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WHO SAYS YOU HAVE A MAJOR DEVELOPMENT PROGRAM. (U)
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STUDY TITLE:

WHO SAYS YOU HAVE A MAJOR DEVELOPMENT PROGRAM?

STUDY PROJECT GOALS:

Identify and examine the criteria considered by the SecDef and others when designating a development effort as a major program. Determine significances of program costs.

Study was limited to reviewing primarily Air Force programs

STUDY REPORT ABSTRACT:

The purpose of this report ^{attempts} is to identify, based on current data, the main considerations used in the designation of a development program as 'major'. While primarily considering Air Force programs, certain Army and Navy programs were also included. The principle references sources were: DOD Directives, the OSD Budget Manual, OMB Major System Acquisition Policy, HQ USAF/HQ AFSC Assessment Reviews, and the final report of the Acquisition Advisory Group (AAG).

Section II of the report describes the criteria for different types of major programs and in Section III the data is evaluated to determine the degree the stated criteria are being met or surpassed on a practical basis. Included is an examination of the new OMB policy of reviewing, in detail, the front end of the acquisition process and the recent decision by the Deputy Sec Def to delegate certain DSARC 1 reviews to the Service Secretaries. The report concludes that from a practical view, dollar thresholds (\$50M RDT&E/\$200M Investment) for DSARC programs are unrealistically low. ✓

KEY WORDS: Program Management, DSARC Process, System Acquisition

KEY WORDS ALSO

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PROGRAM ANALYSIS

MILESTONE CONTRACTING

SYSTEMS MANAGEMENT

PROGRAM MANAGEMENT

NAME, RANK, SERVICE	CLASS	DATE
John W. Hilten, Major, USAF	PMC 76-1	12 May 1976

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DEFENSE SYSTEMS MANAGEMENT SCHOOL



PROGRAM MANAGEMENT COURSE INDIVIDUAL STUDY PROGRAM

WHO SAYS YOU HAVE A
MAJOR DEVELOPMENT PROGRAM?

STUDY PROJECT REPORT
PMC 76-1

John W. Hilten
Major USAF

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WHO SAYS YOU HAVE A
MAJOR DEVELOPMENT PROGRAM?

Study Project Report
Individual Study Program

Defense Systems Management School
Program Management Course
Class 76-1

by

John W. Hilten
Major USAF

May 1976

Study Project Advisor
Mr William Cullin, DSMS

This study project report represents the views, conclusions and recommendations of the author and does not necessarily reflect the official opinion of the Defense Systems Management School or the Department of Defense.

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EXECUTIVE SUMMARY

The purpose of this report is to identify and evaluate current factors that place development programs in that category called "major". Four categories of major programs were considered: DSARC Programs; Major programs per DOD Budget Manual; Major Programs per OMB and programs requiring Sec Air Force/HQ USAF/HQ AFSC formal reviews. Due to time and data access constraints, only Air Force programs were included in this review except in the case of the DSARC programs where data from all three services was available. In addition to considering existing major program criteria, the impact of the proposed Milestone 0 decision (considers mission analysis and need) is also included.

Major development programs per the DOD Budget Manual are all those that have \$50M total R&D costs and/or \$200M investment costs. In the FY 1977 Air Force Budget there were thirty-five programs in this category. Similarly, DSARC programs have the same dollar threshold with the recent added note that these numbers are in unescalated FY 72 dollars. OMB in their recent Major System Acquisition Policy circular left the setting of dollar thresholds with the developing agency, however, they did establish the policy that a more comprehensive review of the need was required at the "front-end" of the program. This factor plus the overloading of the DSARC principals with too many DSARC programs to keep track of, are the apparent reasons for the new 4 step acquisition process being proposed by DDR&E.

Milestone 0 would be added, however, the Service Secretaries would assume some Milestone 1 (DSARC 1) review responsibility and the monitoring of Milestone 3 (DSARC 3) production.

It was concluded that the answer to the question, "Who says you have a Major Program?", is the Secretary of Defense and/or the OSD Comptroller. The explicit cost criteria established by the DOD Budget Manual ensured that fairly detailed data on a relatively large number of major programs (compared to the number of DSARC programs) will be forwarded to Congress. However, these same dollar amounts appear to be only about one-half the minimum required to be designated a DSARC program.

