Statement of
Rudolph G. Penner
Director
Congressional Budget Office

before the
Committee on Armed Services
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NOTICE

This statement is not available for public release until it is delivered at 9:30 a.m. (EST), on Tuesday, February 3, 1987.

Mr. Chairman, I appreciate the opportunity to testify before this Committee. My remarks today will deal with the federal budget and will focus particularly on the defense budget.

The government's current fiscal outlook is much improved from that of two years ago, with deficits down and likely to decline further. Nonetheless, federal deficits are still extremely high by historical standards and may well limit Congressional willingness to appropriate dollars for all federal programs, including defense. As a result, the Administration and the Congress will face difficult choices in formulating of the defense budget.

I do not have a detailed prescription for those choices; they depend on what defense capabilities you judge most critical. I can tell you that some growth in operating and support costs is likely as new weapons enter the inventory. If there is little or no growth in total budgets, that will create pressure to limit or reduce dollars available for investment. Some ways of responding to that pressure are clearly less efficient than others--for example, stretching out production of weapons or across-the-board cuts such as those mandated by the Balanced Budget and Emergency Deficit Control Act of 1985.

BUDGET TRENDS, 1978-1987

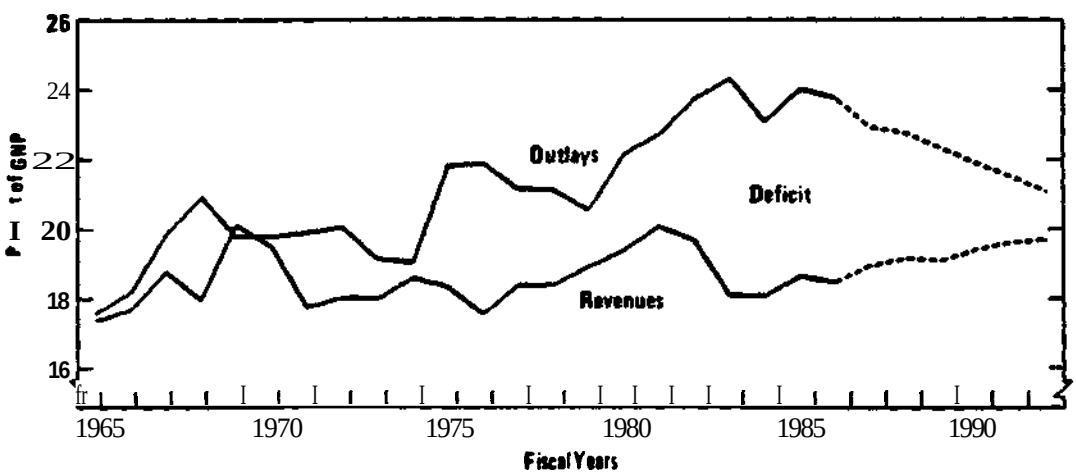
Over the last 10 years, the federal budget has undergone changes with important implications for the deficit. As a percent of the gross national

product (GNP), outlays have grown from 21.1 percent in 1978 ($459 billion) to a peak level of 24.3 percent in 19S3 but will decline to an estimated level of 22.9 percent ($1,008 billion) this fiscal year (see Figure 1). Total federal revenues have also grown as a percent of GNP, peaking in 1981 but still remaining at a higher level in 1987 than in 1978. These shifts in outlays and revenues have produced dramatic changes in the federal deficit. The deficit stood at 2.7 percent of GNP ($59 billion) in 1978. As a percent of GNP, it peaked at 6.3 percent in 1983 but should decline to about 4 percent of GNP ($174 billion) in 1987.

From a Vietnam peak of 9.6 percent of GNP in fiscal year 1968, national defense outlays fell rapidly to a low of 4.7 percent of GNP by 1979. Since that time they have been rising rapidly, both absolutely and as a share of GNP (see Figure 2). By 1987, these outlays had risen to 6.4 percent of

FIGURE 1.

