
31	0.00079	0.0	0.0	31	0.00576	0.0	0.0
32	0.00141	0.0	0.0	32	0.00534	0.0	0.0
33	0.00218	0.0	0.0	33	0.00463	0.0	0.0
34	0.0	0.0	0.0	34	0.0	0.0	0.0

EXAMPLE: NINE COMPLETED YEARS OF SERVICE COULD INCLUDE ANYTHING FROM 9.0 TO 9.999 YEARS OF SERVICE. THE ASSOCIATED RATE APPLIED TO THE NUMBER OF PEOPLE AT THE BEGINNING OF THE YEAR IN THE CATEGORY WILL PRODUCE THE EXPECTED NUMBER OF OCCURANCES DURING THE FOLLOWING YEAR.

OFFICE OF THE ACTUARY - DMDC 1981

TRANSFER RATES OF ENLISTED (BY COMPLETED YEARS OF SERVICE)

ORIGINAL STATUS				STATUS AFTER TRANSFER			
REGULAR ENLISTED		NONREGULAR ENLISTED		REGULAR ENLISTED		NONREGULAR ENLISTED	
SER- VICE	REGULAR OFFICER	NONREGULAR OFFICER	NONREGULAR ENLISTED	SER- VICE	REGULAR OFFICER	NONREGULAR OFFICER	REGULAR ENLISTED
0	0.00001	0.00205	0.00060	0	0.00019	0.00771	0.02373
1	0.0	0.00128	0.00026	1	0.00010	0.00048	0.04622
2	0.0	0.00123	0.00021	2	0.00005	0.00065	0.12197
3	0.00004	0.00172	0.00071	3	0.00004	0.05434	0.13121
4	0.00030	0.00250	0.00043	4	0.00008	0.00497	0.08489
5	0.00089	0.00311	0.00052	5	0.00016	0.00225	0.06959
6	0.00141	0.00395	0.00059	6	0.00026	0.00190	0.05578
7	0.00180	0.00460	0.00091	7	0.00036	0.00160	0.05261
8	0.00218	0.00557	0.00079	8	0.00046	0.00140	0.05003
9	0.00299	0.00587	0.00077	9	0.00053	0.00120	0.03591
10	0.00323	0.00594	0.00046	10	0.00060	0.00110	0.02738
11	0.00331	0.00560	0.00033	11	0.00071	0.00140	0.02849
12	0.00378	0.00487	0.00019	12	0.00083	0.00140	0.02919
13	0.00451	0.00421	0.00011	13	0.00093	0.00116	0.02958
14	0.00422	0.00340	0.00006	14	0.00100	0.00091	0.02955
15	0.00372	0.00242	0.00005	15	0.00104	0.00075	0.02611
16	0.00305	0.00160	0.00004	16	0.00107	0.00056	0.01939
17	0.00241	0.00076	0.00004	17	0.00112	0.00039	0.01231
18	0.00170	0.00044	0.00004	18	0.00120	0.00017	0.01330
19	0.00135	0.00036	0.00005	19	0.00135	0.0	0.02098
20	0.00107	0.00028	0.00005	20	0.0	0.0	0.04719
21	0.00051	0.00024	0.00003	21	0.0	0.0	0.09023
22	0.00020	0.00019	0.00002	22	0.0	0.0	0.13305
23	0.00011	0.00021	0.00004	23	0.0	0.0	0.16795
24	0.00010	0.00010	0.00006	24	0.0	0.0	0.19236
25	0.0	0.00006	0.00007	25	0.0	0.0	0.20191
26	0.0	0.00016	0.00009	26	0.0	0.0	0.18876
27	0.0	0.00044	0.00014	27	0.0	0.0	0.15764
28	0.0	0.0	0.0	28	0.0	0.0	0.12878
29	0.0	0.0	0.0	29	0.0	0.0	0.12043
30	0.0	0.0	0.0	30	0.0	0.0	0.13747
31	0.0	0.0	0.0	31	0.0	0.0	0.16878
32	0.0	0.0	0.0	32	0.0	0.0	0.19135
33	0.0	0.0	0.0	33	0.0	0.0	0.18785
34	0.0	0.0	0.0	34	0.0	0.0	0.0

EXAMPLE: NINE COMPLETED YEARS OF SERVICE COULD INCLUDE ANYTHING FROM 9.0 TO 9.999 YEARS OF SERVICE. THE ASSOCIATED RATE APPLIED TO THE NUMBER OF PEOPLE AT THE BEGINNING OF THE YEAR IN THE CATEGORY WILL PRODUCE THE EXPECTED NUMBER OF OCCURRENCES DURING THE FOLLOWING YEAR.

OFFICE OF THE ACTUARY - DMDC 1981

RETIRED DEATH RATES (BY AGE NEAREST BIRTHDAY)

OFFICERS

AGE	NON DISA- BILITY	PERMANENT DISA- BILITY	TEMPORARY DISABILITY ----- YEAR OF RETIREMENT				
			ONE	TWO	THREE	FOUR	FIVE
16	0.0	0.01032	0.03860	0.03140	0.02880	0.02610	0.01970
17	0.0	0.01208	0.03500	0.02850	0.02620	0.02390	0.01800
18	0.0	0.01118	0.03240	0.02640	0.02420	0.02210	0.01660
19	0.0	0.01032	0.02990	0.02440	0.02240	0.02040	0.01540
20	0.0	0.00953	0.02760	0.02250	0.02060	0.01880	0.01420
21	0.0	0.00874	0.02530	0.02060	0.01890	0.01720	0.01300
22	0.0	0.00804	0.02330	0.01900	0.01740	0.01590	0.01200
23	0.0	0.00745	0.02160	0.01760	0.01620	0.01480	0.01110
24	0.0	0.00696	0.02020	0.01640	0.01520	0.01390	0.01040
25	0.0	0.00657	0.01900	0.01550	0.01440	0.01320	0.00990
26	0.0	0.00629	0.01820	0.01480	0.01380	0.01270	0.00950
27	0.0	0.00611	0.01770	0.01440	0.01340	0.01240	0.00930
28	0.0	0.00602	0.01740	0.01420	0.01350	0.01280	0.00940
29	0.0	0.00647	0.01870	0.01530	0.01450	0.01370	0.01010
30	0.0	0.00691	0.02000	0.01630	0.01540	0.01460	0.01070
31	0.0	0.00733	0.02120	0.01730	0.01640	0.01540	0.01140
32	0.0	0.00773	0.02240	0.01820	0.01720	0.01620	0.01200
33	0.0	0.00811	0.02350	0.01910	0.01810	0.01700	0.01260
34	0.0	0.00848	0.02460	0.02000	0.01890	0.01770	0.01310
35	0.00156	0.00883	0.02560	0.02080	0.01960	0.01840	0.01360
36	0.00177	0.00917	0.02660	0.02160	0.02040	0.01910	0.01410
37	0.00187	0.00949	0.02750	0.02240	0.02110	0.01970	0.01460
38	0.00208	0.00979	0.02830	0.02310	0.02170	0.02030	0.01510
39	0.00211	0.01007	0.02920	0.02380	0.02230	0.02090	0.01550
40	0.00216	0.01034	0.02990	0.02440	0.02290	0.02140	0.01590
41	0.00226	0.01059	0.03070	0.02500	0.02350	0.02190	0.01630
42	0.00239	0.01083	0.03140	0.02560	0.02400	0.02240	0.01660
43	0.00256	0.01105	0.03200	0.02610	0.02450	0.02290	0.01700
44	0.00276	0.01126	0.03260	0.02660	0.02490	0.02330	0.01730
45	0.00299	0.01146	0.03320	0.02700	0.02540	0.02370	0.01760
46	0.00326	0.01166	0.03380	0.02750	0.02580	0.02410	0.01790
47	0.00357	0.01186	0.03430	0.02800	0.02630	0.02450	0.01820
48	0.00391	0.01207	0.03490	0.02850	0.02670	0.02500	0.01850
49	0.00428	0.01229	0.03560	0.02900	0.02720	0.02540	0.01890
50	0.00469	0.01253	0.03630	0.02960	0.02780	0.02590	0.01920
51	0.00513	0.01280	0.03710	0.03020	0.02840	0.02650	0.01970
52	0.00561	0.01311	0.03800	0.03090	0.02910	0.02720	0.02020
53	0.00613	0.01347	0.03900	0.03180	0.02990	0.02800	0.02080
54	0.00669	0.01391	0.04030	0.03280	0.03090	0.02900	0.02150
55	0.00729	0.01442	0.04170	0.03400	0.03210	0.03010	0.02230
56	0.00794	0.01502	0.04350	0.03540	0.03350	0.03150	0.02330
57	0.00865	0.01574	0.04560	0.03710	0.03510	0.03310	0.02440
58	0.00942	0.01659	0.04800	0.03910	0.03710	0.03500	0.02580
59	0.01026	0.01757	0.05090	0.04150	0.03930	0.03710	0.02740
60	0.01118	0.01872	0.05420	0.04420	0.04190	0.03970	0.02920
61	0.01219	0.02005	0.05800	0.04730	0.04490	0.04260	0.03130

OFFICE OF THE ACTUARY - DMDC 1981

RETIRED DEATH RATES (BY AGE NEAREST BIRTHDAY)

OFFICERS

AGE	NON DISA- BILITY	PERMANENT DISA- BILITY	TEMPORARY DISABILITY ----- YEAR OF RETIREMENT				
			ONE	TWO	THREE	FOUR	FIVE
62	0.01331	0.02156	0.06240	0.05090	0.04840	0.04590	0.03370
63	0.01456	0.02329	0.06740	0.05500	0.05230	0.04960	0.03650
64	0.01596	0.02523	0.07300	0.05950	0.05670	0.05380	0.03950
65	0.01752	0.02741	0.07940	0.06470	0.06160	0.05850	0.04300
66	0.01928	0.02983					
67	0.02125	0.03251					
68	0.02347	0.03545					
69	0.02595	0.03867					
70	0.02874	0.04216					
71	0.03185	0.04594					
72	0.03532	0.04999					
73	0.03918	0.05434					
74	0.04346	0.05898					
75	0.04813	0.06391					
76	0.05338	0.06913					
77	0.05909	0.07464					
78	0.06535	0.08044					
79	0.07217	0.08653					
80	0.07959	0.09291					
81	0.08764	0.09959					
82	0.09550	0.10511					
83	0.10407	0.11094					
84	0.11341	0.11710					
85	0.12359	0.12359					
86	0.13758	0.13758					
87	0.15157	0.15157					
88	0.16556	0.16556					
89	0.17955	0.17955					
90	0.19354	0.19354					
91	0.20753	0.20753					
92	0.22152	0.22152					
93	0.23551	0.23551					
94	0.24950	0.24950					
95	0.26349	0.26349					
96	0.27748	0.27748					
97	0.29147	0.29147					
98	0.30546	0.30546					
99	0.31945	0.31945					
100	0.33660	0.33660					
101	0.35467	0.35467					
102	0.37372	0.37372					
103	0.39378	0.39378					
104	0.41492	0.41492					
105	0.43720	0.43720					
106	0.46067	0.46067					
107	0.48541	0.48541					
108	0.51147	0.51147					
109	0.53893	0.53893					
110	1.00000	1.00000					

OFFICE OF THE ACTUARY - DMDC 1981

RETIRED DEATH RATES (BY AGE NEAREST BIRTHDAY)

