



ESTABLISHING A FRAMEWORK FOR THE OVERSIGHT OF MAJOR DEFENSE

ACQUISITION PROGRAMS – A HISTORICAL ANALYSIS

THESIS

Diane I. K. Kuderik, Captain, USAF

AFIT/GCA/ENV/04M-04

**DEPARTMENT OF THE AIR FORCE
AIR UNIVERSITY**

AIR FORCE INSTITUTE OF TECHNOLOGY

Wright-Patterson Air Force Base, Ohio

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED.

The views expressed in this thesis are those of the author and do not reflect the official policy or position of the United States Air Force, Department of Defense, or the United States Government.

AFIT/GCA/ENV/04M-04

ESTABLISHING A FRAMEWORK FOR THE OVERSIGHT OF MAJOR DEFENSE
ACQUISITION PROGRAMS – A HISTORICAL ANALYSIS

THESIS

Presented to the Faculty

Department of Systems and Engineering Management

Graduate School of Engineering and Management

Air Force Institute of Technology

Air University

Air Education and Training Command

In Partial Fulfillment of the Requirements for the

Degree of Master of Science in Cost Analysis

Diane I. K. Kuderik, BS

Captain, USAF

March 2004

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED.

Abstract

The Department of Defense (DoD) has budgeted over \$134.5 billion for Fiscal Year 2004 for Acquisition, yet little is written about the personnel responsible for managing and evaluating Major Defense Acquisition Programs (MDAP), that is those who perform Acquisition Oversight. The Acquisition Oversight process has not been studied in a disciplined manner.

Congress, past Administrations, and the DoD Inspector General have commissioned several studies on the Acquisition Oversight Process. Recommendations were considered and implemented such that the process evolved to where it stands today. Over 40 years separate the first iteration with the latest version. Commission reports, countless studies, and historians agree on the need for oversight in military acquisitions; they agree that the system takes too much money, takes too long, and does not perform as well as most would wish; yet they disagree on who should perform oversight.

This thesis reviewed relevant literature to model historical oversight hierarchies. Then expert opinions were gathered from the studies mentioned above, on how well the oversight process modeled preformed. As expected, the oversight process has improved over time but further improvements are currently being sought. Those seeking improvement would do well to study past processes and learn from their mistakes.

Acknowledgments

I would like to express my sincere appreciation to my faculty advisor, Maj Michael Greiner, for his guidance and support throughout the course of this thesis effort. The insight and experience was certainly appreciated. I would, also, like to thank my readers, Lt. Col John Driessnack from the Defense Acquisition University and Maj David King of SAF/AQP, for both the support and latitude provided to me in this endeavor. Mostly I would like to thank my family and church for their support and understanding.

Diane I. K. Kuderik

Table of Contents

	Page
Abstract	iv
Acknowledgments	v
List of Figures	viii
List of Tables	ix
I. Introduction	1
Background.....	1
Problem Statement.....	7
Research Objective	8
Scope.....	9
Assumptions.....	10
Thesis Overview	10
II. Literature Review.....	12
Introduction.....	12
Role Definition (1947-1950)	13
Decade of Reorganization (1950-1960).....	28
Era of McNamara (1961-1968).....	39
Oversight Outgrowth (1969 – 1988).....	44
Reducing Service Oversight (1977-1988)	52
Streamlining (1989-2003).....	61
Ongoing Pilot Studies	70
Summary	71
III. Methodology.....	73
Introduction.....	73
Criteria of Acquisition Oversight	74
Data Source.....	77
1949 Oversight.....	78
1964 Oversight.....	85
1977 Oversight.....	92
1988 Oversight.....	99
Chapter Summary	102

	Page
IV Conclusion	103
Review of Research Objectives	103
Discussion of Results	103
Recommendations for Future Research	104
V Bibliography	106

List of Figures

Figure	Page
1. The Defense Acquisition Management Framework	3
2. Budget Pie Chart	5
3. Model Key	9
4. National Military Establishment	17
5. Air Force Acquisition Oversight Hierarchy of 1949	26, 78
6. Air Force Acquisition Oversight Hierarchy of 1955	33
7. Air Force Acquisition Oversight Hierarchy of 1959	39
8. Air Force Acquisition Oversight Hierarchy of 1964	43, 85
9. Air Force Acquisition Oversight Hierarchy of 1977	51, 92
10. Air Force Acquisition Oversight Hierarchy of 1988	60, 99
11. Air Force Acquisition Oversight Hierarchy of 1994-2003	70

List of Tables

Table	Page
1. Major Commissions on Defense Acquisition Process	7
2. Hoover I Recommendations	24
3. Rockefeller Committee Recommendations	32
4. Hoover II Recommendations	35
5. Packard Initiatives.....	45
6. Fitzhugh Commission Recommendations	47
7. Commission on Government Procurement Recommendations	49
8. Carlucci Initiatives	54
9. Grace Commission Recommendations	55
10. Packard Commission Recommendations.....	57
11. Defense Science Board Task Force Recommendations.....	64
12. Acquisition Oversight and Review Process Action Team.....	66
13. Federal Acquisition Streamlining Act (FASA) Highlights.....	67

ESTABLISHING A FRAMEWORK FOR THE OVERSIGHT OF MAJOR DEFENSE
ACQUISITION PROGRAMS – A HISTORICAL ANALYSIS

I. Introduction

Background

On 11 September 2001 America awoke to the threat of terror when Al Qaeda forces crashed commercial airplanes into the World Trade Center in New York and the Pentagon in Washington D.C. President George W. Bush sent troops into Afghanistan and later into Iraq to pursue those responsible. America's Armed Forces accomplished this with the use of highly skilled personnel and technologically advanced equipment. The technology employed by America's Armed Forces and the training on said systems are products of the Defense Acquisition System. Keeping the technological edge over America's enemies requires a Defense Acquisition System that is flexible, affordable, and manageable.

Evaluating the adequacy of the Defense Acquisition System starts by understanding the parts of this institution and defining terms. Defense includes the uniformed and civilian military and the officials appointed over them. The Acquisition System is the management process by which research, development, and procurement of an item occurs. The regulation, Department of Defense (DoD) 5000 *The Defense*

Acquisition System, governs this system. As defined by the May 2003 issue of the DoD 5000 series “Defense Acquisition System is the management process by which the Department of Defense provides effective, affordable, and timely systems to the users” (DoD 2003). The users are the Combatant and Unified Commands.

The systems that qualify for major defense acquisition programs (MDAPs) status are multibillion dollar items such as tanks, planes, carriers and missiles. An MDAP as described by the DoD 5000 series is “a directed, funded effort that provides a new, improved, or continuing material, weapon, or information system or service capability in response to an approved need” (DoD 2003). The United States Code 10 chapter 144 defines a MDAP as:

a Department of Defense Acquisition Program that is not a highly sensitive classified program (as determined by the Secretary of Defense) and – 1) that is designated by the secretary of defense as a major defense acquisition program; or 2) that is estimated by the Secretary of Defense to require an eventual total expenditure for research, development, test, and evaluation of more than \$300,000,000 (based on fiscal year 1990 constant dollars) or an eventual total expenditure for procurement of more than \$1,800,000,000 (based on fiscal year 1990 constant dollars). (10 USC 2430)

The Secretary of Defense is required by law to ensure all MDAPs are being reviewed properly. Therefore several layers of Acquisition Executives are employed to review a program at key decision points known as *milestones* or “the point at which a recommendation is made and approval sought regarding starting or continuing an acquisition program” (DoD 2003). The management review by acquisition executives placed within the Department of Defense prior to a milestone decision will henceforth be called *oversight*.

Programs are separated into Acquisition Categories (ACAT). MDAPs are designated as ACAT I, a category defined by the DoD 5000 series as:

An Acquisition Category (ACAT) I program that is estimated to require an eventual total expenditure for research, development, test and evaluation of more than \$365 million in fiscal year (FY) 2000 constant dollars or, for procurement, of more than \$2.190 billion in FY 2000 constant dollars, or a program that is designated as an MDAP because of special interest by the Under Secretary of Defense (Acquisition, Technology, and Logistics). (DoD 2003)

The MDAPs that receive the oversight from officials placed in the highest ranks of the Defense Department are those that fall into ACAT ID. Conversely, those falling into ACAT IC are MDAPs delegated down to the Services for milestone reviews (DoD 2003).

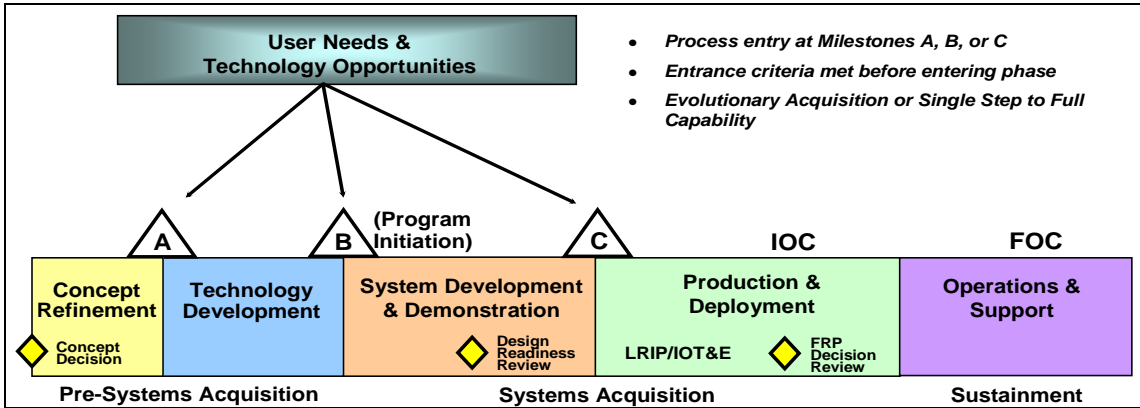


Figure 1. The Defense Acquisition Management Framework. (DoD 2003)

Milestone reviews occur during the system’s acquisition life; depicted in figure one as triangles. A MDAP is initiated at milestone B (see Figure 1). Prior to milestone B several iterative studies are performed on the product so the program baseline can be established. With this acquisition program baseline and 19 other supportive documents required by statute or regulations, a series of officials evaluate the product’s readiness to become an MDAP. For more on the documentation required for a milestone review, see DoD 5000, Table E3 (DoD 2003: 18-22).

Quantitative Studies.

Ideally the comparison of oversight processes would be done quantitatively. That is evaluating Acquisition Oversight process by its burden on the federal budget and personnel, and its cost in time. Unfortunately such information is not readily available. The Selective Acquisition Reports mandated by Congress for all MDAPs does not contain the costs of performing the oversight over each MDAP. The Federal budget does not record the fiscal costs of oversight activities. Personnel Commands do not have a specialty code to record the personnel costs of oversight activities. The time to perform one milestone review is not uniformly recorded by meeting minutes, travel logs, or any readily available report.

The fiscal cost of acquisition oversight process has been studied by several organizations.

The Carnegie Commission on Science, Technology and Government, using an indirect measure of cost of the DoD regulatory system, calculated that the overhead, or management and control costs, associated with the DoD acquisition process were about forty percent of the DoD acquisition budget...This figure includes both the Government's internal costs, and the costs borne by DoD contractors and ultimately reimbursed by the Government (Perry 1994:5).

RAND took into consideration the Carnegie study as well as many others then made a more conservative estimate. RAND estimates that the cost of the oversight process is between five and ten percent of the Defense Acquisition Budget (Lorell 1990:12).

To get an idea of the magnitude of this cost see figure 2. To fund the armed forces ability to defend America, to go to war, and to perform military duties, President Bush requested from Congress \$379.9 billion for fiscal year 2004 (DoD Budget 2003:1).

As part of his request, \$134.5 billion of the \$379.9 billion or 35 percent is slated to fund Defense Acquisition Programs (DoD Budget 2003:5). As stated previously Acquisition Oversight costs is not a line item in the federal budget but if one puts a wedge in for this expense it would be between \$6.7 and \$53.6 billion in FY 2004 dollars (using RAND 5% estimates as low and Carnegie 40% estimates for the high). Note that these costs include the contractors mark-up for working with the government and complying with the government's demand for reports. Not included in these figures are government costs related to personnel, the maintenance of facilities, or a number of overhead costs such as supplies; these items are included in the Operation and Maintenance (O&M) budget line. Therefore a more precise estimate of the cost of oversight would include a margin for these items included in the O&M budget line.

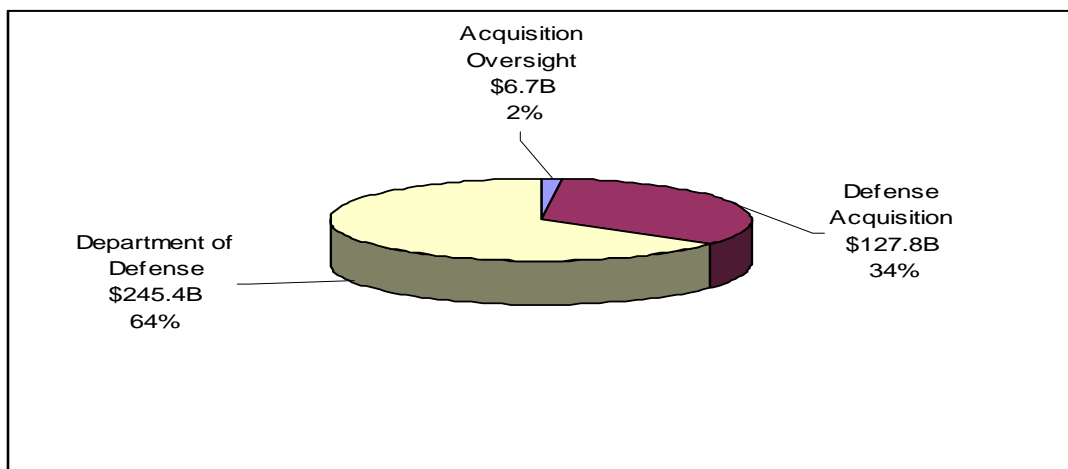


Figure 2 Budget Pie Chart (DoD Budget 2003)

Unlike the RAND study or the Carnegie study, The Process Action Team, as commissioned by President Clinton in 1994, estimated the average cost for one formal review of one MDAP. The PAT found that it costs \$10-\$12 million in Fiscal Year 1993

dollars. The PAT estimated that over the MDAP's lifetime, \$40 million or more could be spent on acquisition oversight alone (PAT 1994:8). It is not certain whether the PAT included a margin for the O&M expenses mentioned earlier.

The time to perform oversight has only just been studied by the 1994 PAT. The PAT commissioned the Institute for Defense Analysis (IDA) to study the actual average time to perform a milestone review for one MDAP. The DoD 5000 series estimates the average time to perform one review is 180 days. The IDA studied 150 programs across Services, system type, and program phase. The IDA places the average time for oversight at milestone B (Figure 1) as 10 weeks beyond the 180 days or close to 9 months total (Bicksler 1991:50).

Personnel costs have not been studied judiciously. When challenged to estimate the number of personnel involved with the oversight process, the PAT stated we "could not even grossly estimate the number" (PAT 1994:8). Not all the costs are captured by the 1994 PAT study, neither has there been studies to back up the PAT findings, nor are there government reports currently collecting cost information. An improved data collection method would be needed to better track the quantitative costs of oversight.

Qualitative Studies.

In addressing the question on who should perform oversight, Congress, past Administrations, and the DoD Inspector General have commissioned several studies on the Acquisition Process (See table 1). Recommendations were considered and implemented such that the process evolved to where it stands today. Over 40 years separate the first iteration of the DoD Acquisition Process with the latest version. Reports done by major commission on Defense Acquisition Process, countless studies,

and historians agree on the need for oversight in military acquisitions; they agree that the system takes too much money, takes too long, and does not perform as well as most would wish; they disagree on who should perform oversight (Defense Policy 1988, McNaugher 1989, and GAO 1997). The commission reports listed in Table 1 has all commented on the quality of DoD management, often in regards to Acquisition. The reports embody the expert opinions on past oversight hierarchies and the oversight ability to perform.

Table 1. Maior Commissions on Defense Acquisition Process

Date	Major Commission
1949	First Hoover Commission on the Organization of the Executive Branch
1953	Rockefeller Committee
1955	Second Hoover Commission on the Organization of the Executive Branch
1970	Fitzhugh Commission / Blue Ribbon Defense Panel
1972	Commission on Government Procurement
1983	Grace Commission / President's Private Sector Survey on Cost Controls
1986	Packard Commission/ President's Blue Ribbon Defense Commission
1994	Process Action Team on Oversight and Review

Problem Statement

The current Acquisition Oversight process has not been studied in a discipline manner to understand how it is performing given the evolution of the past 40 years. Studies centered on the Acquisition Process have primarily focused on government-to-contractor relations or on Congress' relationship with the DoD (Farrell 1997, Fox 1994, GAO 1997, and Harman 2003). The oversight process within the DoD has been treated

as a “black box” where MDAPs disappear into or emerge as a new product in the hands of the Warfighters. The first step to understanding the process is to identify the players, their mission, and their capabilities and how they relate to each other. This thesis identifies the organizations that perform formal milestone reviews on MDAP and how they have evolved to their current state then evaluated performance over the years. Since hard data on costs is not available a qualitative analysis was done in lieu of a quantitative comparison.

Research Objectives

This thesis has three research objectives.

- 1) Define, document, and utilize available literature relevant to Acquisition Oversight procedures, to identify the organizations involved with the process as it evolved to its form today.
- 2) Build models of the Acquisition Oversight Process, emphasis on the chain of command construct, as it existed in the 1950s, 1960s, 1970s, 1980s, and the present construct.
- 3) Evaluate each on its ability to accomplish seven goals derived from Clinton’s 1994 Process Action Team on Acquisition Oversight report, using past research relevant to Acquisition Oversight procedures.

Methodology

First the organizations were identified. Then models were developed from organization charts, historically documented relationships, and statutory relationships recorded in Title 10. The Models have the following key (see Figure 1).

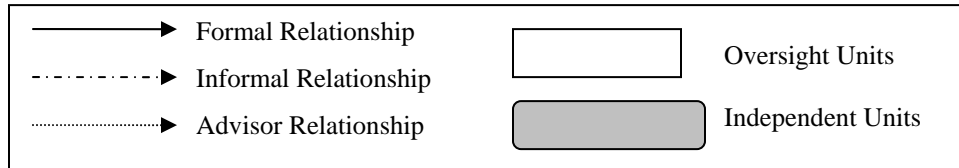


Figure 3. Model Key

Expert opinions regarding the oversight process in relation to seven criteria was extracted from commission reports. If there were no comments found in the commission reports stating differently the oversight process met each criterion.

Scope

This thesis is limited to the DoD Acquisition Oversight Process as it historically existed between the Air Force and the Secretary of Defense, or those serving similar positions. As such, the following limits were placed on the thesis.

- 1) Both the requirements generation system and the budget process are being transformed; each is not as well documented as the Acquisition process or as thoroughly studied. Relationships between the budget process, requirements generation process and the Acquisition process are being redefined. Therefore organizations generating the requirements entering the acquisition process and organizations providing the budget and performing the planning, programming, budgeting activities are not covered.
- 2) The decision to start an acquisition program requires the most intense form of acquisition oversight. Therefore this thesis concentrates on the oversight process at this decision point (currently Milestone B).

- 3) The Air Force is the service of interest; therefore the period being covered starts with the passage of the National Security Act of 1947 and the creation of the Air Force, and concludes in 2003 with the approval of the latest version of the DoD 5000 series.

Assumptions

The Defense Acquisition System works with a multitude of organizations outside the system; such interfaces can skew the effectiveness of the oversight performed.

Therefore the following assumptions have been employed for this research effort.

- 1) The Defense Acquisition System processes MDAP that face a stable budget and stable requirements; it is understood that such MDAPs are rare.
- 2) Studies performed on acquisition and its oversight process evaluate the process as depicted in the DoD 5000 series, Air Force regulations, and statutory laws.
- 3) The majority of MDAPs went through the entire process as depicted in the DoD 5000 series, Air Force regulations, and statutory laws.
- 4) External agencies to the process do not adversely affect measures of performance.

Thesis Overview

Chapter Two focuses on entities responsible for the Acquisition Process as found in historical literature. Discussion focuses on the evolution of the Acquisition Oversight Process. The models of the Acquisition Oversight Process and corresponding Commission Reports used in this research are introduced. Chapter Three focuses on the seven criteria for an ideal Acquisition Oversight Process. An analysis of the Commission

Studies as they relate to the seven criteria follows. The examination will focus on data collected from reviewed documents. The results of this analysis provide the basis for conclusions and the recommendations for change and future research, found in Chapter Four.

II. Literature Review

Introduction

Concerns about government officials abusing their positions for personal gain have existed from the beginning of the republic. In early Colonial history, accusations of favoritism and profiteering in the acquisition process were numerous and oftentimes true. Monetary abuses were so prevalent that in 1808 Congress “devised a provision entitled ‘Officials Not to Benefit,’ which established penalties to prevent these abuses of power” (Harma, 1995:13). With the growing cost of weapons acquisition, questions are currently asked as to who oversees weapons acquisition and prevents abuses of taxpayer’s money (GAO 1997).

Before World War II, budgets for the armed forces were relatively large during war and significantly smaller during peace. In like manner, personnel employed by the War and Navy Departments surged during war and dwindled during peace. Administrators hired to turn domestic products into military weapons would build a bureaucracy of reviewers and auditors then dismantle it after the threat had past. World War II saw the advent of aviation, the birth of the atomic bomb, the genesis of rocket power and other technological advances; such weapon systems could not be turned back into domestic products easily. The tooling used to make these weapons were specialized and complex. The time needed to produce these weapons was greater and the costs higher. During the cold war, both Americans and Soviets pursued greater military

strength, thereby participating in a great arms race. In recent years, the higher quality, quantity, and technology inherent in America's military are being sustained in order to defend her against enemies and avert war. Inventing, developing, testing, evaluating, buying, and producing implements of war grew into an immensely complex activity. The organizational structure that performed these tasks, collectively called the Acquisition Process, became an enduring element of the executive branch.

