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## CHAPTER II. EFFECTS ON BUDGET AUTHORITY AND OUTLAYS OF ALTERNATIVE APPROACHES TO ACCRUAL ACCOUNTING

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This chapter focuses on the proposals for accrual accounting made by the House Armed Services Committee and the Administration, since these are the most likely to be debated by the Congress. Since the approaches are very similar, they are discussed together. Minor differences are noted during the discussion.

### Specific Provisions

The essential step in accrual accounting is to replace the present retired pay appropriation for current retirees in the defense budget with an accrual charge for military retirement. The House Armed Services and the Administration proposals both do this.

They would also liquidate the unfunded liability--that is, the retirement liabilities accumulated for military service performed prior to the implementation of the accrual system--by amortizing it over a specified period of time through annual payments into a trust fund. The trust fund, which would also receive the annual accrual charge, would pay all retirement benefits and earn interest on its balance.

Finally, both options would establish an independent board of actuaries to determine the economic assumptions and actuarial basis of the accrual system. These include projections of inflation, interest rates, and wage growth in addition to actuarial valuations of death, disability, withdrawal, and retirement rates. The board would also determine the period of time over which the system's original unfunded liability would be amortized. The members of the board, who would be appointed by the President for terms of 15 years, would report annually to the Secretary of Defense and periodically to the President and the Congress on the status of the trust fund, and on its accounting assumptions. The board would recommend changes needed to ensure that the trust fund remained actuarially sound.

The House Armed Services and Administration proposals differ significantly in only two ways. The Administration proposal would have accrual accounting begin in fiscal year 1984, the House in 1985. (For simplicity, this

study assumes that both are implemented beginning in 1985, since it seems unlikely that such a complex change can be accomplished by the beginning of 1984.) The Administration proposal would provide annual funds from the defense function to pay off the unfunded liability, whereas the House proposal would finance this out of the general fund of the Treasury. The following discussion of budget effects illustrates the difference.

### Budget Effects in Fiscal Year 1985

Key Changes. The most important changes in the system of accounts would occur in the Department of Defense military budget and in the total federal budget. Tables 2 and 3 show how the changes would affect the accounts under the House Armed Services and Administration proposals respectively.

The important changes are reflected in columns 1 and 7 in each table. Column 1 shows the changes that would occur in the Department of Defense's military budget (subfunction 051). Under both proposals, it would no longer include the retired pay appropriation of \$17.6 billion. In its place, the Department of Defense would incur an accrual charge of \$17.0 billion, for a net reduction of \$0.6 billion. Under each proposal, the same change would take place in the total defense function (function 050), which includes not only the military budget but also civil and other defense activities.

The accrual charge of \$17.0 billion represents 50.7 percent of the expected 1985 cost for military basic pay. <sup>1/</sup> Actuaries estimate the 50.7 percent using a so-called "entry-age normal method" and specific assumptions about future mortality, interest rates, wage growth, and other variables. <sup>2/</sup>

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1. The actuarial costs are expressed as a percentage of basic pay because this is the only pay that all military personnel receive in cash. As a percentage of total pay--which includes other allowances and pays other than basic pay--the percentage would be lower. Thus care should be used when comparing the 50.7 percent to percentages for other private or public pension plans.
  2. Actuaries commonly call this the entry-age normal cost. It represents the charge--expressed as a constant percentage of basic pay--that must be set aside each year to fund future retirement annuities that are earned by the military work force in the current year. The long-

Column 7 in each table shows the second important change, namely the change that would result in the total federal budget. Under both proposals, there would be no effect on total outlays, since there would be no change in retirement benefits as a result of the adoption of the accrual system. Total budget authority, however, would increase as the budget began to recognize the system's future retirement liabilities. In 1985, this would equal \$16.1 billion for reasons discussed below.