ENLISTED

AGE	NON DISA- BILITY	PERMANENT DISA- BILITY	TEMPORARY DISABILITY				
			ONE	TWO	THREE	FOUR	FIVE
16	0.0	0.01081	0.01940	0.01940	0.01560	0.01400	0.01240
17	0.0	0.00980	0.01760	0.01760	0.01410	0.01270	0.01130
18	0.0	0.00907	0.01630	0.01630	0.01310	0.01180	0.01040
19	0.0	0.00837	0.01500	0.01500	0.01210	0.01080	0.00960
20	0.0	0.00774	0.01390	0.01390	0.01120	0.01000	0.00890
21	0.0	0.00709	0.01270	0.01270	0.01020	0.00920	0.00810
22	0.0	0.00652	0.01170	0.01170	0.00940	0.00840	0.00750
23	0.0	0.00604	0.01080	0.01090	0.00870	0.00780	0.00690
24	0.0	0.00565	0.01010	0.01020	0.00820	0.00730	0.00650
25	0.0	0.00533	0.00960	0.00960	0.00770	0.00690	0.00610
26	0.0	0.00510	0.00910	0.00920	0.00740	0.00660	0.00590
27	0.0	0.00495	0.00890	0.00890	0.00710	0.00640	0.00570
28	0.0	0.00489	0.00880	0.00880	0.00710	0.00630	0.00560
29	0.0	0.00489	0.00880	0.00880	0.00710	0.00630	0.00560
30	0.0	0.00498	0.00890	0.00890	0.00720	0.00650	0.00570
31	0.0	0.00513	0.00920	0.00920	0.00740	0.00660	0.00590
32	0.0	0.00534	0.00960	0.00960	0.00770	0.00690	0.00610
33	0.0	0.00561	0.01010	0.01010	0.00810	0.00730	0.00640
34	0.0	0.00594	0.01060	0.01070	0.00860	0.00770	0.00680
35	0.00271	0.00631	0.01130	0.01130	0.00910	0.00820	0.00720
36	0.00271	0.00671	0.01200	0.01210	0.00970	0.00870	0.00770
37	0.00271	0.00715	0.01280	0.01280	0.01030	0.00930	0.00820
38	0.00271	0.00762	0.01370	0.01370	0.01100	0.00990	0.00870
39	0.00271	0.00811	0.01450	0.01460	0.01170	0.01050	0.00930
40	0.00271	0.00863	0.01550	0.01550	0.01250	0.01120	0.00990
41	0.00279	0.00917	0.01640	0.01650	0.01320	0.01190	0.01050
42	0.00296	0.00974	0.01750	0.01750	0.01410	0.01260	0.01120
43	0.00322	0.01034	0.01850	0.01860	0.01490	0.01340	0.01190
44	0.00359	0.01097	0.01970	0.01970	0.01580	0.01420	0.01260
45	0.00406	0.01164	0.02090	0.02090	0.01680	0.01510	0.01340
46	0.00458	0.01237	0.02220	0.02220	0.01790	0.01600	0.01420
47	0.00509	0.01315	0.02360	0.02360	0.01900	0.01700	0.01510
48	0.00565	0.01399	0.02510	0.02510	0.02020	0.01810	0.01610
49	0.00630	0.01490	0.02670	0.02680	0.02150	0.01930	0.01710
50	0.00710	0.01588	0.02850	0.02850	0.02290	0.02060	0.01820
51	0.00810	0.01694	0.03040	0.03040	0.02440	0.02190	0.01940
52	0.00922	0.01807	0.03240	0.03250	0.02610	0.02340	0.02070
53	0.01036	0.01928	0.03450	0.03460	0.02780	0.02500	0.02210
54	0.01140	0.02056	0.03680	0.03690	0.02970	0.02660	0.02360
55	0.01232	0.02193	0.03930	0.03940	0.03160	0.02840	0.02520
56	0.01318	0.02337	0.04190	0.04200	0.03370	0.03030	0.02680
57	0.01410	0.02490	0.04460	0.04470	0.03590	0.03230	0.02860
58	0.01513	0.02651	0.04750	0.04760	0.03830	0.03430	0.03040
59	0.01630	0.02822	0.05060	0.05070	0.04070	0.03660	0.03240
60	0.01766	0.03002	0.05380	0.05390	0.04330	0.03890	0.03450
61	0.01927	0.03193	0.05720	0.05730	0.04610	0.04140	0.03660

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RETIRED DEATH RATES (BY AGE NEAREST BIRTHDAY)

ENLISTED

AGE	NON DISA- BILITY	PERMANENT DISA- BILITY	TEMPORARY DISABILITY ----- YEAR OF RETIREMENT				
			ONE	TWO	THREE	FOUR	FIVE
62	0.02113	0.03325	0.06080	0.06100	0.04900	0.04460	0.03900
63	0.02315	0.03609	0.06470	0.06480	0.05210	0.04670	0.04140
64	0.02523	0.03834	0.06870	0.06890	0.05530	0.04970	0.04400
65	0.02736	0.04072	0.07300	0.07310	0.05880	0.05270	0.04670
66	0.02963	0.04323					
67	0.03216	0.04588					
68	0.03509	0.04863					
69	0.03853	0.05163					
70	0.04245	0.05475					
71	0.04678	0.05803					
72	0.05136	0.06148					
73	0.05604	0.06511					
74	0.06072	0.06892					
75	0.06538	0.07291					
76	0.07005	0.07703					
77	0.07483	0.08142					
78	0.07984	0.08594					
79	0.08523	0.09061					
80	0.09119	0.09544					
81	0.09787	0.10043					
82	0.10375	0.10578					
83	0.10998	0.11141					
84	0.11659	0.11734					
85	0.12359	0.12359					
86	0.13758	0.13758					
87	0.15157	0.15157					
88	0.16556	0.16556					
89	0.17955	0.17955					
90	0.19354	0.19354					
91	0.20753	0.20753					
92	0.22152	0.22152					
93	0.23551	0.23551					
94	0.24950	0.24950					
95	0.26349	0.26349					
96	0.27748	0.27748					
97	0.29147	0.29147					
98	0.30546	0.30546					
99	0.31945	0.31945					
100	0.33660	0.33660					
101	0.35467	0.35467					
102	0.37372	0.37372					
103	0.39378	0.39378					
104	0.41492	0.41492					
105	0.43720	0.43720					
106	0.46067	0.46067					
107	0.48541	0.48541					
108	0.51147	0.51147					
109	0.53893	0.53893					
110	1.00000	1.00000					

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RATES OF NONDEATH, NONVA LOSS FROM NONDISABILITY
(AGE NEAREST BIRTHDAY AT BEGINNING OF YEAR)

AGE	OFFICER	ENLISTED	AGE	OFFICER	ENLISTED
16	0.0	0.0	56	0.00423	0.01496
17	0.0	0.0	57	0.00453	0.01233
18	0.0	0.0	58	0.00452	0.01188
19	0.0	0.0	59	0.00408	0.01237
20	0.0	0.0	60	0.00323	0.01165
21	0.0	0.0	61	0.00226	0.00967
22	0.0	0.0	62	0.00152	0.00791
23	0.0	0.0	63	0.00114	0.00666
24	0.0	0.0	64	0.00098	0.00615
25	0.0	0.0	65	0.00085	0.00558
26	0.0	0.0	66	0.00067	0.00413
27	0.0	0.0	67	0.00046	0.00284
28	0.0	0.0	68	0.00029	0.00211
29	0.0	0.0	69	0.00019	0.00186
30	0.0	0.0	70	0.00015	0.00146
31	0.0	0.0	71	0.00014	0.00101
32	0.0	0.0	72	0.00013	0.00073
33	0.0	0.0	73	0.00013	0.00065
34	0.0	0.0	74	0.00013	0.00067
35	0.0	0.00297	75	0.00014	0.00072
36	0.0	0.00221	76	0.00014	0.00073
37	0.0	0.00158	77	0.00015	0.00064
38	0.00100	0.00109	78	0.00019	0.00073
39	0.00037	0.00072	79	0.00023	0.00111
40	0.00012	0.00047	80	0.00027	0.00177
41	0.00015	0.00031	81	0.00029	0.00263
42	0.00034	0.00022	82	0.00030	0.00358
43	0.00053	0.00017	83	0.00031	0.00444
44	0.00055	0.00015	84	0.00036	0.00505
45	0.00046	0.00017	85	0.00046	0.00523
46	0.00035	0.00022	86	0.00057	0.00503
47	0.00021	0.00031	87	0.00068	0.00470
48	0.00020	0.00043	88	0.00073	0.00454
49	0.00028	0.00058	89	0.00072	0.00469
50	0.00034	0.00075	90	0.00064	0.00509
51	0.00049	0.00093	91	0.00050	0.00541
52	0.00061	0.00113	92	0.00032	0.00527
53	0.00055	0.00137	93	0.00011	0.00447
54	0.00274	0.00837	94	0.0	0.00297
55	0.00365	0.01732	95	0.0	0.0

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TRANSFER RATES FROM TEMPORARY DISABILITY TO PERMANENT DISABILITY
(AGE NEAREST BIRTHDAY AT BEGINNING OF THE YEAR)

AGE	OFFICERS				ENLISTEDS			
	----- ONE	YEAR OF TWO	RETIREMENT THREE	----- FOUR	----- ONE	YEAR OF TWO	RETIREMENT THREE	----- FOUR
16	0.06910	0.30531	0.23289	0.40977	0.06748	0.41156	0.22541	0.34714
17	0.06910	0.30531	0.23289	0.40977	0.06748	0.41156	0.22541	0.34714
18	0.06910	0.30531	0.23289	0.40977	0.06748	0.41156	0.22541	0.34714
19	0.06910	0.30531	0.23289	0.40977	0.07140	0.41156	0.22541	0.34714
20	0.06910	0.30531	0.23289	0.40977	0.07457	0.40459	0.22541	0.34714
21	0.06910	0.30531	0.23289	0.40977	0.07675	0.39815	0.23065	0.34714
22	0.06910	0.30531	0.23289	0.40977	0.08094	0.39224	0.23592	0.35445
23	0.06910	0.30531	0.23289	0.40977	0.08683	0.38685	0.24124	0.36111
24	0.06710	0.30531	0.23289	0.40977	0.09482	0.38199	0.24660	0.36714
25	0.06910	0.30531	0.23289	0.40977	0.10446	0.37765	0.25199	0.37254
26	0.07960	0.31085	0.23289	0.40977	0.11374	0.37384	0.25743	0.37731
27	0.08981	0.31657	0.23289	0.40977	0.11713	0.37055	0.26290	0.38147
28	0.09965	0.32290	0.23388	0.40977	0.11426	0.36780	0.26841	0.38501
29	0.10876	0.33010	0.23495	0.40834	0.10754	0.36557	0.27396	0.38796
30	0.11690	0.33842	0.23666	0.40688	0.10065	0.36386	0.27955	0.39031
31	0.12405	0.34757	0.23878	0.40525	0.09928	0.36268	0.28518	0.39207
32	0.13010	0.35698	0.24123	0.40457	0.10329	0.36203	0.29085	0.39323
33	0.13493	0.36616	0.24474	0.40543	0.11036	0.36190	0.29656	0.39381
34	0.13867	0.37498	0.24930	0.40793	0.11874	0.36230	0.30231	0.39381
35	0.14167	0.38326	0.25446	0.41224	0.12593	0.36322	0.30809	0.39323
36	0.14428	0.39033	0.26006	0.41850	0.12898	0.36467	0.31392	0.39211
37	0.14650	0.39581	0.26583	0.42699	0.12845	0.36665	0.31978	0.39044
38	0.14813	0.39992	0.27147	0.43689	0.12761	0.36915	0.32568	0.38827
39	0.14964	0.40292	0.27638	0.44735	0.12997	0.37217	0.33162	0.38561
40	0.15107	0.40502	0.28048	0.45758	0.13712	0.37573	0.33759	0.38252
41	0.15212	0.40615	0.28454	0.46699	0.14786	0.37980	0.34361	0.37702
42	0.15373	0.40626	0.28876	0.47457	0.15957	0.38440	0.34966	0.37518
43	0.15355	0.40493	0.29275	0.47968	0.17007	0.38953	0.35575	0.37103
44	0.15516	0.40220	0.29612	0.48222	0.17770	0.39518	0.36188	0.36662
45	0.15871	0.39803	0.29945	0.48240	0.18087	0.40135	0.36805	0.36200
46	0.16495	0.39292	0.30341	0.48024	0.18165	0.40805	0.37425	0.35722
47	0.17439	0.38694	0.30830	0.47633	0.18246	0.41527	0.38050	0.35231
48	0.18688	0.38018	0.31404	0.47159	0.18511	0.42301	0.38678	0.34733
49	0.20202	0.37297	0.31981	0.46658	0.18727	0.43128	0.39309	0.34228
50	0.21929	0.36574	0.32519	0.46128	0.18559	0.44008	0.39945	0.33722
51	0.23805	0.35875	0.32909	0.45531	0.17896	0.44939	0.40584	0.33215
52	0.25730	0.35188	0.33179	0.44844	0.17052	0.45923	0.41227	0.32709
53	0.27657	0.34520	0.33339	0.44084	0.16406	0.46960	0.41874	0.32207
54	0.29559	0.33869	0.33371	0.43275	0.16277	0.48048	0.42525	0.31707
55	0.31405	0.33252	0.33297	0.42418	0.16991	0.49190	0.43179	0.31211
56	0.33162	0.32697	0.33142	0.41479	0.18892	0.50383	0.43837	0.30720
57	0.34866	0.32201	0.32927	0.40433	0.22208	0.51629	0.44499	0.30232
58	0.36533	0.31752	0.32691	0.39306	0.27035	0.52927	0.45165	0.29749
59	0.38185	0.31319	0.32455	0.38143	0.33415	0.54278	0.45834	0.29270
60	0.38185	0.31319	0.32455	0.38143	0.33415	0.54278	0.45834	0.29270
61	0.38185	0.31319	0.32455	0.38143	0.33415	0.54278	0.45834	0.29270
62	0.38185	0.31319	0.32455	0.38143	0.33415	0.54278	0.45834	0.29270
63	0.38185	0.31319	0.32455	0.38143	0.33415	0.54278	0.45834	0.29270
64	0.38185	0.31319	0.32455	0.38143	0.33415	0.54278	0.45834	0.29270
65	0.38185	0.31319	0.32455	0.38143	0.33415	0.54278	0.45834	0.29270