This thesis documents the evolution of the oversight construct placed over the Acquisition Process with a concentration on Air Force Acquisition Oversight. Oversight shall be defined as the performance of formal reviews of a Major Defense Acquisition Program (MDAP) that approves entry into an Acquisition cycle, which is the creation of an Acquisition Program for the purpose of development and eventual procurement. This chapter evaluates relevant literature to ascertain who had performed Acquisition Oversight from 1947 to 2003.

Role Definition (1947-1950)

During World War II the rapid expansion of the Army Air Forces "led to a split between functions of research and development (R&D) and those of material and support; this was accompanied by some dispersal of procurement authority" (Benson 1996:1). Beyond the Army Air Corps, the Roosevelt administration attempted to consolidate the War Department and Navy Department acquisition decisions under one body, that of the War Resources Board. Due to the charged political atmosphere, the board was not used as intended and went into obscurity the same year it was created.

Other overarching acquisition boards came and went; first the Office of Emergency Management was created; then the Advisory Commission to the Council of National Defense was established. The urgency of the war caused Roosevelt to create the Office of Production Management (OPM). The “OPM assumed responsibilities for production, materials, and employment” but because it lacked authority, it criticized military agencies instead of manage acquisitions (Jones 1999:253). In addition, the OPM lacked military representatives, technological expertise, or a basis to approve or cancel programs.

OPM was disbanded and Roosevelt created the War Production Board to assure “the most effective prosecution of war procurement and production” (Jones 1999:254). He vested it with presidential powers over all aspects of acquisition from raw materials through production; powers the previous boards lacked. He filled it with “representatives from the White House, the War, Navy, and Commerce Departments, the Price Administrator, and the Board of Economic Warfare” (Jones 1999:254). In addition Roosevelt established the Office of War Mobilization in 1943 to “develop unified programs and to establish policies for the maximum use of the nation’s natural and industrial resources for military and civilian needs” (Jones 1999:254). Therefore, over the existing Service Acquisition Process, there were two overarching executive boards. Neither the overarching executive boards, nor the services, had the acquisition expertise, formalized procedures, or organizational structure to handle the demands for war. The fact that the mobilization efforts succeeded to produce quality weapons systems is accredited more to the patriotism of industry rather than the Military Acquisition Process (Jones 1999:257).

Emerging from World War II, the War Production Board was abolished in November, 1945 (Columbia 2003). The Office of War Mobilization was also disbanded two years later. The Army Air Force once again “centralized development, procurement, and logistics into an Air Material Command” (Benson 1996:1). Domestic policies regained precedence in Congress while the War and Navy Departments went their separate ways. The Department of War and the Department of the Navy were separately administrated, had their own Presidential cabinet seat, fell under separate Congressional subcommittees and each had their own version of how America should fight a war. Such separateness was labeled inefficient, costly, and detrimental for the prosecution of future wars by then Secretary of War Forrestal and President Truman (OSD History 1978:23, 29).

Congressional hearings were held in 1944 on the *Proposal to Establish a Single Department of Armed Forces*. War Department officials advocated the establishment of a single Department of the Armed Forces. Navy Department officials urged further study on the issue. In response, the Joint Chiefs of Staff (JCS) established a special committee for Reorganization of National Defense. Its aim was to “study the most efficient and practicable organization” of National Defense organizations, namely the Department of War and the Department of the Navy (Report on Post-War military Policy as quoted by OSD History 1978). It recommended the establishment of a single Department of the Armed Forces but the Joint Chiefs never took action.

The Navy launched a separate study, commonly known as the Eberstadt Report, named after its chairman Ferdinand Eberstadt. It advised against the establishment of a single defense department. Instead, it advocated the creation of an Air Department and

the use of joint committees. The report “proposed the establishment of a National Security Council and a National Security Resources Board supported by the Joint Chiefs of Staff, a Military Munitions Board, and special agencies for intelligence and research” (OSD History 1978:6). Hearings were again held on the matter but failed to produce a solution.

Recognizing America’s new role as a world leader, Truman called for a Military Department where strategic planning, programming, and budgeting can be achieved, unified training established, and duplication between the Services reduced. The two services cooperated through the war to do these activities but during peace such cooperation was not guaranteed. When cooperation could not be obtained, the President and Congress had to make a decision (Public Papers of the Presidents: Harry S. Truman as quoted by OSD History 1978:8-13). President Truman sent a message to Congress stating that: “there is enough evidence now at hand to demonstrate beyond question the need for a unified department” (Public Papers of the Presidents: Harry S. Truman as quoted by OSD History 1978:8-13). On 13 May 1946, President Truman asked the Secretaries of War and Navy to reach an agreement. After compromises were made between the two departments, Truman submitted a draft bill to Congress that had the approval of both Secretaries and of the Joint Chiefs of Staff. The bill became Public Law 253, 80th Congress (61 Stat. 495); better known as the National Security Act of 1947.

National Security Act of 1947.

This act made the intent of Congress clear

...to provide three military departments for the operations and administration of the Army, the Navy (including naval aviation and the United States Marines Corps), and the Air Force, with their assigned combat and service components; to provide for their authoritative coordination and unified direction under civilian control but not to merge them; to provide for the effective strategic direction of the armed forces and for their operation under unified control and for their integration into an efficient team of land, naval, and air forces (National Security Act of 1947 as quoted by OSD History 1978:36)

To this end, the National Military Establishment was created (see Figure 3).

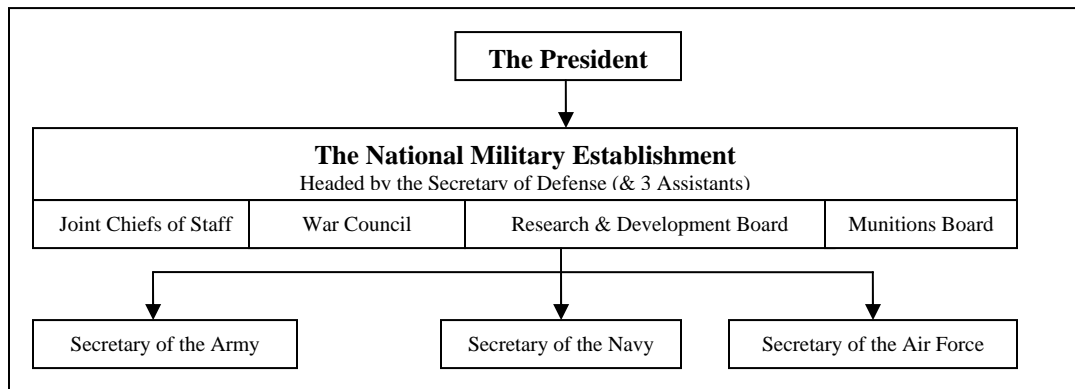


Figure 4. National Military Establishment (Acher 1993:354)

Secretary of Defense.

The Secretary of Defense headed the new organization. The Act detailed the

Secretary of Defense duties as follows:

- 1) Establish general policies and programs for the National Military Establishment and for all of the departments and agencies therein.
- 2) Exercise general direction, authority, and control over such departments and agencies.
- 3) Take appropriate steps to eliminate unnecessary duplication or overlapping in the fields of procurement, supply, transportation, storage, health, and research.
- 4) Supervise and coordinate the preparation of the budget estimates of the departments and agencies comprising the National Military Establishment; formulate and determine the budget estimates for submittal to the Bureau of the Budget; and supervise the budget programs of such departments and agencies

under the applicable appropriation Act: PROVIDED, That nothing herein contained shall prevent the Secretary of the Army, the Secretary of the Navy, or the Secretary of the Air Force from presenting to the President or the Director of the Budget, after first so informing the Secretary of Defense, any report or recommendation relating to his department which he may deem necessary: AND PROVIDED FURTHER, That the Department of the Army, the Department of the Navy, and the Department of the Air Force shall be administered as individual executive departments by their respective Secretaries and all powers and duties relating to such departments not specifically conferred upon the Secretary of Defense by this Act shall be retained by each of their respective Secretaries. (National Security Act of 1947 as quoted by OSD History 1978:40-41)

Take note of the two clauses in the Act that limited the Secretary of Defense's powers; in the fourth clause his powers are limited to those specifically granted him, and all other powers were retained by the Services; secondly, the Services were granted the ability to appeal decisions to the President or the Director of the Budget. Even if the Secretary had the Presidential powers over the Services, he did not have the staff to assist him in those duties. Within the Act, the Secretary of Defense was given a small staff composed of three assistants, none of whom could be military. He was to perform duties through the use of several joint agencies, including the War Council, Joint Chiefs of Staff, Munitions Board, and Research and Development Board.

The Joint Chiefs of Staff (JCS).

JCS was created to coordinate Army and Navy actions during World War II. In the Act the duties of the Joint Chiefs of Staff were as "principal military advisors to the President, the National Security Council, and the Secretary of Defense"

- 1) To prepare strategic plans and to provide for the strategic direction of the military forces.
- 2) To prepare joint logistic plans and the assign to the military services logistic responsibilities in accordance with such plans.

- 3) To establish unified commands in strategic areas when such unified commands are in the interest of national security.
- 4) To formulate policies for joint training of the military forces.
- 5) To formulate policies for coordinating the education of members of the military forces.
- 6) To review major material and personnel requirements of the military forces, in accordance with strategic and logistic plans.
- 7) To provide United States representation on the Military Staff Committee of the United Nations in accordance with the provisions of the Charter of the United Nations. (National Security Act of 1947 as quoted by OSD History 1978:45)

The members of the JCS wore two hats, one as Service Chief, and the other as an advisor void of service specific blinders. The JCS were ineffective because of this duality. The JCS had lacked a central figure to decide definitively on a course of action therefore the President and Congress had to decide for them.

The Munitions Board.

The Munitions Board was “to support the strategic and logistic plans prepared by the Joint Chiefs of Staff” by performing the following duties.

- 1) Coordinate...procurement, production, and distribution plans of the departments and agencies comprising the Establishment.
- 2) Plan for the military aspects of industrial mobilization.
- 3) Recommend assignment of procurement responsibilities.
- 4) Prepare estimates of potential production procurement, and personnel for use in evaluation of the logistic feasibility of strategic operations.
- 5) Determine relative priorities of the various segments of the military procurement programs.
- 6) Supervise such subordinate agencies as are or may be created to consider the subjects falling within the scope of the Board’s responsibilities.

- 7) Make recommendations to regroup, combine, or dissolve existing inter-service agencies operating in the fields of procurement, production, and distribution in such manner as to promote efficiency and economy.
- 8) Maintain liaison with other departments and agencies for the proper correlation of military requirements with the civilian economy, particularly in regard to the procurement.
- 9) Assemble and review material and personnel requirements.
(National Security Act of 1947 as quoted by OSD History 1978:46)

Within the Act are words such as supervise, coordinate, and recommend. The Board was not given overall authority to fulfill their responsibilities.

The Research and Development Board

The Research and Development Board was “to advise the Secretary of Defense as to the status of scientific research relative to the national security, and to assist him in assuring adequate provision for research and development on scientific problems relating to the national security.” According to the Act the Research and Development Board had the following duties.

- 1) Prepare a complete and integrated program of research and development for military purposes.
- 2) Advise with regard to trends in scientific research relating to national security and measures necessary to assure continued and increasing progress.
- 3) Recommend measure of coordination of research and development among the military departments, and allocation among them of responsibilities for specific programs of joint interest.
- 4) Formulate policy for the National Military Establishment in connection with research and development matters involving agencies outside the National Military Establishment.
- 5) Consider the interaction of research and development and strategy, and to advise the Joint Chiefs of Staff in connection therewith.
(National Security Act of 1947 as quoted by OSD History 1978:47)

The Act allows the R&D board to advise and recommend only. The Act is criticized for making the Service representatives on the two boards co-equal to the Chairman of each Board (Blue Ribbon Defense Panel Report as republished in Defense Policy 1988:162). In effect the R&D Board and the Munitions Board had no command over the Services; any consolidation of resources in the fields of research and development, procurement, production, and distribution would require Service agreement and cooperation. The Board's recommendations were mostly ignored.

The Air Force.

The Air Force achieved its independence through this Act. As defined by the Act, the United States Air Force shall include:

aviation forces both combat and service not otherwise assigned. It shall be organized, trained, and equipped primarily for prompt and sustained offensive and defensive air operations. The Air Force shall be responsible for the preparation of the air forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with integrated joint mobilization plans, for the expansion of the peacetime components of the Air Force to meet the needs of war. (National Security Act of 1947 as quoted by OSD History 1978:45)

The new Department of the Air Force looked to Air Material Command (AMC) to be its sole “manger of development, testing, procurement, and logistics” (Benson 1996:9).

Unfortunately, AMC was more concerned with preserving and improving the assets inherited from the Army than developing the next generation of aircraft. Unlike the Army and the Navy, the Air Force relied heavily on contractors for R&D services rather than in-house personnel. Contractors and commercial R&D labs presented their products to Air Force procurement officers in the Engineering Division or the Material Division

within AMC. AMC was supported by the Deputy Chief of Staff for Material stationed in Washington D.C. (Benson 1996:9-10).

Executive Order 9877.

This executive order was signed by President Truman on the same day that he signed the National Security Act of 1947. The language used to describe the function of the DoD and each service contained in the Executive Order, differed from the wording in the Act. The difference in language was a lightning rod with “the continuing dispute between the Navy and the Air Force over responsibility for air missions” (U.S. DoD JCS files as quoted by OSD History 1978:270). In the months to follow, the Joint Chiefs were employed to hash out an agreement. After four months of discussion, the JCS reported that they had failed to reach agreements and asked that these issues be “resolved by higher authority” (U.S. DoD JCS files as quoted by OSD History 1978:275). Secretary Forrestal then held two meetings with JCS, one lasted five days in Key West, Florida. The agreement later became known as the Key West Agreement.

Executive Order 9877 was rescinded by Executive Order 9950, its language modified to more closely match the language in the Act. In a Memorandum from the Key West Conference, JCS acquisition role was further defined:

It is intended that an individual Service is to be permitted to carry through the development stage any material improvement program or new weapon development program considered by the Service to be essential in the interest of increased effectiveness of its weapons, material, or equipment. The ultimate application and utilization of the product of such a development program shall, of course, be subject to the examination and recommendation of the Joint Chiefs of Staff on the basis of its contributions to the over-all war effort. (OSD History 1978:286)

The JCS was to advise the President on the application of the product but were not to disturb the Acquisition Process as performed by the Services.

Forrestal Recommendations.

With any new organization, lessons are learned and changes are made. The first Secretary of Defense, James V. Forrestal, made recommendations in his first annual report. It included the following:

- 1) Create a separate staff for the Secretary of Defense.
- 2) Provision of an Under Secretary of Defense.
- 3) Provision of a Chairman for the Joint Chiefs of Staff.
- 4) Enlargement of the Joint Staff.
- 5) Increased Secretary of Defense's authority over the Military Departments.
- 6) Removal of the Service Secretaries from membership on the National Security Council; a body that advised the President directly. (Acker 1993:57)

His recommendation influenced President Truman to commission further study on the National Military Establishment.

Hoover Commission.

The Hoover Commission formally Commission on Organization of the U.S. Executive Branch was formed to find ways "to improve operations and to reduce costs" of the existing organization" (OSD History 1978:65). Within the Hoover Commission

was created the Committee on the National Security Organization, known as the Eberstadt Task Force. The Hoover Commission studied the Eberstadt Task Force Report and adopted its conclusions in six recommendations (see Table 2).

Table 2. Hoover I Recommendations

- | | |
|---|---|
| 1) The Secretary of Defense should have full power over preparation of the budget and expenditures. | 4) More adequate and effective relations should be developed at the working level among the appropriate committees of the Joint Chiefs of Staff, National Security Council, Central Intelligence Agency, Research and Development Board, Munitions Board, and the National Security Resource Board. |
| 2) The Secretary of Defense should have full statutory authority now vested in the service departments and full authority for the procurement and management of supplies and material. | 5) Steps be made to implement the recommendations made by the Commission regarding medical departments. |
| 3) The Secretary of Defense should have powers over military personnel administration, military education, training, recruitment, promotion and transfers among the services. He should also have full authority to prescribe uniform personnel policies for civilian and military personnel throughout the several services. | 6) The President should take immediate steps to prepare for civilian defense. Emergency plans for civilian and industrial mobilization should be promptly and continuously revised. Defenses for unconventional warfare should be developed. |

(The National Security Organization, A Report to Congress as quoted by OSD History 1979:75-77)

President Truman reviewed the proposed changes over the winter of 1948. He incorporated the Administration's recommendations in a message to Congress transmitted on 7 March 1949. In his message, Truman reviewed lessons learned from World War II and urged congress to strengthen the Secretary of Defense into more than an administrator limited to specified items into "a fully responsible official with authority adequate to meet his responsibility, whom the President and the congress can hold

accountable” (Public papers of the Presidents: Harry S. Truman as quoted by OSD History 1979:79)

National Security Act of 1949.

Congress passed a 1949 amendment to the National Security Act and accomplished the following:

- 1) Changed the name of the National Military Establishment into the Department of Defense (DoD).
- 2) The Secretary of Defense was given a Deputy and three Assistant Secretaries.
- 3) The Chairman for the Joint Chiefs of Staff (JCS) was created as a non-voting member, senior in rank to all other military officers. He was to expedite the JCS business.
- 4) Increased the Joint Staff from 100 to 210 officers.
- 5) Made the Department of Defense into an Executive Department. Reduced the Army, Navy, and Air Force from Executive Departments into Military Departments under the Department of Defense. Strengthened the Secretary of Defense’s powers over the three Services’ budgets and the Service members. He was to provide “direction, authority, and control” over the services. (Jones 1999:323)
- 6) The Service Secretaries were removed from the National Security Council.
- 7) Chairmen of the Munitions Board and the R&D Board were given powers of decision.
- 8) Services were still “separately administered,” and retained powers to appeal decisions with the President and Congress even after this act. (Acher 1993:61).

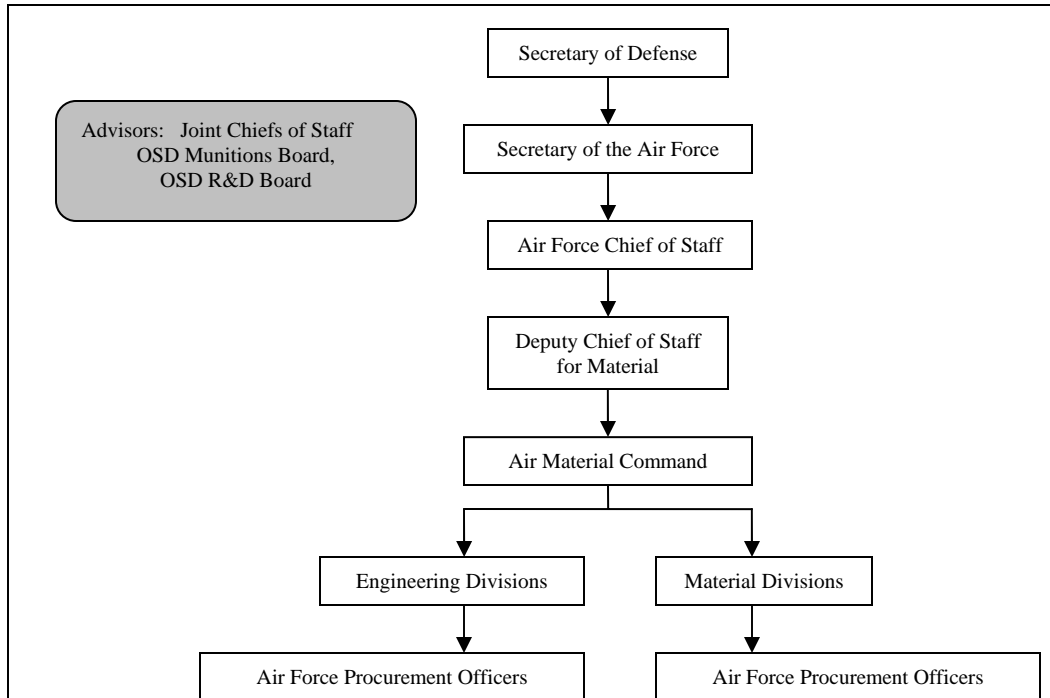


Figure 5: The Air Force Acquisition Oversight Hierarchy of 1949

Initial organization of oversight activities.

The resultant Acquisition Oversight construct is depicted in Figure 4. The hierarchy of oversight was finally made clear, yet the process suffered from several maladies. The Air Force lacked in-house experts capable of harnessing science and technology for the future, therefore research and development was neglected. The Air Force focused their efforts on logistical management and building a supply system separate from the Army. The Air Force lacked support equipment and components and the expertise to maintain them; therefore it had to rely heavily on the Army. The Air Force Acquisition Process inherited traits from the Army that were unsuited to the rapidly changing aircraft technology. An Air Force Historian describes the process as a “traditional practice of procuring the airframe, engines, navigation aids, fire control

system, ground equipment, etc., from different sources and then relying on the airframe manufacturer to fit them together and make them function as a unit” (Benson 1996:11-12). Such disconnects led to the expensive practice of post-production reworks

Every Service brought up a type of Acquisition Process that was thick with bureaucracies, and contracting practices meant to protect it from Congressional reviews and contractor lawsuits. To protect its budget from cutbacks, each service lobbied Congress for weapon system funding, often ending in the cannibalization of sister services for funds. This type of inter-service rivalries lead to “duplication in weapons development, as the services fought for proprietorship of a specific mission by seeking to outdo rivals in developing weapons appropriate for that mission” (McNaugher 1989:39).