SECTION I

INTRODUCTION

Purpose: Based on previous experience in the United States Air Force Research and Development business and the subject material covered in the Defense Systems Management School's Program Management Course, the definition of what constitutes a "major" program appeared to vary depending on who was assigning the label. In addition to these programs designated major by the Secretary of Defense per Department of Defense Directive 5000.1, other levels in the government bureaucratic hierarchy also designated certain programs as major. The consequences of being so designated are certain management, reporting, travel and briefing requirements (visibility) which are not required of the non-major programs. This report reviews this process with the purpose of identifying the main consideration(s) in designating a program as major, thus providing some insight for program managers who have told they have a major program and must immediately prepare and forward to Headquarters certain program information, reports, etc.

Study Goals: Intuitively it is reasonable to expect that program acquisition cost would be the main (and perhaps only) significant factor used to determine if a program should be designated as major regardless of who in the hierarchy makes the determination. It is this program cost aspect

which will be examined in detail to determine the role it plays. In addition, cost data from the various programs now designated major will be evaluated to determine what the current cost threshold is for major programs. A third area of consideration is to see if there is any evidence that development efforts are combined or separated in order to ensure or avoid being designated a major program.

Scope and Limitations: The study considered all the current USAF development and production programs which is a limitation in the sense that Army and Navy programs are not included. It was not possible in the time available to become familiar enough with the other service programs to adequately address them in this study. However, approximate acquisition cost figures are included and considered for those Army and Navy programs designated major by the Secretary of Defense. As a result, this study primarily addresses the USAF development programs in an attempt to perceive what the Department of Defense and the Congress consider important enough to warrant their playing a role in the program's management.

Report Organization: The body of this report is separated into two main sections (in addition to this introductory section) with summary comments at the end. The first research objective was to specifically identify who, based on current regulations, directives, and practices can identify a program as major. The results are reported in Section II

and includes a description of the process, the stated criteria for selection, and some of the ramifications of a program being so designated. Having identified the who and how, this baseline data is evaluated in Section III in order to determine what the apparent thresholds are for major programs.

SECTION II

MAJOR PROGRAM DESIGNATION

Based on recent experience with the programming and budgeting of the USAF RDT&E funds, it was apparent that several different people could require the generation of special descriptions, reports, and briefings on what were identified as major programs. Specifically these include the Secretary of Defense and the Defense Systems Acquisition Review Council (DSARC) programs, major systems according to the Office of Management and Budget (OMB), programs meeting the Department of Defense Budget Guidance Manual, and programs requiring Secretary of the Air Force/Headquarters USAF/Headquarters AFSC assessment reviews. The requirements which must be met to qualify as a major program according to each of these categories are described in the following paragraphs.

SAF/HQ USAF/HQ AFSC Assessment Reviews: Secretary of the Air Force Program Reviews (SPR's) are management reviews on all aspects of selected major programs of high national and departmental priority and importance (1:5)¹. Currently the Secretary has designated sixteen programs for review quarterly or semi-annually (2: Atch 2,1&2). Prior to presentation to the Secretary, the program is reviewed at HQ AFSC and at HQ USAF. HQ AFSC calls this a Program Assessment Review (PAR) or more commonly a PAR/SPR (3:1). This information presented

¹This notation will be used throughout the report for sources of quotations and major references. The first number is the source listed in the bibliography. The second number is the page in the reference.

at the SPR is basically similiar (same format) as that presented at the HQ AFSC PAR. The presentation sequence for this 20 to 30 minute briefing by the program manager is first to the HQ AFSC Commander and his key staff, then to the Air Force Council (HQ USAF DCS level, 3-star Generals) and Air Staff Board (key 2-star Directors chaired by the Director of Programs) in joint session. Finally the presentation is made to the Secretary and the Chief of Staff. It is normal for these presentations to span a two or three day period. In addition to these programs reviewed at the Pentagon, HQ AFSC conducts reviews of programs selected by the AFSC Commander which are of lesser priority and importance than the PAR programs. This is the Command Assessment Review (CAR) which is also normally conducted quarterly, spans 30 minutes, and covers program status and progress (3:1). Currently there are 44 CAR programs (2: atch 2, 2-5). All other programs managed by AFSC (those not included in the SPR/PAR/CAR reporting) follow the Management Assessment Review (MAR) process which provides for monthly written reports by the program manager (quarterly for programs less than 1 million dollars). The AFSC field activity is responsible for conducting this review to assess progress, current and future status, and existing or potential problems throughout the period that AFSC is responsible for the program (4: 1,3).