OFFICE OF THE ACTUARY - DMDC 1981

RATES OF NONDEATH, NONVA LOSS FROM PERMANENT DISABILITY

(AGE NEAREST BIRTHDAY AT BEGINNING OF THE YEAR)

AGE	OFFICER	ENLISTED	AGE	OFFICER	ENLISTED
16	0.0	0.0	54	0.00101	0.00458
17	0.0	0.0	55	0.00095	0.00543
18	0.0	0.0	56	0.00090	0.00610
19	0.0	0.0	57	0.00085	0.00653
20	0.0	0.00031	58	0.00079	0.00668
21	0.0	0.00060	59	0.00075	0.00654
22	0.0	0.00084	60	0.00070	0.00616
23	0.0	0.00104	61	0.00065	0.00559
24	0.0	0.00119	62	0.00060	0.00489
25	0.0	0.00131	63	0.00056	0.00415
26	0.0	0.00138	64	0.00052	0.00342
27	0.0	0.00140	65	0.00048	0.00276
28	0.0	0.00138	66	0.00043	0.00221
29	0.0	0.00134	67	0.00040	0.00179
30	0.0	0.00128	68	0.00036	0.00151
31	0.0	0.00122	69	0.00032	0.00135
32	0.0	0.00115	70	0.00029	0.00131
33	0.0	0.00107	71	0.00025	0.00136
34	0.0	0.00099	72	0.00022	0.00149
35	0.0	0.00090	73	0.00019	0.00167
36	0.0	0.00080	74	0.00016	0.00187
37	0.0	0.00070	75	0.00013	0.00208
38	0.0	0.00060	76	0.00011	0.00227
39	0.0	0.00052	77	0.00008	0.00243
40	0.0	0.00045	78	0.00006	0.00256
41	0.0	0.00041	79	0.00004	0.00263
42	0.0	0.00038	80	0.00001	0.00266
43	0.0	0.00037	81	0.0	0.00263
44	0.0	0.00037	82	0.0	0.00255
45	0.0	0.00038	83	0.0	0.00240
46	0.0	0.00041	84	0.0	0.00213
47	0.0	0.00048	85	0.0	0.00188
48	0.0	0.00063	86	0.0	0.00151
49	0.0	0.00090	87	0.0	0.00107
50	0.00124	0.00133	88	0.0	0.00055
51	0.00118	0.00195	89	0.0	0.0
52	0.00112	0.00274	90	0.0	0.0
53	0.00106	0.00364			

OFFICE OF THE ACTUARY - DMDC 1981

RATES OF DIVORCE

<u>Rate</u>
.0005
.0004
.0003
.0002
.0001

<u>Age</u>
78
79
80
81
82

<u>Rate</u>
.0046
.0044
.0042
.0040
.0038
.0036
.0034
.0032
.0030
.0028
.0026
.0024
.0022
.0020
.0019
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.0014
.0013
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.0010
.0009
.0008
.0007
.0006

<u>Age</u>
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<u>Rate</u>
.0050
.0127
.0128
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.0132
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.0133
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.0133
.0133
.0120
.0120
.0110
.0110
.0100
.0090
.0090
.0090
.0080
.0070
.0060
.0050
.0048
.0048
.0048
.0048
.0048

<u>Age</u>
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RATES OF REMARRIAGE (AGE NEAREST BIRTHDAY)

AGE	RATE	AGE	RATE
16	0.0983	38	0.0442
17	0.0983	39	0.0409
18	0.0983	40	0.0382
19	0.0983	41	0.0354
20	0.0983	42	0.0327
21	0.0983	43	0.0301
22	0.0983	44	0.0280
23	0.0983	45	0.0258
24	0.0983	46	0.0238
25	0.0983	47	0.0219
26	0.0988	48	0.0204
27	0.0930	49	0.0186
28	0.0870	50	0.0172
29	0.0815	51	0.0157
30	0.0767	52	0.0145
31	0.0714	53	0.0133
32	0.0672	54	0.0121
33	0.0627	55	0.0110
34	0.0582	56	0.0101
35	0.0549	57	0.0091
36	0.0510	58	0.0081
37	0.0474	59	0.0073

OFFICE OF THE ACTUARY - DMDC 1981

CHILD TERMINATION RATES

Age Nearest Birthday

0	.00
1	.00
2	.00
3	.00
4	.00
5	.00
6	.00
7	.00
8	.00
9	.00
10	.00
11	.00
12	.00
13	.00
14	.00
15	.00
16	.00
17	.17
18	.32
19	.20
20	.20
21	.40
22	.80
23	.80

February 1981
Office of the Actuary

SURVIVOR DEATH RATES (AGE NEAREST BIRTHDAY)			
AGE	RATE	AGE	RATE
0	0.0	55	0.0062
1	0.0	56	0.0067
2	0.0	57	0.0071
3	0.0	58	0.0077
4	0.0	59	0.0083
5	0.0	60	0.0090
6	0.0	61	0.0098
7	0.0	62	0.0105
8	0.0	63	0.0114
9	0.0	64	0.0124
10	0.0	65	0.0135
11	0.0	66	0.0145
12	0.0	67	0.0158
13	0.0	68	0.0171
14	0.0	69	0.0187
15	0.0	70	0.0200
16	0.0007	71	0.0221
17	0.0007	72	0.0240
18	0.0007	73	0.0264
19	0.0007	74	0.0280
20	0.0007	75	0.0307
21	0.0007	76	0.0339
22	0.0007	77	0.0376
23	0.0007	78	0.0415
24	0.0007	79	0.0460
25	0.0007	80	0.0501
26	0.0007	81	0.0559
27	0.0007	82	0.0628
28	0.0007	83	0.0704
29	0.0008	84	0.0783
30	0.0009	85	0.0869
31	0.0009	86	0.0972
32	0.0010	87	0.1080
33	0.0011	88	0.1188
34	0.0011	89	0.1310
35	0.0012	90	0.1427
36	0.0013	91	0.1539
37	0.0014	92	0.1670
38	0.0015	93	0.1782
39	0.0017	94	0.1899
40	0.0018	95	0.2016
41	0.0020	96	0.2133
42	0.0022	97	0.2241
43	0.0024	98	0.2367
44	0.0026	99	0.2475
45	0.0028	100	0.2597
46	0.0030	101	0.2718
47	0.0033	102	0.2880
48	0.0036	103	0.2970
49	0.0040	104	0.3060
50	0.0043	105	0.3150
51	0.0047	106	0.3240
52	0.0051	107	0.3330
53	0.0055	108	0.3420
54	0.0059	109	1.0000

OFFICE OF THE ACTUARY - DMDC 1981

APPENDIX B

SUMMARY OF THE MILITARY
RETIREMENT SYSTEM
AS OF 30 SEPTEMBER 1980

The military retirement system as summarized below applies to the Army, Navy, Marine Corps, and Air Force. However, most of the provisions also apply to retirement systems for members of the Coast Guard (administered by the Department of Transportation) officers of the Public Health Service (administered by DHHS), and officers of the National Oceanic and Atmospheric Administration (administered by the Department of Commerce). The key provisions of the military retirement system are as follows:

- Nondisability retirement after 20 years of active service equal to (base pay) times (years of service) times (2 1/2%). There is a limit of 75% of base pay. Base pay is equal to terminal basic pay if retiree first became a member of the Armed Services before 8 September 1980. If the retiree first became a member of the Armed Services on or after 8 September 1980, base pay is equal to the average of the highest 36 months of basic pay.
- Disability retirement with similar provisions.
- Reserve retirement with parallel provisions.
- Optional survivor benefit protections for retirees and retirement eligible reservists.
- CPI adjustments for both retirement pay and survivor annuities.
- No contributions by the service members of the military services and no retirement fund, but reductions in member annuities when survivor benefits are elected.
- No vesting prior to 20 years of service.
- Interrelationships with Social Security, Veterans Administration benefits, and other federal service.

Cost-of-Living Increases

All nondisability retirement, disability retirement, and most survivor annuities are presently adjusted semiannually for inflation. Cost-of-living adjustments are scheduled to occur every six months, on March 1st and September 1st, to be reflected in checks issued at the end of those months.

The cost-of-living increase effective March 1st is computed by calculating the percentage increase (adjusted to the nearest 1/10 of one percent) in the Consumer Price Index from the previous June to the previous December. Similarly, the cost-of-living increase effective September 1st is obtained by calculating the percentage increase in the June CPI over the CPI from the previous December.

The Bureau of Labor Statistics publishes two Consumer Price Indexes: (1) a CPI for All Urban Consumers, and (2) a revised CPI for Urban Wage Earners and Clerical Workers. OMB has determined that the revised CPI should be used in calculating military cost-of-living increases.

Nondisability Retirement from Active Service

The current system allows voluntary retirement upon credit of at least 20 years of service at any age, subject to Service Secretary approval. The military retiree receives an immediate annuity calculated as 2 1/2% of base pay for each year of creditable service, subject to a maximum of 75% of base pay. Base pay is equal to terminal basic pay if retiree first became a member of the Armed Services before 8 September 1980. If the retiree first became a member of the Armed Services on or after 8 September 1980, base pay is equal to the average of the highest 36 months of basic pay. In calculating years of service, over 6 months service is rounded up to a full year.

In FY80 1.1 million nondisability retirees were paid \$10.5 billion.

