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STATEMENT OF

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COMPTROLLER GENERAL OF THE UNITED STATES

before the

Governmental Affairs Committee

United States Senate

on

Department of Defense

Major Weapon Systems

Acquisition Procedures

Mr. Chairman and Members of the Committee:

I am pleased to have this opportunity to appear before the Committee on behalf of the General Accounting Office to discuss (1) cost growth in weapon systems, (2) the Army's potential weapon system acquisition affordability problem, and (3) the Department of Defense's recent initiatives to improve its management of weapon system acquisition programs.

COST GROWTH IN WEAPON SYSTEMS

There has been major concern in Congress for years over why the cost of weapon system acquisition programs usually exceed original estimates. The investments to acquire and operate major weapon systems have a heavy impact on the allocation of national resources. Currently, the armed forces are going through the largest modernization program in our history by making up the inventory shortfalls and obsolescence caused by the Vietnam War. At June 30, 1981, there were 47 major acquisitions in development and production and reported in the DOD Selected Acquisition Reporting (SAR) System. These systems had current estimated costs of $316 billion, of which nearly $167 billion is yet to be appropriated. Of the total of $316 billion, $171 billion represents cost growth over the development estimates. In addition there are a number of other systems in early development which are potential SAR systems in future years. Based on historical records, these systems can expect to experience billions of dollars of cost growth in the future.

Cost Estimating

As far back as the early 1970s, GAO has reported that both planning and development cost estimates on Federal acquisitions in many cases are quite optimistic on technical development problems, cost, and potential performance.

Typically, cost estimates involve a planning estimate and a development estimate. For projects with a follow on production phase there would also be a production estimate. The Congress usually gives its initial approval based on the planning estimate. This estimate should be the best early projection that an agency can make after having considered all pertinent factors. Too often, however, it is nothing more than a rough feel for the potential cost of a project. The development estimate is a refinement of the planning estimate after some degree of project definition work and is usually made at about the time the development contract is awarded. A current estimate is the latest estimate for the project. For purposes of measuring cost growth, DOD has traditionally compared the development estimate to the current estimate.

The Effect of New Technology

The exploration of new technology has long been a major driving force behind new weapon system proposals and will probably continue to remain so in the future. Accurate cost estimates when developing new technology applications are usually difficult to determine. This coupled with threat analyses persuades advocates to attempt to seek approval from Congress for complex, high technology systems with optimistic initial cost estimates. These

estimates are usually low and often carry high expectations of solving unknown technical problems. DOD acknowledges that it often accepts low initial cost estimates and this process (usually referred to as "buying in") frequently leads to apparent cost overruns and criticism of its management abilities. The Deputy Secretary of Defense has instituted a new management initiative called "Budget to Most Likely Cost," directed at achieving greater accuracy in cost estimating.

Estimating the Effect of Inflation

The use of optimistic inflation rates in developing cost estimates also accounts for considerable cost growth. The low rates used to project inflation through the lengthy out years of the acquisition program have consistently resulted in underestimated program costs.

On August 6, 1981, the Secretary of Defense set forth his concern that some change is necessary in the way inflation is accounted for in the annual budget in a letter to the Director of the Office of Management and Budget. For the past nine years, DOD has used the U.S. Gross National Product (GNP) implicit price deflator, to project inflation and further adjusted its estimates so as to be consistent with the respective Administration's overall economic assumptions. In recent years, defense purchase prices have risen faster than most goods and services as measured in the GNP and the OMB directed rates for inflation have been below actual inflation. The Secretary's letter proposed three options for consideration but they have not yet been adopted.

GAO has made a number of recommendations over the years to help the DOD get better control over the cost growth problem. They are still valid recommendations today. They include:

For cost estimating DOD should provide for:

(1) An adequate data base of readily retrievable cost data.

(2) An effective independent review of cost estimates, including judgment by top officials as to the realism of the cost estimates on which decisions are based.