Changes to Set Up Trust Fund. Columns 2 through 6 in each table show the changes from current accounting procedures needed to set up and maintain the military retirement trust fund. Column 2 shows the funds coming into and going out of the trust fund. Under both proposals, the trust fund receives an accrual charge of \$17.0 billion in budget authority. But the accrual charge only reflects future retirement liabilities. In order for the system to be actuarially sound, as both the House Armed Services and Administration proposals require, the unfunded liability built up before implementation of accrual accounting must be amortized over a specified period of time. <sup>3/</sup> However, neither proposal specifies the period. If 40-year amortization is assumed (consistent with the requirements for private pension plans set out in the Employee Retirement Income Security Act), then a payment of \$15.5 billion in budget authority in fiscal year 1985 would be made into the trust fund. <sup>4/</sup>

The House Armed Services bill requires that this payment on the unfunded liability be made from the general fund of the Treasury, shown in

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term economic assumptions used by the DoD actuary in the calculation of the 50.7 percent estimate include increases of 5.5 percent per year, and a nominal interest rate of 6 percent per year. In addition, the 50.7 percent estimate is based upon an actuarial assumption of dynamic improvements in life expectancy.

3. In addition to the pre-existing unfunded liability, new unfunded liabilities or actuarial surpluses may occur after the creation of a trust fund as a result of differences between economic and actuarial assumptions and actual experience. Both the House Armed Services and Administration proposals provide for the amortization of any new unfunded liability along with the pre-existing unfunded liability. In the case of actuarial surpluses, the two approaches would liquidate and transfer them to the general fund of the Treasury.
4. The accounting is the same regardless of the payoff period chosen.

TABLE 2. CHANGES IN FISCAL YEAR 1985 ACCOUNT STRUCTURE UNDER ACCRUAL ACCOUNTING:  
HOUSE ARMED SERVICES VERSION BY FUNCTION, AGENCY, AND SUBFUNCTION  
(40-year amortization, in billions of dollars)

	(1)		(2)		(3)		(4)		(5)		(6)		(7)	
	Defense DoD Military (051)		Income Security DoD Civil: Military Retirement Trust Fund (602)		General Government DoD Civil: Payment for Unfunded Liability (805)		Undistributed Offsetting Receipts Employer Share, Employee Retirement (951)		Interest Treasury: Interest on the Public Debt (901)		Undistributed Offsetting Receipts Interest Received by Trust Funds (902)		Total Budget	
	BA	O a/	BA	O	BA	O	BA	O	BA	O	BA	O	BA	O
Accrual Charge b/	17.0	17.0	17.0	0.0	0.0	0.0	-17.0	-17.0	0.0	0.0	0.0	0.0	17.0	0.0
Unfunded Liabilities														
Appropriation from federal fund to trust fund	0.0	0.0	15.5	0.0	15.5	15.5	0.0	0.0	0.0	0.0	0.0	0.0	31.0	15.5
Offsetting collections	0.0	0.0	0.0	0.0	-15.5	-15.5	0.0	0.0	0.0	0.0	0.0	0.0	-15.5	-15.5
Interest on Trust Fund Balance	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	1.2	1.2	-1.2	-1.2	1.2	0.0
Retired Pay Appropriations	-17.6	-17.6	0.0	17.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-17.6	0.0
Total	-0.6	-0.6	33.7	17.6	0.0	0.0	-17.0	-17.0	1.2	1.2	-1.2	-1.2	16.1	0.0

a. BA is Budget Authority and O is Outlays.

b. Assumes HASC fiscal year 1984 pay raise of 4.0 percent, CBO baseline pay raise of 4.8 percent in fiscal year 1985, and constant fiscal year 1983 end strength.

TABLE 3. CHANGES IN FISCAL YEAR 1985 ACCOUNT STRUCTURE UNDER ACCRUAL ACCOUNTING:  
ADMINISTRATION'S PROPOSAL BY FUNCTION, AGENCY, AND SUBFUNCTION  
(40-year amortization, in billions of dollars)

	(1)		(2)		(3)		(4)		(5)		(6)		(7)	
	Defense DoD Military (051)		Income Security DoD Civil: Military Retirement Trust Fund (602)		Defense DoD Civil: Payment for Unfunded Liability (054)		Undistributed Offsetting Receipts Employer Share, Employee Retirement (951)		Interest Treasury: Interest on the Public Debt (901)		Undistributed Offsetting Receipts Interest Received by Trust Funds (902)		Total Budget	
	BA	O a/	BA	O	BA	O	BA	O	BA	O	BA	O	BA	O
Accrual Charge b/	17.0	17.0	17.0	0.0	0.0	0.0	-17.0	-17.0	0.0	0.0	0.0	0.0	17.0	0.0
Unfunded Liabilities														
Appropriation from federal fund to trust fund	0.0	0.0	15.5	0.0	15.5	15.5	0.0	0.0	0.0	0.0	0.0	0.0	31.0	15.5
Offsetting collections	0.0	0.0	0.0	0.0	-15.5	-15.5	0.0	0.0	0.0	0.0	0.0	0.0	-15.5	-15.5
Interest on Trust Fund Balance	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	1.2	1.2	-1.2	-1.2	1.2	0.0
Retired Pay Appropriations	-17.6	-17.6	0.0	17.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-17.6	0.0
Total	-0.6	-0.6	33.7	17.6	0.0	0.0	-17.0	-17.0	1.2	1.2	-1.2	-1.2	16.1	0.0