Disability Retirement

If a military member is disabled he/she is entitled to disability retired pay, assuming the disability is at least 30% (under a standard schedule of rating disabilities by the Veterans Administration) and either (1) the member has 8 years of service; (2) the disability results from active duty or; (3) the disability occurred in the line of duty during a time of war or national emergency or certain other time periods.

In disability retirement the member receives base pay multiplied by the larger of (1) 2 1/2% times years of service, or (2) percent disability. The benefit cannot be more than 75% of base pay. Only the excess of (1) over (2) is subject to federal income taxes.

Members whose disability may not be permanent are placed on a temporary disability retired list and receive disability retirement pay just as if they were permanently disabled. However, they must be physically examined once every 18 months to determine any change in disability until a final determination is made within 5 years. While on the temporary disability retired list, the member receives base pay multiplied by the larger of (1) 2 1/2% times years of service or, (2) percent disability with a minimum of 50% of base pay. Base pay is equal to terminal basic pay if retiree first became a member of the Armed Services before 8 September 1980. If the retiree first became a member of the Armed Services on or after 8 September 1980, base pay is equal to the average of the highest three years basic pay.

In FY80, 151,000 disability retirees were paid \$1.2 billion.

Reserve Retirement

It is also possible for members of the reserves to retire after 20 years of service, the last 8 of which must be in a reserve component. Reserve retired pay, however, does not begin until age 60. If the reservist was first a member of the Armed Services before 8 September 1980, the retired pay (base pay) is based upon active duty pay scales for the member's grade in effect at the time the retired pay commences. If the reservist first became a member of the Armed Services on or after 8 September 1980, retired pay is based upon (base pay) the average basic pay for the member's grade in the last 3 years that he/she was a member of the Armed Services. The retired pay is computed as (base pay) times (2.5%) times (years of creditable service). The years of service is in turn determined using a point system, where 360 points convert to a year of service. Typically, a point is awarded for a day of service or a drill attendance, with 15 points being awarded for a year's membership in a reserve component.

Survivor Benefits

Legislation originating in 1953 provided optional survivor benefits later referred to as the Retired Serviceman's Family Protection Plan (RSFPP). The plan proved to be inadequate since the survivor annuities were never adjusted for inflation and could not be more than 50% of retired pay. RSFPP was designed to be self-supporting in the sense that member annuities were reduced so that the present value of the reductions would equal the present value of survivor annuities. However, no fund was involved.

RSFPP still insures those servicemen retired before 1972 who did not convert to the new plan and still pays survivor annuities. However, since 21 September 1972, RSFPP has been replaced by the Survivor Benefit Plan (SBP) for new retirees. Under SBP, member annuities are also reduced but the SBP is not a self-supporting program; its costs are shared by the Government and retired members. The survivor annuity is originally 55% of the member's base amount. The base amount is elected by the member but can be no less than \$300 (or full pay if the monthly pay is less than \$300) and no more than the member's whole retired pay. SBP annuities are adjusted with CPI increases, and integrated with Social Security and Veterans' benefits.

For reserve retirees the same set of reductions provide coverage after the reservist reaches age 60 (when the reservist begins to receive retired pay). A second set of optional reductions (funded by the employee only) extend this coverage to the reservist who has enough service to retire but who has not attained age 60.

In FY80 survivors were paid \$256 million.

Relationship with Social Security

Beginning in 1957 military members on active duty have been full participants in the Social Security System. Retirement annuities from the two systems are additive. However, there is a social security offset for surviving spouses of SBP participants equal to 100% of the social security benefit attributable

sely to military service, with the exception that the offset provisions apply to a spouse with one child and spouses over age 62 who are not working in Social Security covered employment. At no time can a Social Security offset be greater than 40% of the survivor annuity.

Relationship with Veterans Administration Benefits

The Veterans Administration provides compensation to service connected and certain nonservice connected disabilities. This annuity can be in place of or in combination with LoB retirement pay (non-disability), but is not additive. Since VA annuities are exempt from federal income taxes, it is sometimes to the advantage of a member to elect whatever VA benefits are available.

Veterans Administration benefits also overlap survivor benefits through the Dependency and Indemnity Compensation (DIC) program. DIC is payable to survivors of veterans who died from service connected causes and are deducted from the SBP annuity.

Interrelationship with Other Federal Service

For retirement purposes no credit is given for other federal service, except where cross-service transferability is allowed. However, military service is generally creditable toward the Federal civilian retirement systems if military retired pay is waived. Military service is not generally creditable under both systems (but is for reservists and certain disability retirees). Retired regular officers employed by the federal government lose a substantial portion of their retired pay while so employed. All former members are subject to a combined ceiling equivalent to level V of the Executive Schedule.

APPENDIX C

TABLE 1. AVERAGE MONTHLY ACTIVE DUTY SALARIES BY ACTIVE YEARS OF SERVICE AND AGE FOR FY1980 VALUATION

AGE	YEARS OF ACTIVE SERVICE																				30+	31+	32+	33+	34+	35+	36+	37+	38+	39+	40+	41+	42+	43+	44+	45+	46+	47+	48+	49+	50+	51+	52+	53+	54+	55+	56+	57+	58+	59+	60+	61+	62+	63+	64+	65+	66+	67+	68+	69+	70+	71+	72+	73+	74+	75+	76+	77+	78+	79+	80+	81+	82+	83+	84+	85+	86+	87+	88+	89+	90+	91+	92+	93+	94+	95+	96+	97+	98+	99+	100+	101+	102+	103+	104+	105+	106+	107+	108+	109+	110+	111+	112+	113+	114+	115+	116+	117+	118+	119+	120+	121+	122+	123+	124+	125+	126+	127+	128+	129+	130+	131+	132+	133+	134+	135+	136+	137+	138+	139+	140+	141+	142+	143+	144+	145+	146+	147+	148+	149+	150+	151+	152+	153+	154+	155+	156+	157+	158+	159+	160+	161+	162+	163+	164+	165+	166+	167+	168+	169+	170+	171+	172+	173+	174+	175+	176+	177+	178+	179+	180+	181+	182+	183+	184+	185+	186+	187+	188+	189+	190+	191+	192+	193+	194+	195+	196+	197+	198+	199+	200+	201+	202+	203+	204+	205+	206+	207+	208+	209+	210+	211+	212+	213+	214+	215+	216+	217+	218+	219+	220+	221+	222+	223+	224+	225+	226+	227+	228+	229+	230+	231+	232+	233+	234+	235+	236+	237+	238+	239+	240+	241+	242+	243+	244+	245+	246+	247+	248+	249+	250+	251+	252+	253+	254+	255+	256+	257+	258+	259+	260+	261+	262+	263+	264+	265+	266+	267+	268+	269+	270+	271+	272+	273+	274+	275+	276+	277+	278+	279+	280+	281+	282+	283+	284+	285+	286+	287+	288+	289+	290+	291+	292+	293+	294+	295+	296+	297+	298+	299+	300+	301+	302+	303+	304+	305+	306+	307+	308+	309+	310+	311+	312+	313+	314+	315+	316+	317+	318+	319+	320+	321+	322+	323+	324+	325+	326+	327+	328+	329+	330+	331+	332+	333+	334+	335+	336+	337+	338+	339+	340+	341+	342+	343+	344+	345+	346+	347+	348+	349+	350+	351+	352+	353+	354+	355+	356+	357+	358+	359+	360+	361+	362+	363+	364+	365+	366+	367+	368+	369+	370+	371+	372+	373+	374+	375+	376+	377+	378+	379+	380+	381+	382+	383+	384+	385+	386+	387+	388+	389+	390+	391+	392+	393+	394+	395+	396+	397+	398+	399+	400+	401+	402+	403+	404+	405+	406+	407+	408+	409+	410+	411+	412+	413+	414+	415+	416+	417+	418+	419+	420+	421+	422+	423+	424+	425+	426+	427+	428+	429+	430+	431+	432+	433+	434+	435+	436+	437+	438+	439+	440+	441+	442+	443+	444+	445+	446+	447+	448+	449+	450+	451+	452+	453+	454+	455+	456+	457+	458+	459+	460+	461+	462+	463+	464+	465+	466+	467+	468+	469+	470+	471+	472+	473+	474+	475+	476+	477+	478+	479+	480+	481+	482+	483+	484+	485+	486+	487+	488+	489+	490+	491+	492+	493+	494+	495+	496+	497+	498+	499+	500+	501+	502+	503+	504+	505+	506+	507+	508+	509+	510+	511+	512+	513+	514+	515+	516+	517+	518+	519+	520+	521+	522+	523+	524+	525+	526+	527+	528+	529+	530+	531+	532+	533+	534+	535+	536+	537+	538+	539+	540+	541+	542+	543+	544+	545+	546+	547+	548+	549+	550+	551+	552+	553+	554+	555+	556+	557+	558+	559+	560+	561+	562+	563+	564+	565+	566+	567+	568+	569+	570+	571+	572+	573+	574+	575+	576+	577+	578+	579+	580+	581+	582+	583+	584+	585+	586+	587+	588+	589+	590+	591+	592+	593+	594+	595+	596+	597+	598+	599+	600+	601+	602+	603+	604+	605+	606+	607+	608+	609+	610+	611+	612+	613+	614+	615+	616+	617+	618+	619+	620+	621+	622+	623+	624+	625+	626+	627+	628+	629+	630+	631+	632+	633+	634+	635+	636+	637+	638+	639+	640+	641+	642+	643+	644+	645+	646+	647+	648+	649+	650+	651+	652+	653+	654+	655+	656+	657+	658+	659+	660+	661+	662+	663+	664+	665+	666+	667+	668+	669+	670+	671+	672+	673+	674+	675+	676+	677+	678+	679+	680+	681+	682+	683+	684+	685+	686+	687+	688+	689+	690+	691+	692+	693+	694+	695+	696+	697+	698+	699+	700+	701+	702+	703+	704+	705+	706+	707+	708+	709+	710+	711+	712+	713+	714+	715+	716+	717+	718+	719+	720+	721+	722+	723+	724+	725+	726+	727+	728+	729+	730+	731+	732+	733+	734+	735+	736+	737+	738+	739+	740+	741+	742+	743+	744+	745+	746+	747+	748+	749+	750+	751+	752+	753+	754+	755+	756+	757+	758+	759+	760+	761+	762+	763+	764+	765+	766+	767+	768+	769+	770+	771+	772+	773+	774+	775+	776+	777+	778+	779+	780+	781+	782+	783+	784+	785+	786+	787+	788+	789+	790+	791+	792+	793+	794+	795+	796+	797+	798+	799+	800+	801+	802+	803+	804+	805+	806+	807+	808+	809+	810+	811+	812+	813+	814+	815+	816+	817+	818+	819+	820+	821+	822+	823+	824+	825+	826+	827+	828+	829+	830+	831+	832+	833+	834+	835+	836+	837+	838+	839+	840+	841+	842+	843+	844+	845+	846+	847+	848+	849+	850+	851+	852+	853+	854+	855+	856+	857+	858+	859+	860+	861+	862+	863+	864+	865+	866+	867+	868+	869+	870+	871+	872+	873+	874+	875+	876+	877+	878+	879+	880+	881+	882+	883+	884+	885+	886+	887+	888+	889+	890+	891+	892+	893+	894+	895+	896+	897+	898+	899+	900+	901+	902+	903+	904+	905+	906+	907+	908+	909+	910+	911+	912+	913+	914+	915+	916+	917+	918+	919+	920+	921+	922+	923+	924+	925+	926+	927+	928+	929+	930+	931+	932+	933+	934+	935+	936+	937+	938+	939+	940+	941+	942+	943+	944+	945+	946+	947+	948+	949+	950+	951+	952+	953+	954+	955+	956+	957+	958+	959+	960+	961+	962+	963+	964+	965+	966+	967+	968+	969+	970+	971+	972+	973+	974+	975+	976+	977+	978+	979+	980+	981+	982+	983+	984+	985+	986+	987+	988+	989+	990+	991+	992+	993+	994+	995+	996+	997+	998+	999+	1000+	1001+	1002+	1003+	1004+	1005+	1006+	1007+	1008+	1009+	1010+	1011+	1012+	1013+	1014+	1015+	1016+	1017+	1018+	1019+	1020+	1021+	1022+	1023+	1024+	1025+	1026+	1027+	1028+	1029+	1030+	1031+	1032+	1033+	1034+	1035+	1036+	1037+	1038+	1039+	1040+	1041+	1042+	1043+	1044+	1045+	1046+	1047+	1048+	1049+	1050+	1051+	1052+	1053+	1054+	1055+	1056+	1057+	1058+	1059+	1060+	1061+	1062+	1063+	1064+	1065+	1066+	1067+	1068+	1069+	1070+	1071+	1072+	1073+	1074+	1075+	1076+	1077+	1078+	1079+	1080+	1081+	1082+	1083+	1084+	1085+	1086+	1087+	1088+	1089+	1090+	1091+	1092+	1093+	1094+	1095+	1096+	1097+	1098+	1099+	1100+	1101+	1102+	1103+	1104+	1105+	1106+	1107+	1108+	1109+	1110+	1111+	1112+	1113+	1114+	1115+	1116+	1117+	1118+	1119+	1120+	1121+	1122+	1123+	1124+	1125+	1126+	1127+	1128+	1129+	1130+	1131+	1132+	1133+	1134+	1135+	1136+	1137+	1138+	1139+	1140+	1141+	1142+	1143+	1144+	1145+	1146+	1147+	1148+	1149+	1150+	1151+	1152+	1153+	1154+	1155+	1156+	1157+	1158+	1159+	1160+	1161+	1162+	1163+	1164+	1165+	1166+	1167+	1168+	1169+	1170+	1171+	1172+	1173+	1174+	1175+	1176+	1177+	1178+	1179+	1180+	1181+	1182+	1183+	1184+	1185+	1186+	1187+	1188+	1189+	1190+	1191+	1192+	1193+	1194+	1195+	1196+	1197+	1198+	1199+	1200+	1201+	1202+	1203+	1204+	1205+	1206+	1207+	1208+	1209+	1210+	1211+	1212+	1213+	1214+	1215+	1216+	1217+	1218+	1219+	1220+	1221+	1222+	1223+	1224+	1225+	1226+	1227+	1228+	1229+	1230+	1231+	1232+	1233+	1234+	1235+	1236+	1237+	1238+	1239+	1240+	1241+	1242+	1243+	1244+	1245+	1246+	1247+	1248+	1249+	1250+	1251+	1252+	1253+	1254+	1255+	1256+	1257+	1258+	1259+	1260+	1261+	1262+	1263+	1264+	1265+	1266+	1267+	1268+	1269+	1270+	1271+	1272+	1273+	1274+	1275+	1276+	1277+	1278+	1279+	1280+	1281+	1282+	1283+	1284+	1285+	1286+	1287+	1288+	1289+	1290+	1291+	1292+	1293+	1294+	1295+	1296+	1297+	1298+	1299+	1300+	1301+	1302+	1303+	1304+	1305+	1306+	1307+	1308+	1309+	1310+	1311+	1312+	1313+	1314+	1315+	1316+	1317+	1318+	1319+	1320+	1321+	1322+	1323+	1324+	1325+	1326+	1327+	1328+	1329+	1330+	1331+	1332+	1333+	1334+	1335+	1336+	1337+	1338+	1339+	1340+	1341+	1342+	1343+	1344+	1345+	1346+	1347+	1348+	1349+	1350+	1351+	1352+	1353+	1354+	1355+	1356+	1357+	1358+	1359+	1360+	1361+	1362+	1363+	1364+	1365+	1366+	1367+	1368+	1369+	1370+	1371+	1372+	1373+	1374+	1375+	1376+	1377+	1378+	1379+	1380+	1381+	1382+	1383+	1384+	1385+	1386+	1387+	1388+	1389+	1390+	1391+	1392+	1393+	1394+	1395+	1396+	1397+	1398+	1399+	1400+	1401+	1402+	1403+	1404+	1405+	1406+	1407+	1408+	1409+	1410+	1411+	1412+	1413+	1414+	1415+	1416+	1417+	1418+	1419+	1420+	1421+	1422+	1423+	1424+	1425+	1426+	1427+	1428+	1429+	1430+	1431+	1432+	1433+	1434+	1435+	1436+	1437+	1438+	1439+	1440+	1441+	1442+	1443+	1444+	1445+	1446+	1447+	1448+	1449+	1450+	1451+	1452+	1453+	1454+	1455+	1456+	1457+	1458+	1459+	1460+	1461+	1462+	1463+	1464+	1465+	1466+	1467+	1468+	1469+	1470+	1471+	1472+	1473+	1474+	1475+	1476+	1477+	1478+	1479+	1480+	1481+	1482+	1483+	1484+	1485+	1486+	1487+	1488+	1489+	1490+	1491+	1492+	1493+	1494+	1495+	1496+	1497+	1498+	1499+	1500+	1501+	1502+	1503+	1504+	1505+	1506+	1507+	1508+	1509+	1510+	1511+	1512+	1513+	1514+	1515+	1516+	1517+	1518+
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OFFICERS ACTIVE DUTY PERSONNEL BY YEARS OF SERVICE AND AGE FOR FY140 VALUATION
YEARS OF ACTIVE SERVICE