(3) More complete documentation of cost estimates, coupled with a requirement for an adequate feedback of results, to provide a basis for comparing costs achieved with those estimated.

--Cost estimates in SARs should be given in a range of probable cost including a single-point "best estimate."

--DOD should reinstitute a chart showing the impact on the program cost estimate of using different inflation rate projections at least as high as the approximate rate being experienced when the SARs are prepared.

--Inflation should be included in the budget year and future costs should be given as a range of costs dependent on different inflation rates and spending profiles. Each year the programs' current estimates would be adjusted to include actual inflation.

--OMB should establish guidelines for DOD and other agencies to adjust budget estimates to account for inflation during the budget processing cycle, so that budgets and cost estimates are expressed in comparable prices.

The Committee may wish to pursue the adoption of these recommendations further with Defense officials.

ARMY BUDGETARY PROBLEMS CREATED BY WEAPON SYSTEM PROCUREMENT

Mr. Chairman, we have recently completed a review of the budgetary pressures the Army is experiencing as a result of its plans to procure several new major weapon systems. We expect these pressures to become more severe during the next few years. Yesterday, we issued our report (MASAD 82-5) to the Congress on this situation. We concentrated on the Army's top 14 weapon systems which are expected to consume about 50 percent of the total Army procurement budget during the next 5 years. These weapons represent an intensive modernization effort the Army began in the early 1970s to develop new armored vehicles, helicopters, missiles, guns, and electronic equipment.

Although the budgetary implications of actually procuring these weapons have been known or suspected for some time, it was not until the Army first prepared its 1982-86 procurement plan that the fiscal realities of this long anticipated "bow wave" were actually felt. In the 1981-85 procurement plan, the Army estimate for these 14 weapons was $52.2 billion, but in preparing the 1982-86 procurement plan, the estimate rose by 30 percent to $68.1 billion. There was a combination of reasons for this increase. First, the existence of overall budget constraints was coupled with the fact that development of several high cost programs were nearing completion and therefore competing for available procurement funds. Second, an emphasis was placed on allocating a greater share of projected

Army funds to near-term readiness of existing forces, thus limiting the amount of funds available for weapons procurement. Third, and of major significance, there was dramatic real cost growth in the procurement estimates of several systems. In order to avoid canceling programs, the Army chose to stretchout the planned production schedules for 10 of the 14 systems--a decision which exacerbated the procurement cost estimates because it guaranteed that in future years more fixed costs and projected higher inflation would be incurred.

Upon taking office, the current administration revised the 1982-86 procurement plan and requested an increase in total obligational authority for the Army which returned many of the weapon programs to more efficient production schedules. This reduced the total procurement cost estimate for the 14 systems by about $2 billion. A further reduction of $4.6 billion was made by deliberately lowering the forecasted inflation rates. This inflation reduction was made in conjunction with the assumptions inherent in the President's economic recovery program.

Although these estimated procurement cost reductions amounted to $6.6 billion, they were offset by a $6.7 billion increase due to real procurement cost growth, increased quantities, and engineering and other program changes. We believe the resulting $68.2 billion estimated to procure the 14 systems is still likely to be understated. This is primarily due to a pattern of cost growth occurring as the weapon systems make the transition from development into production and gain further production experience.

Production decisions have been made on 9 of the 14 systems, but only 3 have had sufficient experience in production where deliveries have actually been made. These 3 systems--the Blackhawk Helicopter, Stinger Air Defense Missile, and M1 Tank--have experienced substantial cost growth largely due to a higher labor hours in production than earlier estimated. Generally, these systems require more labor hours and more machine time to produce than expected, and the contractors have experienced start-up difficulties and quality control problems. To a large extent, the resultant cost increases stemmed from poor assessments of production risks or unrealistic projections of the manufacturing processes required. More problems were experienced when the amounts budgeted turned out to be lower than actual costs. This forced a reduction in the quantities procured which further increased unit costs, pushed the schedule for unproduced quantities into later years, and slowed down the contractor learning rate.