Baseline Revenues and Outlays



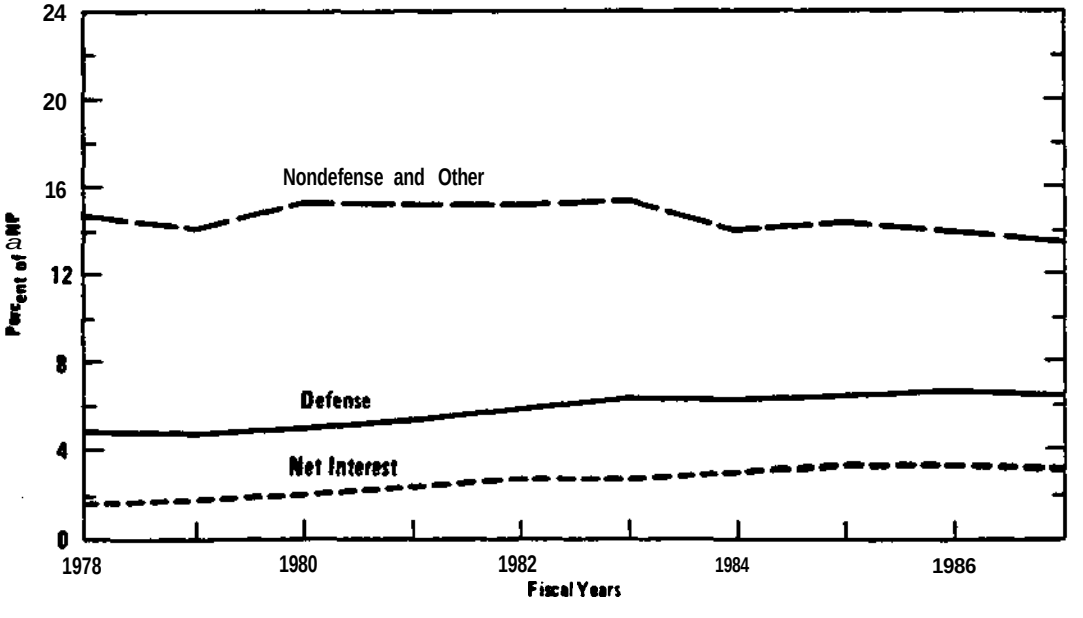
SOURCES: Congressional Budget Office; Office of Management and Budget; Department of Commerce, Bureau of Economic Analysis.

GNP ($280 billion). Similarly, budget authority rose from $117 billion in 1978 to $290 billion in 1987--an increase, after adjustment for inflation, of about 48 percent.

Over the entire period, added defense dollars have produced changes, and continue to produce them, in U.S. defense forces. Except in the Navy, there has not been much increase in the numbers of those forces, probably reflecting this Administration's emphasis on modernization rather than force expansion. All the services have modernized their weapons aggressively. Often the services have bought more expensive and presumably more capable models of new weapons, which has generally meant proportionally larger increases in dollars than in numbers of weapons.

The Administration has given highest priority to improving personnel readiness. Pay increases, added recruiting resources, changes in the

Figure 2.
Federal Outlays by Category



SOURCE: Congressional Budget Office; Office of Management and Budget.

economy, and shifts in the national mood have combined to improve markedly the educational levels and test scores of new military recruits and the experience level of career personnel in all the services. As a result, U.S. forces are more combat ready today than they were in the late 1970s.

Important as these improvements are, they are clearly less than the Administration planned. The defense budget for 19S7 is about $80 billion lower (in constant 1987 dollars) than the Administration projected in its long-range plan of February 1982. Many goals have been dropped or postponed--for example, most of the planned increases in Air Force tactical fighter wings, the increased numbers of the most modern ships in the Navy, and growth in numbers of active-duty personnel in the Army. Unfortunately, it is difficult to relate these reduced goals to changes in the ability of the United States to fulfill its defense commitments. Because of recent growth in the defense budget, U.S. military effectiveness must have improved in some absolute sense. But, of course, it is necessary to measure our strength relative to that of potential adversaries and that is much more difficult conceptually.

BUDGET OUTLOOK

The debate over any further increases in defense spending will be influenced by the overall budget outlook. Each year the Congressional Budget Office (CBO) prepares a "baseline" estimate of budget trends. The baseline assumes no changes in current tax or entitlement laws and an adjustment for

inflation--but no real growth--in all federal outlays subject to discretionary appropriation. Specifically, the baseline assumes no real growth in defense budget authority. Baseline spending for entitlements is allowed to grow only enough to reflect inflation and demographic changes, such as more people on the social security rolls. The baseline estimates also reflect CBO's latest assumptions about the future performance of the economy. These baseline estimates are not intended as a guide to what the Congress should do about the budget or as a forecast of what it will do. Rather they are one useful starting point for the budget debate.