In the OSD, statutory organizations proved to be ineffective. The Munitions Board reviewed requirements surfaced by the JCS and issued policies on Acquisition, but little was enforced or adhered to by the Services. The R&D Board suffered from the same malady (Jones 1999:325). These boards advised the Secretary of Defense and were without real power. The Secretary of Defense himself seemed more like a “mediator between the President and the services and among the services” (Weigley as quoted by Jones 1999:323). Oversight was provided internally by Air Force officials (Benson 1995:9).

Decade of Reorganization (1950-1960)

Current affairs forced the Truman Administration to rethink the unhappy compromise of the National Security Act as amended in 1949. The Korean War lasted from 1950 to 1953, a war meant to contain communism; it ended in a stalemate at the 49th parallel. The Soviets successfully tested its first hydrogen bomb in 1953, igniting fears of nuclear war. The race was on to develop a system capable of delivering the bomb. Hence the missile crisis era was born. The DoD had to rethink and reorganize to handle developing threats (Benson 1996:11).

The concept of program manager came into existence around 1950. A program manager (PM) is defined as “the individual designated...to manage an acquisition program” (DoD 2003). PMs managed what was known in 1951 as the Weapon System Project Office (WSPO), a body comprised of representatives from various agencies involved in developing and operating the system (Benson 1995:12). In 1960, the WSPO was renamed the System Program Offices (SPO) in recognition of the “growing importance of C3 [Command, Control and Communications], surveillance, and other technologies that supported war fighting” (Benson 1996:15).

Related to the PM concept is the idea of a *weapons systems* approach to development. This approach integrated the design of the entire weapon system, which may include the services, facilities, and trained personnel required to operate it besides the weapon itself (McNaugher 1989:33). A weapon system was defined in 1958 as “the entire complex of equipment, support facilities, trained manpower, and concept for

employment necessary to make a weapon system operational” (The Department of Defense as quoted by Jones 1999:327).

Reorganization of the Air Force.

The Air Force acknowledged the need for R&D by creating the Research and Development Command on 23 January 1950. It was composed of the Research, Development, Testing, and Evaluation (RDT&E) components of AMC and named the Air Research and Development Command (ARDC) (Benson 1995:11). The ARDC “did not assume formal responsibilities for weapon development until 1951” (McNaugher 1989:35). In 1953, the Air Force established a Special Assistant for Research and Development as part of the Secretariat; the position was redesignated Assistant Secretary for Research and Development in 1955. At the same time, the Air Staff created a new Deputy Chief of Staff position for Development with “directorates for R&D and Requirements” (Benson 1995:11) (see Figure 6). AMC continued to handle procurement and logistics under the purview of the Assistant Secretary for Material

Separation of development and procurement into two major commands with parallel reporting channels and loyalties hindered the management of a MDAP. To decrease conflicts, development programs would start under direction of ARDC and then “transfer of program management responsibility from ARDC to AMC” would occur “at the time of a production decision” (Benson 1996:12). Testing was performed by the Air Proving Ground Command (APGC) or operational units prior to the production phase. The Air Proving Ground Command was decommissioned in 1958 for the purposes of reducing expenditures. In its place the Air Force employed the contractor, ARDC test centers, and operational units to perform testing.

Reorganization of the Department of Defense.

In a letter to President Truman dated 18 November 1952, former Secretary of Defense Robert Lovett outlined some weaknesses in the organization of the DoD.

- 1) The Secretary of Defense is required “to make use of inter-service Committees for much of his staff work” and is prohibited from “having a military staff.” As a result, the Secretary of Defense will be “unable to handle the distribution of shortages in an efficient and direct fashion.”
- 2) The Act provides that the three services be “separately administered” yet be under the “direction, authority and control” of the Secretary of Defense. In the fields of supply, warehousing, and issue the Secretary of Defense has encountered resistance to unification and efficiency.
- 3) The three statutory agencies: JCS, the Munitions Board, and the Research and Development Board all suffer from the three weaknesses.
 - a. “excessive rigid statutory prescriptions of functions
 - b. rigid statutory composition
 - c. the requirements in the statute that each agency perform functions inappropriate, if not actually impossible, for it to perform efficiently and expeditiously.”
- 4) The language in the National Security Act of 1947, as amended, does not make clear whether or not the JCS are directly under the Secretary of Defense.
- 5) The two boards “compels three of the four members to sit as judges on their own requests and to pass on estimates of production, on schedules, and on procurement and distributing systems for which they are each responsible in a separately administered Service.”
- 6) There is ambiguity in the lines of authority and responsibility that can be eliminated by abolishing the two boards and establishing under secretaries within OSD to perform acquisition functions. (Source: Press Release as quoted by OSD History 1978:115-126)

Several of these concerns were readdressed by the Committee on Department of Defense Organization, more commonly known as the Rockefeller Committee, named so after its chairman, Nelson A. Rockefeller.

Rockefeller Committee.

In 1953 the Committee on Department of Defense Organization Report pointed out three weaknesses in the roles performed by DoD personnel. They were as follows:

- 1) Each service had developed roles, missions, and acquisition priorities separate from another. Therefore, Services engaged in competition for funding of new weapons for potentially overlapping even competing missions and roles.
- 2) JCS members were Service loyal in their recommendations to the Secretary of Defense. Also their responsibilities did not include presenting an integrated, strategic plan for national defense.
- 3) The Secretary of Defense spent too much time detangling inter-Service disputes and too little on generating integrated military policies. (Acker 1993:66)

Changes recommended by the Committee include 1) the Secretary of Defense making greater use of the three military department Secretaries and the Armed Forces Policy Council and 2) the JCS delegating administrative duties down, and increasing the number of Assistant Secretaries from three to nine (one of them being the Assistant Secretary (R&D)) (see Table 3). President Eisenhower reviewed the Rockefeller Committee Report and submitted his recommendations to Congress on 30 April 1953.

Table 3. Rockefeller Committee Recommendations

- | | |
|--|---|
| 1) The direction, authority, and control of the Secretary of Defense over all agencies within the Department should be confirmed. | 4) “The Secretary of Defense should use the Armed Forces Policy Council as his principal advisory group on major problems of policy in which he requires both civilian and military advice.” |
| 2) “The Secretaries of the military departments, subject to the direction, authority, and control of the Secretary of Defense, should be the operating heads of their respective departments in all aspects.” | 5) The Secretary of Defense should “be free to adjust from time to time the assignment of staff functions within his own office in a flexible and expeditious manner.” Therefore the two boards created by statute should be abolished and additional Assistant Secretaries authorized to take their place. |
| 3) The Joint Chiefs of Staff, to more effectively work as a unified planning agency, should work closely with the Secretary of Defense, delegate their less important duties, and be allowed to organize the Joint Staff as necessary. Unified Commands should be assigned to a military department instead of to the Joint Chiefs of Staff. | 6) Military personnel in OSD should receive equal opportunity and consideration as those outside OSD. |

(Report of the Rockefeller Committee as quoted by OSD History 1979:128-149)

Reorganization Plan No. 6.

President Eisenhower took office in 1953 and immediately called for DoD reorganization to further strengthen the Secretary of Defense. He abolished the Munitions and R&D Boards with his Reorganization Plan No. 6 effective 30 June 1953 (see Figure 5). This happened after several congressional investigations into the two boards.

One fault cited was ‘that each member, except for the chairman, was both a claimant and a judge of his own requests’ making it ‘extremely difficult, if not impossible’ at times of serious shortages of materiel and manpower [to scale back or eliminate a weapon from the acquisition process] (Kintner, as quoted by Jones 1999:350).

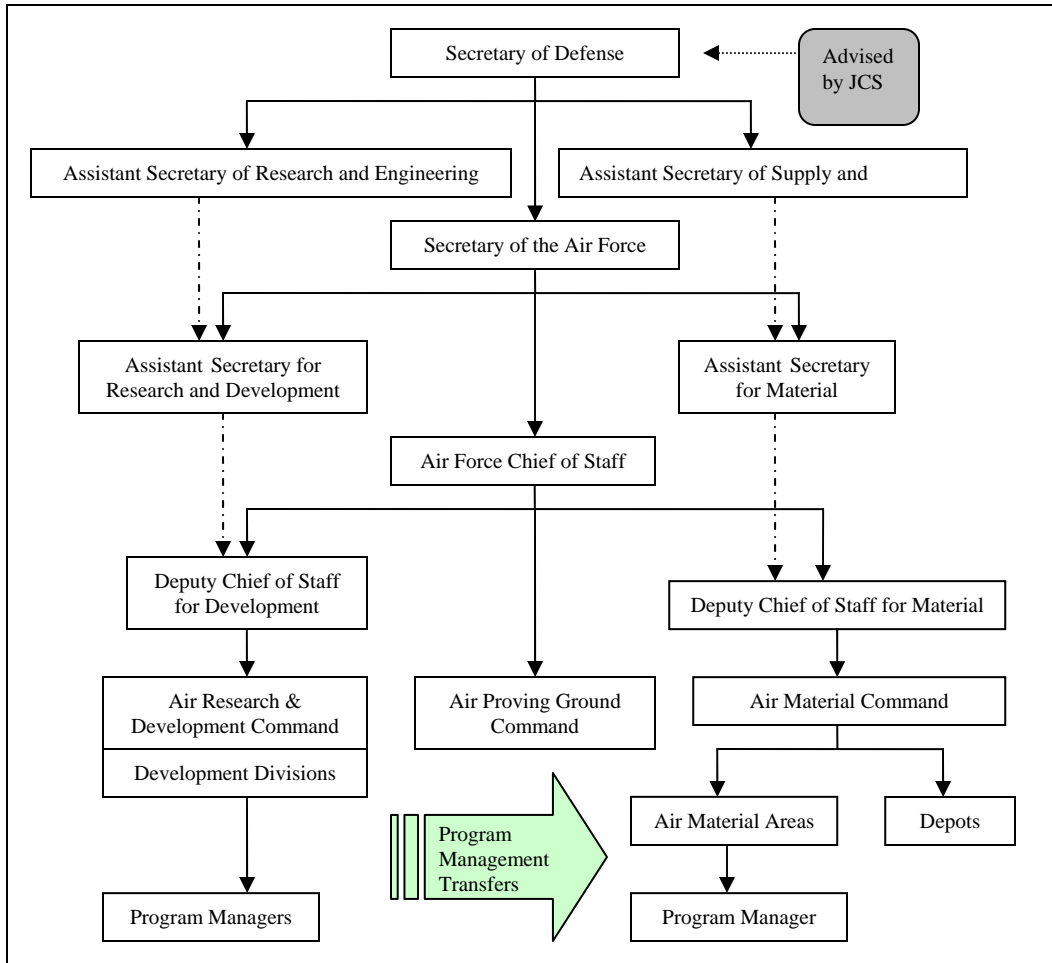


Figure 6: The Air Force Acquisition Oversight Hierarchy of 1955

In the place of the two boards President Eisenhower designated the Assistant Secretary of Defense (Supply and Logistics) and the Assistant Secretary of Defense (R&D). The Assistant Secretary positions were devised as purely advisory, but their strategic relationship to the Secretary of Defense often put them in direct control over weapons acquisitions (Bair 1994:9).

Also included in the Reorganization Plan No. 6 were the following: the appointment of a Director of Joint Staff, a General Council and six additional Assistant Secretaries of Defense; strengthen the position of Chairman of the Joint Chiefs of Staff

by allowing him voting rights; and providing that the Chairman of JCS be appointed by the Secretary of Defense and President, not by members of the JCS as previously agreed to in the West Keys Agreement. Neither the House nor the Senate took adverse actions against this plan within the 60 day window and the plan went into effect 30 June 1953.

Hoover II.

On 10 July 1953 a new Commission on Organization of the Executive Branch of the Government, more commonly known as the Second Hoover Commission was established to “promote economy, efficiency, and improved services in the transaction of the public business” (Comments on the Hoover Commission Report as quoted by Defense Policy 1988:8). The Commission completed its report after two years; it contained 19 recommendations to improve the DoD as seen in Table 4.

Being proactive the DoD merged the Assistant Secretary of Defense (R&D) and Applications Engineering into the Assistant Secretary of Defense (R&D) in 1957. In a letter to Congress Secretary of Defense Wilson summarized the DoD response to the Second Hoover Commission. In regards to role clarification, coordination efforts were redoubled and lines of authority better clarified. In regards to improving management of common supply and service activities, DoD launched the Single Manager Plan which provided a Single Manager in a designated area from procurement through distribution. This program acts in lieu of a civilian controlled supply agency. On the other recommendations, the Secretary of Defense fully agreed with the recommendations.

Table 4. Hoover II Recommendations

- 1) The Secretary of Defense should create a civilian position with authority over military requirements
- 2) The Secretary of Defense should regroup functions under Assistant Secretaries for logistics, research and development, personnel and finance.
- 3) The Secretary of Defense should appoint a principal career assistant for each Assistant Secretary.
- 4) Service Secretaries should have similar Assistant Secretaries in Recommendation 2.
- 5) Chiefs of Staff should relate to support activities as planners, requesters, and users.
- 6) Departmental Assistant Secretaries for should control supply and service activities
- 7) Departmental Assistant Secretaries for Research and Development (R&D) should have clear responsibility for coordinating R&D.
- 8) A separate civilian-managed common supply agency should be established
- 9) The supply agency should have a strictly supporting role for the agency.
- 10) The supply agency's director should be appointed by the President.
- 11) The Secretary of Defense should make semi-annual reports on supply and logistics to Congress.
- 12) Laws should be changed and incentives increased to attract and hold able administrators.
- 13) Military and Civilian personnel should be better positioned to optimize utilization.
- 14) Support manager roles should be defined.
- 15) Standards of manager selection, training, promotion and compensation should be uniform.
- 16) Military Secretaries should use the career management program in activities under them.
- 17) DoD should improve management over budgets, working capital funds, and inventory.
- 18) Departmental Assistant Secretaries for Financial Management (FM) should screen requirements and review budgets
- 19) Laws should be passed to give secretaries in Recommendation 18 exclusive control of FMs

(US Commission on Organization of the Executive Branch as quoted by OSD History 1979:164-165)

The Department of Defense Reorganization Act of 1958.

This Act provided that the Services were to be “separately organized” versus the language “separately administered” used in previous acts. The Secretary of Defense was given stronger powers to better define the Services respective roles and missions. Administrative duties of the Secretary of Defense were absorbed by assistant secretaries. Assistant Secretaries could now give orders regarding their respective areas of responsibilities provided such orders first go through the Service Secretaries (Acker 1993:71). Specifically, the Assistant Secretary of Defense (R&D) was upgraded to Director of Defense Research and Engineering. The Director was given specific powers over weapons acquisition (Benson 1995:14). This act separated the Operation Commands from the Service to have a user and supplier relationship. Each Service was to provide training, support, and logistics to operational commands who were directed by the Joint Chiefs of Staff under the command of the Secretary of Defense.

Establishment of the Advanced Research Projects Agency in 1958.

On 4 October 1957 the Soviets successfully launched Sputnik I.

The world's first artificial satellite was about the size of a basketball, weighed only 183 pounds, and took about 98 minutes to orbit the Earth on its elliptical path. That launch ushered in new political, military, technological, and scientific developments. While the Sputnik launch was a single event, it marked the start of the space age and the U.S.-U.S.S.R space race. (NASA 2003)

On 3 November 1957 the Soviets successfully launched Sputnik II which had a larger payload. President Eisenhower warned the American people how the Soviet’s achievements threatened national security. He stated “that any new missile or related program hereafter originated will, whenever practicable, be put under a single manager

and administered without regard to the separate services” (Public Papers of the Presidents: Eisenhower as quoted by OSD History 1979:171).

On 7 January 1958 President Eisenhower requested \$10 million for the formation of an Advanced Research Projects Agency. Secretary of Defense McElroy explained that it would be a separate agency that would “manage new weapon programs during the early stages of research and exploratory development” (Hearings on the Ballistic Missile Program as quoted by OSD History 1979:172). President Eisenhower signed Public law 85-325 that said in part

The Secretary or his designee is authorized to perform assigned research and development projects: by contract with private business entities, educational or research institutions, or other agencies of the Government, through one or more of the military departments, or by utilizing employees and consultants of the Department of Defense.

The Secretary of Defense shall assign any weapons systems developed to such military department or departments for production and operational control as he may determine. (Public law 85-325 72 Stat. 11 as quoted by OSD history 1979:173)

The Advance Research Projects Agency (ARPA) was chartered on 7 February 1958. It was “to explore new technologies ‘in an objective and detached manner’ that precluded the services ‘from acquiring proprietary interest in their projects’” (McNamara 1989:41). It was renamed Defense Advance Research Projects Agency (DARPA) in 1972.

Conclusion of Decade.

The Secretary of Defense started the decade as an arbitrator between Services. After all the reorganization acts, his role became one of Armed Forces manager and sole advisor to the President in matters of Defense. In the area of acquisition, the Secretary of Defense had no say in 1947 but emerged from the decade with increased powers. He

now had the power to cancel and transfer Service programs and their appropriations. He had a budget line item, direct from Congress, to conduct R&D programs at the DoD level. In essence, the Secretary of Defense had authority over all aspects of acquisition; that of research, development and procurement. Services were to give OSD staff their “full cooperation” (Acker 1993:66). Research and development gained structure as Assistant Secretaries were given administrative powers over the development of new technologies for the purpose of incorporating them into military hardware. Over the decade, the Acquisition Process accumulated layers of oversight and a library of acquisition doctrine (McNaugher 1989:35).

Oversight in 1959 existed as depicted in Figure 6. The PM, supported by the SPO, markets a development program before higher levels of Air Force and DoD. Problems of inter-service rivalries, duplication of efforts, and other inefficiencies continued to plague the DoD. Pentagon and OSD decision makers were engaged daily for point-on-point system analysis thereby elongating the Acquisition Process. One historian notes that acquisition program information surfaced to higher levels was often incomplete and unsuited for milestone decisions (Benson 1996:16).

Concern over cost overruns, performance short-comings, and missed deadlines prompted the new Kennedy Administration to undertake a major review and overhaul of the weapons acquisition process. The solution, according to the prevailing view, was to adopt a more business-like approach. Secretary of Defense McNamara, the former president of the Ford Motor Co., brought just that kind of experience and management philosophy to the Pentagon job. (Defense Policy 1988:10)

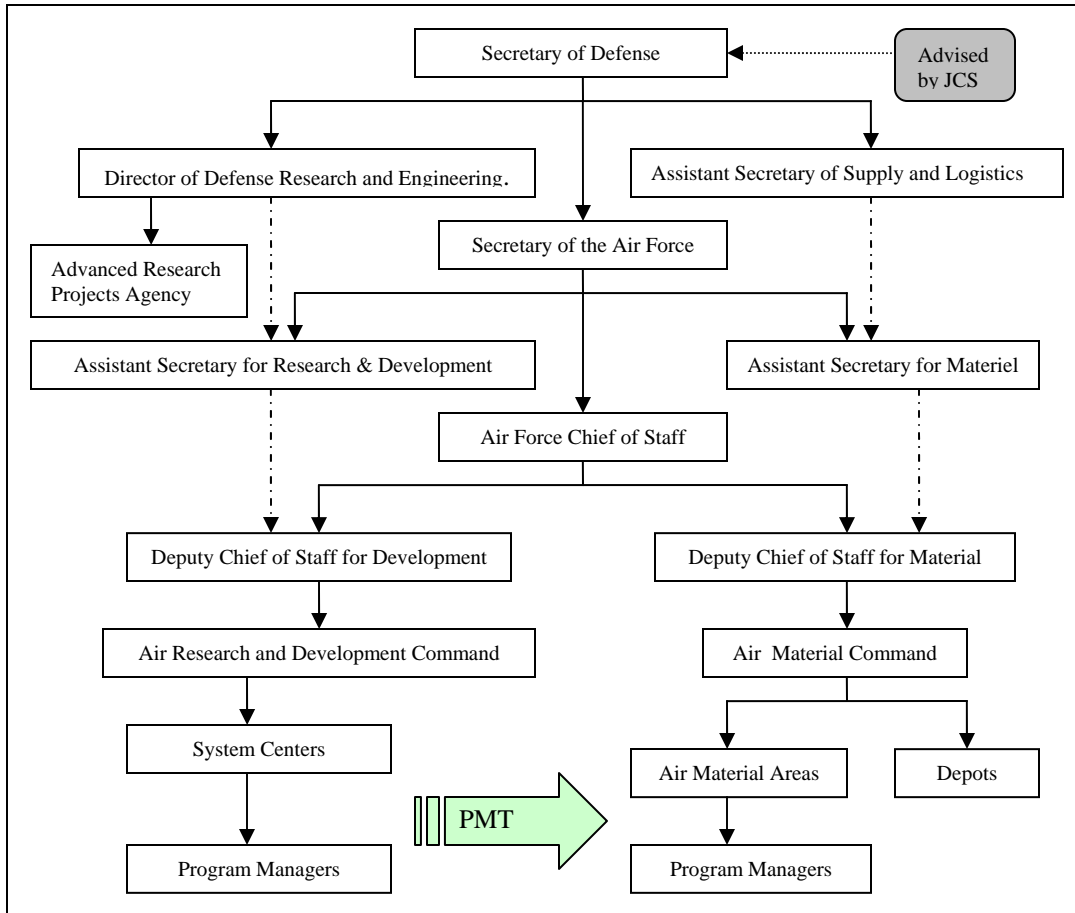


Figure 7: The Air Force Acquisition Oversight Hierarchy of 1959

Era of McNamara (1961 – 1968)

Secretary of Defense Robert S. McNamara served from 1961 to 1968, the longest of any other Secretary. He is credited with bringing order and standardization to acquisition management (McNaugher 1989:63). He centralized control over budget matters, reduced redundant acquisition programs, and further refined the acquisition process through the introduction of business concepts.