AGE	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT	18460	20884	18663	16970	14987	12473	11880	10948	10912	11138	11494	11234	11572	10677	11110	7730

NOTES: NUMBERS HAVE BEEN ADJUSTED TO BUDGET.
AGE IS AGE NEAREST BIRTHDAY.

DMDC - DOD ACTUARY OFFICE

OFFICERS ACTIVE DUTY PERSONNEL BY YEARS OF SERVICE AND AGE FOR FY1990 VALUATION

AGE	YEARS OF ACTIVE SERVICE															TOTAL
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30+	
16	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
17	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
18	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
19	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
20	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
21	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
22	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
23	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
24	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
25	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
26	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
27	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
28	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
29	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
30+	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
TOTAL	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000

NOTES: NUMBERS HAVE BEEN ADJUSTED TO BUDGET.
AGE IS AGE NEAREST BIRTHDAY.

DMDC - DOD ACTUARY OFFICE

ENLISTED ACTIVE DUTY PERSONNEL BY YEARS OF SERVICE AND AGE FOR FY1980 VALUATION

		YEARS OF ACTIVE SERVICE															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
AGE																	
17	373	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18	5285	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
19	54415	5287	2176	206	0	0	0	0	0	0	0	0	0	0	0	0	
20	80207	80207	46119	206	0	0	0	0	0	0	0	0	0	0	0	0	
21	50340	50340	50340	50340	50340	50340	50340	50340	50340	50340	50340	50340	50340	50340	50340	50340	
22	24747	24747	24747	24747	24747	24747	24747	24747	24747	24747	24747	24747	24747	24747	24747	24747	
23	11090	11090	11090	11090	11090	11090	11090	11090	11090	11090	11090	11090	11090	11090	11090	11090	
24	6777	6777	6777	6777	6777	6777	6777	6777	6777	6777	6777	6777	6777	6777	6777	6777	
25	5266	5266	5266	5266	5266	5266	5266	5266	5266	5266	5266	5266	5266	5266	5266	5266	
26	2220	2220	2220	2220	2220	2220	2220	2220	2220	2220	2220	2220	2220	2220	2220	2220	
27	1731	1731	1731	1731	1731	1731	1731	1731	1731	1731	1731	1731	1731	1731	1731	1731	
28	1034	1034	1034	1034	1034	1034	1034	1034	1034	1034	1034	1034	1034	1034	1034	1034	
29	617	617	617	617	617	617	617	617	617	617	617	617	617	617	617	617	
30	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	
31	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
32	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
33	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
34	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
35	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
36	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
37	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
38	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
39	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
40	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
41	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
42	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
43	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
44	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
45	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
46	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
47	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
48	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
49	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
50	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	
TOT	329601	266746	230627	196352	103948	80328	66339	58897	51939	43335	32113	35030	35205	27212	25811	23325	

NOTES: NUMBERS HAVE BEEN ADJUSTED TO BUDGET.
AGE IS AGE NEAREST BIRTHDAY.

DMDC - DOD ACTUARY OFFICE

ENLISTED ACTIVE DUTY PERSONNEL BY YEARS OF SERVICE AND AGE FOR FY1980 VALUATION

AGE	YEARS OF ACTIVE SERVICE															TOTAL
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30+	
16	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30+	TOTAL
17	17	18	19	20	21	22	23	24	25	26	27	28	29	30+		170000
18	18	19	20	21	22	23	24	25	26	27	28	29	30+			170000
19	19	20	21	22	23	24	25	26	27	28	29	30+				170000
20	20	21	22	23	24	25	26	27	28	29	30+					170000
21	21	22	23	24	25	26	27	28	29	30+						170000
22	22	23	24	25	26	27	28	29	30+							170000
23	23	24	25	26	27	28	29	30+								170000
24	24	25	26	27	28	29	30+									170000
25	25	26	27	28	29	30+										170000
26	26	27	28	29	30+											170000
27	27	28	29	30+												170000
28	28	29	30+													170000
29	29	30+														170000
30	30															170000
31																170000
32																170000
33																170000
34																170000
35																170000
36																170000
37																170000
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39																170000
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94																170000
95																170000
96																170000
97																170000
98																170000
99																170000
100																170000

NOTES: NUMBERS HAVE BEEN ADJUSTED TO BUDGET.
AGE IS AGE, YEAREST BIRTHDAY.

DMDC - DOD ACTUARY, OFFICE

ALL 100 ACTIVE DUTY PERSONNEL BY YEARS OF SERVICE AND AGE FOR FY1980 VALUATION

AGE	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
19	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
69	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
79	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
83	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
86	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
87	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
88	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
89	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NOTES: NUMBERS HAVE BEEN ADJUSTED TO BUDGET.
AGE IS AGE NEAREST BIRTHDAY.

DMDC - DOD ACTUARY, OFFICE

ALL DOD ACTIVE DUTY PERSONNEL BY YEARS OF SERVICE AND AGE FOR FY1980 VALUATION
YEARS OF ACTIVE SERVICE

AGE	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30+	TOTAL
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NOTES: NUMBERS HAVE BEEN ADJUSTED TO BUDGET.
AGE IS AGE NEAREST BIRTHDAY.