Under these baseline assumptions, CBO projects that the federal deficit will decline from its record high of $221 billion in 1986 to $174 billion in 1987, $169 billion in 1988, and $85 billion in 1992. In relation to GNP, the deficit is projected to decline from 5.3 percent of GNP in 1986 to 3.6 percent in 1988 and 1.4 percent in 1992.

These budget projections are contingent on CBO's forecast of a moderate pickup in economic growth from its subdued pace in 1986, and a modest decline in both short-term and long-term interest rates over the projection period from their average levels in 1986. The budgetary outlook and the economic assumptions underlying the forecast are presented in Table 1.

As Table 1 shows, the baseline deficit declines sharply in 1987 with a further moderate reduction in 1988. About half of the expected decline in the 1987 deficit results from one-time factors, including an increase in revenues under the Tax Reform Act of 1986, asset sales, and shifts of

TABLE 1. BASELINE BUDGET PROJECTIONS, DEFICIT TARGETS, AND UNDERLYING ECONOMIC ASSUMPTIONS

	Actual 1986 a/	1987	1988	1989	1990	1991	1992
Budget Projections (By fiscal year, in billions of dollars) b/							
Baseline Estimates							
Revenues	769	834	900	962	1,050	1,138	1,220
Outlays	990	1,008	1,069	1,124	1,184	1,247	1,305
Deficit	221	174	169	162	134	109	85
Deficit Targets	172	144	108	72	36	0	n.a.
Baseline Less Targets	49	30	61	90	98	109	n.a.
Economic Assumptions (By calendar year)							
Nominal GNP (percent change)	5.4	6.0	6.9	7.2	7.4	7.0	6.8
Real GNP (percent change)	2.6	2.8	3.0	3.0	3.1	2.7	2.5
CPI-W (percent change)	1.6	3.5	4.3	4.3	4.3	4.3	4.3
Civilian Unemployment Rate (percent)	7.0	6.6	6.5	6.3	6.1	6.0	6.0
Three-Month Treasury Bill Rate (percent)	6.0	5.6	5.7	5.6	5.5	5.3	5.2

SOURCE: Congressional Budget Office

NOTE: n.a. = not applicable.

a. 1986 data for nominal and real GNP and the CPI-W are CBO estimates. The estimates do not reflect the actual data for the fourth quarter of 1986 that were released on January 22, 1987.

b. The baseline estimates and deficit targets include Social Security, which is off-budget.

outlays into adjacent years. After 1987, revenues under current laws are projected to grow at an annual rate of nearly 8 percent--slightly faster than GNP--while baseline outlays grow only 5 percent per year, which is substantially below the 10 percent annual growth rate experienced earlier in the 1980s and less than the projected growth in the economy.

Progress toward deficit reduction has been substantial during the last two years. CBO baseline forecasts of two years ago showed deficits remaining above $200 billion and 5 percent of GNP. At that time, Congressional budget resolutions assumed substantial continued growth in defense spending, and CBO's baseline paralleled those assumptions. Today, the budget resolutions call for little real growth in defense. Much of the change in baseline deficit forecasts reflects this change in assumptions about future defense spending.

Despite important progress on deficit reduction, the current level continues to be a concern. Deficit projections are well above the targets set in the Balanced Budget Act; in fact, baseline projections exceed targets in the act by more than $60 billion in 1988 and by an average of about $100 billion between 1989 and 1992. Moreover, deficits could be larger than CBO's baseline estimates if the Congress approves the Administration's defense plans--which call for real growth in defense--without offsetting reductions in other spending areas or increases in taxes.