We are also concerned that the costs to operate and support these 14 systems are likely to continue placing pressure on the Army budget as the weapons are fielded. These costs can comprise up to two-thirds of a weapon's total life cycle cost. Adequate operation and support funding (basically consisting of the military personnel and operation and maintenance appropriations) is essential to ensure a weapon system's combat readiness and effectiveness, and a commitment to procure a system now should also be a commitment to support it when fielded.

Unfortunately, operation and support estimates are not as visible as procurement estimates during the weapons acquisition process. They also tend to be more difficult to determine. The

5-year defense program, including the 10-year extended planning annex, which is the mechanism for making weapon affordability decisions on a life cycle cost basis, pays much closer attention to the current budget year and 4 years beyond. For the 14 systems, the next 5 years will be dominated by procurement rather than operation and support estimates.

We believe the Army should give increased attention to operation and support estimates because of the likelihood that more resources will be needed for the 14 systems. For example, about 23,000 more people will be required during the next 10 years, and higher skill levels will be needed to support the new weapons due to their complexity. This demand will occur when the supply could very well diminish because the population of 17-22 year olds is expected to decline by 25 percent between 1980 and 1992. Introduction of the new weapons will also create a greater demand for expendable resources such as fuel and ordnance. This, together with more expensive spare parts, will surely place an increasing strain on the Army's ability to support its new weapon systems.

We have concluded that the Army's procurement cost estimates for its new weapons are probably understated, that a further funding squeeze is likely, and that stretching out procurement schedules is an unsatisfactory alternative. We also believe the Army has not adequately evaluated its ability to provide operation and support resources for its new weapon systems.

We recommended that the new systems deemed by the Army to be essential to strengthening its missions be fully funded even

at the expense of canceling or reducing other acquisition programs. We also recommended that forseeable production risks be identified, procurement cost estimates be revised accordingly, and steps taken to forestall or minimize the risks. In addition, we recommended that the additional resources needed to operate and support the new systems be identified and their availability determined when making procurement funding decisions.

We also believe the Congress should be alert to similar financing difficulties that the Navy and Air Force may be having by determining (1) whether procurement cost estimates reflect all costs anticipated when systems make the transition from development into production, and (2) that sufficient resources to operate and support new systems are likely to be available when procurement funds are requested.

NEW INITIATIVES IN DEFENSE MANAGEMENT

This past March, the Deputy Secretary of Defense, Frank Carlucci, established a special steering group to provide recommendations to improve Defense's management of weapon system acquisitions. Time was decreed to be of the essence and on April 30, 1981, the Deputy Secretary announced that some 31 management initiatives suggested by the panel would be undertaken to achieve improvements. Subsequently a 32nd initiative encouraging use of competition was added.

Basically the initiatives are directed at

--reducing acquisition cost

--shortening acquisition time

--improving weapon support and readiness

--improving the acquisition milestone progress review process

--improving the stability of acquisition programs.

Defense has adopted an implementation plan which involves among other things effecting legislative changes, rewriting defense directives, identifying weapon systems for application of specific initiatives, and redirecting people.

GAO's Viewpoints On The Initiatives

Overall, we view the recent changes in acquisition policy announced by Mr. Carlucci as an effort to tighten up management of the acquisition process which we believe is a good idea and a logical and timely effort on behalf of the new administration.

To comment on each recommendation and decision made by Mr. Carlucci would take a considerable amount of time, so I will just talk about some to which we have had an initial reaction.

Assuring implementation, Initiative 23

Perhaps the most important of Mr. Carlucci's initiatives is number 23, "Assure Implementation of the Acquisition Process Decisions." As this initiative says, this plan will not succeed without a . . . "relentless implementation phase." We agree. There have been numerous studies and recommendations going back a number of years, but Defense still struggles to control a process that it has been practicing for many years. As experience has shown, only persistent effort will effect improvement.