DOD Budget: The preparation of the DOD budget each year is accomplished per direction of the Office of the Assistant

Secretary of Defense (Comptroller) who publishes the DOD Budget Guidance Manual. This manual provides direction to the services on how to prepare and what to include in the October Budget Submission to OSD and the justification material forwarded to Congress. Included in the justification material for the RDT&E Appropriation is a volume titled "Supporting Data for Fiscal Year 19BY Budget Estimates - Major Programs." Major is defined as 50 million dollars or more (over life of development or production) in RDT&E and/or 200 million dollars or more in investment (over life of development or production). All programs that meet these dollar thresholds must provide test and evaluation data and program milestone data over and above the data provided by lesser programs (5: 325-1,4). In the FY 1977 Air Force budget there were thirty-five programs in this category (6). The HQ USAF Director of Budget (AF/ACB) also prepared a summary of the FY 1977 President's Budget which included a list of twenty-eight programs identified as major systems (7:4,5).

DSARC Programs: Prior to the July 1971 publication of Department of Defense Directive 5000.1, Acquisition of Major Defense Systems, "particular systems/projects" were managed per Department of Defense Directive 5010.14. This directive, titled "System/Project Management", stated that certain programs meeting specific criteria would use what has now become commonly known as the program manager method of management, i.e., single individual with appropriate

responsibility and authority. The criteria included systems/ projects which:

- a. Are rated in the Brick-Bat category of the National and Military Urgency Determinations.
- b. Are estimated to require total RDT&E financing in excess of twenty-five million dollars, or estimated to require total production investment in excess of one hundred million dollars.
- c. Are designated by the Secretary of Defense or Head of a DOD Component based on effect on military posture, programs which are closely related and meet dollar thresholds, urgent, involve organizational complexity, technology advancement, and high RDT&E/ production concurrency.

The directive also states, however, that discretion should be exercised in optional application of this exceptional management technique (8:1,4).

DODD 5000.1 replaced 5010.14 in July 1971 and established a new policy for acquisition of major defense systems by the Military Departments and Defense Agencies. The program management philosophy remained the same where a single individual has a charter which defines his responsibility and authority; however, the criteria for program application was changed in order to achieve a greater degree of management by the DOD Components (decentralized management). This management by exception approach did make one other significant change.

The Defense Systems Acquisition Review Concil was established with the purpose of making recommendations to the Secretary of Defense regarding approval for the program to proceed to the next key decision milestones, i.e., conceptual to validation phase (DSARC I), validation to full-scale development (DSARC II), and full-scale development to production/operational (DSARC III), in the development/acquisition process. The baseline for conducting each of these reviews is established in the Decision Coordinating Paper (DCP) which is usually prepared in draft by the program manager. Application of this directive was intended primarily for major programs but the management principles are considered to be applicable to all programs. The single criteria for specific application of this directive is to be so designated by the Secretary of Defense. The directive further states that this designation shall consider: (1) dollar value (programs which have an estimated RDT&E cost in excess of 50 million dollars, or an estimated Production Cost in excess of 200 million dollars); (2) national urgency; (3) recommendations by DOD Component Heads or Office of Secretary of Defense (OSD) officials (9:1,2). In December 1975, the dollar criteria was ammended to reflect the threshold as \$50 million/\$200 million in FY 1972 dollars (10:1). There are currently 68 programs in the DSARC/DCP process with 19 more preliminarily identified to enter the process. Of these, 28 are Air Force programs (11). Certain of these major programs, normally those past DSARC II,

require quarterly written status reports called Selected Acquisition Reports (SARs). Most of the SARs are forwarded to the Congress to keep them apprised of the program status and are intended to be primarily a financial report. An appropriate analogy is the financial report prepared by a company for its stockholders. Currently 51 programs prepare SARs (11 of which are Air Force) and 49 are forwarded to Congress (12:1).

OMB Major Systems: The Office of Management and Budget (OMB) has just recently published (6 April 1976, OMB Circular No. A-109) new policies to be followed by executive branch agencies (which includes the DOD) in the acquisition of major systems. This OMB Circular is a product of the new Congressionally established Office of Federal Procurement Policy within OMB and has a prime objective of improved economy, efficiency, and effectiveness in Federal Procurement. Specifically this circular requires:

- a. Top level management attention to determine agency mission needs and goals.
- b. Earlier direction to research and development efforts to meet mission needs and goals.
- c. Improved opportunities for innovative private sector contribution to meet national needs.
- d. Avoidance of premature commitments to full-scale development and production.
- e. Communicating with Congress earlier in the acquisition process by relating major systems acquisitions to agency mission and goals.