Secretary McNamara brought to fruition the budget overhaul called for by the first Hoover Commission.

McNamara sought and instituted a quantitative budgeting system to match his view of military strategy and policy that bridged planning and programming, often disconnected in the past, while flexible enough to link priorities and requirements. (Jones 1999:328)

The Planning, Programming, and Budgeting System (PPBS) centered on “out year” requirements as outlined in a Five Year Defense Plan (FYDP). He authored the strategic forces program category, which, unlike previous budgetary methods that grouped acquisition programs by service, grouped acquisition programs by similar capabilities. In theory, comparisons between bombers, fighters, and missiles could be made across services and the program with the greatest value would win a budget, the others being terminated or delayed.

Using the refined arts of systems analysis (or cost-effectiveness analysis), and operations research, Secretary McNamara terminated several weapons projects in the interest of reducing acquisition cost and eliminating redundancies.

These choices were often made in the face of stiff political opposition. McNamara often incurred the wrath of a particular services as well as members of Congress interested in particular projects. (McNaugher 1989:55)

He formed the Office of System Analysis to perform cost-effectiveness studies and encouraged the Services to do likewise. A new position of Assistant Secretary of Defense (Systems Analysis) was established on 10 September 1965.

Canceling programs was easier then trying to get Services to change methods. That is to move “away from allowing weapons projects to proliferate and toward fewer but more important and strategically appropriate development programs” (McNaugher

1989:58). President Kennedy supported a *flexible response* military strategy which was drastically different from the *mass retaliation* supported in past administrations (Jones 1999:332). Secretary McNamara was hard pressed to get the Services to write requirements for more conventional weapons in lieu of nuclear weapons and therefore found himself and his staff in the business of writing requirements for the Services (McNaugher 1989:59). His best efforts to control the Acquisition Process drew political fire. Towards the end of his tenure, Service Chiefs made greater use of their rights to address Congress directly per the National Security Act of 1947 as amended. With Congressional help, Service Chiefs limited Secretary McNamara's powers (McNaugher 1989:54).

Late in his tenure Secretary McNamara introduced the concept of "Total Package Procurement" that gave system contractors the responsibility to submit developmental and production costs of system as well as estimate some operational costs (McNaugher 1989:62). This concept greatly increased the "proliferation of detailed proposals, studies, and paper competitions, followed up by reports, audits, program reviews, and other oversight tools" (Benson 1996:16). Technology advances at unpredictable speeds and in divergent directions such that assigning a hard target for budget and schedule led to unrealistic bids and paper promises. Total Package Procurement was abandoned after 1966 because it was out of touch with the realities of both the uncertainty inherent in technology development and the ability of defense industrial base to absorb the cost of unknowns (Jones 1999:329).

Other concepts conceived by McNamara are still in

use in various forms, including: value engineering; information systems for planning and control of schedules and costs; technical data management; proposal evaluation and source selection; defense standardization; improved quality assurance; configuration management; work breakdown structure; and integrated logistics support for systems and equipment (Jones 1999:329).

For more information on these concepts see Acher's book *Acquiring Defense Systems: A Quest for the best*.

Reorganization.

The Assistant Secretary of Defense (Supply and Logistics) was combined with the Assistant Secretary of Defense (Properties and Installations) in 1961 to form the position of Assistant Secretary of Defense (Installations and Logistics). The Air Force realigned their assets and established management structures parallel to DoD (see Figure 7).

ARDC became the Air Force Systems Command (AFSC) with the procurement powers previously attributed the AMC on 1 April 1961. In turn, AMC became the Air Force Logistics Command (AFLC), now solely responsible for Logistics (Benson 1996:15).

“At a mutually agreed time after deployment, a program management responsibility transfer (PMRT) between an AFSC product division and an AFLC logistic center would occur” (Benson 1996:16).

AFSC and the newly formed Office of Aerospace Research handled R&D matters for the Service (Jones 1999:363). In 1962, the Deputy Chief of Staff (Material) and (Development) were combined into the Deputy Chief of Staff (Systems and Logistics) who would provide guidance to the two Major Commands. Also created was a Deputy Chief of Staff for Research and Technology to oversee technologies not specific to a particular weapons system (Jones 1999:363). MDAP “managers in the field were to use ‘red line’ procedures to report directly to system offices in the Pentagon for decisions by

a Systems Review Board” (Benson 1996:15). In 1966, the SPOs were realigned under new divisions; “Aeronautical Systems Division, Armament Division, Electronic Systems Division, Space Systems Division, Ballistic Missile Division, and Aerospace Medial Division” (Benson 1995:16).

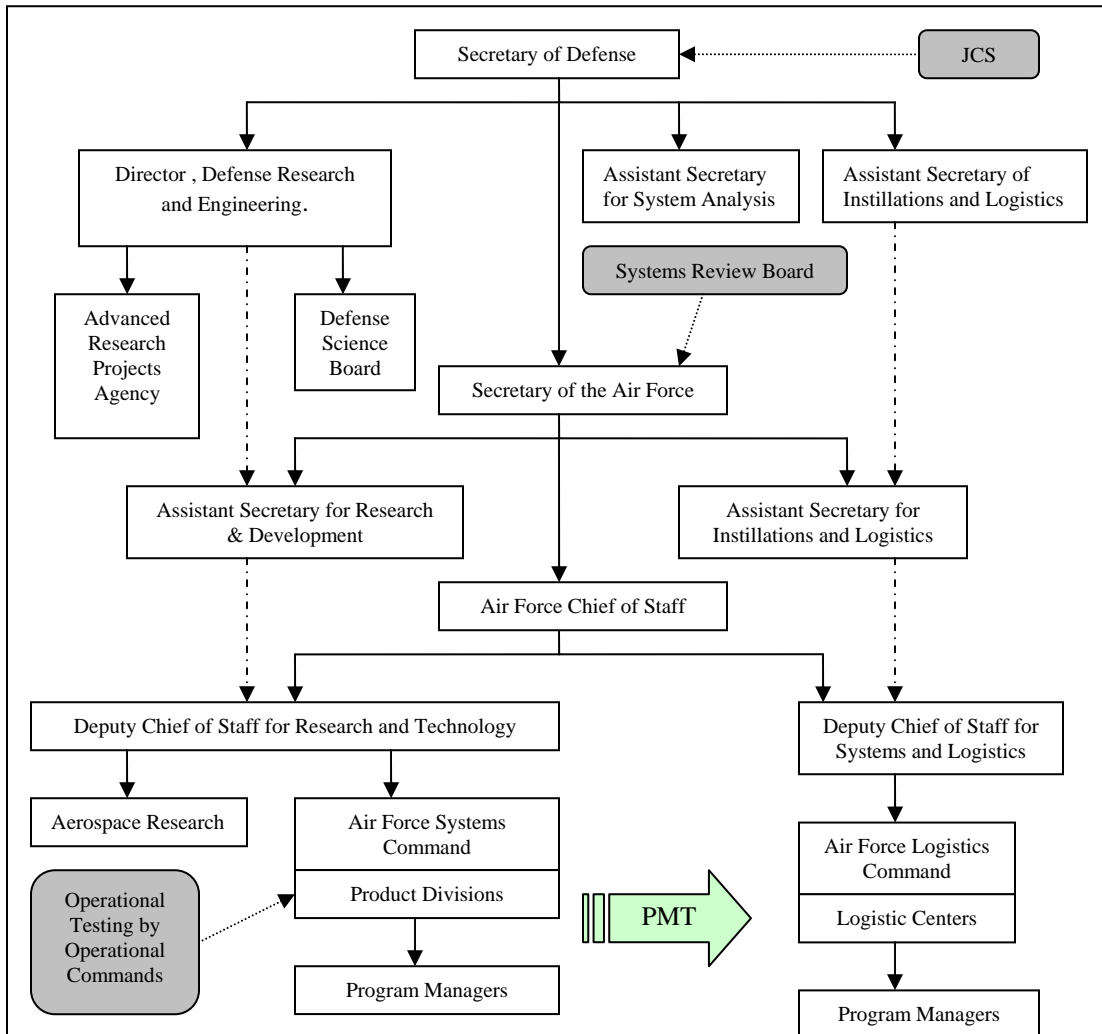


Figure 8: The Air Force Acquisition Oversight Hierarchy of 1964

Oversight Outgrowth (1969 – 1977)

America's public and its legislators were becoming disenchanted with the Vietnam War and the military's role in increasing the National Deficit. Congress made the Defense budget a primary target for budget cuts. To better understand acquisition costs, Congress passed Public Law 94-106 mandating System Acquisition Reports (SARs) be submitted by DoD at the end of each quarter to provide official data on the status of all MDAPs in April of 1969 (Acker 1993:151).

Packard Initiatives.

Deputy Secretary of Defense David Packard responded with ten initiatives aimed at improving weapons acquisition first published in 1970 (see Table 5). Secretary Packard called for several changes to make DoD more business-like.

New policies included...more realistic cost estimates, more precisely defined operational requirements, technical risk analyses, less concurrency in favor of sequential schedules, a return to the practice of building prototypes, and for aircraft, competitive fly-offs between contractors. (Benson 1995:17)

He established the Defense System Acquisition Review Council (DSARC), later to be renamed the Defense Acquisition Board (DAB) in 1987 (Srull 1998:5). This new body would review MDAPs at milestone points and advise the Assistant Secretary of Defense on the MDAP status and readiness. Among the members of the DSARC were: as Chairman the Director, Defense Research and Engineering; the Assistant Secretary of Defense (Installations and Logistics), (Systems Analysis), and (Comptroller) (Srull 1998:6). The Air Force response was to create an Air Force System Review Council (AFSARC) as well as support panels to help keep track of MDAP progress (Benson 1995:19).

Table 5. Packard Initiatives

<p>Improve the quality of information available from development.</p> <ol style="list-style-type: none">1) Use more hardware testing.2) Establish Operational Test and Evaluation agencies separate from developing commands3) establish the Cost Analysis Improvement Group (CAIG) within OSD to improve the quality of cost estimates during development. <p>Enhance program flexibility.</p> <ol style="list-style-type: none">4) Practice “design-to-cost”5) Account for all “life-cycle costs”6) Strengthen PM independence and lengthen their tenures.7) Reduce production concurrency...fly before you buy	<p>Restore competition to weapons acquisition.</p> <ol style="list-style-type: none">8) Reduce risk and stimulate contractor efforts during development .9) Prime-contractor competition through full-scale development to avoid developer monopoly at the time the initial production contract is negotiated. <p>-- Regulate the OSD’s involvement in acquisition.</p> <ol style="list-style-type: none">10) Establish a Defense System Acquisition Review Council (DSARC). It shall meet to approve the start of development (DSARC I), meet again to decide on full-scale development (DSARC II), and meets a third time to approve the move to production.
--	--

(As summarized by McNaugher 1989:67-68)

The Fitzhugh Commission.

The practice of concurrency, that is putting weapons into production prior to flight testing, yielded weapons that did not perform as advertised. “In a sample of 22 weapon systems deployed to Southeast Asia [Vietnam] from 1965-1970, DoD studies found all but one had suffered major deficiencies in the field” (Benson 1996:17). In the midst of an unpopular war, battered by unfavorable analysis, and faced with acquisition cost overruns, the Nixon Administration commissioned a new study called the Blue

Ribbon Defense Panel headed by Gilbert Fitzhugh on July 1969, more commonly known as the Fitzhugh Commission.

The 16 member panel took a year to publish their findings (OSD History 1978:249). This panel was “instructed to study, report, and make recommendations on the organization and management of the Department of Defense” with a greater emphasis on the Acquisition Process than the two Hoover Commission (Defense Policy 1988:144). The panel’s report contained 113 recommendations (OSD History 1978:249). One finding relating to the acquisition oversight states “the diffusion of responsibility and accountability, the freedom to ‘pass the buck’ to the top on hard decisions, and the opportunity to use the extensive coordination process to advance parochial objectives, are circumstances to which many in the Department have adapted comfortably” (Barrett 1983:xxiv). The need for accountability seems to pervade the Fitzhugh Commission Recommendations. Table 6 charts findings and recommendations pertaining to the Acquisition Process.

Table 6. Fitzhugh Commission Recommendations

- 1) Decentralized Authority:
Observation: Effective civilian control is impaired by the generally excessive centralization of decision-making authority at the level of the Secretary of Defense.
Recommendation: The functions of the Department of Defense should be divided into three major groupings: Operations, Resource Management, and Evaluation...Each of these major groups should report to the Secretary of Defense through a separate Deputy Secretary
- 2) Operational Test and Evaluation (OT&E):
Observation: OT&E has been too infrequent, poorly designed and executed, and generally inadequate.
Recommendation: A Defense Test Agency should be created to perform the functions of overview of all Defense test and evaluation, ... with particular emphasis on operational testing, and on systems and equipments which span Service lines
- 3) Career and Professional Development:
Observation: The promotion and rotation systems of the Military Services do not facilitate career development in the technical and professional activities,
Recommendation: Specialist career should be established for officers in such staff, technical and professional fields as research, development, intelligence, communications, automatic data processing and procurement...the duration of assignments for officers should be increased, and should be as responsive to the requirements of the job as to the career plan of the officer.
- 4) Research and Development:
Recommendation: A new development policy for weapons systems and other hardware should be formulated and promulgated to cause a reduction of technical risks through demonstrated hardware before full-scale development, and to provide the needed flexibility in acquisition strategies.
- 5) Program and Project Management
Recommendation: The effectiveness of program or project management should be improved by:
 - a) Establishing a career specialty code for Program managers in each Military Service and developing selection and training criteria that will ensure the availability of an adequate number of qualified officers. The criteria should emphasize achieving a reasonable balance between the needs for knowledge of operational requirements and experience in management;
 - b) Increasing the use of trained civilian personnel as program managers;
 - c) Providing authority commensurate with the assigned responsibility and more direct reporting lines for program managers, particularly those operating in matrix organizational arrangements; and
 - d) Giving the Program Manager directive authority, subject to applicable laws and regulations, over the contracting officer, and clarifying the fact that the contract auditor acts in an advisory role.

(As summarized in Defense Policy 1988:10-13)

The first recommendation was never acted upon. In response to the second recommendation, President Nixon created the Independent Operational Test and Evaluation (IOT&E) organizations in 1970. These organizations were to help ensure weapons deployed to the field worked for the Warfighter. The Air Force formed the Air Force Operational Test and Evaluation Center (AFOTEC) in 1974 (Benson 1995:18). AFOTEC findings were to be used by the DSARC in performing oversight.

On the third, fourth and fifth recommendations, Secretary Packard laid the foundations for the 1971 publication of DoD Directive 5000 series, officially entitled “Acquisition for Major Defense Systems” (Acker 1993:169). This document unified and formalized Acquisition policy across the Services. Secretary Packard required the Director, Defense Research and Engineering to conduct “a management review at least once during” each MDAP’s life (Acker 1993:167). Improving OSD management was the focus of these reviews.

The Commission on Government Procurement.

Coinciding with the Fitzhugh Commission, Congress established the Commission on Government Procurement in November 1969 to study and recommend methods “to promote the economy, efficiency and effectiveness” of procurement by the executive branch of the Federal Government (Defense Policy 1988:390). The 12 member commission submitted their report in December 1972. The recommendations pertinent to the Acquisition Process and the Acquisition Oversight Process are listed in Table 7.

Table 7. Commission on Government Procurement Recommendations

<p>1) General Procurement Considerations:</p> <p>a. <u>Finding:</u> Void in policy leadership and responsibility and a fragmented and outmoded statutory base. <u>Recommendation:</u> create the Office of Federal Procurement Policy within the Office of Management and Budget.</p> <p>b. <u>Finding:</u> The military procurement is govern by the Armed Services Procurement Act of 1947, but civilian procurement came under the Federal Property and Administrative Services act of 1949. There are inconsistencies between the two statutes. <u>Recommendation:</u> Enact legislation to eliminate inconsistencies</p> <p>c. <u>Finding:</u> There is a burdensome mass and maze of regulations <u>Recommendation:</u> Establish a system of Government-wide coordinated, and uniform procurement regulations under the direction of the Office of Federal Procurement Policy.</p> <p>2) Research and Development Acquisition:</p> <p>a. <u>Recommendation:</u> Emphasis should be placed on basic, innovative research and the sharing of new ideas among Government agencies. There should be more cooperative industry-Government relationship which maximizes the creative energies of U.S. suppliers.</p> <p>b. <u>Finding:</u> In cost allowability principles, the independent research and development (IR&D) and bind and proposal (B&P) expenditures are in the Nation's best interest to promote competition, to advance technology, and to foster economic growth <u>Recommendation:</u> Establish a policy recognizing IR&D and B&P efforts as necessary costs of doing business.</p>	<p>3) Acquisition of Major Systems</p> <p>a. <u>Finding:</u> too often the focus has been on the system product and not on its purpose...adequate attention [is not given] to why and new level of capability is needed. <u>Recommendation:</u> Start new system acquisition programs with agency head statements of needs and goals.</p> <p>b. <u>Finding:</u> Funds spent on development of alternative systems serve as insurance against the possibility of a premature and potentially costly choice involving only one system. <u>Recommendation:</u></p> <ul style="list-style-type: none"> i) Create alternative system candidates; ii) Finance the exploration of alternative systems; and iii) Maintain competition between contractor exploring alternative systems. <p>c. <u>Finding:</u> The cost to maintain competition throughout rises substantially. Thus, systems entering production and deployment normally do so under an evolved monopoly situation, with only a single system and contractor to meet the need. <u>Recommendation:</u> Procuring Agencies and Congress should withhold approval for full production and use of new systems until the need has been reconfirmed and system performance has been tested and evaluated in an environment closely approximating the operational conditions.</p> <p>d. <u>Recommendation:</u> Alleviate the problem of management layering and excessive staff reviews;</p> <p>e. <u>Recommendation:</u> Strengthen each agency's cost estimating capability</p>
---	---

(As summarized by Defense Policy 1988:13-17)

The Office of Federal Procurement Policy was created by statute in 1974 in fulfillment of Recommendation 1a. (Defense Policy 1988:14). To combat complaints that unrealistic cost data was being used for oversight and in fulfillment of recommendation 3e, the OSD Cost Analysis Improvement Group (CAIG) came into existence in 1971. The CAIG was to perform independent cost analysis for the use of DSARC (Srull 1998:5). The other recommendations were addressed by later commissions and reports.

DoD Organizational Changes.

Several organizations changed their names in the 1970s. The only new agency to the Oversight Hierarchy was the Director, Operational Test and Evaluation. Established in 1970, he heads Office of Operational Test and Evaluation (see Figure 8). The Assistant Secretary of Defense (Installations and Logistics) position was abolished in 1977 with acquisition activities transferred to the Director of Defense Research and Engineering and other responsibilities assigned to the new Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics). The Director of Defense Research and Engineering was redesignated Under Secretary of Defense (Research and Engineering) by Public law 95-140 in 1977. Assistant Secretary of Defense (Systems Analysis) was redesignated four times: to Director of Defense Program Analysis and Evaluation in 1973; to Assistant Secretary of Defense (Program Analysis and Evaluation) in 1974; to Director of Planning and Evaluation in 1976; and lastly to Assistant Secretary of Defense (Program Analysis and Evaluation) in 1977 (US Organization 1998:33-36).

The creation of DSARC and AFSARC increased the number of participants in the Acquisition Process. Program Managers were forced to brief, not only their chain of command, but also all the member organizations represented in DSARC and AFSARC.

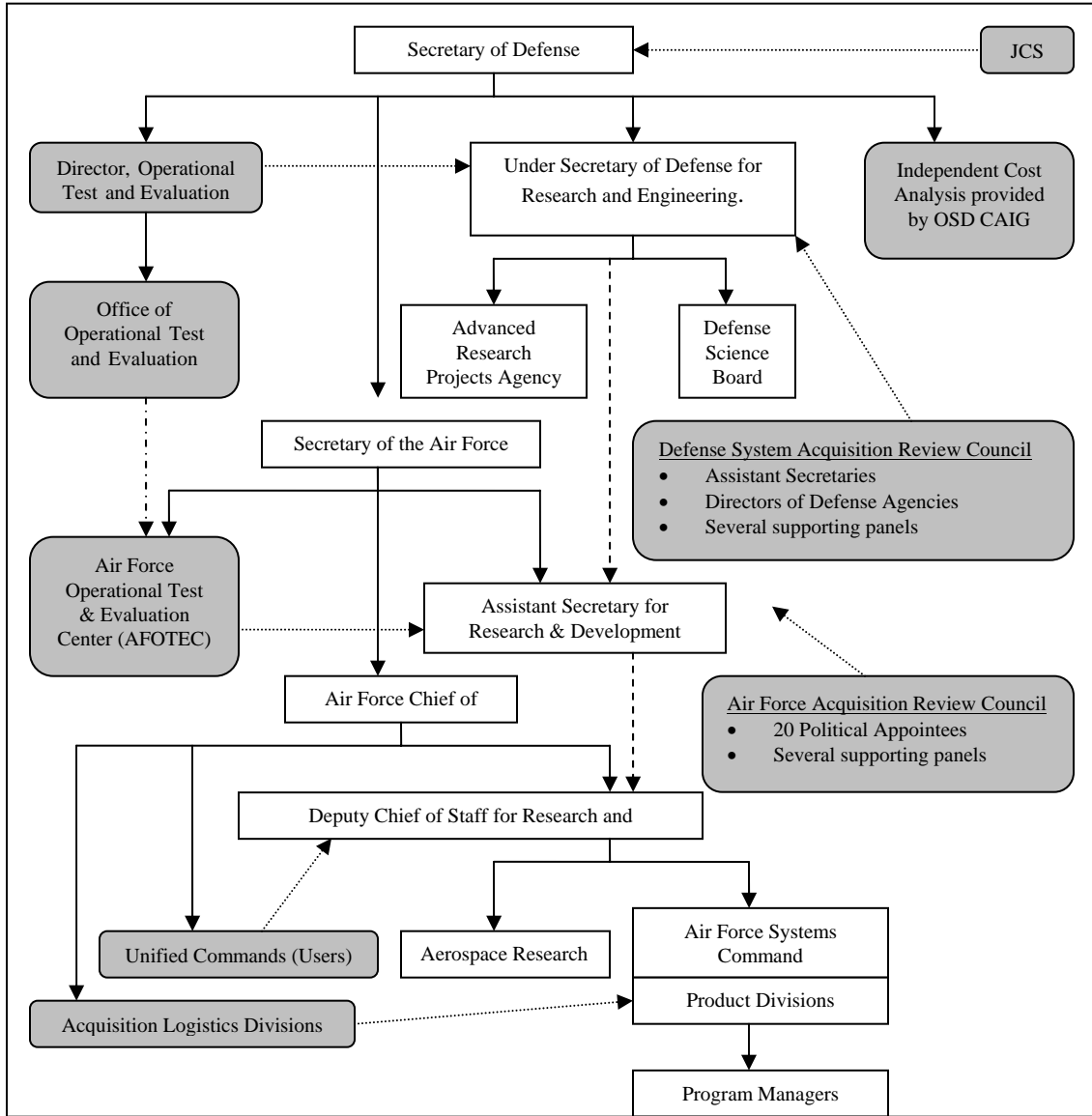


Figure 9: The Air Force Acquisition Oversight Hierarchy of 1977

Air Force Organizational Changes.