Perhaps most importantly, CBO's estimate of declining deficits depends on continued growth in the economy. CBO does not foresee a recession in the next year or so. Beyond 1988, however, CBO's economic

numbers are not a forecast but rather projections that assume continued growth in the economy based on historical experience. CBO does not rule out the possibility of mild recessions during the period, but also would expect periods of above average growth that would offset the impact of recessions on budget totals. At some point, however, there could well be a deep recession, and that would make deficits much larger than in the baseline. For illustration, CBO developed an alternative baseline estimate assuming a recession, beginning in 1987, that is similar in depth and duration to the recession of 1973 to 1975; the assumed recovery is average by postwar standards. Under these assumptions, the deficit in 1988 would rise to $266 billion, or about 6 percent of GNP, and never fall below $200 billion through 1992. Clearly, federal fiscal policies have not built up a cushion against the adverse effects of a serious recession.

EFFECTS OF THE BALANCED BUDGET ACT

The Balanced Budget Act, which reflects concern over these deficits, could have an important effect on the defense budget. As you know, the Balanced Budget Act sets targets for deficits--the target for 1988 is $108 billion--and specifies that certain types of spending cuts are to be made if the targets are not met. Under current law, these cuts go into effect only if the Congress and the President approve them.

The report that begins the process is not due to the Congress until August 20. The deficit estimates used in that report will be an average of

individual estimates made by CBO and the Office of Management and Budget. It is possible to estimate what would happen, however, should CBO's current economic assumptions be adopted at that time and should the Congress take no action in the interim to alter spending or taxes. Under rules established in the Balanced Budget Act, the deficit in 1988 would total $158 billion. (These rules, and hence the deficit, differ in several ways from those CBO uses in the baseline estimates I just discussed.) To reach the target deficit of $108 billion, a reduction of $50 billion would be required. If the Congress chose to make the cut using an across-the-board sequestration, it could mean a reduction in nondefense budgetary resources subject to cuts under this approach of 20 percent and a cut of 14 percent below 1987 levels in defense budgetary resources (defined as future defense budget authority plus unobligated balances from past years). That reduction would leave national defense budget authority for 1988 at about $250 billion, roughly $60 billion below the level proposed by the Administration.

Not only would the defense cuts be large under a sequestration, they would have to be achieved in a very mechanical way. Reductions must be equal in percentage terms for each "program, project, and activity" or PPA. If the 1986 sequestration is a guide, there would be thousands of PPAs for defense. Thus, for example, cuts would have to be equal in percentage terms for accounts as diverse as Army active-duty enlisted personnel and funding for long-lead items for the F/A-18 aircraft. Nor does current law provide for exemptions such as those the President invoked in 1986. Thus, a substantial sequestration could create major disruptions--especially for

military personnel accounts, where dismissals of large numbers of personnel would be needed to satisfy the law.

I want to emphasize again that this scenario would unfold only if the Congress did not make changes in taxes or spending that would reduce the deficit, and only if the Congress and the President both approved a triggering of the Balanced Budget Act. The specific numbers are also highly sensitive to changes in economic assumptions.

THE ADMINISTRATION'S DEFENSE BUDGET REQUEST

Let me turn now to the Administration's proposals for the defense budget. For the national defense function, the Administration proposes budget authority of $312 billion in 1988, rising to $397 billion by 1992. After adjustment for inflation, growth above the 1987 appropriated level would average about 3 percent a year under the Administration's economic assumptions and about 2 percent a year under CBO assumptions. Outlays would grow from $298 billion in 1988 to $371 billion by 1992.

Despite substantial real growth, the Administration's request may not provide enough funds to meet all the goals established by the services. CBO recently estimated that reaching the Army's goals would require real increases in the Army's budget averaging about 6 percent a year through 1991. A 1985 CBO report estimated that meeting the Navy's goals as of January 1985, including the goal of 600 ships and 15 deployable aircraft

carriers, would require real increases in the Navy's budget averaging between 3 percent and 5 percent a year through the mid 1990s.

The appropriateness of these service goals must be judged, however, in light of defense needs as well as the overall budget outlook that I discussed earlier. It seems clear that, because of deficit concerns, the Congress will consider reducing the 1988 defense request, as it has all recent requests.