a. BA is Budget Authority and O is Outlays.

b. Assumes HASC fiscal year 1984 pay raise of 4.0 percent, CBO baseline pay raise of 4.8 percent in fiscal year 1985, and constant fiscal year 1983 end strength.

column 3 of Table 2 as a payment from subfunction 805. This avoids adding costs to the defense function not related to current defense decisions. Under the Administration proposal, as shown in column 3 of Table 3, the payment on the unfunded liability would be made out of subfunction 054 of the defense function--presumably because it is defense-related--but would also be offset in subfunction 054 to avoid including in the defense function costs related to current defense decisions. Thus, the difference in the placement of the payment on the unfunded liability represents a minor difference that does not affect the total amount in the defense function 050.

In addition to the accrual charge and the payment on the unfunded liability, the trust fund would also receive in budget authority \$1.2 billion in interest on the trust fund balance (arising because the \$15.5 billion unfunded liability income plus the accrual charge exceed the \$17.6 billion in outlays for current retirees). 5/

Changes to Avoid Double Counting. The remaining changes in columns 3 to 6 offset certain of the above transactions to avoid double counting. All changes in outlays are offset, since outlays are not changed in the total budget (see column 7). However, not all of the changes in budget authority are offset. Budget authority initially increases by an amount equal to the funds coming into the trust fund for future retirement liabilities: \$17.0 billion for the accrual charge, plus \$15.5 billion for payment on the unfunded liability, plus \$1.2 billion for interest on the trust fund balance. This increase is partially offset because under accrual accounting--which reflects future liabilities rather than liabilities already incurred--budget authority for the \$17.6 billion in payments for those already retired no longer appears in the budget. Current retirees are funded from the accrual and unfunded liability appropriations plus any interest earned. Net budget authority in the overall budget, therefore, increases by \$16.1 billion (\$17.0 billion plus \$15.5 billion plus \$1.2 billion less the offset of \$17.6 billion). This \$16.1 billion becomes the trust fund balance at the end of 1985 and also represents an increase in the federal debt. All of the debt increase would be internal to the federal government, however, so debt held by the public would not be affected.

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5. As noted above, these estimates are based on the assumption of a 40-year payoff period. In the case of a 75-year payoff period, the payment on the unfunded liability would be \$8.9 billion instead of \$15.5 billion, and interest payments \$0.7 billion rather than \$1.2 billion (see tables in Appendix C).

## Budget Effects Beyond 1985

In the years beyond 1985, accrual accounting still would not change total federal outlays. The effects it would have on budget authority, and on outlays in individual budget functions, depend on the assumptions made concerning the size of the military and the relation of wages, interest rates, and prices in those years. For purposes of illustration, it is assumed here that military end strength remains at the fiscal year 1983 level, interest rates decline from 7.1 percent in 1986 to 6 percent in 1990, and wages increase by 4.8 percent annually. These assumptions are consistent with those used by CBO in its January 1983 five-year projections.

As is reflected in Table 4, implementing accrual accounting under these assumptions would result in continued reductions in budget authority and outlays in the defense function relative to its size under current accounting procedures, since the accrual charge would grow more slowly than the retired pay appropriations it replaced (see second and third columns of Table 4). Also shown in Table 4 is the growing trust fund balance, which would result in increases in total federal budget authority. Ultimately, the trust fund balance would reach a level sufficient to pay total obligations to current and future retirees. Assuming no changes in end strength, retirement benefits, or economic and actuarial assumptions, the trust fund balance would remain at this steady-state level indefinitely.