DMDC - DOD ACTUARY OFFICE

RETIREE MILITARY VALUATION DATA AS OF ENO FY 1980

(ALL OFFICERS)

AGE	NON-DISABLED		STRENGTH		TOTAL		AVERAGE ANNUAL NET RETIRED PAY		TOTAL
	DISABLED	TITLE	DISABLED	TITLE	DISABLED	TITLE	DISABLED	TITLE	
16	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0
51	0	0	0	0	0	0	0	0	0
52	0	0	0	0	0	0	0	0	0
53	0	0	0	0	0	0	0	0	0
54	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0
56	0	0	0	0	0	0	0	0	0
57	0	0	0	0	0	0	0	0	0
58	0	0	0	0	0	0	0	0	0
59	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0
61	0	0	0	0	0	0	0	0	0
62	0	0	0	0	0	0	0	0	0
63	0	0	0	0	0	0	0	0	0
64	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0
66	0	0	0	0	0	0	0	0	0
67	0	0	0	0	0	0	0	0	0
68	0	0	0	0	0	0	0	0	0
69	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0

RETIREE MILITARY VALUATION DATA AS OF END OF FY 1980

(ALL OFFICERS)

AGE	NON-DISABLED		STARTING AGE		TOTAL	NON-DISABLED		AVERAGE ANNUAL NET RETIRED PAY		TOTAL
	DISABLED	TEMP	DISABLED	TEMP		DISABLED	TEMP	DISABLED	TEMP	
61	3207	1153	0	0	4360	17229	0	7584	0	12011
62	2944	1130	0	0	4074	17095	0	7164	0	11809
63	2612	877	0	0	3489	16422	0	7002	0	11188
64	2157	629	0	0	2786	16012	0	7002	0	11134
65	1363	549	0	0	1912	16012	0	7002	0	11134
66	1561	619	0	0	2180	16012	0	7002	0	11134
67	1329	549	0	0	1878	16012	0	7002	0	11134
68	1180	430	0	0	1610	16012	0	7002	0	11134
69	962	361	0	0	1323	16012	0	7002	0	11134
70	845	346	0	0	1191	16012	0	7002	0	11134
71	610	281	0	0	891	16012	0	7002	0	11134
72	522	272	0	0	794	16012	0	7002	0	11134
73	334	234	0	0	568	16012	0	7002	0	11134
74	303	166	0	0	469	16012	0	7002	0	11134
75	297	145	0	0	442	16012	0	7002	0	11134
76	219	163	0	0	382	16012	0	7002	0	11134
77	174	118	0	0	292	16012	0	7002	0	11134
78	144	104	0	0	248	16012	0	7002	0	11134
79	122	79	0	0	201	16012	0	7002	0	11134
80	171	79	0	0	250	16012	0	7002	0	11134
81	63	40	0	0	103	16012	0	7002	0	11134
82	37	44	0	0	81	16012	0	7002	0	11134
83	31	30	0	0	61	16012	0	7002	0	11134
84	17	21	0	0	38	16012	0	7002	0	11134
85	10	21	0	0	31	16012	0	7002	0	11134
86	7	5	0	0	12	16012	0	7002	0	11134
87	6	2	0	0	8	16012	0	7002	0	11134
88	5	2	0	0	7	16012	0	7002	0	11134
89	5	2	0	0	7	16012	0	7002	0	11134
90	5	2	0	0	7	16012	0	7002	0	11134
91	5	2	0	0	7	16012	0	7002	0	11134
92	5	2	0	0	7	16012	0	7002	0	11134
93	5	2	0	0	7	16012	0	7002	0	11134
94	5	2	0	0	7	16012	0	7002	0	11134
95	5	2	0	0	7	16012	0	7002	0	11134
96	5	2	0	0	7	16012	0	7002	0	11134
97	5	2	0	0	7	16012	0	7002	0	11134
98	5	2	0	0	7	16012	0	7002	0	11134
99	5	2	0	0	7	16012	0	7002	0	11134
100	5	2	0	0	7	16012	0	7002	0	11134
101	5	2	0	0	7	16012	0	7002	0	11134
102	5	2	0	0	7	16012	0	7002	0	11134
103	5	2	0	0	7	16012	0	7002	0	11134
104	5	2	0	0	7	16012	0	7002	0	11134
105	5	2	0	0	7	16012	0	7002	0	11134
106	5	2	0	0	7	16012	0	7002	0	11134
107	5	2	0	0	7	16012	0	7002	0	11134
108	5	2	0	0	7	16012	0	7002	0	11134
109	5	2	0	0	7	16012	0	7002	0	11134
110	5	2	0	0	7	16012	0	7002	0	11134
TOT	254163	55474	964	0	403562	18435	17140	7532	15521	12735
65+	54111	19668	0	0	54569	17495	13600	7703	7703	12735

NOTE: AGE IS RETIREE'S CURRENT AGE TO NEAREST BIRTHDAY AT END OF FISCAL YEAR.
 1. TOTAL AGE 65 AND OVER.
 FIGURES ADJUSTED TO BUDGET.

OWDC - DOD ACTUARY'S OFFICE

RETIRED MILITARY VALUATION DATA AS OF EN FY 1980

(ALL ENLISTED)

AGE	NON- DISABLED	PERM DISABLED	STRENGTH TEMP DISABLED	TITLE	TOTAL	NON- DISABLED	PERM DISABLED	AVERAGE ANNUAL DISABLED	NET RETIRED PAY TEMP DISABLED	TITLE	TOTAL
16	0	1	0	0	1	0	0	3216	0	0	3216
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	13	0	13	0	0	4116	4116	0	4116
19	0	0	18	0	18	0	0	3739	3739	0	3739
20	0	21	200	0	301	0	0	3517	3517	0	3517
21	0	78	514	0	692	0	0	3904	3904	0	3904
22	0	105	335	0	1204	0	0	5726	5726	0	5726
23	0	244	390	0	1304	0	0	3267	3267	0	3267
24	0	631	717	0	1348	0	0	4048	4048	0	4048
25	0	128	921	0	1446	0	0	3304	3304	0	3304
26	0	126	461	0	1436	0	0	4368	4368	0	4368
27	0	1180	373	0	1553	0	0	4644	4644	0	4644
28	0	1608	326	0	1934	0	0	4782	4782	0	4782
29	0	2039	245	0	2284	0	0	4950	4950	0	4950
30	0	2485	200	0	2727	0	0	5346	5346	0	5346
31	0	2463	124	0	2647	0	0	5619	5619	0	5619
32	85	1597	127	0	1809	7918	0	6311	6311	0	6311
33	106	1444	94	0	1650	7651	0	6057	6057	0	6057
34	1416	1372	1156	0	3500	7407	0	7118	7118	0	7118
35	4714	1134	1175	0	5703	7460	0	7877	7877	0	7877
36	13027	1162	1175	0	11155	7591	0	7877	7877	0	7877
37	1972	1158	126	0	1681	7718	0	8781	8781	0	8781
38	36379	1359	156	0	126	7900	0	9180	9180	0	9180
39	32374	1491	117	0	33482	8126	0	8926	8926	0	8926
40	34437	1691	182	0	36310	8497	0	10106	10106	0	10106
41	3530	1980	50	0	3420	8602	0	10240	10240	0	10240
42	33044	2320	73	0	34607	8760	0	11609	11609	0	11609
43	37335	3769	49	0	42771	8878	0	11643	11643	0	11643
44	44422	3793	77	0	42852	8882	0	10694	10694	0	10694
45	4777	3923	285	0	44238	8756	0	11493	11493	0	11493
46	4760	36379	225	0	44015	8856	0	11004	11004	0	11004
47	4714	2443	11	0	42798	8814	0	11526	11526	0	11526
48	2510	2283	6	0	2299	8143	0	14836	14836	0	14836
49	23380	2134	6	0	2299	8051	0	10112	10112	0	10112
50	22360	2073	0	0	22360	7995	0	0	0	0	0
51	22334	1906	0	1057	22334	7830	0	0	0	214	7670
52	19479	1846	0	3089	23344	7854	0	0	0	7	7426
53	16672	1590	0	2993	16672	7718	0	0	0	7	7338
54	12017	1316	0	1978	12017	7644	0	0	0	7	7276
55	10434	1101	0	1687	10434	7565	0	0	0	7	7181
56	7077	851	0	1371	7077	7429	0	0	0	7	7035
57	5948	727	0	1073	5948	7351	0	0	0	7	6977
58	5349	577	0	973	5349	7191	0	0	0	7	6812
59	3309	389	0	86	3309	6887	0	0	0	7	6650
60	3309	389	0	86	3309	6887	0	0	0	7	6492

RETIREE MILITARY VALUATION DATA AS OF EN FY 1980

(ALL ENLISTED)

AGE	NON- DISABLED		STRENGTH TEMP DISABLED		TOTAL		AVERAGE ANNUAL NET RETIRED PAY		TOTAL
	DISABLED	TEMP DISABLED	DISABLED	TEMP DISABLED	DISABLED	TEMP DISABLED	DISABLED	TEMP DISABLED	
71	2413	295	0	0	3522	0	6756	0	680
72	2417	275	0	0	3711	0	6929	0	680
73	2069	316	0	0	2744	0	6503	0	680
74	1615	301	0	0	2116	0	6223	0	680
75	1353	206	0	0	1779	0	6377	0	680
76	1135	182	0	0	1511	0	6370	0	680
77	966	183	0	0	1315	0	6375	0	680
78	827	206	0	0	1146	0	6542	0	680
79	779	171	0	0	1034	0	6460	0	680
80	700	173	0	0	956	0	6224	0	680
81	644	165	0	0	883	0	6214	0	680
82	584	140	0	0	766	0	6346	0	680
83	553	113	0	0	535	0	6160	0	680
84	420	85	0	0	439	0	6230	0	680
85	258	85	0	0	378	0	6460	0	680
86	174	64	0	0	291	0	5614	0	680
87	142	55	0	0	221	0	5807	0	680
88	123	36	0	0	189	0	6107	0	680
89	108	27	0	0	168	0	6291	0	680
90	6	17	0	0	23	0	6291	0	680
91	65	10	0	0	79	0	6594	0	680
92	50	14	0	0	56	0	6386	0	680
93	33	14	0	0	34	0	6351	0	680
94	39	44	0	0	43	0	4221	0	680
95	17	47	0	0	24	0	3953	0	680
96	10	64	0	0	16	0	4572	0	680
97	10	44	0	0	14	0	2972	0	680
98	0	10	0	0	10	0	1936	0	680
99	0	2	0	0	2	0	2022	0	680
100	3	0	0	0	3	0	0	0	680
101	13	2	0	0	16	0	3846	0	680
102	12	11	0	0	15	0	4062	0	680
103	17	11	0	0	15	0	4992	0	680
104	11	11	0	0	15	0	4032	0	680
105	15	3	0	0	18	0	4644	0	680
106	21	2	0	0	26	0	5934	0	680
107	21	1	0	0	24	0	10500	0	680
108	31	1	0	0	33	0	6876	0	680
109	34	1	0	0	36	0	15000	0	680
110	7	0	0	0	7	0	8275	0	680
107	746522	25419	9239	19783	860963	5567	5098	4125	7855
65+	50191	6894	0	9665	66750	7097	0	4052	6652

NOTE: AGE IS RETIREE'S CURRENT AGE TO NEAREST BIRTHDAY AT END OF FISCAL YEAR.
65+ IS TOTAL AGE 95 AND OVER.
FIGURES ADJUSTED TO 31 JULY.

