

DEFENSE ACQUISITION PROCEDURES

Statement of

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**Mr. Chairman:**

I am pleased to appear before this Committee today as you review the defense acquisition process. Such a review is certainly timely, both because of the proposed buildup in defense investments and because of widespread criticism of acquisition procedures. That criticism has covered almost every aspect of the acquisition process: its length, the costs and reliability of the weapons purchased, and the management of the process itself. Today I will focus on one key ~~criticism--the~~ troubling growth in prices of weapons systems. I will discuss some possible changes in acquisition procedures that might hold down cost increases and suggest steps the Congress could take to effect those changes. Also, I will discuss the difficulty in estimating the budgetary savings from changes in acquisition practices.

Review Timely Because of Defense Buildup

A gradual buildup in the real levels of the defense investment ~~accounts--which~~ include weapons procurement, research and development, and military ~~construction--began~~ in 1979. This Administration has proposed a substantial acceleration of that buildup. Based on plans announced last month, defense investment will grow from \$68 billion in budget authority in fiscal year 1981 to \$89 billion in 1982 and \$175 billion in 1986. After adjusting

for inflation using the **Administration's** assumptions, this translates into a real increase of 95 percent between fiscal years 1981 and 1986. By contrast, the defense budget as a whole will grow by 52 percent in real terms over the same period, underscoring the **Administration's** emphasis on investment.

Some of the growth in investment stems from plans to buy more weapons. In fiscal year 1982, for example, this Administration proposes to buy more major weapons than did the previous Administration; the added buys include 3 new ships, 67 new fighter aircraft, and 232 new tanks and fighting vehicles. Proposed buys of smaller weapons and of spare parts also increased.

But not all of the increases in investment costs stem from larger **buys**. Some result from a troubling growth in defense prices. In recent years, the price deflator for defense purchases has increased faster than the overall gross national product (**GNP**) deflator. Between 1972 and 1980, for example, the difference averaged about 1.7 percent a year. Lately, that gap has widened, amounting to an average of 3 percent in 1979 and 1980.

Moreover, unit price increases for some weapons systems have been staggering. For example, the unit costs of the **Army's** new **M-1** tank and fighting vehicle have climbed by 76 percent and 49 percent, respectively, over the last year, even after factoring out the amount of inflation anticipated last year. The unit cost

of the **Navy's** new **F/A-18** fighter aircraft has grown by 43 percent. Even some mature systems, such as the Air **Force's F-15** fighter, have increased 5 percent in unit cost.

Many factors have contributed to this cost growth. Some stem from the Defense **Department's** choice of complex, sophisticated weapons whose proper functioning sometimes requires numerous design changes after production has begun. The desire to get started on important weapons programs may also lead contractors to make unrealistically low bids to get a program underway, anticipating raising prices once the program is initiated. Budgeting procedures may also lead to unrealistically low estimates of future cost growth. And uneconomical buy rates, along with widely varying annual procurement rates, can also contribute to price **increases.**

Broadly **construed**, a discussion of defense acquisition procedures could cover all of these topics. But I will focus this morning on five problems in the way the Defense Department budgets and contracts for weapons.

I should note, Mr. Chairman, that CBO has not worked extensively with the laws and regulations governing defense **acquisition** procedures. Therefore, my suggestions are intended as a **spring-**board for further discussion, rather than as definitive solutions.

## Problem Areas and Possible Congressional Action

Encourage Better Planning for Inflation. In recent years, the Department of Defense has often not budgeted enough money for inflation. As a result, it has needed supplemental appropriations to maintain its planned buys. When these **supplementals** could not be obtained, the size of the buy frequently had to be sharply reduced. Such reductions led to uneconomical buy sizes and to the instability that the department has identified as a key problem in the acquisition process.

In part, the underestimates of inflation reflect overly optimistic forecasts of the **GNP** deflator. In addition, the mix of goods priced by the GNP deflator differs from the mix in DoD investment accounts. For example, defense investment includes more high-technology equipment and critical materials, whose prices may have increased faster than the average in recent years. And defense has less access to imports, which can sometimes hold down costs.

There is no obvious alternative to the overly optimistic forecasts of future inflation often made by the Executive Branch. Consulting a variety of forecasters may be a hedge. But most **forecasts--including CBO's--**have understated inflation in recent years, though usually by less than those of the Executive Branch.