Acquisition and Logistics were still handled by two different major commands. The program management responsibility transfer (PMRT) between AFSC and AFLC was ineffective and MDAPs suffered from the discontinuity. Air Staff established the Acquisition Logistics Division in 1976; an oversight organization meant to “ensure that reliability, maintainability, and supportability were built into weapon systems” by overseeing acquisition programs in AFSC’s product divisions (Benson 1996:19).

Reducing Service Oversight (1977-1988)

President Carter came into office promising a cut in Defense spending. He cut President Ford’s 1978 budget proposal for defense by \$3 billion. Instead of decreased spending, Defense spending generally increased each year after because of high inflation at home and serious challenges internationally. In December of 1979 the Soviets invaded Afghanistan and made it part of its Soviet Bloc.

In November 1979, Iranian revolutionaries occupied the U.S. embassy in Tehran and took more than 50 hostages. The planned rescue operation ended in failure and the loss of eight U.S. servicemen on 24-25 April 1980. Not until the last day of his administration, on 20 January 1981, could President Carter make final arrangements for the release of the hostages. (Defense Link 2003: Brown)

Faced with these issues, the Carter Administration concentrated on issues abroad and did little to alter the DoD organizational structure or Acquisition Process.

President Reagan enjoyed peace and prosperity during his two terms in office. He achieved peace through strength; the DoD budget was increased by 35%; improved relations with the Soviet culminated with a treaty to eliminate intermediate-range nuclear

missiles; and he maintained a strong military presence in the Persian Gulf to keep oil shipping lines open despite hostilities in the Iran-Iraq War (The White House 2004:Reagan). Despite these successes, Defense watchdogs were prevalent in the 1980's. Prompted by outside concerns or other factors, Congress formed a bipartisan 80-member Military Reform Caucus in the late 1970's. Its aim was to slash waste and discourage abuse of defense dollars. "Public interest groups such as the Project on Military Procurement led by crusader Dina Rasor" and "investigative television programs such as CBS's '60 Minutes' frequently exposed alleged DoD weapons boondoggles" (Jones 1999:400). Allegations of fraud, waste, and abuse were prevalent in popular media.

The Carlucci Initiatives.

The Regan administration recognized a need to study and fix the acquisition system. In 1981, then Secretary of Defense Weinberger ordered his Deputy Secretary of Defense Frank C. Carlucci to study all aspects of defense acquisition. Officially called the Acquisition Improvement Task Force, it published 32 initiatives, more commonly known as the Carlucci Initiatives (see Table 8). A majority of these initiatives were implemented, adopted, or adapted (Benson 1996:19 and Jones 1999:406).

Table 8. Carlucci Initiatives

- | | |
|--|--|
| 1) Reaffirm Acquisition Management Principles | 17) Decrease DSARC briefing and data requirements |
| 2) Increase use of Preplanned Product Improvement | 18) Budget for inflation |
| 3) Implement multiyear procurement | 19) Forecast business base conditions |
| 4) Increase program stability | 20) Improve source selection process |
| 5) Encourage capital investment to enhance productivity | 21) Develop and use standard operation and support systems |
| 6) Budget to most likely costs | 22) Provide more appropriate design-to-cost-goals |
| 7) Use economical production rates | 23) Implement acquisition process decisions |
| 8) Assure appropriate contract type | 24) Reduce number of DSARC milestones |
| 9) Improve system support and readiness | 25) Submit MENS with Service POM |
| 10) Reduce administrative costs and time | 26) Revise DSARC membership |
| 11) Budget for technological risk | 27) Retain USDR&E as Defense Acquisition Executive |
| 12) Provide front-end funding for test hardware | 28) Raise dollar threshold for DSARC review |
| 13) Reduce governmental legislation related to acquisition | 29) Integrate DSARC and PPBS process |
| 14) Reduce number of DoD Directives | 30) Increase PM visibility of support resources |
| 15) Enhance funding flexibility | 31) Improve reliability and support |
| 16) Provide contractor incentives to improve reliability. | 32) Increase use of competition |

(As summarized by Holbrook 2003:10)

The Grace Commission.

In June 1982, President Reagan established the President's Private Sector Survey on Cost Controls (PPSSCC), better known as the Grace Commission. The 45 members representing 21 private sector companies evaluated 36 segments of the Department of Defense under the guidance of J. Peter Grace. President Reagan directed the Grace Commission to "identify opportunities for increased efficiency and reduced costs achievable by executive action or legislation" (PPSSCC report as quoted by Defense Policy 1988:596). The Grace Commission applauded several of the Carlucci Initiatives but maintained that improvements in the Acquisition Process could still be made. See Table 9 for a summary of their findings.

Table 9. Grace Commission Recommendations

- | | |
|---|--|
| <p>1) Improved Organization
 <u>Observation:</u> Massive duplication of effort among the services and OSD
 <u>Recommendation:</u> Total consolidation of day-to-day acquisition functions at the OSD level.</p> | <p>6) Common Parts and Standards
 <u>Recommendation:</u> Use standardized parts in weapons systems and decrease the use of military specifications.</p> |
| <p>2) Defense Contract Administration Consolidation
 <u>Observation:</u> Wide variations in the procedures between the Defense Contract Administration Service...and the various related components at the service level.
 <u>Recommendation:</u> Consolidate all contract administration at the OSD-level.</p> | <p>7) Major Weapons System new Starts
 <u>Recommendation:</u> Limit the number of new weapons programs started each year and impose stricter entry requirements for new systems.</p> |
| <p>3) Regulatory Constraints
 <u>Observation:</u> The Department of Defense acquisition of weapons systems operates under a complex regulatory system.
 <u>Recommendation:</u> Defense Acquisition Regulations (DAR) should be replaced with general guidelines for DoD procurement actions.</p> | <p>8) Estimating Weapons systems Costs
 <u>Recommendation:</u> Establish procedures to ensure more accurate estimates of weapons cost in order to permit better planning and reduce cost overruns.</p> |
| <p>4) Independent Research and Development Costs
 <u>Observation:</u> The DoD reimbursement policy for independent research and development (IR&D) costs involves an elaborate and time-consuming technical review process.
 <u>Recommendation:</u> Eliminate technical review and group IR&D under overhead costs.</p> | <p>9) Instability of the Weapons Acquisition Process
 <u>Recommendation:</u> The DoD should commit to a stable 5-year spending plan for the acquisition of weapons systems at economical production rates</p> |
| <p>5) Department of Defense Laboratories
 <u>Recommendation:</u> Improve data exchange,...reduce duplication, and DoD laboratories should phase out their involvement in the late stages of the development cycle.</p> | <p>10) Transfer of Consumable Inventory Items
 <u>Observation:</u> DLA has proven its ability to manage successfully consumable items with statistically superior results over services.
 <u>Recommendation:</u> Of the 1.2 million inventories being managed by the Services, 900,000 should be transferred to DLA.</p> |
| | <p>11) Implementation of OMB Circular A-76
 <u>Recommendation:</u> Remove various legislative requirements that serve to restrict DoD's implementation of the A-76 program. Thereby outsource commercial functions.</p> |

(Summarized from Defense Policy 1988:17-20)

The Packard Commission.

On 15 July 1985, President Reagan established the President's Blue Ribbon Commission on Defense Management, more commonly known as the Packard Commission after its chairman David Packard. Table 10 summarizes the main points. President Regan began to implement the Packard Commission recommendations prior to the Commission's final report. On 1 April 1986, President Regan issued National Security Decision Directive 219 which established an Under Secretary of Defense (Acquisition) "to set policy for and oversee program management through the new Service Acquisition Executives (SAE) and a number of high level committees with interlocking membership" (Benson 1996:21). He became the Defense Acquisition Executive (DAE). The Defense Acquisition Board (DAB) replaced DSARC in its responsibilities. The Joint Requirements Oversight Council (JROC) was established within the offices of the Joint Chiefs of Staff to define requirements and select programs for development. The Packard Commission and the resultant reform measures were seen as managerial fixes to political problem woven into the organization itself.

In organizational politics terms, the Packard reforms—in conjunction with other events and developments of the time—produced a net decline in OSD's capacity to influence the...process. (Jones 1999:403)

In the first Bush administration, Secretary of Defense Dick Chaney would order the implementation, in whole or in part, all the Packard recommendations through such initiatives as the Defense Management Review.

Table 10. Packard Commission Recommendations

Institutionalize, expand, and link a series of critical determinations within the Executive Branch and Congress.

- 1) National Security Council (NSC) issues national security objectives.
- 2) President issues a five-year budget with input from NSC and the Office of Management and Budget.
- 3) Chairman of Joint Chiefs of Staff (CJCS) prepares a military strategy and budget priorities
- 4) Department of Defense (DoD) generates a five year defense plan and a two-year defense budget based on budget level and programs chosen by the President.
- 5) The President presents the budget to congress based on national strategy and operational concepts.

Military Organization and Command

- 1) Make CJCS principal uniformed military advisor to the President, NSC, and Secretary of Defense.
- 2) Joint Staff and the office of JCS are exclusively directed by the CJCS.
- 3) Correspondence to the Commanders-in-Chief of the Unified and Specified Commands (CINCs) goes through the CJCS.
- 4) Create a Vice Chairman of the Joint Chiefs of Staff.
- 5) Reduce Military Headquarters
- 6) Establish a single unified command to integrate global transportation.

Acquisition Organization and Procedures

- 1) Create the position of Under Secretary of Defense (Acquisition) (USD(A)) as the Defense Acquisition Executive (DAE)
- 2) Services should have similar executives. They will act as Service Acquisition Executives (SAE).

- 3) The SAE appoints Program Executive Officers (PEO), each responsible for a set number of acquisition programs.
- 4) Program managers are responsible to the respective PEO and report only to him on program matters.
- 5) All federal statues governing procurement should be recoded into a single procurement statue.
- 6) Establish business-related education and experience criteria for senior-level acquisition personnel.
- 7) Establish the Joint Requirements and Management Board (JRMB) co-chaired by the CJCS and the USD(A) to define requirements and select programs for development.
- 8) Use a greater number of “off the shelf” items.
- 9) Increase use of prototypes
- 10) Operational testing should be completed prior to high-rate production.
- 11) Increase use of commercial-style competition.
- 12) DoD should fully institutionalize “baselining”
- 13) Greater use of multi-year procurement
- 14) Reduce requirements for Data rights

Government-Industry Accountability

- 1) Aggressively enforce federal civil and criminal laws governing defense acquisition.
- 2) Defense contractors should promulgate and vigilantly enforce codes of ethics and develop internal controls to monitor themselves.
- 3) DoD should develop specific ethics guidance on matters of DoD acquisition and train personnel on such matters.
- 4) Oversight of defense contractors must be better coordinated among the various DoD agencies.
- 5) USD(A) should establish audit policies and foster contractor self-governance.

(Summarized from PBRC:1986:xvi-xxx)

Goldwater-Nichols Reorganization Act of 1986.

On 1 October 1986, President Reagan signed into Public Law 99-433, the Goldwater-Nichols Department of Defense Reorganization Act of 1986. Such sweeping changes had not been accomplished since the Reorganization Act of 1958. The acts major provisions implemented many of the recommendations of the Packard Commission.

- 1) In this act the Chairman of the Joint Chiefs of Staff was strengthened in a manner suggested by the Packard Commission (Benson 1996:21). Command relationships were clarified and streamlined. No longer were Service Secretaries included in the command chain.

As outlined in the conference report to the Goldwater-Nichols Act, the law intends generally for the Secretary to have 'sole and ultimate power within the Department of Defense on any matter on which the Secretary chooses to act,' giving him broad authority to reorganize DoD activities without changing statutory arrangements (Donley 1995:91-92)

- 2) The Act "emphasized that experience in the joint (inter-Service) Unified Commands and other joint organizations were more important to an officer's career advancement than assignments within one's own Service" (Jones 1999:408). Joint duty was given higher accord when the Act made Joint Duty necessary to qualify as a senior general or flag officer.
- 3) The Under Secretary of Defense (Policy) was created to assist in preparing written policy guidance for the preparation and review of contingency plans and in reviewing such plans. He was also invited to be a member of DAB.
- 4) Service headquarter staffs were to be reduced. The Services were ordered to eliminate panels that performed duties redundant to DoD organizations (Jones 1999:408). For this reason the AFSARC was later disestablished.

The primary purpose of the Act was to strengthen civilian control over the military and reduce layering and duplication within the head quarters by designating a single office within the Secretariat for Acquisition. The General Accounting Office (GAO) evaluated

the DoD reorganization and found civilian powers strengthened but Acquisition expertise within the secretariat lacking. In particular, “military officers dominate the leadership positions in acquisition secretariat” of the Air Force (GAO Acq Reform 1991:2). The GAO report concludes that a lack of acquisition expertise in the secretariat and the dominance of uniformed personnel within the acquisition secretariat weaken civilian power over Air Force Acquisition.

Organizational Changes.

On July 1, 1986, the title, the Undersecretary of Defense (Research and Engineering), was changed to Under Secretary of Defense (Acquisition). The position of Director for OT&E was established in September 1983; he is to report directly to the Secretary of Defense (U.S. Organization 1998:38). The Air Force merged the positions and staffs of the Deputy Chief of Staff for Research, Development, and Acquisition with the Assistant Secretary of Air Force (Research, Development, and Acquisition) to form the office of the new Assistant Secretary of the Air Force (Acquisition); he would become the designated Service Acquisition Executive (SAE) for MDAPs. At first, the Air Force Program Executive Officers (PEOs) were dual hatted as Product Center Commanders. The resulting oversight model is depicted in Figure 9.

Those granted the power to cancel, delay, or approve an MDAP are depicted in Figure 9 with double outlines. Historically, personnel and organizations outside the PM, PEO, CAE, and DAE have been known to exercise the same powers. The acquisition culture expected the PMs to defer to the other organizations depicted in Figure 9 before meeting an official DAB. It was a method to share responsibility and gain consensus within DoD (Jones 1999:402).

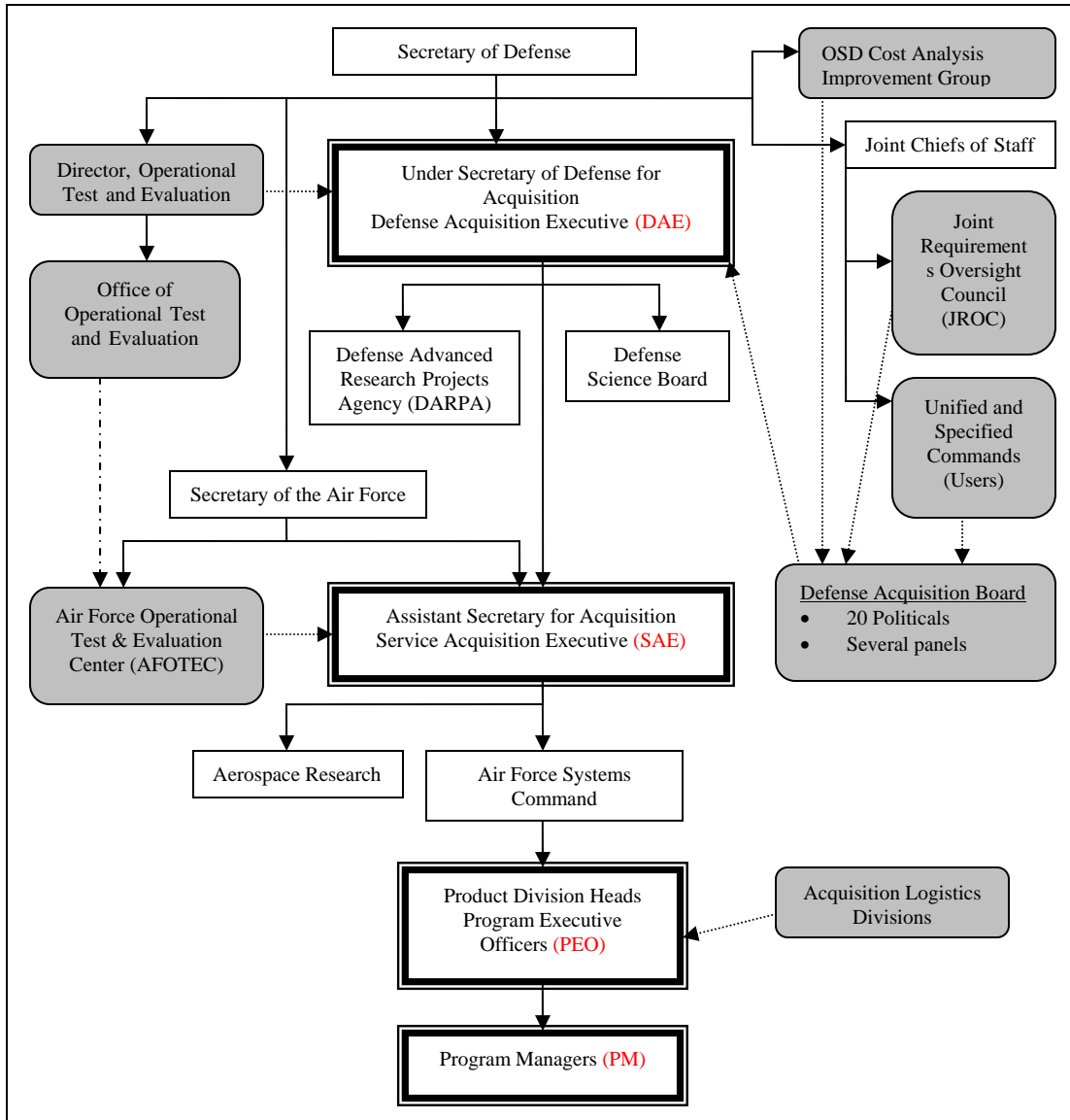


Figure 9: The Air Force Acquisition Oversight Hierarchy of 1988

Streamlining (1988-2003)

In 1988, George Herbert Walker Bush was elected President. Diplomatically he succeeded on many fronts: on 9 November 1989 the Berlin Wall was torn down and the Soviet administration of Russia collapsed in 1990 putting an end to the Cold War. Militarily he gained popular victories. He sent troops into Panama to overthrow General Manuel Noriega by arresting him for drug trafficking thereby protecting the Americans who lived there and the canal for international travel. He sent troops to keep the peace in the war-torn Bosnia. Most notably he thwarted Iraqi President Saddam Hussein's attempts to annex Kuwait in a combination of military actions collectively known as the Persian Gulf War in 1991 (White House 2004: Bush).

Defense Management Review of 1989.

In July 1989, Secretary of Defense Richard Cheney chartered the Defense Management Review (DMR) Committee to identify ways of trimming expenses within the DoD and implement the Packard Commission's Recommendations fully (Elliot 1991:1). Common support functions such as defense acquisition were consolidated through Defense Management Review Decisions. As a result of the DMR more authority migrated to OSD officials, and responsibilities for day-to-day execution split between newly created defense agencies combined to further diminished military departments.

The DMR

included 250 separate decisions to implement consolidations; improve information systems, enhance management, and employ better business practices. These decisions were expected to yield anywhere from \$62 billion to \$71 billion in savings over a 5-year period and DoD's budget were reduced up-front to capture these savings. (GAO Defense Management 1998:3.2)

The defense budget was cut drastically in anticipation of savings from reduced infrastructure. Often realized savings were less than estimated or realized slower than anticipated (GAO Defense Management 1998:3.2).

DMR greatly reduced the chain of command between the PM and the SAE. Though the workforce between a PM and the SAE had decreased, the workforce between the SAE and the DAE had not. The DAB include the over 20 appointed officials (USD(A&T) Report 1995:10). Through DMR Decisions PMs were no longer required to formally brief major command personnel. Formal briefings to OSD personnel were also greatly reduced. PMs were slow to take advantage of reporting freedoms since program success often relied on keeping OSD and Major Commands informed. (GAO Acquisition Reform 1991:3-5)

Other than procedural and organizational changes, DMR decisions also revamped the entire acquisition career field. In 12 June 1989, a DMR decision “had directed the services to correct deficiencies in the training and development of personnel involved in acquisition by developing plans for a dedicated corps of officers to serve as acquisition specialists” (Benson 1996:23). Greater changes to the Acquisition career field were made into law by Congress with the Defense Acquisition Workforce Improvement Act.