TABLE 4. MILITARY RETIREMENT OUTLAYS, APPROPRIATIONS, NET FLOWS INTO THE TRUST FUND, AND TRUST FUND BALANCES FOR HOUSE ARMED SERVICES AND ADMINISTRATION PROPOSALS, FISCAL YEARS 1985-1990  
(In billions of dollars) a/

Fiscal Year	Retired Pay Outlays <u>b/</u>	Accrual Cost	Payment on the Unfunded Liability	Net Amount Going to Trust Fund <u>c/</u>	Trust Fund Balance (End of Year)
Unfunded Liability Amortized Over 40 Years					
1985	17.6	17.0	15.5	14.9	16.1
1986	18.8	17.8	16.3	15.3	33.7
1987	19.8	18.6	17.2	16.0	52.9
1988	20.9	19.5	18.1	16.7	73.8
1989	23.1	21.2	19.1	17.2	96.5
1990	24.6	22.5	20.2	18.1	121.5
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Unfunded Liability Amortized Over 75 Years					
1985	17.6	17.0	8.9	8.3	9.0
1986	18.8	17.8	9.4	8.4	18.6
1987	19.8	18.6	9.9	8.7	29.1
1988	20.9	19.5	10.5	9.1	40.5
1989	23.1	21.1	11.0	9.1	52.6
1990	24.6	22.5	11.7	9.6	65.9

- a. Appropriations include both the accrual charge and the payment on the unfunded liability.
- b. Also represents what retired pay appropriations would be under the current accounting system.
- c. Does not include interest on the trust fund.

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## APPENDIXES

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APPENDIX A. BRIEF DESCRIPTION OF THE CURRENT  
MILITARY RETIREMENT SYSTEM

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The current military retirement system consists of three noncontributory components. It pays retirement benefits to military personnel with 20 years or more of active service, to qualifying reservists at age 60, and to qualifying individuals on disability retirement from the military. The system also pays benefits to surviving families of members who elected to forgo part of their annuity in order to have survivor's family benefits.

The basic active-duty nondisability benefit is calculated as 50 percent of basic pay for those with 20 years of service and 2.5 percent for each additional year of service, up to a maximum of 75 percent of basic pay for those with 30 years or more. The basic pay used in the calculation of benefits is equal to final basic pay if the retiree entered the Armed Services before September 8, 1980. For those who entered on or after September 8, 1980, basic pay (for benefit calculation purposes) is equal to the average of the highest 36 months of basic pay. Reservists receive points for portions of years of creditable service for retirement purposes and at the age of 60 can (so long as they have at least 20 years of creditable service) receive a benefit based on this service. Those on disability retirement receive basic pay multiplied by the larger of (1) 2.5 percent times years of service, or (2) the percent of disability (not to exceed 75 percent of base pay).

At the end of fiscal year 1982, over 1 million persons were receiving regular retirement benefits, 133,244 reservist benefits, 142,105 disability benefits, and 77,346 survivor benefits. In fiscal year 1982, system outlays were \$14.9 billion. This is expected to rise to \$16.4 billion in fiscal year 1983 and \$20.9 billion in fiscal year 1988.



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## APPENDIX B. UNFUNDED LIABILITY AND THE TRUST FUND

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The key feature of accrual accounting would be the replacement of the present retired pay appropriation in the defense budget with an accrual charge; this step would achieve the improved visibility of manpower costs. The establishment of a trust fund and the paying off of unfunded liability are not essential to a viable accrual system for military retirement.

However, many proposals to establish accrual accounting for military retirement obligations call for creating a trust fund and amortizing the system's pre-existing unfunded liability, following the example set by private-sector pension plans. In considering their merits, it should be emphasized that the accrual charge is a separate issue from the liquidation of the unfunded liability. It should also be noted that the unfunded liability in private-sector pension plans differs in its importance from a similar liability in a public-sector plan. Fully funded pension plans with funds held in trust offer private-sector employees a measure of protection against benefit losses from adverse economic circumstances or company mismanagement. While such safeguards may be necessary in the private sector, they are not essential in a military retirement system that is backed by the resources of the federal government.

Proponents of a military retirement trust fund also argue that interest earned on invested balances would provide additional funds to defray future retirement obligations. But such earnings would represent only accounting transactions, since the trust fund would invest in federal government securities; interest would take the form of payments from one part of the government to another.