The Congress could **encourage--or** even **direct--that** the Department of Defense use specialized deflators that more **accur-**

**ately** reflect the mix of goods it purchases. CBO and others have developed such deflators, and they are available to the department.

Better estimates of inflation could sharply increase the projections of dollars needed to pay for defense purchases of weapons and services. If the **Administration's** planned purchases as of the mid-session review were **reestimated** using **CBO's** deflators, defense budget authority would be higher by \$4 billion in 1982 and by a total of \$81 billion over the next five years. (CBO has not recosted the **Administration's** October plans; the added costs might be lower.) These estimates reflect both **CBO's** higher GNP deflator and the use of specialized defense deflators. **Deflators** have an important effect on the defense budget because weapons are often built over a period of many years. Budget authority for such weapons reflects projected price growth over the entire period.

The Administration is reluctant to adopt special defense inflators because it believes that use of the overall GNP **deflator--which** has recently increased more slowly than specialized **deflators--puts** pressure on the Department of Defense to hold down costs. I can understand the need to avoid high deflators that can become self-fulfilling prophecies. But it still may be desirable to develop defense deflators that reflect the actual mix of defense purchases, lest we foster other problems such as cost **overruns.**

Improve Congressional **Oversight** of Weapons Cost Increases.

Underestimates of inflation are, of course, only one reason for the growth in weapons prices. I noted others earlier, including unrealistically low initial cost estimates and design changes. At its heart, the problem of cost growth is one of incentives. Officials at the Department of Defense want to keep initial costs low in order to increase chances of funding for research or production of weapons they feel are crucial to national security. Moreover, in the past at least, DoD officials may have been rewarded more for the quality and timeliness of weapons than for staying within initial cost estimates. Defense contractors are also interested in keeping initial cost estimates low to get research or production started, since continued contracts are then much more likely. These incentives can combine to yield underestimates of weapons costs and subsequent cost growth.

The Congress cannot solve this problem alone; indeed, the Department of Defense should take the lead in providing needed management. But the Congress may be able to help through closer scrutiny of prices; such scrutiny may change the incentives that lead to **underestimates**.

One approach is included **in** the **Senate's** defense authorization bill. That bill would require DoD to report to the Congress whenever the program unit cost of a weapons **system--as** reflected in the Selected Acquisition Reports, or **SARs--increases** by more than 10 percent for systems in production or 15 percent for

systems in research and development. Such a report should help focus the attention of the Department of Defense on weapons costs.

Important as they are, the Selected Acquisition Reports may come too late to allow the Congress to consider alternatives to weapons systems that have grown sharply in cost. The Congress could seek earlier warning, perhaps by requiring that DoD include in the **SARs** some of the cost and performance data now submitted to the department by defense contractors. These data, which are currently not made available to the Congress, compare money spent with the amount of work completed. If the proportion of money spent greatly exceeds that of the work completed, the data suggest a potential cost overrun. Early warning of such overruns could trigger timely Congressional debate over whether the weapon is needed even at higher cost, or whether alternatives should be **pursued.**

I am keenly aware that the Congress must weigh the value of additional reporting against the danger of excessive Congressional oversight, which could itself increase costs or stifle the needed flow of information to the department. One solution may be to limit any reporting to **Congress--particularly** transmission of contractor **data--to** the major SAR systems whose reported cost and performance data exceed a threshold that suggests large potential cost overruns. This should ensure that only the most critical problems come to the attention of the Congress, while



increasing the incentives of the department to scrutinize all programs **for** potential cost problems.

Encourage Competition in **Defense** Industries Through Second Sourcing. Economists have long argued that increased competition can hold down prices. Many factors could enhance competition in defense, such as emphasis on competitive contracts where feasible. Let me discuss one other **strategy--namely, "second sourcing,"** or the use of more than one contractor to manufacture a particular **weapon.**

Second sourcing may sometimes reduce costs. It is difficult to say by how much, since one must compare actual costs under second sourcing with an estimate of the costs had only one manufacturer been used. Nonetheless, studies by Dr. Gansler, one of your subsequent witnesses, suggest that cost savings of 30 percent can sometimes be achieved. Such savings would be most likely if the second sourcing began at the development stage, when competition can lead to a less costly design, and continued through production.

Second sourcing is not the solution for all **weapons** systems. Buy sizes must be large in order to make a second producer feasible. Also, the Administration and the Congress must be willing to bear the **"up-front"** costs of qualifying a new contractor, such as the costs of writing an extensive technical description of the system. **And,** of course, the potential savings must justify these **up-front** costs.