Multiyear procurement, Initiative 3

GAO has historically supported multiyear contracting and we commend the present initiative to encourage its use to major weapon systems, when it is based on a case-by-case benefit/ risk analysis. In recent testimony before both the House Appropriations Subcommittee

on Defense and the House Committee on Government Operations we supported the legislative initiative contained in H.R. 3519 with one caveat--that we approach its application on major weapon systems carefully until we get an appreciation of all its ramifications. While the DOD criteria appears sound for making multiyear contract decisions on case-by-case analysis basis, there also appears to be a need for a continuous macro analysis which displays the cumulative funding commitment for future years . This is in order for the Congress to decide, notwithstanding the merits of an individual contract, whether its future year authorization and appropriation prerogatives are being overly restricted.

Preplanned product improvement

We also support the DOD efforts in preplanned product improvement (Initiative 2), a method of planning ahead to use advanced technology for upgrading deployed systems. We recently issued a report to Defense (MASAD 81-39, August 13, 1981) discussing the benefits of this method and recommending some key procedures that should be considered. The report was favorably received by the Department of Defense.

Some Initiatives May Be Difficult to Achieve

All of the initiatives reflect good intention on the part of DOD, but some may be difficult to achieve. For example, achieving economical production rates is a commendable desire, but difficult to achieve in Defense programs. Production rates are influenced by many considerations. One of the foremost is that we are in a peacetime environment which limits the amount of Defense funding

which in turn limits the amount that can be spent on any one program in a given year. The Under Secretary of Defense Research and Engineering acknowledged 2 weeks ago that it is not possible to increase production rates across the board when understandable contraints are placed on the Defense budget. However, Defense has identified seven programs for production rate increases planned for fiscal year 1983.

Initiatives Meriting Special Attention

Prior to the Carlucci Initiatives, the Services were required to submit a statement of need for each proposed new major weapon system acquisition program to the Secretary of Defense for his approval prior to commitment of resources to the program. Discussion with Defense officials confirmed that Secretary of Defense approval of the Statement of Need would now be accomplished by its submission in the Services' annual budget request and its acceptance in the President's budget rather than by specific approval/disapproval notification to the Services. The Statement of Need document is important. As the Congressionally appointed Commission on Government Procurement found "Defense....programs have suffered when well defined and coordinated statements of need and goals were lacking." OSD should carefully review and validate the Services budget requests to assure that new program proposed are genuinely needed.

Program milestone changes

In the past, the Secretary of Defense maintained oversight of major programs through a process of reviewing progress at four key program transition points. These four reviews have now been reduced to two, one to be sometime subsequent to the Service's initiation of the program and the other when a preliminary design is developed in the engineering phase.

Progress reviews are essential to good management. They require taking a look at both the program's progress and where the program is going at crucial decision times. Decisions that establish the potential for or direct the expenditure of major portions of Defense resources should be approved by the Secretary of Defense. This would be prior to the Service's initiation of the program and when the commitment to production is actually made. Decisions validating concepts and authorizing follow-on production are operating level decisions that could be left to the Services. If properly implemented, this initiative could provide proper review.

Encouraging capital investment to enhance productivity

Initiative number 5 outlines several suggested actions to be taken by DOD to increase productivity in the defense sector of the U.S. economy. While we do not have serious reservations regarding most of the proposed actions, we believe one requires further consideration before it is undertaken.

We oppose DOD's recommendation to amend or repeal Cost Accounting Standard 409 "Depreciation of Tangible (Capital) Assets" without considering other related cost accounting standards. The practical effect of amendment or repeal would be to permit the use of shortened depreciation lives such as the lives permitted by the Internal Revenue Code. This in turn could result in a great increase in the costs chargeable to defense contracts. We are concerned that the proposal does not establish what a fair rate of return on investment should be nor does it require that the increased cash flow that might result be invested in additional productivity enhancing capital assets.