Defense Acquisition Workforce Improvement Act of 1990.

GAO noted that “while some program managers possessed substantial experience and training, many did not” (GAO Acquisition Reform 1991:7). The same was true for OSD and other supporting Acquisition personnel. In 1990 Congress formalized requirements for acquisition professionals with the passage of the Defense Acquisition Workforce Improvement Act. Within the Act were new education, training, and

experience requirements. Also included was the following provision calling for more civilians in the Acquisition workforce.

The Secretary of Defense shall ensure that the acquisition workforce is managed such that, for each fiscal year from October 1, 1991, through September 30, 1996, there is a substantial increase in the proportion of civilians (as compared to armed forces personnel) serving in critical acquisition positions in general, in program manager positions, and in division head positions over the proportion of civilians (as compared to armed forces personnel) in such positions on October 1, 1990. (EC 2004: title 2 subsection 1721)

The acquisition community hierarchy was further supported by this act. This act partially fulfilled the Packard Commission's recommendation for a more permanent Acquisition Workforce unlike the uniformed military who would move every two to four years.

Defense Science Board Report on Defense Acquisition Reform.

The Defense Science Board had existed as an advisory panel since 1954 and the creation of the Assistant Secretary of Defense (Science and Technology). In 1993 Secretary of Defense Richard Cheney asked the Defense Science Board (DSB) to advise him on the best way to "acquire adequate defense capability, with state-of-the-art technologies and industrial processes, at affordable prices, in the quantities needed" (DSB 1993:i). DSB published four reports. Phase one came out in 1993 emphasizing the need to adopt commercial practices into Defense Acquisition. Phase two came out in 1994 identifying defense industry segments for further commercialization, identified major commands for increased responsibility in requirement generation, and identified barriers to the implementation of commercial practices. Phase three came out in 1996 evaluating the possibility of extending commercial practices into the R&D phase of the Acquisition Process (see Table 11). Phase four came out in 1999 reporting on the metrics the DoD could establish to measure its implementation of Acquisition Reform initiatives.

Table 11. Defense Science Board Task Force Recommendations

<p>Phase I Recommendations</p> <ul style="list-style-type: none"> • Broaden procurement of commercial products • Increase the use of simplified procurement procedures ... raises the threshold to \$100,000. • Reduce reliance on cost or pricing data. • Select industries for pilots to used commercial practices to acquire goods and services. • Select Major Commands for greater role in requirements definition. • Make Annual Plans for Commercialization • Establish a standing outside Review Group • Establish a comprehensive education, training, communications, and outreach program for government, industry, and the public. 	<p>Phase II Recommendations</p> <ul style="list-style-type: none"> • Pilot Industries should include military jet engines , software, and microelectronics. • Increased CINC Capabilities in USACOM and CENTCOM for evaluating new technologies and developing joint user needs in a more flexible requirement process. • The DoD should allow contractors to be governed by the same body of laws and practices that cover the commercial world instead of DoD specific ones. • DoD should encourage the use of commercial practices and specifications. 	<p>Phase III Recommendations</p> <ul style="list-style-type: none"> • DoD model Acquisition Process on the American free-market system • R&D programs should be phased to halve the average time to field a usable major system. • Promote Integrated Product Teams composed of contractors, users, and supplier agencies to provide the best solutions within specific schedule and price constraints. • Use carefully structured, relatively short, fixed price/flexible performance contracts. • Implement risk-reduction phase before full system development • Include contractor’s past performance as significant factors in source selection.
DSB 1: 1993:iii-iv	DSB 2:1994:8	DSB 3:1996:i-ii

Government Performance and Results Act of 1993.

On 5 January 1993, Congress passed the Government Performance and Results Act. Its purpose was “to provide for the establishment of strategic planning and performance measurement in the Federal Government” and “improve internal management of the Federal Government” (USC 2004). To this end, the GPO has reported annually on the DoD’s performance starting in fiscal year 2000. Of the five selected outcomes one directly measures the performance of the Acquisition Community,

that “the U.S. maintains technological superiority in key war-fighting capabilities”

(GAO DoD 2001:1). GAO found that:

some of the performance goals underlying measures—such as procurement spending and defense technology objectives—do not provide a direct link toward meeting the goal [and that the] DoD’s performance report does not reflect concerns raised within the Department about the adequacy of its strategy and the timely introduction of new technologies to operation forces. (GAO DoD 2001:2)

The lesson to be learned here is that the Acquisition Process is complicated, interrelated, and difficult to measure.

Process Action Team on Oversight and Review of 1994.

The Clinton Administration chartered a process action team to “...develop within 90 days a comprehensive plan to reengineer the oversight and review process for systems acquisition, in both the Components and OSD, to make it more effective and efficient, while maintaining an appropriate level of oversight” (PAT 1994:i). The recommendations of the PAT team are depicted in Table 12. President Clinton implemented several of their recommendations in a series of executive decisions.

Table 12. Process Action Team Recommendations

<ul style="list-style-type: none">• Reduce number of milestones; Forge a Three-Milestone Process.• Trim Milestone Decision Documents and Activities.• Collapse the number of formal pre-milestone meetings to one.• Institutionalize Integrated Product Teams to Do Oversight and Review.• Align program accountability and reporting for all acquisition programs, not just the MDAPs.• Centralize the affordability decision by placing it into the Warfighter's hands.• Consolidate the oversight and review process for joint programs and those programs requiring substantial inter-service harmonizing.	<ul style="list-style-type: none">• Establish more stringent experience criteria for ACAT I Program Managers and Deputy Program Managers• Stabilize MDAP Program manager tenure from program initiation until start of production• Establish a Career Civilian Deputy for the Defense Acquisition Executive and each Component Acquisition Executive.• Revitalize the Acquisition Program Baseline as the major program control tool thereby eliminating need for other documents.• Institutionalize a summit process for ACAT I Programs• Apply reengineering principles to contractor oversight.
--	---

(Summarized from the Process Action Team Report 1994:viii-xi)

National Performance Review.

With the end of the Cold War, many felt that the DoD funding should be reduced, the national debt paid down, and other social programs prosper from the peace dividend. Further budget cuts and workforce downsizing was inevitable. To better streamline the DoD Acquisition Process President Clinton initiated the National Performance Review. It offered the following initiatives: streamlining the Army Corps of Engineers, creating incentives to generate revenues, establishing a unified budget, implementing a productivity-enhancing capital investment fund, and reducing some National Guard and Reserve costs. As part of the National performance Review President Clinton signed into law the Federal Acquisition Streamlining Act on 19 October 1994. Its purpose was to

“overhaul the cumbersome and complex procurement system of the federal government” (DSMB 2004). Some highlights are listed in Table 12.

Table 13. Federal Acquisition Streamlining Act (FASA) Highlights

- Eliminated most paperwork for acquisitions below \$100,000 within the Simplified Acquisition Threshold (SAT).
- Allowed direct “micropurchases” of items below \$2,500 without competitive quotations or compliance with Buy American Act and certain small business requirements.
- Promotes the acquisition of commercially available items
- Establishing a Government –wide Federally Acquisition Computer Network (FACNET) to make electronically available, MDAP materials
- Established a six year limitation period for filing claims under the Contract Disputes Act (CDA) and increased dollar thresholds for claim certification and the accelerated and small claims procedures.
- Reserved acquisitions over \$2,500 but under \$100,000 for small business concerns.
- Expanded the Small Disadvantaged Business set-aside program to include civilian agency procurements.
- Established new 5% contracting Goal for women-owned small businesses.
- Preserved private contractors’ ability to file bid protests in the U.S. District Courts and authorizing federal district courts to obtain advisory opinions from board of contract appeals.
- Improved bid protest and contract administrations procedures.
- Repealed that part of the Walsh-Healey Act requiring an offeror to certify that it is a regular dealer or manufacturer.
- Requiring evaluation of past performance before contract award.
- Raising the Truth in Negotiation Act (TINA) threshold for requiring certified cost or pricing data to a uniform \$500,000 for both civilian agencies and DoD procurements.

(Federal Acquisition Streamlining Act as summarized by DSMB 2004)

Organizational Changes.

At the DoD level, best practices were being identified and implemented. In 1995, Secretary of Defense William Perry directed the Department of Defense to employ the use of Integrated Product Teams (IPT). The “IPT concept for oversight...is intended to replace the current sequential process” that often times modify review documents greatly or reject the product (USD(A&T) Report 1995:3). The Overarching IPTs, composed of political appointees and its subordinate Working IPTs are used as advisors to the DAB.

Under Secretary of Defense for Research and Engineering was abolished in 1993 when acquisition activities were transferred to the Under Secretary of Defense for Acquisition and Technology.

With the passage of the Clinger-Cohen Act of 1996 MDAPs that fell under the Information Technology (IT) category were given a separate DAB, one called the Information Technology Acquisition Board (ITAB) and the DAE duties were transferred to the Under Secretary of Defense (Information Technology). The Act stated that the level of expertise necessary to perform oversight of this highly technical field required a different skill set than that provided by the DAB or the Under Secretary of Defense (Acquisition).

At the Air Force level Deputy Assistant Secretary Darleen Druyun issued a series of reform measures known as “Lightening Bolt” initiatives. They are in brief form:

- 1) Centrally scrub all major requests for proposals
- 2) Create a standing acquisition strategy panel
- 3) Develop a new SPO manpower standard based on SAR programs
- 4) Cancel all AFMC center acquisition policies
- 5) Reinvent the AFSARC process using IPTs
- 6) Improve the consideration of past performance in making source selections
- 7) Consolidate documents required for milestone decision into a single acquisition management plan.
- 8) Incorporate acquisition reform into the PEO and DAC portfolios.
- 9) Enhance workforce training and education.
- 10) Cut contract award time in half.

11) Adopt business processes in laboratories. (Benson 1996:24)

Increased PEO responsibilities forced the Air Staff to “establish a separate PEO structure in the Pentagon on 15 February 1990” (Benson 1996: 21). Product Center Commanders gave 37 MDAPs to the PEOs but continue to give oversight to lesser programs (mainly programs in Logistics and Communications). The new PEO structure absorbed AFSC acquisition operations and in 1991, AFSC and AFLC were merged together into the Air Force Material Command (AFMC). The new Air Force Material Command implemented the concept of integrated weapons system management (IWSM). With one command in charge of research, development, development tests and evaluation, acquisition, and logistics AFMC could assign one PM to a MDAP and eliminate the need for program management responsibility transfers (PMRT) (Benson 1996:22). The resulting oversight construct is as follows.

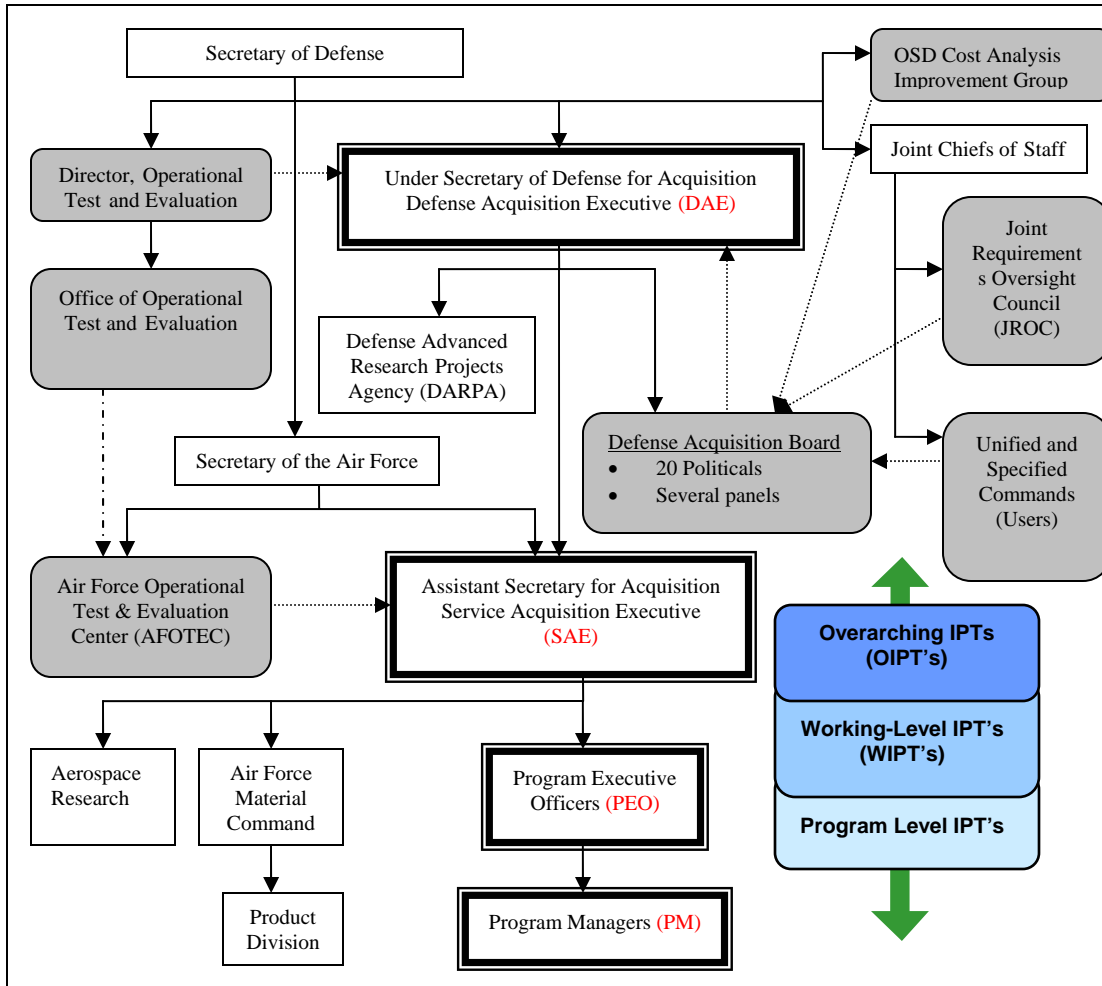


Figure 10: The Air Force Acquisition Oversight Hierarchy of 1994-2003

Ongoing Pilot Studies

In an effort to reduce the cost of oversight, the Bush Administration has enabled three experimental oversight processes other than the current DoD 5000 series. The DoD 5000 series is the regulation that defines the boundaries of the Acquisition Process; it is the “box” the pilot study groups are looking to reengineer. The Information Technology MDAPs navigate through the “box” in the virtual realm. Instead of holding meetings within the Pentagon, upper management will evaluate MDAPs over the Internet, video

teleconference meetings, or via e-mail. The Air Force Space Command (AFSPC) has taken their MDAPs through a smaller “box.” Instead of holding meetings at the Pentagon, meetings are held in-house with a body of non-stakeholders. The team provides a recommendation to the AFSPC Commander at key decision points. The Missile Defense Agency (MDA) is creating a new “box” that entails the use of program experts instead of the OSD personnel. For additional information see Neal 2004, Rousseau 2004, and DeReus 2004.

Summary

For the past five decades, the Air Force has made strides in organizing and managing MDAPs as efficiently and effectively as possible. It inherited a heavily encumbered process from the Army; one that entailed the use of commercially owned labs and Army owned depots. Air Material Command was hard pressed to separate Army assets from Air Force assets in their inventories, logistics support, and personnel. Above the Air Force, the newly appointed Secretary of Defense had his hands tied by statute and too small of a staff to handle the chore of eradicating duplicate processes. A series of law changes greatly centralized power at the Secretary of Defense level, changing his role from arbitrator between the services to the manager of the services and sole defense advisor to the President. Secretary McNamara took advantage of these new powers over budget and acquisition to liquidate duplication between the services.

Acquisition went from service unique to a more unified process. Several defense agencies were created to facilitate a more unified acquisition process. When reports alleging Defense fraud, waste, and abuse surfaced, emphasis was placed on increasing

quality controls through the use of testing, longer development phases, and service independent agencies (i.e. Cost Analysis Improvement Group).

The burden of numerous regulations and statutes, tedious contractual devices, and formal reporting requirements caused PMs and contractors to plead for relief. Such relief was granted; regulations and statutes were codified and reduced. The DoD has of late been fashioning itself like a commercial business. Using corporations as a benchmark, DoD has tried to reduce the cost of Acquisition in both time and money, as well as increase the quality of DoD's inventory. The Acquisition career path required more training, education, and experience. The number of milestones in the MDAP lifecycle was reduced from five to three. The future points at greater flexibilities in oversight constructs. The future may hold several oversight hierarchies, each tailored to a particular technology. Innovators would do well to study past constructs and learn from history.

III. Methodology and Analysis

Introduction

Per the United States Constitution, the role of the military has been to “provide for the common defense.” To support this mission, the Department of Defense (DoD) Acquisition Community has been able to develop and acquire the best weapons and support systems in the world. Since its inception, the DoD have employed various forms of oversight to manage Major Defense Acquisition Programs (MDAP). Numerous studies have been performed over four decades, assessing the status of the Acquisition Process. Therefore it follows, that these studies are the “report card” of the corresponding Acquisition Oversight Process. Studious examination of these reports has revealed supportive evidence or a lack of evidence that a particular construct does not meet eight goals outlined below.

The actors in the Acquisition Oversight Process and studies performed on them were introduced in Chapter 2. This chapter identifies the job performance areas or work criteria. This will form the basis of comparison between the constructs, one from each decade.

Criteria of Acquisition Oversight

The Acquisition Community's overall task is to acquire systems for the armed services in the most efficient manner. Those involved in the Acquisition Oversight Process have a duty to ensure an appropriate level of review is performed on MDAPs (PAT 1994:iv). The following are objectives that the Acquisition Oversight Process should achieve as identified by the 1994 Oversight and Review Process Action Team.

- 1) Help field what the Warfighter needs when he needs it.
- 2) Demand accountability by matching managerial authority with responsibility
- 3) Promote flexibility and encourage innovation
- 4) Foster constant teamwork among everyone who is a stakeholder.
- 5) Actively promote program stability.
- 6) Balance the value of oversight and review with its costs.
- 7) Emulate the best practices of successful commercial companies and successful Government ventures.
- 8) Preserve the public trust. (PAT 1994:iv-v)

Of the eight only seven are being assessed; a more thorough explanation follows.

Help field what the Warfighter needs when he needs it.

While requirements generation is not the focus of this thesis, it drives the acquisition process. The desired outcome of this objective has two parts: 1) the quality of the products being fielded, and 2) how quickly new capabilities become available. Ideally, new capabilities will be available to Warfighters before a shortcoming in relation to opposing forces is realized. The newest technology was only as good as its ability to perform as advertised. The Warfighter must trust the equipment or they will abandon it

and use what they are familiar with. Reports on weapons deployed to the field of war and other military actions detail whether the Acquisition Process and its Oversight process accomplished this objective.

Matching managerial authority with responsibility.

Role definition is key to this objective. The personnel performing oversight activities receive their job descriptions from laws and regulations governing the Acquisition Process. The emphasis of this objective is has three sides: 1) the clarity of such role definition, 2) the ability of personnel to play their role without external interference, and 3) whether decisions are made at the lowest level possible. Several commission reports evaluate the managerial roles played by key Department persons.

Promote flexibility and encourage innovation.

To accomplish this objective, the Program Manager should be allowed, within reason, to diverge from the set Acquisition Process, that is to tailor the Acquisition Process depending upon such factors as the inherent program risk and complexity, the program manager's experience, the program's history, total dollar value, Congressional interest and similar factors.

Foster constant teamwork among everyone who is a stakeholder.

A reporting structure can serve to drive participants apart or it can encourage teamwork. Setting stakeholders at cross purposes could jeopardize an MDAP progress. Committee reports have commented on the harmony within the Acquisition Process. Noted disharmony would signal that teamwork is not fostered in the process.

Actively promote program stability.

Changes of requirements, in budgets, in contracting vehicles, and in the economy or the beginnings of war are the leading factors in program disruptions. The Oversight process could disrupt a program by delaying decision or undoing decisions. It is difficult to estimate the value of such disruptions therefore this objective is subjective to the beholder and can not be a basis of judging between constructs.

Balance the value of oversight and review with its costs.

The net-added-value of the Acquisition Oversight Process should be one where the time, dollar, manpower, and opportunity costs of the process are clearly outweighed by the added value to the decision maker. The cost of Acquisition Oversight has been compared to the satisfactory roll out of military systems in past.

Emulate the best practices.

The Acquisition Oversight Process evolved during wartime into a fitful amalgamation of expedient methods. Committees have compared the Department against the best in industry and in government. Favorable reports are rare.

Preserve the public trust.

The Secretary of Defense, the President, the Congress, and the taxpayer should have confidence that the oversight and review process is helping provide appropriate stewardship of the public monies. Avenues should be available to reassure these customers that the process is working.

Data Source

Several major commissions studied the Department of Defense over the decades of its existence (see Table 10). Within the text of the reports published by these groups are comments about the performance of the oversight process of its time. For instance, the First Hoover Commission, Rockefeller Committee and the Second Hoover Commission shall be investigated for clues on the abilities of the Acquisition Oversight Hierarchy of 1949. If the reports do not contain clues, GAO reports and historian comments are used to assess the capabilities of the Acquisition Oversight Hierarchy to accomplish the seven objectives. Generally Commission Reports, GAO reports and historians often point out areas requiring further improvement rather than areas that are sound. Therefore the data collected is used as evidence to support a construct is not able to meet an objective.