Another point raised in connection with the handling of the unfunded liability is that the failure to liquidate it through amortization would prevent the system from being actuarially sound. While amortization is a requirement for most private-sector pension plans, it would not be essential to accrual accounting for military retirement. Since total outlays for retirement benefits would not be affected under an accrual system, all that would be necessary is that the accrual charge in any given year cover actual retirement outlays. If it failed to do so, the shortfall for that year could be made up by a supplemental appropriation from the general fund of the Treasury, which would be tabulated under the income security function.



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APPENDIX C. CHANGES IN ACCOUNT STRUCTURE  
UNDER 75-YEAR AMORTIZATION  
OF THE UNFUNDED LIABILITY

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TABLE C-1. CHANGES IN FISCAL YEAR 1985 ACCOUNT STRUCTURE UNDER ACCRUAL ACCOUNTING:  
HOUSE ARMED SERVICES VERSION BY FUNCTION, AGENCY, AND SUBFUNCTION  
(75-year amortization, in billions of dollars)

	(1)		(2)		(3)		(4)		(5)		(6)		(7)	
	<u>Defense</u> DoD Military (051)		<u>Income Security</u> DoD Civil: Military Retirement Trust Fund (602)		<u>General Government</u> DoD Civil: Payment for Unfunded Liability (805)		<u>Undistributed Offsetting Receipts</u> Employer Share, Employee Retirement (951)		<u>Interest Treasury:</u> Interest on the Public Debt (901)		<u>Undistributed Offsetting Receipts</u> Interest Received by Trust Funds (902)		<u>Total Budget</u>	
	BA	O a/	BA	O	BA	O	BA	O	BA	O	BA	O	BA	O
Accrual Charge b/	17.0	17.0	17.0	0.0	0.0	0.0	-17.0	-17.0	0.0	0.0	0.0	0.0	17.0	0.0
Unfunded Liabilities														
Appropriation from federal fund to trust fund	0.0	0.0	8.9	0.0	8.9	8.9	0.0	0.0	0.0	0.0	0.0	0.0	17.8	8.9
Offsetting collections	0.0	0.0	0.0	0.0	-8.9	-8.9	0.0	0.0	0.0	0.0	0.0	0.0	-8.9	-8.9
Interest on Trust Fund Balance	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.7	0.7	-0.7	-0.7	0.7	0.0
Retired Pay Appropriations	-17.6	-17.6	0.0	17.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-17.6	0.0
Total	-0.6	-0.6	26.6	17.6	0.0	0.0	-17.0	-17.0	0.7	0.7	-0.7	-0.7	9.0	0.0

a. BA is Budget Authority and O is Outlays.

b. Assumes HASC fiscal year 1984 pay raise of 4.0 percent, CBO baseline pay raise of 4.8 percent in fiscal year 1985, and constant fiscal year 1983 end strength.

TABLE C-2 CHANGES IN FISCAL YEAR 1985 ACCOUNT STRUCTURE UNDER ACCRUAL ACCOUNTING:  
ADMINISTRATION'S PROPOSAL BY FUNCTION, AGENCY, AND SUBFUNCTION  
(75-amortization, in billions of dollars)

	(1)		(2)		(3)		(4)		(5)		(6)		(7)		
	BA	Oa/	BA	O	BA	O	BA	O	BA	O	BA	O	BA	O	
Accrual Charge b/	17.0	17.0	17.0	0.0	0.0	0.0	0.0	-17.0	-17.0	0.0	0.0	0.0	0.0	17.0	0.0
Unfunded Liabilities															
Appropriation from federal fund to trust fund	0.0	0.0	8.9	0.0	8.9	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.8	8.9
Offsetting collections	0.0	0.0	0.0	0.0	-8.9	-8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-8.9	-8.9
Interest on Trust Fund Balance	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.7	0.7	-0.7	-0.7	0.7	0.7	0.0
Retired Pay Appropriations	-17.6	-17.6	0.0	17.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-17.6	0.0
Total	-0.6	-0.6	26.6	17.6	0.0	0.0	-17.0	-17.0	0.7	0.7	-0.7	-0.7	9.0	9.0	0.0

a. BA is Budget Authority and O is Outlays.

b. Assumes HASC fiscal year 1984 pay raise of 4.0 percent, CBO baseline pay raise of 4.8 percent in fiscal year 1985, and constant fiscal year 1983 end strength.