CAS 409 was carefully crafted by the Cost Accounting Standards Board. It was founded in the cost accounting concept that depreciation costs "should be a reasonable measure of the expiration of service potential of the tangible assets subject to depreciation." It was published twice in the Federal Register for comment and during its promulgation hearings were held in both the House and the Senate. Congress concurred with the Standard as promulgated. We are opposed to any amendment that would abandon expiration of service "potential" as a basic principle for measuring depreciation in favor of an arbitrary measure which has been devised for other than cost accounting purposes.

Also as previously noted, CAS 409 is only one of a group of actions that were taken in the mid-seventies to deal with the problem of accounting for tangible capital assets. Others included promulgation of CAS 414 - "Cost of Money as an Element of the Cost of Facilities Capital," CAS 417 - "Cost of Money as an Element of the Cost of Capital Assets Under Construction," and introduction of a new policy by DOD in 1976 which places emphasis on capital investment in establishing profits on negotiated contracts. An amendment to CAS 409 without any corresponding review of these other interrelated procurement regulations and/or standards should be avoided.

We believe that, before the DOD proposal on CAS 409 is implemented, relevant budgetary cost estimates should be prepared. In particular, the anticipated cost resulting from any proposed amendment should be presented in conjunction with the amendment.

Program and funding instability

A major problem identified by program managers and other Defense officials has often been the lack of consistent and

sufficient funding to carry out a weapon system program as planned. This is caused to a great extent by the intense competition between the many programs for a share of the Defense budget. Defense officials past and present have acknowledged that there are too many weapon system programs. The Steering Group that developed the management initiatives reported that too many systems were competing for scarce resources and there had been failure and inability to "weed out" low priority programs in order to fully fund and efficiently execute the higher priority programs. Earlier, in February 1981, the Secretary of Defense had highlighted to the service secretaries and others the importance of identifying for elimination, cancellation, or reduction marginal weapons systems whether operational, under procurement or under development.

The results of OSD efforts were announced earlier this month (October 7) by Dr. DeLauer, Under Secretary of Defense (Research and Engineering) when he identified several RDT&E and procurement programs he was recommending for cancellation. The rationale varied but a number were terminated because they did not have well defined requirements. Some weapons systems had already been identified by the Congress for cancellation or cut-back in authorization hearings. Some had also been identified by GAO in past work as marginal programs due to a failure to clearly state requirements and therefore, in our opinion, in need of either being slowed down or terminated. The reasons for the lack of clearly stated requirements is not fully known to us but, in our opinion, OSD could have avoided these costly cancellations or delays by closer examination of the determination of what

exactly was needed by the Service to help it accomplish its mission. To this end, a reemphasis of the basic acquisition principle to develop a formal statement of need would help to eliminate cancellations or costly delays.

Mr. Chairman, this completes my formal statement. I would be pleased to respond to any questions you have.

Enclosures - 3

FIGURE 1

SAR PROGRAMS' DEVELOPMENT ESTIMATES, CURRENT ESTIMATES, CATEGORIES OF COST CHANGES AND PERCENT COST GROWTH BY SERVICE AS OF JUNE 30, 1981 (All Figures in Millions of Then Year Dollars)

Service	Dev. Est.	Cost Changes To Date In Program Then Year Dollars								Current Estimate	% Cost Growth	
		Qty. Chgs	Engrg.	Support	Sched.	Estimtg	Other	Economc Escaltn	Total Changes		Adjusted for Qty.	Unadj.
ARMY	30963.4	5734.7	2029.7	3406.1	4373.5	20150.3	161.7	7178.8	43034.8	73998.2	102	139
NAVY	80875.6	36255.5	4601.5	5722.2	9865.6	12845.2	1121.6	20099.4	90511.0	171386.6	46	112
AIR FORCE	32828.9	9464.1	3994.4	4750.6	8148.5	2178.1	1000.9	8161.3	37697.9	70526.8	67	115
GRAND TOTALS	144667.9	51454.3	10625.6	13878.9	22387.6	35173.6	2284.2	35439.5	171243.7	315911.6	61	118
Percent of Total Cost Changes		30	6	8	13	21	1	21	100			