Table 1. Major Commissions on Defense Acquisition Process

Date	Major Commission
1949	First Hoover Commission on the Organization of the Executive Branch
1953	Rockefeller Committee
1955	Second Hoover Commission on the Organization of the Executive Branch
1970	Fitzhugh Commission / Blue Ribbon Defense Panel
1972	Commission on Government Procurement
1983	Grace Commission / President's Private Sector Survey on Cost Controls
1986	Packard Commission / President's Blue Ribbon Defense Commission
1994	Process Action Team on Oversight and Review

1949 Oversight

With the Passage of the National Security Act of 1947 the Secretary of Defense was created. The resulting Acquisition Oversight Process is depicted in Figure 4.

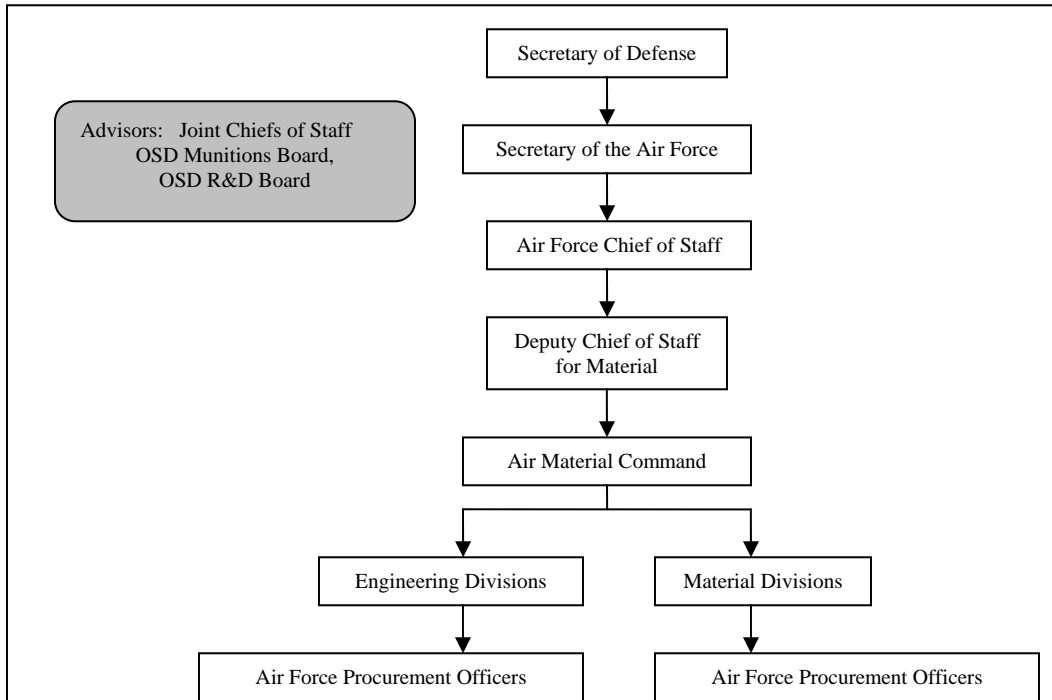


Figure 5: The Air Force Acquisition Oversight Hierarchy of 1949

Help field what the Warfighter needs when he needs it.

On this objective the commission studies were silent. Air Force Historian Lawrence Benson notes that the Air Force primarily relied on European agencies to perform research, develop and in some case to produce weapon systems (Benson 1996:10). Despite budget cuts, the Air Force was able to reach the supersonic age with the introduction of Lockheed's F-80, the Republic's F-84, and the North American made F-86. These planes were instrumental in the Korean War (McNaugher 1989:30). The World War II aircraft were driven by propellers and were no match for the Russian made

MiG. The majority opinion is that the 1949 construct did provide Warfighters with needed technologies in time to meet wartime aggressions. Therefore there is a lack of evidence to support the Warfighter needs objective not being met.

Matching managerial authority with responsibility.

The First Hoover Commission on Organization of the Executive Branch found “continued disharmony and lack of unified planning” (National Security Organization Report quoted by Defense Policy 1988:29). In their report to Congress, the Commission found that both the President and the Secretary of Defense was severely limited by statutes on the membership of key Boards, on the organization of the Department, and on the budget of the Services. Such limits on authority allowed the Services to function as a federation rather than as a unified defense department. The Munitions Board and the Research and Development Boards were both advisors to the President and Secretary of Defense, lacking the authority to direct unified acquisitions. Some units such as the Army Corps of Engineers had direct authority from Congress and were therefore outside the powers of the president, Secretary of Defense, and the Secretary of the Army.

Statutory authority is delegated to subordinate units, the department head is left with only the most general supervisory powers over policies, operations, and budgets. In such cases, the department head cannot enforce consistent policies and obtain the necessary efficiency and economy. Nor can he be held strictly accountable since he lacks authority to carry out the mandates of determined policy (National Security Organization Report quoted by Defense Policy 1988:31).

The Rockefeller Committee on Department of Defense Organization found that Service Secretaries were often omitted from military affairs and left with those of political, economic, and industrial affairs. There was a dual chain of command that

muddled the line of responsibilities from the Secretary of Defense to the Military chiefs.

Further, they found

a long record of challenges based on a legalistic argument that the phrase in the national Security Act which requires that the three military departments be ‘separately administered’ is a limitation on the authority of the Secretary of Defense (Report of the Rockefeller Committee as quoted by OSD History 1978:129).

The Second Hoover Commission on Organization of the Executive Branch of the Government noted there is “vagueness in the assignment of responsibility for support activities between the military Chiefs of Staff and the civilian executives” (Business Organization of the Department of Defense quoted by Defense Policy 1988:61). In the management vacuum “the bureaus of the Navy and the technical services of the Army have enjoyed a high degree of autonomy” (Business Organization of the Department of Defense quoted by Defense Policy 1988:62). There is evidence that the 1947 Acquisition Oversight Process did not meet this objective.

Promote flexibility and encourage innovation.

The First Hoover Commission did not address this objective. The Rockefeller Committee on Department of Defense Organization found that the Research and Development board was “handicapped in carrying out its functions by the rigidity of its membership and the complicated administrative mechanism inherent in the board-type structure” (Report of the Rockefeller Committee as quoted by OSD History 1978:138). The Munitions Board suffered from the same rigidity. The Second Hoover Commission notes that the acquisition bureaus were mostly autonomous, that services had little control over them during peace, and that military oversight over the bureaus were growing stronger (Business Organization of the Department of Defense quoted by

Defense Policy 1988:68). Below the OSD the Services strove to protect themselves from Congressional Inquires and Judicial suits brought forth mostly by dissatisfied contractors. The trend in Acquisition Contracting was towards inflexible contracts with elaborate specifications and extensive testing that could take up to two years. Such practices would serve as a legal defense against law suits or inquires (McNaugher 1989:21). There is evidence that the 1947 Acquisition Oversight Process did not meet this objective.

Foster constant teamwork among everyone who is a stakeholder.

The First Hoover Commission on Organization of the Executive Branch found disharmony in the Department made apparent by the overt Service rivalries. “There is a lack of close working relationships among such important elements as the Research and Development Board and the Joint Chiefs of Staff” (National Security Organization Report quoted by Defense Policy 1988:30). Service secretaries had statutory “authority to resist the supervision of the Secretary of Defense in budgetary matters” (National Security Organization Report quoted by Defense Policy 1988:31). The Joint Chiefs of Staff (JCS), as a unit reported to the President and the Secretary of Defense, as individual Service Chiefs they reported to the President, the Secretary of Defense, and individual Service Secretaries. By design, the Service Chiefs is more apt to curry to the Service Secretary who is his direct supervisor then to answer the needs of the Department. The JCS activities were “not well-coordinated with intra [Departmental] operations, or with the policy work of the Cabinet councils” (National Security Organization Report quoted by Defense Policy 1988:30-32).

The Rockefeller Committee on Department of Defense Organization found the dual role performed by the Joint Chiefs were noted as and invitation to Service

competition or rivalries. They emphasized the need to hold joint meetings, not just with Service Chiefs but also with Service Secretaries, and between working-level staff members within the Office of the Secretary of Defense (OSD). Such meetings would serve to improve cooperation, harmonize functions, and enable the staffers to coordinate their thinking with that of the Secretary of Defense (OSD History 1978:128-149)

The Second Hoover Commission on Organization of the Executive Branch of the Government noted four obstacles impeding teamwork:

- 1) decisions and information does not flow freely from the JCS to the Assistant Secretaries of Defense;
- 2) “the assignment of responsibilities among members of [OSD] impedes effective coordination;”
- 3) “the responsibilities of the Assistant Secretaries in the military departments differ significantly in nature and scope—a condition which complicates coordination and understanding between each department and the [OSD] and among the departments themselves;”
- 4) “responsibility for the management of support activities is not clearly defined between the principal military and the principal civilian executives” (Business Organization of the Department of Defense quoted by Defense Policy 1988:61-62).

There is evidence that the 1947 Acquisition Oversight Process did not meet this objective.

Balance the value of oversight and review with its costs.

The First Hoover Commission on Organization of the Executive Branch were conscious of the cost of maintaining a large standing military stating that the huge military budget should “be used with efficiency, and that costs shall be commensurate with actual needs without damaging or destroying our national economy.” Their focus was on holding the military accountable but the Commission had little insight into the

specific cost of oversight and review (National Security Organization Report quoted by Defense Policy 1988:28). The Rockefeller Committee had a similar prospective stating that “The American people will support the President and the Secretary of Defense in establishing an organization of the Department of Defense which is capable of providing the nation with maximum security at minimum cost and without danger to our free institutions, based on the fundamental principle of civilian control of the Military Establishment” (OSD History 1978:128). The Second Hoover Commission did not comment on this objective. There is a lack of evidence that the 1947 Acquisition Oversight Process did not meet this objective.

Emulate the best practices

The First Hoover Commission Organization stated that there are three principles that underlie good Government management: “efficiency, economy, and clear accountability to the Congress and the people.” The Commission goes on to say that “these principles have been repeatedly violated” (National Security Organization Report quoted by Defense Policy 1988:32). Similarly the Rockefeller Committee stated that best organization have achieved four objectives: 1) clear line of authority 2) Clear roles and mission for the Services 3) Planning based on the most effective use of modern scientific and industrial resources and 4) Maximum economies (i.e. cost controls) without injuring military strength. It goes on to say that “the Department of Defense cannot now attain these four objectives in full” (OSD History 1978:128). The Second Hoover Commission stated simply that the weaknesses of the oversight “are due to the expansion of the military services...these faulty systems are encumbered by traditions...arise from static laws from other days which create roadblocks to effective improvement” (Business

Organization of the Department of Defense quoted by Defense Policy 1988:51). There is evidence that the 1947 Acquisition Oversight Process did not meet this objective.

Preserve the public trust.

The First Hoover Commission Organization stated the need for accountability in order to preserve the public trust but did not say the military had lost said trust. The Rockefeller Committee similarly stated that the American people trust and support the President in reorganizing the military especially with the state of world affairs (i.e. the invasion of Korea by Communist China). The Second Hoover Commission Organization made no comment on public trust. There is a lack of evidence that the 1947 Acquisition Oversight Process did not meet this objective.

1964 Oversight

The Korean War ended in 1953 and the Vietnam War was just beginning just as President Eisenhower was ending his second term in office. The Acquisition Oversight Structure in 1964 is the end result of the 1949 amendment to the National Security Act, Reorganization plan number 6 of 1953, Reorganization Acts of 1958 and Secretary McNamara’s influences. See Figure 8.

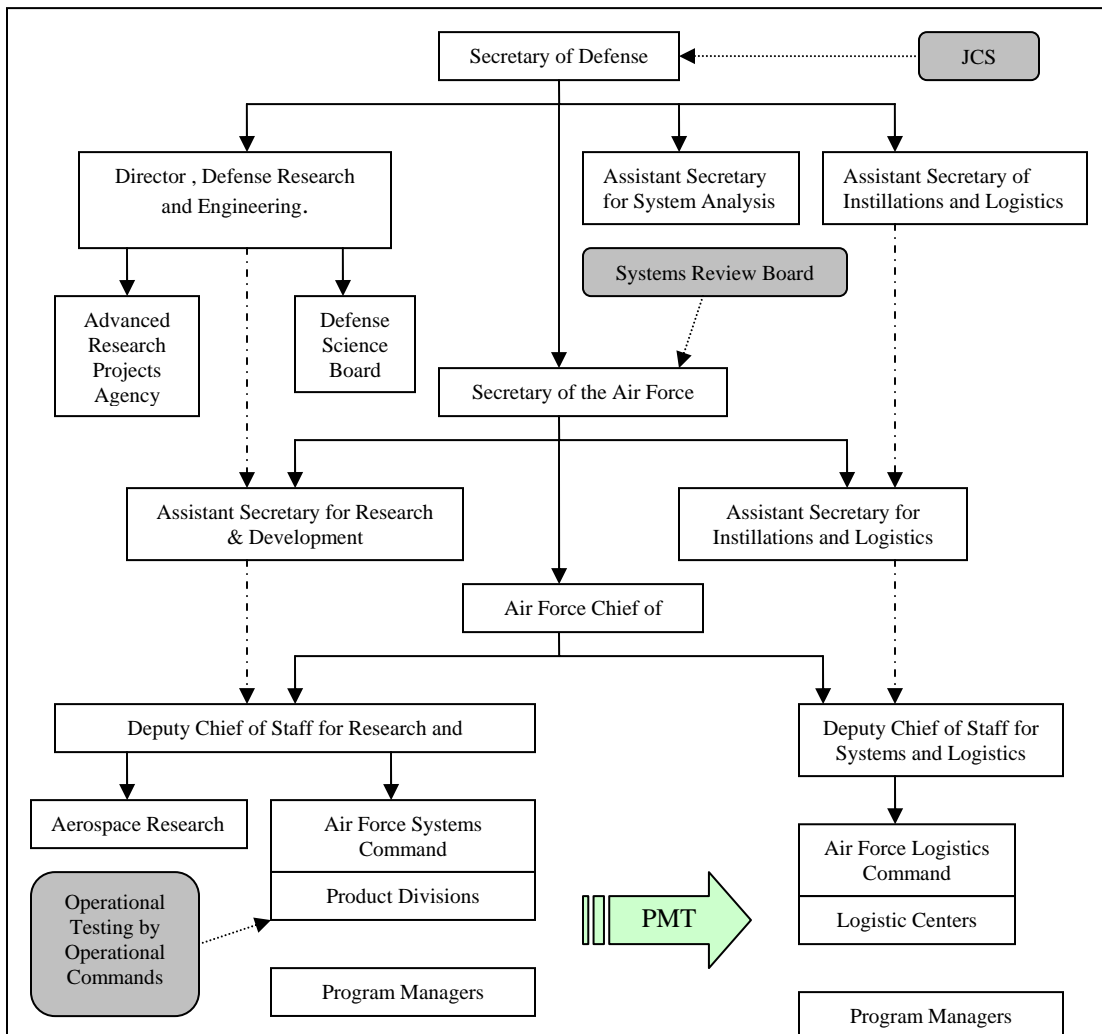


Figure 8: The Air Force Acquisition Oversight Hierarchy of 1964

Help field what the Warfighter needs when he needs it.

The Fitzhugh Blue Ribbon Panel the practice of firm-fixed price contracts, total package procurement, and Production/Development concurrency led to ill-conceived systems that often included out-dated technologies. According to the Panel these factors inhibits the “developer’s capability to achieve the best product” (Report by the Blue Ribbon Defense Panel as quoted in Defense Policy 1988:220). As a consequence, Warfighters were receiving a product that partially met needs, was better then the system it replaced but had flaws requiring several interim fixes. “In a sample of 22 weapon systems deployed to Southeast Asia [Vietnam] from 1965-1970, DoD studies found all but one had suffered major deficiencies in the field” (Benson 1996:17). There is evidence that the 1964 Acquisition Oversight Process did not meet this objective.

Matching managerial authority with responsibility.

The Fitzhugh Blue Ribbon Panel was unhappy with the strong practices Secretary McNamara exhibited. They found that

effective civilian control is impaired by a generally excessive centralization of decision-making authority at the level of the Secretary of Defense. The Secretary’s ability to selectively delegate authority and decentralize management, while still retaining personal authority on major policy issues of the Department, is seriously inhibited by the present organizational structure (Report by the Blue Ribbon Defense Panel as quoted in Defense Policy 1988:149).

The panel notes that in R&D “responsibility and management for conducting such research are widely fragmented among and within the Military Services and the Defense Agencies” (Report by the Blue Ribbon Defense Panel as quoted in Defense Policy

1988:213). There is evidence that the 1964 Acquisition Oversight Process did not meet this objective.

Promote flexibility and encourage innovation

The Fitzhugh Blue Ribbon Panel found several aspects of the Acquisition System that discouraged innovation. With regards to Research and Development the Panel found

some of the [DoD] in-house laboratories display a not-invented-here attitude that inhibits objective consideration of independent research and development products as alternatives to laboratory-originated technological approaches.

(Report by the Blue Ribbon Defense Panel as quoted in Defense Policy 1988:213)

Innovation from independent laboratories was generally discouraged. In Advanced, Engineering, and Operational Systems Development the Panel found that requirements were received from field units then translated from broad requirements into system specifics by unilateral Service commands. The options available to fulfill requirements are further boxed in by the practice of establishing firm-fixed contracts with firm schedules and costs estimates before the advance development phase. These are schedules and cost estimates for the total project including production, operation, and maintenance. The Panel found the “Program Managers find themselves responsible for administering a fixed price contract for development of a product to detailed design specifications on which they are permitted little flexibility for technical trade-offs” (Report by the Blue Ribbon Defense Panel as quoted in Defense Policy 1988:213). The Panel also found that Congress’ Selected Acquisition Reports also inhibits minute changes in cost and schedule further confining PMs. Any change in a SAR could subject the MDAP to a Congressional Review. There is evidence that the 1964 Acquisition Oversight Process did not meet this objective.

Foster constant teamwork among everyone who is a stakeholder.

The Fitzhugh Blue Ribbon Panel found that “no formal mechanism exists within OSD to assure adequate coordination among the various elements of the Department” (Report by the Blue Ribbon Defense Panel as quoted in Defense Policy 1988:149). The Panel goes on to note that routing an Acquisition Document through the hierarchy, or:

staffing for the President and the Secretary of Defense through the Joint Chiefs of Staff and the Military Departments is awkward and unresponsive; it provides a forum for inter-Service conflicts to be injected into the decision-making process. (Report by the Blue Ribbon Defense Panel as quoted in Defense Policy 1988:149)

In order for a team to work well, information must flow freely between all levels of the said team. The panel found that information does not flow freely; “differing opinions are submerged or compromised at lower levels of the DoD” and the large staffs employed by both the military and OSD delays or muddies the information received by the President and the Secretary of Defense (Report by the Blue Ribbon Defense Panel as quoted in Defense Policy 1988:149). There is evidence that the 1964 Acquisition Oversight Process did not meet this objective.

Balance the value of oversight and review with its costs.

The Fitzhugh Blue Ribbon Panel found that oversight and review cost more than it should. As the Panel explains, proposals received from contractors “may weigh as much as one ton” and the personnel required to review them team into the hundreds (Report by the Blue Ribbon Defense Panel as quoted in Defense Policy 1988:218). DoD had just implemented the Defense System Acquisition Review Council (DSARC) to review

MDAPs formally more than once during its lifetime. The Panel applauded the implementation of DSARC but lamented on the layers of Service headquarter management and Chief of Staff personnel between the PM and DSARC.

Typically, for major weapons systems, the Program manager reports to the Deputy Commander for Systems Management or the procuring command, some five-or-six levels below that of the Secretary of the Military Service. (Report by the Blue Ribbon Defense Panel as quoted in Defense Policy 1988:226)

Not mentioned are the levels of management between the Service Secretary to the DSARC. The cost of staffing an item up from the PM to the DSARC is not mentioned but as a starting figure one can be deduced from the cost of reviewing a proposal. The cost of reviewing a proposal, according to the Panel, is upwards of \$100 million per proposal. There is evidence that the 1964 Acquisition Oversight Process did not meet this objective.

Emulate the best practices

According to the Fitzhugh Blue Ribbon Panel, the Acquisition workforce were not well trained, offered few advancement opportunities, and for the most part stagnated.

It found that

“the promotion and rotation systems of the military Services do not facilitate career development in the technical and professional activities, such as research and development, procurement, intelligence, communications, and automatic data processing” (Report by the Blue Ribbon Defense Panel as quoted in Defense Policy 1988:149).

Further that “there is no indication of consistent efforts by the Services to select Program Managers from among those officers who have the most promising potential.” Worst yet, the Panel found that the PM in a matrix organization had a staff that worked for them part-time. “Their efficiency ratings, promotions and reporting lines are not to or through

the Program Manager, but rather to their superior within the functional organization” (Report by the Blue Ribbon Defense Panel as quoted in Defense Policy 1988:149).

Those appointed above the PM were likewise ill-treated.

The Commission on Government Procurement also made comment on the workforce.

When we undertook our studies of the procurement work force it could not be determined from any single source how many people are engaged in procurement, what skills are needed, or how they are being provided. (Report of the Commission on Government Procurement Vol 1 as quoted by Defense Policy 1988:443).

The Commission estimated that one fourth of said workforce were about to retire with no foreseeable recruitment or training of replacements. The Commission notes that the each Service had some form of procurement career development and training but they “were not comparable either with each other or with the civilian programs” (Report of the Commission on Government Procurement Vol 1 as quoted by Defense Policy 1988:447). Such treatment of personnel is not a good practice.