UMDC - DOD ACTUARY'S OFFICE

RETIREMENT MILITARY VALUATION DATA AS OF END FY 1980

(ALL DOO)

AGE	DISABLED	PROW DISABLED	STOIC/UP DISABLED	TITLE III	TOTAL	DISABLED	FROM DISABLED	AVERAGE ANNUAL RECEIVED DISABLED	NET RETIRED PAY III	TOTAL
16	0	1	0	0	1	0	0	3216	0	3216
17	0	0	13	0	13	0	0	1674	0	1674
18	0	0	74	0	74	0	0	1133	0	1133
19	0	0	280	0	280	0	0	3538	0	3538
20	0	21	0	0	21	0	0	3017	0	3017
21	0	70	0	0	70	0	0	2207	0	2207
22	0	165	0	0	165	0	0	2202	0	2202
23	0	313	0	0	313	0	0	22570	0	22570
24	0	444	0	0	444	0	0	2267	0	2267
25	0	632	0	0	632	0	0	2888	0	2888
26	0	43	0	0	43	0	0	2834	0	2834
27	0	133	0	0	133	0	0	2851	0	2851
28	0	123	0	0	123	0	0	2851	0	2851
29	0	1263	0	0	1263	0	0	2802	0	2802
30	0	1663	0	0	1663	0	0	2802	0	2802
31	0	2133	0	0	2133	0	0	2802	0	2802
32	0	2628	0	0	2628	0	0	2802	0	2802
33	0	3009	0	0	3009	0	0	2802	0	2802
34	0	3460	0	0	3460	0	0	2802	0	2802
35	9	1942	0	0	1951	9	9	4020	0	4020
36	135	1785	121	0	2022	8356	8356	4345	0	4345
37	435	1724	137	0	2196	7744	7744	4323	0	4323
38	435	1724	184	0	2196	7744	7744	4323	0	4323
39	1513	1724	211	0	1835	8032	8032	4323	0	4323
40	2704	1397	195	0	2190	8207	8207	4323	0	4323
41	2522	1172	165	0	2899	8458	8458	4323	0	4323
42	3367	1172	151	0	3516	8821	8821	4323	0	4323
43	3367	1172	114	0	4581	9499	9499	4323	0	4323
44	4124	2274	101	0	4499	9671	9671	4323	0	4323
45	4602	3214	119	0	4151	1024	1024	4323	0	4323
46	4602	3214	190	0	4296	1054	1054	4323	0	4323
47	4602	3214	76	0	3887	1067	1067	4323	0	4323
48	5335	4627	60	0	5862	1087	1087	4323	0	4323
49	5335	4627	45	0	5880	1087	1087	4323	0	4323
50	5335	4627	203	0	5860	1087	1087	4323	0	4323
51	5335	4627	13	0	5860	1087	1087	4323	0	4323
52	5335	4627	13	0	5860	1087	1087	4323	0	4323
53	5335	4627	13	0	5860	1087	1087	4323	0	4323
54	5335	4627	13	0	5860	1087	1087	4323	0	4323
55	5335	4627	13	0	5860	1087	1087	4323	0	4323
56	5335	4627	13	0	5860	1087	1087	4323	0	4323
57	5335	4627	13	0	5860	1087	1087	4323	0	4323
58	5335	4627	13	0	5860	1087	1087	4323	0	4323
59	5335	4627	13	0	5860	1087	1087	4323	0	4323
60	5335	4627	13	0	5860	1087	1087	4323	0	4323
61	5335	4627	13	0	5860	1087	1087	4323	0	4323
62	5335	4627	13	0	5860	1087	1087	4323	0	4323
63	5335	4627	13	0	5860	1087	1087	4323	0	4323
64	5335	4627	13	0	5860	1087	1087	4323	0	4323
65	5335	4627	13	0	5860	1087	1087	4323	0	4323
66	5335	4627	13	0	5860	1087	1087	4323	0	4323
67	5335	4627	13	0	5860	1087	1087	4323	0	4323
68	5335	4627	13	0	5860	1087	1087	4323	0	4323
69	5335	4627	13	0	5860	1087	1087	4323	0	4323
70	5335	4627	13	0	5860	1087	1087	4323	0	4323

RETIRED MILITARY VALUATION DATA AS OF EN FY 1980

(ALL DOD)

AGE	DISABLED	PERM DISABLED	STRENGTH TEMP DISABLED	TOTAL	NON- DISABLED	AVERAGE ANNUAL PERM DISABLED	NET RETIRED PAY TEMP DISABLED	TOTAL
71	520	1454	0	11357	12547	12085	7020	10503
72	551	1355	0	11424	12618	11999	6660	10349
73	579	1170	0	12249	12539	11617	5557	10238
74	577	1028	0	7731	12433	12444	5771	10336
75	531	1695	0	6448	12481	11752	5662	10370
76	2795	801	0	5660	12450	11795	6677	10449
77	2295	732	0	4780	12237	11314	6599	10358
78	2007	636	0	3991	12870	11633	5282	10447
79	1735	512	0	3313	12579	11006	5374	10430
80	1546	519	0	3006	12454	11047	5347	10362
81	1254	445	0	2511	12035	10654	6003	10037
82	1037	413	0	2092	11661	11819	6033	10218
83	597	266	0	1412	11329	11423	7247	10423
84	545	270	0	1338	11827	11552	7241	11213
85	413	227	0	1089	14195	13986	5924	11133
86	314	153	0	763	15038	14571	4900	11787
87	270	140	0	665	14525	14339	4809	11970
88	220	113	0	497	14002	15089	5525	12138
89	140	112	0	343	12859	15089	6800	11540
90	129	129	0	272	13042	14475	7211	11290
91	77	50	0	200	13266	15066	5474	11579
92	61	34	0	149	11942	17358	5152	11011
93	27	28	0	108	1168	17344	5186	11360
94	17	11	0	40	12764	10566	5257	10815
95	16	11	0	31	1682	10599	4716	10423
96	15	11	0	28	1682	18084	4716	10423
97	14	11	0	28	1682	18084	4716	10423
98	14	11	0	28	1682	18084	4716	10423
99	14	11	0	28	1682	18084	4716	10423
100	14	11	0	28	1682	18084	4716	10423
101	17	11	0	28	1682	18084	4716	10423
102	20	11	0	28	1682	18084	4716	10423
103	21	11	0	28	1682	18084	4716	10423
104	26	11	0	28	1682	18084	4716	10423
105	26	11	0	28	1682	18084	4716	10423
106	24	11	0	28	1682	18084	4716	10423
107	24	11	0	28	1682	18084	4716	10423
108	24	11	0	28	1682	18084	4716	10423
109	24	11	0	28	1682	18084	4716	10423
110	24	11	0	28	1682	18084	4716	10423
TOT	100635	140893	10203	112744	1264525	8768	6235	10301
65+	104302	26562	0	64234	195098	11912	0	10654

NOTE: AGE IS RETIREE'S CURRENT AGE TO NEAREST BIRTHDAY AT END OF FISCAL YEAR.
PERM DISABLED IS TOTAL AGE 65 AND OVER.
STRENGTH IS ADJUSTED TO AUGUST.

UMDC - DOD ACTUARY'S OFFICE

APPENDIX D

Table 1
Comparison of Active Military Totals by Source, Category, and Date
As of Date and Source

	September 30, 1976			September 30, 1977			September 30, 1978			September 30, 1979		
Category	1/ WDC	2/ WIS	3/ Budget	1/ WDC	2/ WIS	3/ Budget	1/ WDC	2/ WIS	3/ Budget	1/ WDC	2/ WIS	3/ Budget
Officers	274,033	274,197	274,336	275,941	275,956	274,993	274,011	274,275	273,316	273,039	274,129	274,129
Army	18,275	18,151	18,176	18,711	18,708	18,755	18,745	18,745	18,745	18,745	18,745	18,745
Navy	11,466	11,466	11,466	11,466	11,466	11,466	11,466	11,466	11,466	11,466	11,466	11,466
Marine Corps	18,657	18,657	18,657	18,657	18,657	18,657	18,657	18,657	18,657	18,657	18,657	18,657
Air Force	99,244	99,244	99,244	99,244	99,244	99,244	99,244	99,244	99,244	99,244	99,244	99,244
Enlisted	1,775,554	1,791,135	1,791,133	1,746,657	1,785,173	1,795,173	1,773,867	1,775,021	1,775,019	1,739,402	1,740,350	1,740,350
Army	680,007	680,077	680,074	680,033	680,062	680,062	669,333	669,315	669,313	659,978	657,193	657,193
Navy	459,707	460,231	460,231	461,571	462,176	462,176	462,276	463,217	463,217	456,000	457,192	457,192
Marine Corps	171,216	171,216	171,216	171,129	171,129	171,129	171,411	171,411	171,411	172,427	166,971	166,971
Air Force	479,624	479,624	479,624	469,878	469,878	469,878	469,847	469,847	469,847	458,953	458,953	458,953

1/ Based upon Defense Manpower Data Center Active Master Files for these periods.
2/ Based upon Washington Headquarters Services Report P26.0 for these periods with cadet excluded.
3/ Based upon the Presidents' Budgets for Fiscal 1978, 1979, 1980, and 1981 with cadets included.

Table II

ACTIVE DECREMENT RATE FORMULAS

WITHDRAWAL FROM ACTIVE DUTY (by completed years of service)

$$\frac{\text{withdrawals during year}}{\text{number at beginning of year}}$$

ACTIVE DEATH (by age nearest birthday)

$$\frac{\text{deaths during year}}{\text{number at beginning of year} - \frac{1}{2} \text{ withdrawals and nondisability retirees during year}}$$

NONDISABILITY RETIREMENT (by completed years of service)

$$\frac{\text{new retirees during year}}{\text{number at beginning of year}}$$

TEMPORARY DISABILITY RETIREMENT (by completed years of service)

$$\frac{\text{new temporary disabilities during year}}{\text{number at beginning of year} - \frac{1}{2} \text{ withdrawals and nondisability retirees during year}}$$

PERMANENT DISABILITY RETIREMENT (by completed years of service)

$$\frac{\text{new permanent disabilities from active duty}}{\text{number at beginning of year} - \frac{1}{2} \text{ withdrawals and nondisability retirees during year}}$$

TRANSFER RATES (by completed years of service)

$$\frac{\text{transfers to category during year}}{\text{number at beginning of year} - \frac{1}{2} \text{ withdrawals and nondisability retirees during year}}$$

REENTRY RATES (by completed years of service)

$$\frac{\text{number re-entering year}}{\text{number at beginning of year}}$$

Table III
Summary of Graduation Techniques Used

<u>Rate</u>	<u>Category</u>	<u>Ages or Lengths of Service</u>	<u>Technique</u>
Death	All Enlistee	Ages 17-60	WH2
	All Officer	Ages 19-60	WH2
Temporary Disability Retirement	Regular Enlistee	Under 17 years	WH3
		17-19	Ungraduated Rates
	Nonregular Enlistee	Over 19	WH2
		Under 17 years	WH3
	Regular Officer	17-20	Ungraduated Rates
		Over 20	Ungraduated (all zeroes)
	Nonregular Officer	Under 17 years	WH2
		17-18	Ungraduated Rates
	Regular Enlistee	Over 18	WH2
		Under 17 years	WH2
Permanent Disability Retirement	Regular Enlistee	17-21	Ungraduated Rates
		Over 21	WH2
	Nonregular Enlistee	Under 17 years	WH3
		17-18	Ungraduated Rates
	Regular Officer	Over 18	WH3
		Under 17	WH2
	Nonregular Officer	17-20	Ungraduated Rates
		Over 20	Ungraduated (all zeroes)
	Regular Enlistee	Under 17	WH2
		17-18	Ungraduated Rates
Permanent Disability Retirement	Regular Officer	Over 18	WH2
		Under 17	WH2
	Nonregular Officer	17-19	Ungraduated Rates
		Over 19	WH3

Table III (Continued)
Summary of Graduation Techniques Used

<u>Rate</u>	<u>Category</u>	<u>Ages or Lengths of Service</u>	<u>Technique</u>
Transfer to Regular Enlistee	Nonregular Enlistee	All	WH3
	Regular Officer	Under 25 years	WH3
	Nonregular Officer	25 or more	Ingraduated Rates (zeroes)
Transfer to Nonregular Enlistee	Regular Enlistee	Under 3 years	WH2
	Regular Officer	3-19	Ingraduated Rates
	Nonregular Officer	Over 19	Zero
Transfer to Regular Officer	Regular Enlistee	Under 28 years	WH2
	Regular Officer	28 or more	Ingraduated (zeroes)
	Nonregular Officer	Under 4 years	WH2
Transfer to Nonregular Officer	Regular Enlistee	4 or more	Ingraduated (zeroes)
	Regular Officer	Under 20 years	WH2
	Nonregular Officer	20 or more	Zeroes
Transfer to Regular Enlistee	Regular Enlistee	1, 2, and	Zeroes
	Regular Officer	over 24 years	WH3
	Nonregular Officer	Elsewhere	WH3
Transfer to Nonregular Enlistee	Regular Enlistee	Under 20 years	Ingraduated (zeroes)
	Regular Officer	20 or more	Ingraduated Rates
	Nonregular Officer	Under 7	WH2
Transfer to Regular Officer	Regular Enlistee	7-36	Ingraduated (zeroes)
	Regular Officer	Over 36	WH3
	Nonregular Officer	Under 28	Ingraduated (zeroes)
Transfer to Nonregular Officer	Regular Enlistee	28 or more	Ingraduated Rates
	Regular Officer	Under 5 years	Graphically Smoothed
	Nonregular Officer	5-9	WH3
Transfer to Regular Enlistee	Regular Enlistee	10-18	Ingraduated (zeroes)
	Regular Officer	Over 18	WH3
	Nonregular Officer	0, 1, 4, 5, 18-21	Ingraduated Rates
Transfer to Nonregular Enlistee	Regular Enlistee	Elsewhere	WH3
	Regular Officer		WH3
	Nonregular Officer		WH3