Major system acquisition programs, as defined in this OMB Circular, are those programs that: (1) are directed at, and critical to fulfilling an agency mission; (2) entail the allocation of relatively large resources; and (3) warrant special management attention. The circular further states that the individual agencies may establish additional criteria and relative dollar thresholds (13:1-12).

In the following section, the selection criteria described above are compared and evaluated for each of these four categories of major programs.

SECTION III

EVALUATION OF MAJOR PROGRAM DESIGNATION CRITERIA

DSARC Programs: The criteria for designation of major programs by the Secretary of Defense has remained essentially the same over the past decade except for the dollar thresholds. Back in 1965, DODD 5010.14 stated that System/Project Management was to be applied to programs of high priority and of significant importance to the United States military posture. The July 1971 and December 1975 versions of DODD 5000.1 continued the philosophy that the use of a program manager was the best way to conduct programs of high national urgency. Dollar thresholds did change, however, from the 1965 figure of \$25 million RDT&E and/or \$100 million production to the current figure of \$50 million RDT&E or \$200 million production based on 1972 dollars. When DODD 5000.1 was in draft form back in 1971, it was sent to AFSC for review and comments according to Col Charles Kenney and the draft version contained the same \$25M/100M thresholds as its predecessor. Their review concluded that the \$25/100M figure was unrealistically low and they recommended that the threshold be at least doubled. Col Kenney said he was never certain that their recommendation was the real cause of the change to \$50/200M, but felt that their somewhat arbitrary method of arriving at a better figure is a good indication of the relatively minor significance OSD places on these numbers (15). The recent addition of the

escalation factor (use of 1972 dollars) has had the effect of increasing these numbers by 30 to 40%, i.e., \$70M/280M using FY 76 dollars.

A review of all 68 of the current DSARC programs (see figures III-1 thru 3 on the following pages) revealed that only six have an acquisition cost of less than \$250 million and a total of only twelve less than \$500 million (14: Appendix H). Looking at just the Air Force programs, two programs nearing completion (TPN-19 TRACALS and the COBRA DANE radar) cost less than \$250 million. All the proposed USAF DSARC programs are in excess of \$400 million except the IIR Maverick which is a part of the larger laser Maverick program. The average cost of all programs is \$2.4B, however, programs like the F-15, F-14, B-1 and TRIDENT totaling \$56B tend to skew the cost distribution to the high side.

DSARC Program Criteria and the Acquisition Advisory Group (AAG):

The AAG was chartered by the Deputy Secretary of Defense, Mr. Clements, in April 1975 to examine and assess Service submitted comments regarding the management of weapon systems acquisition at the OSD level. Their report of September 1975 included five specific findings and twenty-eight recommendations, two of which relate to the subject of this report. The first concerns the total number of programs OSD can effectively handle using the DSARC process and the other concerns the formal structuring of the front end of the acquisition process. Both of these factors appear to be significant in

CURRENT DSARC REVIEWED PROGRAMS (11)

ARMY

Utility Transport
 Heavy Lift Helo
 TAC Operations System
 CH-47 Mod
 Pershing II
 TAC FIRE
 MICV
 SAM-D Missile
 Lance Missile
 VRFWC
 Roland Sys
 Stinger
 Dragon
 XM-1
 Cannon Launched Guided Proj
 Adv Attack Helo
 Adv Scout Helo
 AN/TTC-39 Switch
 18 Programs
 \$26 B Acquisition Cost¹
 Cost Range from \$5.6B to
 \$.076 B
 Avg Pgm Cost - \$1.44 B

NAVY

S-3A ASW
 DD-963 Destroyer
 Aegis
 SSN-688 Sub
 LHA
 Harpoon
 Sossus Imp
 Lamps
 Captor Mine
 Phalanx CIWS
 TACTAS
 Acoustic Sensor
 Patrol Frigate
 Sub Sonar Sys
 Surface Effects Ship
 NATO Patrol Hydrofoil
 Low Cost EW Suite
 Maj Surface Combatant
 Surv Towed Array Sensor
 Guided Projectile Pgm
 E-2C
 CH-53 Imp
 VCX (COD)
 Condor
 F-14
 AIM-7
 AIM-9