Where warranted, the Congress could encourage second sourcing in two ways. **First**, it could insist that the Defense Department consider second sourcing whenever it **formulates** a procurement strategy. Second, the Congress might amend current law to encourage second sourcing where it might promote competition and so cut costs. Current law encourages second sourcing only when it will improve the department's ability to produce weapons quickly during a wartime mobilization.

Encourage Economical Buy Sizes. The size of a buy is very important to costs. If contractors build facilities capable of producing at a certain rate and then produce fewer weapons, the fixed overhead results in higher unit prices. The 1982 buy of **A-10** aircraft is a good example. Last March the Administration proposed to buy 60 A-10 aircraft at \$9 million apiece. Recent revisions call for procurement of 20 **A-10s** at \$13 million apiece.

Because of the importance of economical buy sizes, the Congress might require a short report specifying the economical buy size for existing systems and the planned rate for proposed **buys**. To limit paperwork, such a report could cover only major systems. Where proposed buys deviate from the economical rate, the report should note the reason and the unit cost at the economical buy level. Such a report would focus the **department's** attention on this important topic and allow the Congress to assess fully the costs of departures from economical buy rates.

Economical buy rates demand more, however, than just managerial attention; they also require political courage. The Administration and the Congress must be willing to terminate a few programs in times of cutbacks, rather than stretching out a large number. During its recent reduction in the defense budget, this Administration did terminate the **KC-10** tanker aircraft program and the **Army's** Roland air defense program. But other buys, such as the **A-10** program, were stretched out.

**Foster Multiyear Procurement.** Multiyear procurement constitutes one of the Administration's major initiatives in the defense acquisition area. Multiyear contracts, which provide for buys over several years with substantial cancellation charges if the buys are not executed, could offer important benefits. They might encourage cheaper bulk buys of parts, foster a stable work force, and facilitate stockpiling of materials needed to avoid production delays.

Such benefits might cut costs. But I would urge caution in assessing potential cost savings. Early estimates overstated the potential savings from multiyear contracting. Congressional debate last year suggested, for example, that reductions of as much as 30 percent were possible for the Air Force's **F-16** aircraft. But much of these savings would have stemmed from quicker buys and the resulting reductions in inflation, rather than from multiyear procurement. Savings from multiyear procurement itself

would more often range from 5 percent to 10 percent. Even these **estimates** should be scrutinized to be sure that the savings do not simply result from more rapid progress payments to contractors, rather than from **multiyear** contracting.

Despite this caveat, the potential benefits of multiyear contracting certainly merit trying the procedure. The Congress seems likely to facilitate such experimentation by raising the amount that can be paid to a contractor if a multiyear contract is abrogated and by other revisions in the law. Indeed, multi-year procurement might allow the Department of Defense to take advantage of slack market conditions to obtain more favorable prices for weapons. For example, much of the U.S. shipbuilding **industry--particularly** the yards that could build support vessels or small combatants for the **Navy--badly** needs business right now. These yards might be willing to enter into multiyear contracts, at very favorable prices, if such contracts would provide some business now.

#### Budgetary Savings Difficult to Estimate

The options I have just discussed could eventually reduce costs **substantially**, but it is difficult to say by how much. Potential savings depend on the peculiarities of individual weapons. The estimates of savings must be provided by the Department of Defense and its contractors, and these numbers are only

now becoming available. Even when some DoD estimates are available, it will not be clear which systems would qualify for revised procedures until the department has time to conduct a review of all candidate systems. Thus, the extent of potential total savings is difficult to estimate at this time.

If the Congress wishes to reduce the costs of defense, it should look beyond the ways the department budgets and contracts for weapons. The Congress should also focus on alternative ways of accomplishing defense missions, especially those in which costs have grown sharply. This consideration has led some to question the role of large ships in the Navy, the **M-1** tank and fighting vehicle system in the Army, and the **F/A-18** aircraft, among others. The Congress might also question whether U.S. defense priorities would permit less emphasis on certain missions, perhaps those directed at NATO or strategic defense. These are contentious topics that are beyond the scope of my testimony today, but they crucially affect defense costs.

The United States is embarked on a substantial buildup of defense. During that buildup, the public must have confidence that defense dollars are being spent wisely. Such confidence is not strong today, but reviews and cooperative action by the Congress and the Administration could help restore it. I hope that the points I have raised this morning will be helpful in focusing this Committee's review.