Table III (Continued)
Summary of Graduation Techniques Used

Rate	Category	Ages or Lengths of Service	Technique
Nondisability Retirement	Regular Enlistee	Under 18 years 18, 29 Elsewhere	Zero Ungraded Rates WH2
	Nonregular Enlistee	Under 18 years 18 Over 18	Zero Ungraded Rate WH2
	Regular Officer	Under 18 years 18, 28-30 Elsewhere	Zero Ungraded Rates WH3
	Nonregular Officer	Under 18 years 18, 28-29 Elsewhere	Zero Ungraded Rates WH3
	Regular Enlistee	Under 7 and over 16 years 7-16	Ungraded Rates WH2
	Nonregular Officer	Under 4 and over 15 years 4-15	Ungraded Rates WH2
	Regular Officer	Under 2 and over 11 years 2-11	Ungraded Rates WH3
	Nonregular Officer	Under 4 and over 18 years 4-18	Ungraded Rates WH3
Other Losses			

Table III (Continued)
Summary of Graduation Techniques Used

<u>Rate</u>	<u>Category</u>	<u>1/ Age or Length of Service</u>	<u>2/ Technique</u>
Reentry Rate	Regular Enlistee	Under 16 18-36	WH2 WH2
	Nonregular Enlistee	0-16 17-20 21-35	WH3 Ungraduated rates WH2
	Regular Officer	Under 5 5-19 20-39	Ungraduated rates WH3 WH2
	Nonregular Officer	Under 6, 19 6-18 20-40	Ungraduated rates WH3 WH2

WH2: Whitaker-Henderson second differences
WH3: Whitaker-Henderson third differences

APPENDIX E

Table I

Military Retirees in Current Pay Status by Source
by Branch of Service, Officer/Enlisted and Type of Retirement
September 30, 1978, 1979, 1980

Item	1978		1979		1980	
	DMDC*	Budget**	DMDC*	Budget**	DMDC*	Budget**
Nondisabled Army Officers	132,301	132,015	138,237	137,957	143,645	143,587
Nondisabled Army Enlistees	205,127	205,408	211,764	212,039	217,956	218,182
Nondisabled Navy Officers	72,431	72,402	75,095	75,095	77,806	77,788
Nondisabled Navy Enlistees	205,003	204,879	209,609	209,609	215,228	215,201
Nondisabled M.C. Officers	13,917	13,911	14,820	14,826	15,765	15,768
Nondisabled M.C. Enlistees	33,695	33,702	34,508	34,500	35,425	35,415
Nondisabled A.F. Officers	98,601	98,535	104,114	104,196	109,894	109,981
Nondisabled A.F. Enlistees	277,666	277,640	287,981	287,907	297,873	297,507
Disabled Army Officers	29,361	29,378	28,626	28,633	27,989	27,985
Disabled Army Enlistees	33,643	33,631	34,156	34,154	35,160	35,144
Disabled Navy Officers	9,074	9,047	8,852	8,852	8,609	8,607
Disabled Navy Enlistees	21,684	21,385	21,222	21,222	20,965	20,951
Disabled M.C. Officers	3,076	3,078	3,043	3,048	3,012	3,017
Disabled M.C. Enlistees	10,147	10,135	10,056	10,044	10,069	10,059
Disabled A.F. Officers	17,467	17,467	17,193	17,201	16,835	16,829
Disabled A.F. Enlistees	29,442	29,442	29,160	29,211	28,515	28,504

*Based upon magnetic tape files submitted from the Service Finance Centers to the Defense Manpower Defense Center.

**Based upon actual accounting reports sent from the military Services to the Comptroller's office (Reports Control Symbol: DD-COMP(M)897).

Table 11
Percent of Cases
Where Needed Data Elements Were Unknown

Type of Retirement	Grade	Data Element	Percent Unknown	
			FY79	FY80
All	All	Type of Retirement	0.04	0.04
Temporary Disability	All	Grade	0.00	0.00
	Officers	Age	7.06	6.58
		Status at End of Fiscal Year	2.38	1.88
		Years Retired	2.98	1.50
	Enlistees	Age	8.68	9.87
		Status at End of Fiscal Year	2.97	3.06
		Years Retired	0.96	0.87
Permanent Disability	All	Grade	0.01	0.01
	Officers	Age	0.32	0.37
		Status at End of Fiscal Year	0.32	0.06
	Enlistees	Age	0.83	0.90
		Status at End of Fiscal Year	0.38	0.13
Nondisability	All	Grade	0.00	0.00
	Officers	Age	1.14	1.23
		Status at End of Fiscal Year	0.14	0.04
	Enlistees	Age	1.91	1.93
		Status at End of Fiscal Year	0.15	0.05

Table III
Proportion of the Change

<u>Type of Retirement and Grade</u>	<u>Fiscal 1979</u>		<u>Fiscal 1980</u>	
	<u>Age Known</u>	<u>Age Unknown</u>	<u>Age Known</u>	<u>Age Unknown</u>
Temporary Disability				
Officer	.90	.89	.90	.90
Enlistee	.82	.85	.82	.88
Permanent Disability				
Officer	.97	.98	.97	.96
Enlistee	.95	.93	.96	.95
Nondisability				
Officer	.98	.99	.98	.99
Enlistee	.98	.99	.98	.99

*This table gives the proportion of retirees in paid status at the beginning of the fiscal year who were still in paid status at the end of the fiscal year.

Table IV

Comparison of Deaths by Source After Allocating
Unknowns for Permanent Disability and Nondisability Retirees

Type of Retirement & Branch of Service	<u>Officers</u>				<u>Enlistees</u>			
	<u>Fiscal 1979</u>		<u>Fiscal 1980</u>		<u>Fiscal 1979</u>		<u>Fiscal 1980</u>	
	<u>DMDC*</u>	<u>OSD**</u>	<u>DMDC*</u>	<u>OSD**</u>	<u>DMDC</u>	<u>OSD**</u>	<u>DMDC*</u>	<u>OSD**</u>
Permanent Disability								
Army	900	904	854	851	608	581	680	670
Navy	268	291	311	337	327	496	383	570
Marine Corps	59	61	53	57	110	219	72	185
Air Force	409	408	422	NA	527	526	519	NA
Nondisability								
Army	2588	2614	2871	2866	2830	2875	3227	3221
Navy	1415	1410	1598	1523	2399	2500	2597	2862
Marine Corp	177	187	188	201	333	356	380	439
Air Force	1107	1095	1223	NA	2243	2216	2439	NA

*Based upon magnetic tape files submitted from Service Finance Centers to the Defense Manpower Data Center.

**Based upon actual accounting reports sent from the military Services to the Office of the Assistant Secretary of Defense (Comptroller), Reports Control
Symbol: DD-COMP(M)897.

Table V

RETIREE DECREMENT RATE FORMULAS

DEATH OF NONDISABILITY RETIREES (by age nearest birthday)

$$\frac{\text{Nondis deaths}}{\text{Number at beginning} - \frac{1}{2} (\text{Nondis deaths} + \text{other nonVA losses}) \text{ of year}}$$

DEATH OF PERMANENT DISABILITY RETIREES (by age nearest birthday)

$$\frac{\text{Perm disability deaths}}{\text{Number at beginning} - \frac{1}{2} (\text{Perm dis deaths} + \text{other nonVA losses}) \text{ of year}}$$

DEATH OF TEMPORARY DISABILITY RETIREES (by age nearest birthday and years retired)

$$\frac{\text{Temporary disability deaths in category*}}{\text{Number at beginning} - \frac{1}{2} (\text{Deaths} + \text{transfers} + \text{nonVA losses}) \text{ of year}}$$

RATES OF NONDEATH, NONTRANSFER, NONVA LOSS FROM NONDISABILITY (by age nearest birthday and years retired)

$$\frac{\text{Nondeath, nontransfer, nonVA losses}}{\text{Number at beginning of year}}$$

RATE OF NONDEATH, NONTRANSFER, NONVA LOSS FROM PERMANENT DISABILITY (by age nearest birthday and years retired)

$$\frac{\text{Nondeath, nontransfer, nonVA losses}}{\text{Number at beginning of year}}$$

RATES OF NONDEATH, NONTRANSFER, NONVA LOSS FROM TEMPORARY DISABILITY (by age nearest birthday and years retired)

$$\frac{\text{Nondeath, nontransfer, nonVA losses}}{\text{Number at beginning of year}}$$

RATES OF TRANSFER FROM TEMP TO PERMANENT DISABILITY (by age nearest birthday and years retired)

$$\frac{\text{Transfers to permanent}}{\text{Number at beginning of year}}$$

*Includes deaths that were temporarily disabled at beginning of year, transferred to permanently disabled, then died during that same year.

Table VI

Summary of Graduation Techniques Used to Create
Permanent Disability and Nondisability Retiree Decrement Rates

<u>Rate</u>	<u>Category</u>	<u>Ages</u>	<u>Technique*</u>
Death	Permanent Disability Officers	28 - 81	WH3
		Elsewhere	LP
	Enlistees	20 - 81	WH3
		Elsewhere	LP
	Nondisability Officers	38 - 81	WH3
		Elsewhere	LP
	Enlistees	39 - 81	WH3
		Elsewhere	LP
"Other Loss"***	Permanent Disability Officers	50 - 80	WH3
		Elsewhere	Set to Zero
	Enlistees	20 - 88	WH3
		Elsewhere	Set to Zero
	Nondisability Officers	38 - 53	WH3
		54 - 93	WH3
	Enlistees	Elsewhere	Set to Zero
		35 - 53	WH3
		54 - 94	WH3
		Elsewhere	Set to Zero

*WH3 = Whittaker-Henderson with third differences.

LP = Linear projection at the logarithms of the graduated values.

***"Other Loss" means all losses except death and VA waiver.

Table VII

Summary of Graduation Techniques Used
for Temporary Disability Decrement Rates

<u>Rate</u>	<u>Group</u>	<u>Years Retired</u>	<u>Age*</u>	<u>Technique**</u>
Transfer to Permanent Disability	Officers	0	25-59	WH2
		1	25-59	WH2
		2	27-59	WH2
		3	28-59	WH2
	Enlistees	0	18-59	WH3
		1	19-59	WH3
		2	20-59	WH?
		3	21-59	WH3
Other Loss***	Officers	0	25-48	WH2
		1	25-51	WH2
		2	27-51	WH2
		3	28-59	WH2
		4	28-58	WH2
	Enlistees	0	18-52	WH2
		1	19-57	WH2
		3	21-55	WH3
		4	22-59	WH2

*Rates for ages outside these ranges were created by extending or projecting or projecting the rates at the end points.

**WH2 = Whittaker-Henderson with second differences.

WH3 = Whittaker-Henderson with third differences.

***Other Losses include all losses other than death, VA waiver, and transfer to permanent disability retired status.

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