Source: Selected Acquisition Reports Summary Tables as of June 30, 1981 (pages 1 and 4 of 5) prepared by OASD(Comptroller) August 14, 1981

SAR PROGRAMS' DEVELOPMENT ESTIMATES AND CURRENT ESTIMATES AND CATEGORIES OF COST CHANGES
AS OF JUNE 30, 1981 (All figures in Millions of Then Year Dollars)

Weapon System	Base Year	Development Estimate[a]	Cost Changes To Date in Program Then Year Dollars: Quantity Changes	Engineering	Support	Schedule	Estimating	Other	Economic Escalation	Total Changes	Current Estimate
ARMY											
PATRIOT (Fire Sections)	72	5240.5	-1842.5	-313.3	1004.8	970.8	1545.2	27.6	1832.8	3225.4	8465.9
PERSHING II	79	1571.0	-	-6.9	28.6	-23.1	40.1	-	184.5	223.2	1794.2
HELLFIRE	75	735.1	2.7	95.0	17.9	97.2	393.8	-	142.4	749.0	1484.1
CH-47 MODERNIZATION	75	1562.8	545.5	-	74.5	69.9	407.1	-	377.1	1474.1	3036.9
CH-60A (BLACK HAWK)	71	2307.3	-22.0	54.3	-23.2	251.8	3206.3	19.9	1535.6	5022.7	7330.0
AH-64 (AAH)	72	3758.1	-	57.2	195.4	599.4	615.8	-	734.2	2202.0	5960.1
SOTAS (Division Sets)	79	1282.8	-393.4	35.3	82.7	288.1	981.8	-	-38.4	956.1	2238.9
FVS (MICV)	72	726.4	3047.6	1758.7	1028.6	-64.6	5032.7	17.9	234.1	11055.0	11781.4
M-1 Tank	72	4779.4	4784.0	234.5	688.1	658.3	6277.6	-	1164.0	13806.5	18585.9
ROLAND (Fire Units)	75	1119.5	143.1	89.4	358.2	227.7	1020.9	90.0	275.3	2204.6	3324.1
COPPERHEAD	75	1240.7	-643.1	25.5	14.7	371.5	417.0	6.3	138.7	330.6	1571.3
DIVAD Gun	78	3185.8	64.1	-	-6.5	606.1	431.8	-	189.3	1284.8	4470.6
MLRS (GSRS)	78	3454.0	48.7	-	-57.7	320.4	-219.8	-	409.2	500.8	3954.8
ARMY SUBTOTALS		30963.4	5734.7	2029.7	3406.1	4373.5	20150.3	161.7	7178.8	43034.8	73998.2
NAVY											
E-2C	68	586.2	1869.9	158.3	648.0	51.4	144.0	-	241.0	3112.6	3698.8
F-14A	69	6166.0	1730.3	162.3	1085.0	1035.4	638.5	79.7	1320.9	6052.1	12218.1
F-18	75	12875.3	6870.4	381.5	1501.7	965.4	5107.5	-	7595.2	22421.7	35297.0
AV-8B	79	9125.5	-	-	-	-	-5.8	-	-	-5.8	9119.7
P-3C	68	1294.2	4320.6	447.1	432.5	1097.4	191.6	5.9	661.6	7156.7	8450.9
LAMPS MK III	76	3907.6	95.3	101.4	66.0	-43.5	1671.3	-	571.1	2461.6	6369.2
CAPTOR	71	329.2	48.7	226.5	365.8	188.6	385.4	-	7.6	1222.6	1551.8
HARM	78	1357.9	-323.4	14.0	-	764.3	244.6	-	83.7	783.2	2141.1
HARPOON	70	1031.8	65.6	264.1	199.7	82.0	191.0	-	314.8	1117.2	2149.0
PHOENIX	63	536.4	537.9	112.1	149.5	586.3	251.3	57.5	397.7	2092.3	2628.7