It is beyond the scope of my testimony to propose specific reductions in the defense budget. Most reductions to defense budgets involve increasing risks. Unless one can buy the same weapons or the same personnel for fewer dollars, then reductions mean less ability to deter or, if necessary, prevail in a future conflict; that results in more risk that the United States would fail to meet its defense needs. No conceivable budget can eliminate risks altogether, and it is very difficult to judge how much risk is appropriate in light of concerns about other problems such as the deficit. I will not attempt to make those judgments. Rather let me turn to some pressures that I see facing the defense budget and alternative ways that the Administration and the Congress might respond.

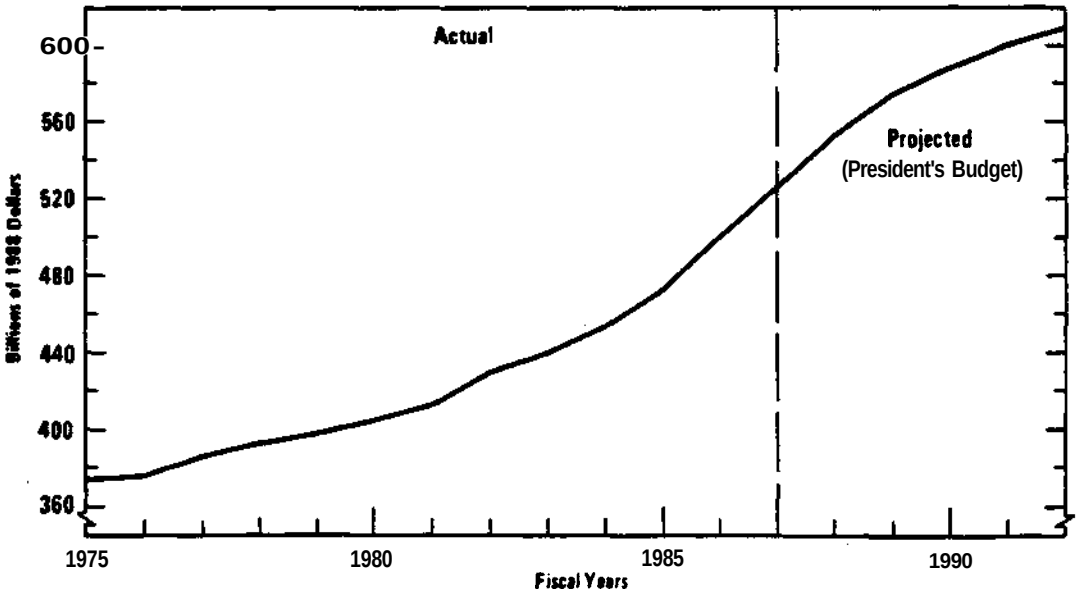
TRENDSINOPERATINGANDSUPPORTCOSTS

Operating and support (O&S) costs today make up roughly 55 percent of the defense budget. These costs include monies for the pay and benefits of most personnel, both military and civilian, plus costs of day-to-day operations.

They are often referred to as readiness-related costs. In its latest budget plan, the Administration requested real growth in O&S costs averaging about 3 percent a year through 1992.

Preliminary results of a CBO analysis for the House Budget Committee suggest that some growth may be necessary. Between 1975 and 1987, there has been a relatively constant relationship between O&S costs and the dollar value of the stock of major Department of Defense (DoD) weapons (defined as ships, aircraft, and major Army fighting vehicles). The ratio between O&S costs and the real value of those weapons dipped as low as 0.31 in 1979, rose to 0.34 in 1985, and again stands at 0.31 in 1987. The relationship has remained roughly constant despite a 40 percent real increase in the value of the stock of major weapons during this period (see Figure 3). The relationship suggests that numbers and complexity of

Figure 3.
Dollar Value of Major DOD Weapons



SOURCE: Congressional Budget Office estimates based on Department of Defense data.

weapons, as measured by dollar value of the stock, influences the cost of operations.

If this historical relationship prevails in the future, then O&S costs would have to increase at roughly the rate proposed by the Administration because the value of the stock of major weapons increases at a real rate averaging about 3 percent a year over the next five years (see Figure 3). It is important to note that, for the next several years, needed growth would not be much affected by procurement decisions now before you. The lag between purchase and delivery of major weapons means that decisions on the budget for 1988 will not have large effects on the value of weapons in the DoD inventory until 1990. In 1990 and beyond, projections do depend on future choices. Figure 3 assumes enactment of the Administration's proposed procurements of major weapons.

