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STATEMENT OF

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BEFORE THE

AD HOC TASK FORCE ON SELECTED DEFENSE PROCUREMENT MATTERS

OF THE COMMITTEE ON ARMED SERVICES

UNITED STATES SENATE

ON

REDUCING THE COST OF WEAPONS ACQUISITIONS

Mr. Chairman and Members of the Task Force:

I am pleased to be here today to discuss the subject of reducing the cost of weapons acquisitions. In announcing these hearings you said you planned to cover a number of issues regarding weapon system acquisition including

--program stability,

--reduction of overhead costs,

--increased productivity,

--detailed specification of weapon systems, and

--effective competition.

We agree that these issues should be addressed, and of these issues, program stability may be key.

On balance, the military weapon system acquisition process is characterized by programs which are extended, exceed original cost estimates, and result in fewer units than are originally planned. DOD has attributed most cost growth to (1) quantity increases necessary to satisfy original objectives or new requirements and (2) inflation. We do not disagree that these two factors are significant contributors, but would add that overoptimism in cost estimating transcends all the reasons for cost growth.

Realistic cost estimates are essential to maintaining stability in the acquisition process. Overly optimistic estimates of future budgets contribute to (1) trying to fund too many acquisition programs with the result that too few are produced at the most efficient procurement levels and (2) continuing lower priority programs on the assumption that adequate future funding will be available.

There are no easy solutions to the problems inherent in the acquisition process. While the problems remain, DOD has and should continue to address them in a systematic manner. DOD initiated its acquisition improvement program in April 1981. A number of the initiatives associated with this program have been

implemented and DOD feels that significant progress has been made. The major remaining initiatives where DOD will focus attention include program stability, realistic budgeting, multi-year procurement, economic production rates, readiness and support, competition, and industrial base. We agree that these are key issues and believe that the initiatives offer sound opportunities for cost reductions overall as well as improvements to the total acquisition process.

While we have not yet made an indepth analysis of the program, in our monitoring efforts we have found that the DOD task force assigned to review the various initiatives have been objective in their evaluations of the progress of the program.

GAO annually reviews selected weapon programs. We also perform reviews and studies which transcend individual programs and focus on system-wide issues which affect the costs of most major acquisitions. Let me briefly mention the former body of work and then elaborate on the latter. Our annual reviews of weapon programs have frequently identified acquisition problems in areas such as

--the ability of systems to meet their performance goals and user needs;

--the adequacy of early planning to assure that systems can be supported when fielded;

--the sufficiency of systems' reevaluation as the threat changes;

--the adequacy of testing and evaluation of developing systems; and

--the accuracy and sufficiency of program information provided the Congress by DOD.

As these kinds of issues are identified, we bring them to the attention of DOD management and the Congress for use in the decisionmaking process.

WEAPON SYSTEM COST GROWTH

GAO has done a number of studies on cost growth, cost estimating and DOD's budget projections. The Five-Year Defense Program (FYDP), developed by DOD, provides an estimate of future defense costs related to ongoing and planned defense programs. In recent years, there has been a great deal of controversy over the accuracy of the cost projections in the FYDP.

GAO has studied the historical relationship between the amounts estimated in individual FYDPs and the total obligational authority ultimately appropriated to execute those plans. The analysis shows that the FYDPs since 1963 consistently understated budget requirements for the third, fourth, and fifth

years by an average of 14 percent, 26 percent, and 38 percent, respectively. In the case of individual major weapon systems, the Congress has historically granted an average of 32 percent more funds than DOD estimated in its FYDPs. Even with the additional funds, the number of weapon systems which DOD was able to procure was less than programed.

Although it is not certain that the historical pattern of underestimation of funding requirements will continue, there is little evidence of a major change. In executing the fiscal year 1980-84 FYDP, actual appropriated total obligational authority exceeded DOD's original estimate by approximately $246 billion.

DOD has stated that cost planning was often too optimistic in the past and despite efforts to address the problem, it continued to plague the DOD through the late 1970s. DOD now believes it has instituted procedures that will result in more realistic plans in the future.

Future improvements in overall program planning and efficient execution depend heavily on better cost planning. The proof will be in the effect on overall defense program costs and execution. Much will depend on whether the estimates in DOD's 1982 through 1986 FYDPs are in fact more accurate than in the past. If these FYDPs are a reflection of better procurement

planning and cost estimating, we should expect the level of total obligational authority required to more closely approximate the FYDP figures as an indicator of progress. A second indicator will be the degree to which defense programs are fulfilled within planning estimates.

The need for reliable cost estimating is greater than ever before. Today's revolution in military technology, the greater complexity of modern weapons, their enormous cost, and their lengthy period of development place an extraordinary premium on sound choices. More than ever before, multi-billion dollar decisions made on the basis of unrealistic estimates could result in unobtainable or unaffordable plans.

IMPROVED PLANNING FOR WEAPON SYSTEMS WHICH ARE TRANSITIONING TO PRODUCTION

For many sophisticated weapon systems, manufacturing the items on time and within cost goals during the early stages of production has proven to be as difficult as developing the weapon. Cost growth and late deliveries have consistently impeded attempts to field new equipment. The additional time and money needed to produce the desired quantities of weapons routinely frustrate planners and contribute to the cost problems just discussed.

GAO reviewed six weapon systems in depth to identify some causes of early production problems and to outline actions which could help minimize their occurrence in future programs. These systems were: Copperhead, Black Hawk, Tomahawk, High Speed Anti-Radiation Missile (HARM), Air-Launched Cruise Missile (ALCM), and F-16.