SIDEWINDER AIM-9M	76	333.4	70.1	-	10.4	34.4	-6.9	-	-2.2	105.8	439.2
SPARROW AIM-7M	78	894.9	5.6	-	87.9	-82.1	31.0	-	110.2	152.6	1047.5
TOMAHAWK	77	2422.9	-376.4	162.1	382.2	211.7	267.8	-	-29.4	618.0	3040.9
TRIDENT	74	12431.1	10761.2	8.0	58.6	2626.5	779.1	527.0	3139.5	17899.9	30331.0[b]
5-inch Guided Proj.	77	500.5	21.6	18.2	-	51.9	206.3	-	-35.6	262.4	762.9
SURTASS	75	259.3	118.1	118.0	19.7	104.8	187.4	9.3	46.7	604.0	863.3
TACTAS	76	601.1	-13.4	107.5	-5.6	32.7	175.2	-	250.1	546.5	1147.6
SSN-688	71	5747.5	6214.4	565.7	284.7	87.3	-680.1	412.8	1942.9	8827.7	14575.2
CG-47 (DDG-47)	78	14083.5	4754.4	862.6	192.3	304.2	1449.9	-	505.3	8068.7	22152.2
FFG-7	73	3244.5	17.7	863.9	242.6	1626.0	1541.3	-	2810.9	7102.4	10346.9
PHM	73/74	726.2	-533.1	6.2	1.2	140.9	74.8	29.4	14.7	-265.9	460.3
CVN-71	79	2420.6	-	22.0	-	-	-	-	152.7	174.7	2595.3
NAVY SUBTOTALS		80875.6	36255.5	4601.5	5722.2	9865.6	12845.2	1121.6	20099.4	90511.0	171386.6
AIR FORCE											
A-10	70	2489.7	78.1	370.5	180.0	1124.7	22.6	28.8	1115.9	2920.6	5410.3
F-15	70	7355.2	460.3	737.3	527.8	1925.5	65.7	767.7	3536.2	8020.5	15375.7
F-16	75	6054.5	5364.7	2412.7	2915.7	1485.6	-278.2	56.4	2250.0	14206.9	20261.4
E-3A (AWACS)	70	2661.6	105.6	47.3	183.3	1218.5	-215.1	-9.8	459.5	1789.3	4450.9
E-4 (AABNCP)	74	484.3	-61.1	22.2	-22.3	559.2	20.6	-	50.2	568.8	1053.1
EF-111A	73	631.9	-	20.3	140.9	371.2	157.4	12.3	82.5	784.6	1416.5
PLSS	77	954.5	-652.5	35.1	-78.9	48.6	98.1	-	68.7	-480.9	473.6
HARM (AGM-88)	78	1052.0	1730.9	-	-19.3	691.7	62.3	-	-67.6	2398.0	3450.0
MAVERICK (IIR)	75	1592.9	1563.3	-	145.6	267.5	393.1	-	166.3	2535.8	4128.7
SIDEWINDER AIM-9M	76	277.6	199.8	-	24.2	63.4	-24.0	-	-30.8	232.6	510.2
SPARROW AIM-7M	78	363.2	920.2	-	55.4	4.9	451.2	-	-216.6	1215.1	1578.3
DSCS III (Space Seg.)	77	893.6	-	59.3	-	67.4	34.1	12.9	101.3	275.0	1168.6
NAVSTAR GPS	79	2306.7	-	-	-	-	18.0	-	-127.7	-109.7	2197.0
ALCM	77	4184.0	-19.1	228.4	158.7	212.0	556.5	-0.2	546.1	1682.4	5866.4
GLCM	77	1527.2	-226.1	61.3	539.5	108.3	815.8	132.8	227.3	1658.9	3186.1
AIR FORCE SUBTOTALS		32828.9	9464.1	3994.4	4750.6	8148.5	2178.1	1000.9	8161.3	37697.9	70526.8
GRAND TOTALS		144667.9	51454.3	10625.6	13878.9	22387.6	35173.6	2284.2	35439.5	171243.7	315911.6

a/ The estimates of Program Acquisition Costs developed at the time of the Secretary of Defense approved full-scale engineering development (DSARC II).