While this weapons-value approach suggests increases, another measure--the cost-factors approach--suggests that O&S needs could be much more modest. This measure builds up O&S costs assuming that major force units (such as aircraft squadrons and Army divisions) cost the same to operate in the future as they did in a recent budget year; adjustments are made only for changes in numbers of units and inflation. Analysis by this measure suggests that real growth in O&S costs would have to average only about 0.5 percent a year over the next five years to keep up with force growth. Estimates using this cost-factors approach are much lower than those under the weapons-value approach for several reasons. The cost-factors approach assumes that portions of O&S costs not directly related to

major force units remain constant in real terms (for example, portions of the costs of facilities and medical care). The method also allows growth only when major force units increase in numbers, and so it does not always capture changes in O&S caused by purchases of new types of weapons.

I want to emphasize the limitations of both these approaches as predictors of overall operating and support costs. Neither method relates O&S dollars directly to military readiness. The weapons-value approach ignores engineering changes aimed at holding down operating costs, while the cost-factors approach may understate some costs associated with shifts to more complex weapons. Perhaps most importantly, both methods fail to account explicitly for efficiencies in methods of operating and supporting forces. O&S costs are highly diverse; efficiencies regarding personnel support, maintenance policies, administrative staffing, and many other factors could hold down the increases suggested above, particularly those suggested by the weapons-value approach.

Given these limitations, the results presented here serve best as rough guides to the range of increases needed in O&S costs. Both do suggest that--in the absence of efficiencies--some growth in O&S costs will be needed.

ACCOMMODATING REDUCTIONS IN INVESTMENT

If O&S costs grow, but the overall DoD budget does not, that clearly means reductions in the remainder of the budget, which pays for investment.

Production stretchouts are a common but inefficient way to reduce investment costs. Avoiding stretchouts, and using more efficient procurement techniques such as multiyear contracting, requires up-front funds that will probably have to be obtained by canceling or delaying production of selected weapons.

Production Stretchouts

The latest Administration budget continues the trend toward stretchouts in production of weapons. Relative to the plan for 1988 published last year, this year's plan shows that 10 of the 20 largest DoD weapons systems are being bought at lower rates. Moreover, of the 25 weapons systems for which CBO has data, four are being bought below what DoD has reported as the minimum sustaining production rate (defined as production for five days each week, one shift per day).

For many systems, production slowdowns add to costs as fixed overhead is spread over fewer systems and economies of large-scale production go unrealized. At this Committee's request, CBO is currently assessing the effects of such stretchouts on weapons costs. CBO's preliminary results are based on budget data and suggest that effects vary widely, with costs of some systems appearing to be relatively insensitive to production rates, while others show significant savings when produced at higher rates.

Among those that do show savings are four aircraft systems listed in Table 2. Estimates in Table 2 assume that the same total number of

aircraft are bought at two different production rates: the planned rates of procurement in the Administration's 1987 budget plan plus rates that range from about 30 percent greater to 80 percent greater and average about 60 percent higher. (To be conservative, the higher rates are always held well below maximum production rates.) At higher rates, savings range from 4.9 percent to 12.3 percent of the costs to complete the program, expressed in constant 1987 dollars, and total $1.7 billion just for these four systems. Moreover, purchases are completed one to four years earlier than under the Administration's plans, which means that the aircraft are in the field more quickly.

CBO's results may understate the true savings from higher production rates, particularly for systems that appear insensitive to rate changes. Our preliminary results extrapolate from budget data to estimate savings. But budget data usually do not include costs associated with higher production rates, which makes extrapolations less reliable. The extrapolations may also be confounded by the costs of system modifications, which could obscure the effects of higher rates. To provide alternative cost data, CBO has also interviewed contractors. They suggest that savings of 10 percent or more of program costs are possible for many systems if production rates are doubled. We are continuing our analyses and will report on more complete results in coming weeks.