Copperhead, HARM, Black Hawk, and Tomahawk encountered substantial problems in early production. Their entry into production proved to be much more difficult than anticipated as evidenced by late deliveries, cost increases, and restructured programs. Problems in these weapons' transition to production occurred when production planning and efforts to prove out production processes took a back seat to design and test activities, almost to the point of being completely shut out of the development phase.

The F-16 and the ALCM on the other hand, did not experience as much difficulty as the other systems in the transition to production. In these two programs, a series of production planning actions, including producibility studies, production line and factory layouts, and tooling purchases, were carried out in development, coupled with some demonstration that capabilities and resources needed to begin production were present.

In all six cases, we found the environment which prevailed during the development phase greatly affected how well prepared the weapons were for production, particularly to the extent that

--the pressures to achieve technical performance dominated the development phase;

--program management, from both the services and the contractors, demonstrated an appreciation for production preparations and devoted adequate staff to those efforts; and

--funding and quantity stability permitted early and serious consideration of production matters during the development phases.

Recently, DOD has taken an important policy step in the form of two directives. Together, they call for the balanced treatment of production preparations with other technical demands during development, as well as more comprehensive production planning and demonstration efforts in weapon programs. These initiatives are aimed at many of the systemic causes of production problems, and if faithfully implemented should contribute substantially to ameliorating these problems in the future.

Since the culmination of a successful development program is the production and fielding of the weapon system, the efforts undertaken to prepare the weapon for production are a critical responsibility of development. It is through these efforts that production risks can be identified and reduced to acceptable levels before production begins. Overcoming transition to production problems will require DOD to fully fund production preparations even if it means starting fewer programs, and deferring or refusing to produce weapon systems when production capabilities are inadequate or unknown.

MULTIYEAR PROCUREMENT

DOD has pointed to multiyear procurement as a way to significantly reduce the cost of acquiring weapon systems. With the 1982 Defense Authorization Act (Public Law 97-86), DOD received increased multiyear contracting authority, and our work indicates that savings are resulting from multiyear procurement. For example, the multiyear contract for the Army's Black Hawk Helicopter should result in savings of about $37 million.

While we support the multiyear approach, our work has demonstrated the need to carefully review each proposed multiyear procurement on a case-by-case basis. For example, the military services and the Office of the Secretary of Defense reviewed 22 potential multiyear candidates before the fiscal

year 1985 budget was submitted to the Congress. On the basis of its review DOD submitted 12 of the candidates for congressional approval.

Multiyear candidates must meet criteria specified in Public Law 97-86 which are designed to balance the benefits and risks associated with the approach. The criteria are that multiyear contracts will benefit the government by saving money and improving contractor productivity, and that the estimated cost and savings are realistic. The criteria also require that the system being procured have a stable design, requirement and funding. In analyzing the 12 fiscal year 1985 candidates, we concluded that 5 did not clearly meet one or more of the criteria, or had undergone enough change to warrant a revised justification.

DUAL SOURCE PROCUREMENT

Dual source procurement has been suggested as a means for attaining additional competition in the acquisition process. Under dual sourcing, contract awards for a product are split between two or more sources, with the larger share usually going to the supplier with the lower price. In the past, the primary objective of dual source procurement has been to assure an adequate industrial base.

Public Law 98-369 authorizes the use of dual sourcing by DOD and civil agencies beginning April 1, 1985, where it would increase or maintain competition and likely result in reduced costs, or where, as under existing law, it would be in specified national defense interests.

We recently completed a review of Army, Navy, and Air Force use of dual source procurement. On the basis of that review, we believe that awarding a larger share of production quantities to low price dual source suppliers can provide an incentive for price competition. However, dual source procurement solely for production price competition can be cost effective only when the product price reduction resulting from competition outweighs all costs to the government for establishing and maintaining the additional source. Therefore, we believe that DOD should carefully analyze the prospective savings prior to using dual sourcing solely for production price competition.

JOINT PROGRAMS

The military services have missions requiring the use of similar aircraft, missiles, vehicles, and other high cost systems. At first glance, it appears that there could be considerable savings by developing and using the same or reasonably common systems to fit the needs more than one service and DOD has made efforts to do this.

We reviewed selected joint acquisitions of major systems--from requirements setting to the verge of production--and concluded that while the concept is attractive, impediments complicate the acquisition process so that, in the final analysis, there have been no real successes. Service differences in doctrine, operations, logistics, and procedures tend to diversify system designs. When joint acquisitions are ordered by the Secretary of Defense or the Congress, the biggest hurdle is getting the services to agree on joint requirements. Each service believes that its concept of a new aircraft, missile, or vehicle will be best for the mission and will oppose compromise of its design or performance goals.

We recommended that DOD develop specific criteria for selecting joint programs and suggested that the following guidelines might help in selecting more promising joint program candidates.

--Essential service doctrines will not be unduly compromised.

--The programs are not too far down the development road at merger time.

--Military effectiveness will not be unduly lessened.

--The potential for economies is persuasive.

--There is conspicuous support by the Congress, the Office of the Secretary of Defense, the top military officers, and the Joint Chiefs of Staff.

While there are many impediments to overcome in conducting joint programs, the reality is that single-service systems cannot be afforded for every possible use. Joint programs, properly launched and administered, are a way to lessen budget affordability problems and, at the same time, satisfy the needs of more than one user.

Mr. Chairman, that concludes my prepared remarks. We would be happy to respond to any questions.