HARM
 TRIDENT
 SLCM
 Fleet Sat Com
 31 Programs
 \$76B Acq Cost¹
 Cost Range
 \$15.9B to \$.156B
 Avg Pgm Cost -
 \$2.45B

AIR FORCE

B-1
 F-15
 F-16
 AMST
 A-10
 AWACS
 DSCS III
 ALCM
 AIM-7
 AABNC
 C-141 Stretch
 EF-111A
 MAVERICK
 F-5 E
 AIM-9
 OTH-B
 NAVSTAR GPS
 TRACALS
 COBRA DAVE
 19 Programs
 \$59.7 B Acq Cost
 Cost Range
 \$21.4 B to \$.053 B
 Avg Pgm Cost
 \$3.1B

USAF DSARC PROGRAMS

USAF DSARC (1) PROGRAMS	Pgm Phase	Acquisition Cost (2)	SAR	Review PAR/SPR	CAR	Major Budget Program
B-1	II	\$21.4B	X	X		X
F-15	III	\$11.4B	X	X		X
F-16	II	\$6B	X	X		X
AMST	I	\$6B			X	X
A-10	III	\$4.2B	X	X		X
AWACS	III	\$3.5B	X	X		X
DSCS III	I	\$1.059		X		X
ALCM	I	\$1.02B		X		X
AIM-7 (3)	III	\$0.811B	X		X	X
AABNC	II	\$0.725B	X	X (AFLC PGM)		X
C-141 Stretch	III	\$0.677B				X
EF-111A	II	\$0.628B	X	X		X
MAVERICK	III	\$0.595B	X	X		X
F-5E	III	\$0.430B	X	X		X
AIM-9 (3)	III	\$0.390B	X	X		X
OTH-B	I	\$0.372B				
NAVSTAR	I	\$0.232B RDT&E			X	X
TRACALS	III	\$0.117B			X	X
COBRA DANE	III	\$0.053B			X	X

(1) - Active USAF programs which have received SecDef approval for phase identified (11)

(2) - Cost figures obtained from Jan 76 SARs and Refs 7 and 14

(3) - Navy Lead service

FIGURE III-2

PROPOSED USAF DSARC PROGRAMS (11)

<u>TITLE</u>	<u>EST ACQ COST (1)</u>	<u>SAR</u>	<u>PAR/SPR</u>	<u>REVIEW</u>	<u>CAR</u>	<u>MAJOR BUDGET PROGRAM</u>
AFSATCOM II	\$.750B		X			X
COMPASS COPE RPV	\$.410B		X			X
IIR MAVERICK	\$.309B		X			X
ATCA	\$2.9B				X	X
MOD GLUIDE WEA	(2)				X	X
PLSS	\$.551B				X	X
SHUTTLE IUS	\$.986B				X	X
M-X	\$3.9B RDT&E (2)				(MAR)	X
C-5 MOD	\$.543B				X	X

(1) - Cost estimates from references 7 and 14

(2) - Could not obtain an acquisition estimate

the future determination of which programs will be developed using the DSARC process (14: Vol I, 5&7).

Number of Programs: The AAG recommendation concerning number of DSARC program reads:

o That the number of major acquisition programs subject to formal DSARC process at OSD level be reduced to approximately 40 programs; delegate responsibility for remainder to Service Secretaries (14: Vol 1,5).

The basis of this recommendation stems from problems associated with the staff and line functions in OSD. Only the Secretary and the Deputy Secretary have total program authority and responsibility within OSD. However, such line authority can hardly be expected to be exercised in detail by the Secretary/Deputy Secretary on the approximately 80 programs now subject to DSARC actions. The nature, frequency, and detail of the reviews make it almost impossible for the DSARC principals to maintain a reasonable level of personal responsibility for all DSARC actions and the result is a shift of this responsibility to the lower echelons of the OSD functional staffs. As noted in the comments by the Services, this allows the lower echelons to become involved in program details without regard to the overall impact on programs (14: Vol 1,20).