TABLE 2. SAVINGS FROM HIGHER PRODUCTION RATES FOR SELECTED SYSTEMS

System	Years to Complete Program		Average Procurement Rate		Cost to Complete Program (In millions of 1987 dollars)		Percent Savings
	Administration's 1987 Plan a/	Higher Rates	Administration's 1987 Plan	Higher Rates	Administration's 1987 Plan	Higher Rates	
CH/MH-53 Helicopter	4	3	14	18	1,000	900	11.3
EA-6B Aircraft	5	3	12	20	2,400	2,100	12.3
F-14D Aircraft	12	8	31	56	13,100	12,400	5.4
F-15E Aircraft	8	5	48	84	12,600	12,000	4.9

SOURCE: Congressional Budget Office.

a. Cost and quantities are based on the Administration's 1987 program, as presented in the December 1985 Selected Acquisition Reports. Five-year details on the 1988 program are not yet available. Results relative to the 1988 program are likely to be more dramatic since rates of production in the 1988 plan are often lower than the 1987 version in the years for which details are available.

Multiyear Contracting/Milestone Budgeting

One way to help ensure higher rates of production on selected systems is to expand the use of either multiyear contracting or the milestone budgeting approach that this Committee proposed last year. The two-year budgets urged by this Committee could also help ensure higher production rates. Such multiyear techniques commit the government to buying weapons for more than one year.

CBO's analysis suggests that multiyear contracting has produced substantial savings, for several reasons. First, it reduces the chance that production will be stretched out. Second, under multiyear contracting, materials and components can be purchased in more economically efficient quantities. Analysis of the 40 multiyear contracts approved from 1982 to 1986 suggests that, based on DoD data, costs averaged about 12 percent less than would have been the case had the same numbers of items been purchased under annual contracts. Twelve percent savings could not be achieved in all of the procurement budget since the 40 contracts were selected as ideal candidates for multiyear contracting. Nonetheless, the fraction of the procurement budget under multiyear contracts has declined since 1986, which suggests that there is potential for further savings.

Canceling or Delaying Production

Realizing the long-term benefits of rapid production and multiyear contracts requires up-front budget authority. In a period of limited budgets,

how can those funds be found? One approach would be to cancel selected systems of lower priority. This has happened only occasionally, especially in the case of large programs. Large systems develop an industrial as well as a military constituency that makes it hard to cancel them in the absence of severe problems in their performance. Moreover, large systems often represent the key weapons in an important area of warfare; thus, cancellation greatly reduces capability.

A more practical approach might be to delay the initial production of selected systems. In this year's budget, there are 29 major weapon systems with initial procurement or research funds scheduled for 1988 or 1989. If all these systems were delayed two years, for example, savings might amount to $8.4 billion in 1988 and over $38 billion in the next five years. Even if only some of these systems were delayed, savings would be enough to raise production rates of selected existing systems to more economic levels and thus complete production more quickly. More rapid production would also lower procurement costs for these existing systems.

Delaying the new systems would not be without its own inefficiencies. For example, delayed production would mean that engineering teams would have to be kept together longer, thus adding to the costs of new systems. Old systems with higher operating costs might also have to be kept in service. Ideally, careful planning would avoid these costs by developing new systems only when funds are available to buy them rapidly. But even for systems that have already reached advanced stages of development, the

costs of delaying production might still be less than the costs of low-rate production.

CONCLUSION

Overall deficit trends have improved in recent years, but deficits are still substantial and may well lead to continued Congressional efforts to hold down the size of the defense budget. The Congress should realize, however, that--absent efficiencies--there is likely to be some increase in needs for operating and support funds as the result of past procurement programs. Aggregate defense budgetary constraints thus mean limiting or reducing investment, including procurement.

CBO's analysis suggests that this pressure could be accommodated most efficiently by avoiding production stretchouts and perhaps by increased use of multiyear contracting or milestone budgeting. The up-front funds for these initiatives would probably have to be achieved through the cancellation or delay of selected weapon systems.

Important as they are, however, more efficient production rates and similar approaches cannot offset the absence of growth in the defense budget for substantial periods. If the Congress chooses to limit the defense budget to little or no growth for a number of years as part of an overall approach to reducing deficits, then--relative to Administration plans--there will be fewer weapons, fewer people, or other reductions. That inevitably implies more risk that the United States will not fulfill all its current

defense commitments. Weighing the importance of those added risks against the benefits of reduced spending is certainly one of the most difficult choices that confront this Committee and the Congress as you debate defense budgets for the next few years.