b/ TRIDENT Current Estimate excludes TRIDENT (C-4) Backfit Program Costs estimated at $4531.9 as of June 30, 1981.

Source: Selected Acquisition Reports Summary Tables as of June 30, 1981 (pages 1 and 4 of 5) prepared by OASD(Comptroller), August 14, 1981

32 CARLUCCI INITIATIVES

#1	--	MANAGEMENT PRINCIPLES
#2	--	PREPLANNED PRODUCT IMPROVEMENT
#3	--	MULTIYEAR PROCUREMENT
#4	--	INCREASE PROGRAM STABILITY IN THE ACQUISITION PROCESS
#5	--	ENCOURAGE CAPITAL INVESTMENT TO ENHANCE PRODUCTIVITY
#6	--	BUDGET TO MOST LIKELY COST
#7	--	ECONOMIC PRODUCTION RATES
#8	--	ASSURE APPROPRIATE CONTRACT TYPE
#9	--	IMPROVE SYSTEM SUPPORT AND READINESS
#10	--	REDUCE THE ADMINISTRATIVE COST AND TIME TO PROCURE ITEMS
#11	--	INCORPORATE THE USE OF BUDGETED FUNDS FOR TECHNOLOGICAL RISK
#12	--	PROVIDE ADEQUATE FRONT END FUNDING FOR TEST HARDWARE
#13	--	GOVERNMENTAL LEGISLATION RELATED TO ACQUISITION
#14	--	REDUCE THE NUMBER OF DOD DIRECTIVES
#15	--	FUNDING FLEXIBILITY
#16	--	CONTRACTOR INCENTIVES TO IMPROVE RELIABILITY AND SUPPORT
#17	--	DECREASE DSARC BRIEFING AND DATA REQUIREMENTS
#18	--	BUDGETING WEAPONS SYSTEMS FOR INFLATION

CARLUCCI INITIATIVES (CONT'D)

#19	--	FORECASTING OF BUSINESS BASE CONDITION AT MAJOR DEFENSE PLANTS
#20	--	IMPROVE THE SOURCE SELECTION PROCESS
#21	--	DEVELOP AND USE STANDARD OPERATIONAL AND SUPPORT SYSTEMS
#22	--	PROVIDE MORE APPROPRIATE DESIGN TO COST GOALS
#23	--	ASSURE IMPLEMENTATION OF ACQUISITION PROCESS DECISIONS
#24	--	REVISE DSARC (DEFENSE SYSTEM ACQUISITION REVIEW COUNCIL) DECISION MILESTONES
#25	--	INCLUDED THE MENS (MISSION ELEMENT NEED STATEMENT) IN THE POM (PROGRAM OBJECTIVE MEMORANDUM)
#26	--	REVIEW DSARC MEMBERSHIP
#27	--	DEFENSE ACQUISITION EXECUTIVE
#28	--	DSARC REVIEW CRITERIA
#29	--	INTEGRATION OF PPBS (PLANNING, PROGRAMMING, BUDGETING SYSTEM)/DSARC PROCESSES
#30	--	PROGRAM MANAGER CONTROL OVER LOGISTICS AND SUPPORT RESOURCES
#31	--	IMPROVING RELIABILITY AND SUPPORT FOR SHORTENED ACQUISITION CYCLE
#32	--	INCREASE COMPETITION IN THE ACQUISITION PROCESS