Deputy Secretary Clements has issued direction and guidance in response to this and other recommendations included in

the report section concerning Direction and Control of Weapon Systems Acquisition by the Secretary of Defense:

a. Accordingly, I am now delegating to the Service Secretaries the responsibility for conducting the DSARC/DCP surveillance of those major weapon programs which have passed Milestone III. Twenty-two of the eighty-seven major programs currently involved in the DSARC/DCP process have passed Milestone III ---. The Service Secretaries will be responsible for informing me on a quarterly basis by a brief "how-goes-it" memorandum on the progress of these programs.

b. I request DDR&E to study--and report to me prior to 1 April 1976--a plan of action for delegating to the Service Secretaries the DSARC/DCP review process for all major acquisition programs at Milestone I, i.e., program initiation, contingent with the structuring of the front end of the acquisition process. This plan of action may contain alternatives for Milestone I. Currently, there are thirteen programs preparing for Milestone I (16:1,2).

DSARC Front End Structuring: The AAG recommended a formal structuring of the front end of the acquisition process, i.e., mission area analyses and/or mission concept studies; precise performance characteristics not be applied prior to DSARC II; and the Weapons System Evaluation Group (WSEG) be

assigned a significant role in advising the Deputy Secretary of Defense on these "front end" matters. It was also recommended this front-end activity not be an administrative extension of the DSARC/DCP process (14: Vol 1,6-7).

Deputy Secretary Clements actions on this recommendation were:

- a. I request DDR&E, in coordination with ASD (PA&E), to develop by 15 March 1976, an implementing DOD Directive to structure the front end of the acquisition process along the general lines of AAG recommendations.
- b. DOD Directive 5000.1 will be revised to indicate its sequential relationship to the front end structuring of the major weapons system acquisition process; additionally it will be revised to indicate that precise performance specifications for a weapon system will not be established until DSARC II.
- d. DDR&E is requested to advise me prior to 1 March 1976 concerning the feasibility and methodology of assigning WSEG the "front end" role (16:3).

DDR&E Proposal for Front End Structuring: In response to the Deputy Secretary of Defense tasking, DDR&E has made a recommendation concerning the best way to implement this front end review (see Figure III-4). The proposed full-cycle of milestone events and tasks starts with the Secretary of Defense approval of the Mission Element Need Statement and ends with production/deployment. The process consists of four milestone events/tasks as follows:

DEFENSE SYSTEM ACQUISITION PROCESS
FRONT END STRUCTURE

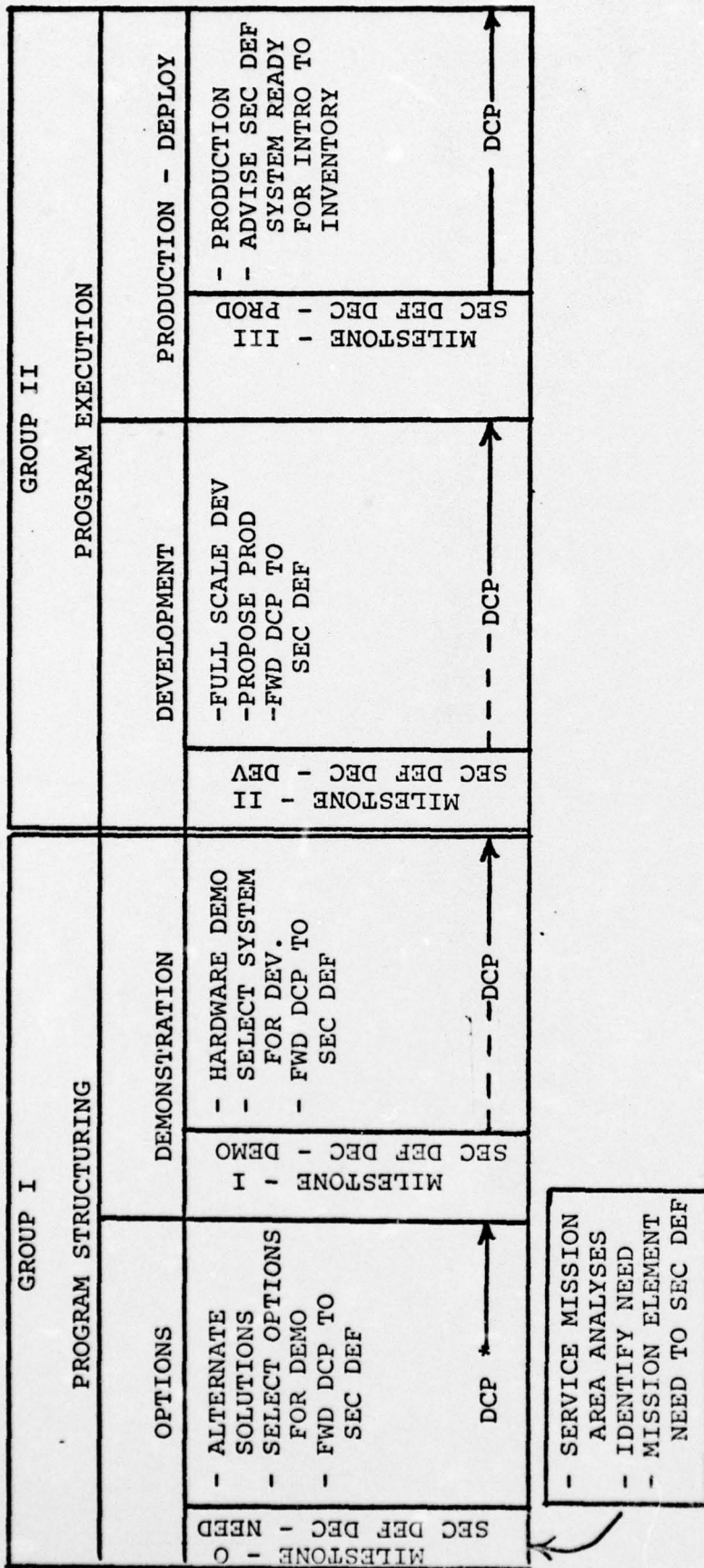


FIGURE III-4

- a. Milestone 0 - SecDef decision approving Service Secretary's statement of mission deficiency or need followed by Service action to identify alternate solutions, selection of options or option for demonstration and preparation of DCP.
- b. Milestone I - SecDef decision to proceed with demonstration followed by Service action to complete the demonstration of selected options or option and the selection of systems for full-scale development.
- c. Milestone II - SecDef decision to proceed with full-scale development followed by Service action to complete development as set forth in the approved DCP; to recommend initiation of production.
- d. Milestone III - SecDef decision to proceed with rate production followed by Service action to accomplish the production task as stated in the approved DCP (17:2).

Note that the above reflects all decisions will continue to be made by the Secretary of Defense. However, in accordance with the Deputy Secretary of Defense's desires for more decentralized management, certain Milestone I reviews will be conducted by the Service Secretary (16:2). Draft proposals for implementing this direction reflect the equivalent of a DSARC review called the (Service) Systems Acquisition Review Council (S)SARC. The Service Secretary would then forward the results

of his review and a coordinated DCP to the Secretary of Defense for the Milestone I decision. Currently it appears that the Services will only be allowed to conduct (S) SARC reviews on those programs which are essentially contained within the service mission. Defense wide programs such as strategic and nuclear, joint services, multi-national, and C³/intelligence would continue to be managed using the DSARC practices. Based on this criteria, it is estimated that approximately forty percent of all Milestone I reviews will be conducted by the Service Secretary (18:2,3).

Given that DODD 5000.1 includes criteria for determining when the DSARC review process should be applied and the fact that a Milestone 0 review and approval are now going to be required, an obvious question is what will be the basis for nominating programs for Milestone 0 reviews. Before the introduction of the Milestone 0 consideration, preceding paragraphs in this section pointed out the evidence that the total number of DSARC programs and program cost appeared to be important factors. Although no specific cost threshold could be determined, it was apparent that potential Air Force DSARC programs would require an acquisition cost in excess of \$400M to be considered. However, estimating acquisition costs for a not-yet-defined solution for an operational need at Milestone 0 is extremely difficult and one could easily be off by 100%. As a result it would not be surprising to see

only a few billion dollar class programs enter the DSARC process at Milestone 0.

It is apparent that the saturation of the DSARC process with too many programs was beginning to occur which precipitated the decision to let the Service Secretaries handle part of the load, i.e., certain Milestone I reviews plus the monitoring of those programs past DSARC III. This consideration plus the fact that there are several current development programs which meet the DSARC dollar threshold but are not DSARC programs leads to the conclusion that new programs marginally meeting the DSARC criteria will probably not be included. Referring back to the study goals, the combining or separating of development efforts to ensure or avoid designation as a major program could not be determined. However, the relative saturation of the DSARC process leads to the conclusion that any such maneuver is not going to be adequate.

DSARC vs Budget Criteria: As described in Section II of this report, the single criteria for determining if you have a major program according to the budget people is strictly dollars (\$50M RDT&E and/or \$200M investment). A comparison of the list of 35 major budget programs (USAF) vs the 28 Air Force DSARC programs (current and planned) revealed that there are currently seven development programs which meet the DSARC cost threshold but are not DSARC programs. This further substantiated the conclusion that "real" threshold is in excess of \$400M. Interestingly the \$7.5B Minuteman program

is not under DSARC review, however, a SAR is prepared and submitted to Congress.

DSARC vs OMB Criteria: The only substantial difference between the DSARC (DODD 5000.1) criteria for a major program and that stated by OMB is the use of dollar thresholds in DODD 5000.1. OMB has, however, stated the requirement for the services to conduct requirements/need reviews early in program development. This direction has evolved into a DDR&E proposed Milestone 0 review. Since DODD 5000.1 can be viewed as the implementing directive for OMB Circular No. A-109, any list of major programs should be the same for both criteria.

DSARC vs Program Reviews: A comparison of the various program assessment reviews with current and proposed DSARC programs is shown on the next page and on pages 14 and 15. There did not appear to be any specific pattern or common criteria except in the case of the SAR. The ten most costly Air Force programs which have passed DSARC II (except Minuteman which seems to be a special case) all require SAR reports. These same ten (plus five others) under go the SPR/PAR review but it was not apparent that cost was directly related to selection for this review.

PROGRAM REVIEWS

PROGRAM TITLE	MAJOR PRGMS ¹⁰	SAR	SPR/PAR	CAR ⁶	MAR
AWACS	X	X	X		
TPN-19	X			X ^S ₈	
AMST	X			X ^S ₈	
C-141 Stretch	X		N/A ⁹	N/A ⁹	N/A ⁹
F-15	X	X	X ⁹		
Int Ftr	X	X ¹	X ⁴		
Maverick	X	X ¹	X ⁵		
A-10	X	X	X ⁵		
Cobra Dane	X			X ^Q	
F-16	X	X	X		
B-1	X	X	X		
ALCM	X			X ^Q	
MX	X				X
Space Shuttle	X			X ^Q	
NAVSTAR	X		X		
AFSATCOM	X		X		
DSCS III	X		X ²		
AABNCP	X	X	X		
C-5 Mod	X			X ^Q	
Compass Cope	X		X ³	X ^S ₇	
GBU-15	X				X
PLSS	X			X ^Q	
OTH-B	X			X ^Q	
ATCA	X			X ^Q	
EF-111	X	X	X		
IIR Maverick	X		X ⁵		
Minuteman III		X	X		
AIM-7F (Navy)	X	X		X ^Q	
AIM-9L (Navy)	X	X		X ^Q	
FLTSATCOM (Navy)	X			X ^Q	

1. Last SAR - Mar 76
2. Total DSCS Program
3. Drone/RPV (semi-annual)
4. Request for semi-annual
5. Total Maverick Program (EO, Laser/IIR)
6. CAR Review Quarterly (Q) or Semi-Annual (S)
7. Alternates as PAR
8. TRACALS Program
9. AFLC Program
10. Includes current and proposed DSARC Programs

SECTION IV

SUMMARY

Summary of Conclusions: The answer to the question, "Who says you have a major program?", is the Secretary of Defense and/or the OSD Comptroller. If your program has been so designated by the Secretary of Defense it probably means that your acquisition cost is at least \$400M to \$500M. It will also mean that you will be facing a new DSARC review process with four decision points instead of the current three. This new decision point (Milestone 0) is at the "front end" of the program where mission area analyses and mission concept studies (analyses of the requirement) will be reviewed. It is also possible that your Milestone I (same as DSARC I) review will be conducted by your Service Secretary instead of DDR&E as a result of the Secretary of Defense's emphasis to decentralize parts of the DSARC process. When your program passes DSARC II and if it is in the upper one-half of your service's major programs (in terms of acquisition cost), you can anticipate preparing quarterly program financial report called the SAR which will be forwarded to the Congress to keep them abreast of progress.

Alternatively, your program could have been identified as major by the budget people based on cost criteria (\$50M RDT&E and/or \$200M Investment) which means your program will have high visibility throughout the Service/OSD budget reviews. In addition, details of your program will be included in the supporting data package sent to the Congress in support of

the President's Budget. The key message of course is that you should attempt to become fully aware of who in Washington is watching your program and what the corresponding implications are.

Recommendations: A recommended follow-on project is a detailed review of the proposed new four step program review process resulting from the addition of the Milestone 0 decision point.

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