On the issue of contractor treatment, both the Panel and the Commission agreed that the DoD did not use best practices of commercial firms. Contractors were subject to numbers reports, scrutiny but defense agencies placed in their company, and a complex array of regulations and statues. The situation discouraged rather than encourage firms to compete for government contracts.

On the issue of management, both the Panel and the Commission lamented on the burden of regulations and statues placed on the procurement officers or PMs. Several of these regulations are noted to contradict each other (Defense Policy 1988:428-434).

There is evidence that the 1964 Acquisition Oversight Process did not meet this objective.

Preserve the public trust.

Public trust had eroded since the 1949. As more panels, commissions, and other reports became public, there had been a noted lack of confidence in the oversight system.

The Fitzhugh Blue Ribbon Panel

“recognizes that the Department of Defense currently lacks the confidence of a significant segment of the American public. While some of this is undoubtedly due to misunderstandings, basically the Department must work harder to do the jobs assigned to it as efficiently as possible and to keep the public properly informed.” (Fitzhugh Commission Report of the Blue Ribbon Defense Panel as quoted by Defense Policy 1988:165)

Such was the degree of eroded confidence that Congress established the Commission on Government Procurement with Public Law 91-129. During the hearings conducted by congress on this law, it was found that “Congress and the public are deeply concerned about the effectiveness of procurement and the manner in which it is conducted” (Report of the Commission on Government Procurement Vol 1 as quoted by Defense Policy 1988:400). There is evidence that the 1964 Acquisition Oversight Process did not meet this objective.

1977 Oversight

The Vietnam War ended in 1974 and President Ford was elected to office. The Acquisition Oversight Structure in 1977 is the end result of the implementation of Packard Initiatives and the DoD’s corrective actions in response to the Fitzhugh Panel and the Commission on Government Procurement reports. See Figure 8.

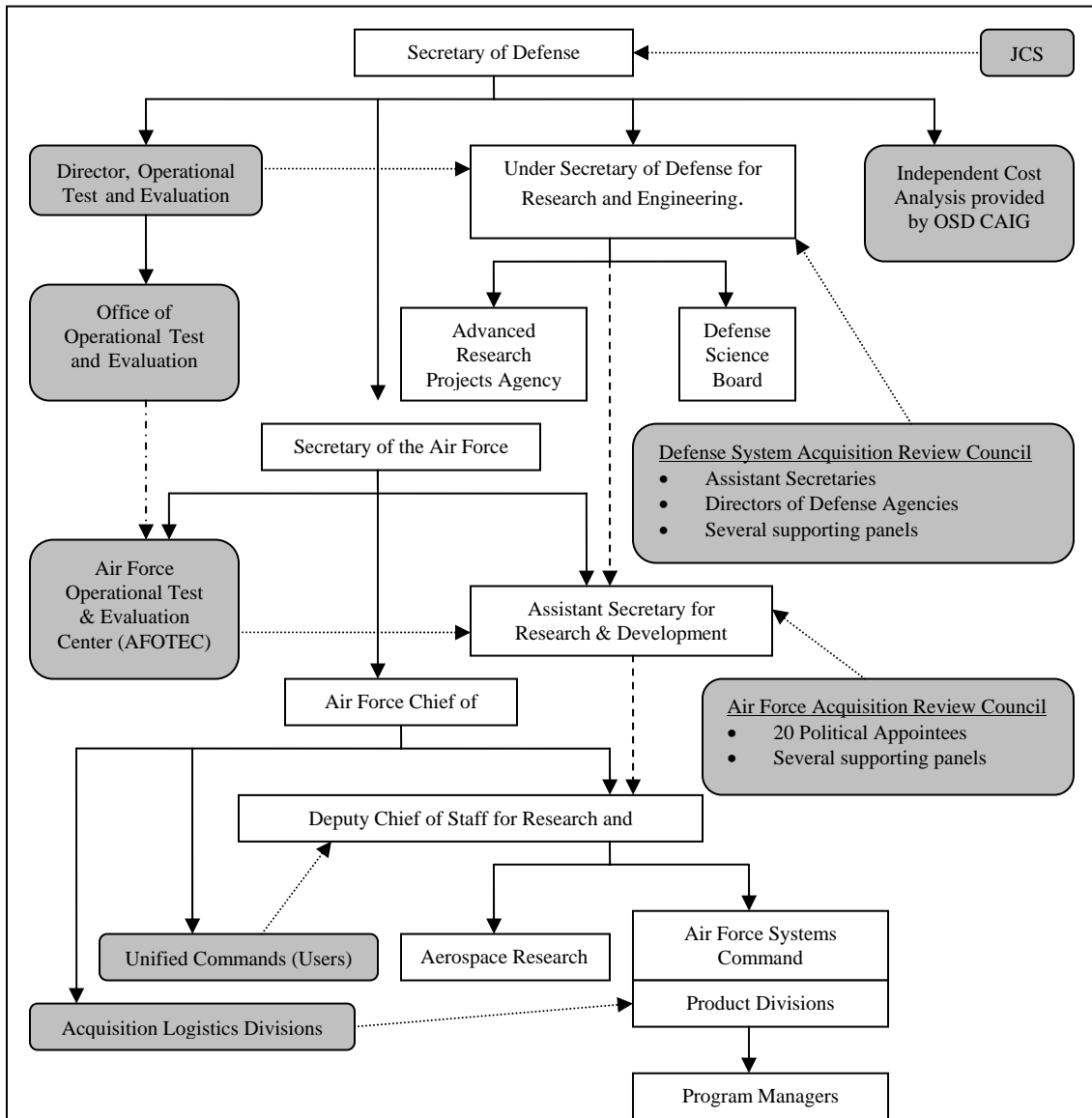


Figure 9: The Air Force Acquisition Oversight Hierarchy of 1977

Help field what the Warfighter needs when he needs it.

According to the President's Private Sector Survey on Cost Controls (PPSSCC) Task Force on the OSD, hence forth call the Grace Commission, too many new major weapons systems were allowed to start thereby resulting

in each program being given less than the required resources which, in turn, increases system costs and delays...the system may end up being obsolete and may be built in insufficient numbers to meet the mission. (PPSSCC as quoted by Defense Policy 1988:797-798)

The President's Blue Ribbon Commission on Defense Management, hence forth called the Packard Commission, states "too many of our weapon systems cost too much, take too long to develop, and by the time they are fielded, incorporate obsolete technology" (President's Blue Ribbon Commission on Defense Management 1986:44). There is evidence that the 1977 Acquisition Oversight Process did not meet this objective.

Matching managerial authority with responsibility

The Grace Commission found that the DoD use too many committees thereby defusing authority. Also the Commission found that PMs are reluctant to accurately portray the status of the programs they are assigned to and "often continue until someone else shuts them down" (PPSSCC as quoted by Defense Policy 1988:660). As a result, PMs push responsibility back up to where real authority is perceived to exist. Higher managers, faced with an overwhelming burden, create committees or other management layer to the process thereby diffuses authority and responsibility even further. In summary, the Committee found that

Program managers are not presently held responsible for all aspects of the program, since they are not able to control certain aspects, such as funding and program changes. Accountability for a program is shared by a number of entities—the services, the program manager, the Congress and OSD. As a result, no one is really held accountable. (PPSSCC as quoted by Defense Policy 1988:818)

The Packard Commission found that “an army of advocates for special interests descends on the program” to “demand that the program manager take or refrain from taking some action” thereby producing “a diffusion of management responsibility, in which everyone is responsible, and no one is responsible” (President’s Blue Ribbon Commission on Defense Management 1986:44-45). The Commission depicts the role of the PM as someone held responsible for the cost, schedule, or performance of the program but find themselves as “a supplication for, rather than a manager of, his program” (President’s Blue Ribbon Commission on Defense Management 1986:45). There is evidence that the 1977 Acquisition Oversight Process did not meet this objective.

Promote flexibility and encourage innovation.

The Grace Commission found that the DoD, by its organization and incentives to management, discourage change and thereby innovations.

Few management tools are in place to make innovation automatic. Most private sector companies establish guidelines to demonstrate their willingness to invest capital to reduce costs, improve service or increase productivity. Instead, the Government sometimes sets up systems which inhibit or retard change. (PPSSCC as quoted by Defense Policy 1988:664)

Culturally the Government was found to avoid change or innovations. The Commission found that “most Government personnel strictly adhere to the regulations, even when some flexibility is intended by the regulations, in order to avoid criticism” (PPSSCC as

quoted by Defense Policy 1988:764). Program Managers had fallen victim to this mind set more often than not. The Packard Commission found that law and regulation tend to make acquisition procedures even more inflexible and removes whatever motivation exists for the exercise of individual judgment (President's Blue Ribbon Commission on Defense Management 1986:44). There is evidence that the 1977 Acquisition Oversight Process did not meet this objective.

Foster constant teamwork among everyone who is a stakeholder.

Through surveys and interviews with stakeholders, the Grace Commission has concluded that there is a pervasive feeling within DoD that the Office of the Secretary of Defense (OSD) does not have the final say. In the Commission's estimation, "the military have never really bought into the need for central management by the Secretary of Defense" (PPSSCC as quoted by Defense Policy 1988:603). The Commission found that "even after 35 years of OSD, Congress continues to deal directly with the services—and vice versa—and frequently around OSD" (PPSSCC as quoted by Defense Policy 1988:640). The Commission found "widespread feelings that OSD interfered with the service organizations by micromanaging their businesses" further that "OSD was not performing the function that subordinate units needed the most" (PPSSCC as quoted by Defense Policy 1988:657).

The Commission reasoned that the cause of such feelings was due to indistinct roles and missions performed by OSD. The fuzzy nature of roles and missions was the result of two organization quirks. First that "many staff functions which were placed in OSD were never completely eliminated from the staffs of the Service Secretaries" and second that "emphasis was on the political, the expedient, and the doable" instead of the

long-term mission orientation needed (PPSSCC as quoted by Defense Policy 1988:657). The lack of clarity "invites and even encourages turf battles" (PPSSCC as quoted by Defense Policy 1988:658).

The Packard Commission portrays a starker environment where several special interest groups, including Congressional committees, fight to make their interests paramount and demand the PM attention. The infighting results in gold-plating requirements and a high incidence of cost overruns on MDAPs; it also elongates the time it takes to field a system (President's Blue Ribbon Commission on Defense Management 1986:46-47). There is evidence that the 1977 Acquisition Oversight Process did not meet this objective.

Balance the Value of oversight and review with its cost.

The Grace Commission was disturbed by the hundreds of thousands of people needed to perform acquisition and its oversight.

Throughout the acquisition system in DoD, there are major overlaps of functions in OSD and the Services which make the process of acquiring major weapons systems both more costly and more time consuming than necessary. (PPSSCC as quoted by Defense Policy 1988:647)

According to the Grace Commission "there are 65,000 people in DoD who are directly involved in the acquisition process" (PPSSCC as quoted by Defense Policy 1988:750). Further, that each person also have roughly seven people supporting them. Arguably, Acquisition Oversight is one of the primary duties performed by the 65,000. The Packard Commission estimated the number of people closer to 145,000. There is evidence that the 1977 Acquisition Oversight Process did not meet this objective.

Emulate the best practices.

The Grace Commission found that, unlike successful private firms, the DoD did not practice goal setting, did not have a method to perform self evaluations, did not delegate authority well and resisted change (PPSSCC as quoted by Defense Policy 1988:660-664). In regards to organization, the Commission found “no clear insight or emphasis on long-range planning” (PPSSCC as quoted by Defense Policy 1988:649). The Commission “believes that DoD places undue reliance on written regulations to accomplish the job of acquiring weapons systems.” The Commission notes that “private industry has learned that spending scarce private funds is best accomplished, not by voluminous written regulations, but by brief policy statements which provide guidance for skilled professionals” (PPSSCC as quoted by Defense Policy 1988:765).

The Packard Commission found six practices that DoD should emulate but don't.

The are as follows

- 1) Clear command channels that is a short, unambiguous chain-of-command to the decision maker.
- 2) Stability in performance demanded, schedule and funding.
- 3) Limited reporting requirements
- 4) Small, high-quality staff to manage the program rather than sell it or defend it.
- 5) Greater communication with users throughout the lifecycle of the system.
- 6) Greater use of prototyping and testing.

Further the Commission found that “compared to its industry counterparts [the Defense Acquisition Workforce] is undertrained, underpaid, and inexperienced” (President's Blue

Ribbon Commission on Defense Management 1986:66). There is evidence that the 1977 Acquisition Oversight Process did not meet this objective.

Preserve the public trust.

On this objective the Grace Commission was relatively silent. The Commission found that there was a perception “that the acquisition process is largely inefficient and uncontrollable” (PPSSCC as quoted by Defense Policy 1988:750). The President established the Blue Ribbon Commission on Defense Management (Packard Commission) due to so called horror stories involving alleged fraud, waste, and abuse in the Acquisition Process had shaken public confidence. To its credit the DoD had been forthcoming regarding these issues and public about the remedies being implemented (President’s Blue Ribbon Commission on Defense Management 1986:44). There is evidence that the 1977 Acquisition Oversight Process did not meet this objective.

1988 Oversight

President Reagan responded to the Grace Commission and Packard Commission by implementing a series of organizational changes. The resulting Acquisition Oversight Hierarchy is depicted in Figure 9.

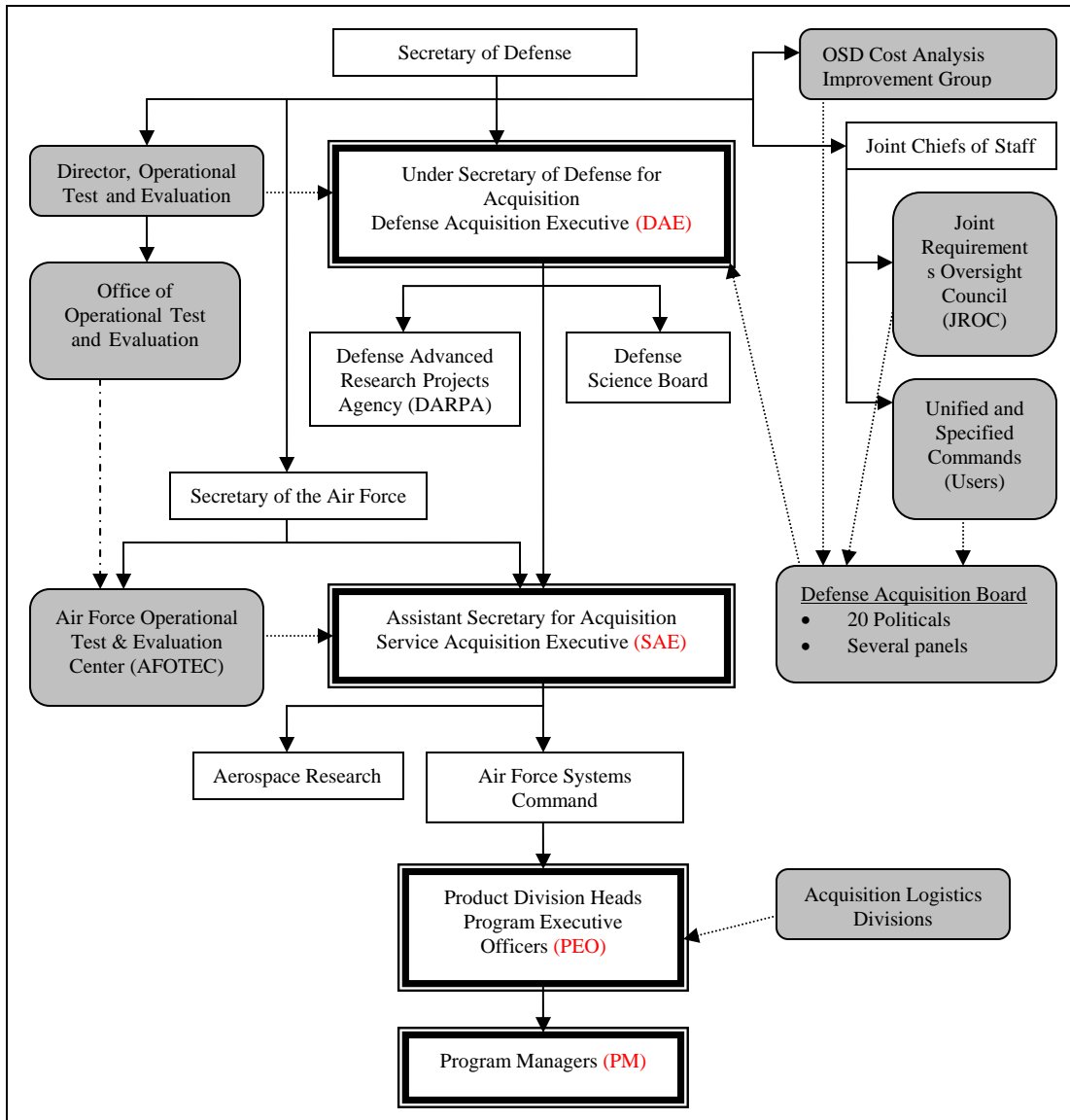


Figure 9: The Air Force Acquisition Oversight Hierarchy of 1988

Help field what the Warfighter needs when he needs it.

Several organizations were pleased with the performance of hardware in the Persian Gulf War (Jones 1999:423). A “remarkable performance and reliability of a host of sophisticated aerospace systems” was witnessed during this war (Benson 1996:20). The PAT noted that the Acquisition Oversight and Review process “is pretty good” in this respect (PAT 1994:7). There is no evidence that the 1988 Acquisition Oversight Process did not meet this objective.

Matching managerial authority with responsibility

The PAT was silent on this aspect. There is no evidence that the 1988 Acquisition Oversight Process did not meet this objective.

Promote flexibility and encourage innovation.

The PAT commented on the inflexibility of the reporting requirements, the regulations, and statues governing MDAPs. The underlying culture of the Acquisition Process is such that strict adherence to these instructions are expected (PAT1994:19-21). There is evidence that the 1988 Acquisition Oversight Process did not meet this objective.

Foster constant teamwork among everyone who is a stakeholder.

The PAT identified three issues that hinder teamwork: Sub-optimization of functional talents, the manner staffers handle issues, and the late involvement of functional experts. In OSD staffs are organized along functional veins and integrated groups are not formed when milestone reviews commence “as a result, each staff elements; oversight and review is often oriented toward achieving the best functional

solution instead of the best overall program solution” (PAT 1994:18). Therefore the decision-maker “are left with the responsibility for integrating the information from these functional areas” when teamwork between functional representatives could better optimize the solution (PAT 1994:8). Another hindrance to team work is the staffer’s tendency to reveal issues or problems to decision makers prior to making the PM aware of them. Staffers should work with PMs to find solutions to issues for Decision Maker’s review. The PAT teams suggests that early involvement of functional staffers to the program would alleviate the previous two issues. There is evidence that the 1988 Acquisition Oversight Process did not meet this objective.

Balance the Value of oversight and review with its cost.

The PAT found that the average delay directly attributable to the Acquisition Oversight Process is “15 weeks beyond the scheduled 180-day Defense Acquisition Board process as laid out in the DoD 5000 series. The size of the workforce employed for this process is assessed to be too numerous to count. The cost of reviews ranged between \$10 million and \$12 million. The PAT saw these costs as excessive (PAT 1994:7-9). There is evidence that the 1988 Acquisition Oversight Process did not meet this objective.

Emulate the best practices.

Corporations perform fewer reviews than Government organizations. “Before the actual milestone decision meeting, there are a series of formal and informal component and OSD pre-meetings” which include “functional reviews as well as broad reviews within the Component” (PAT 1994:37). The PAT sees the pre-meetings as time used by Components “to establish their position vis-à-vis OSD” (PAT 1994:37). It is a practice

that undermines teamwork and produces lengthy delays. There is evidence that the 1988 Acquisition Oversight Process did not meet this objective.

Preserve the public trust.

The PAT was silent on this objective. It would appear from reviewing historian accounts that there is a lack of evidence that 1988 Acquisition Oversight Process did not meet this objective.

Chapter Summary

This chapter laid out the methodology for analysis of the various Acquisition Oversight Hierarchies. Table 11 compares the Acquisition Oversight Hierarchies.

		Acquisition Oversight Hierarchy			
		194 7	196 4	197 7	198 8
OBJECTIVES					
1	Help field what the Warfighter needs when he needs it.	+	-	-	+
)					
2	Matching managerial authority with responsibility.	-	-	-	+
)					
3	Promote flexibility and encourage innovation.	-	-	-	-
)					
4	Foster constant teamwork.	-	-	-	-
)					
5	Balance the Value of oversight and review with its cost.	-	-	-	-
)					
6	Emulate the best practices.	-	-	-	-
)					
7	Preserve the public trust.	-			-

VI. Conclusion

Review of Research Objectives

This study started out with three main objectives. They are as follows.

- 1) Define, document, and utilize available literature relevant to Acquisition Oversight procedures, to identify the organizations involved with the process as it evolved to its form today.
- 2) Build models of the Acquisition Oversight Process, emphasis on the chain of command construct, as it existed in the 1950s, 1960s, 1970s, 1980s and present process.
- 3) Evaluate each on its ability to accomplish the seven objectives identified by Clinton's 1994 Process Action Team on Acquisition Oversight using past research relevant to Acquisition Oversight procedures.

Discussion on Results

Table 11 displays the results of the qualitative analysis. The various Commission Reports included evidence that the Acquisition Oversight Hierarchies of all periods did not meet criteria three through six signifying that more improvement in those areas can still be achieved. The second through sixth criteria was more meaningful than the first or the seventh. It was easy to find opinions regarding them. One problem, there is a lack of evidence that the commissions held each oversight process to the same standard. For a better analysis, a benchmark should be set and experts grade to that benchmark. The first criteria was difficult to determine without references to wartime performance. The qualitative analysis would benefit from a more thorough discovery on how weapons

created under a certain oversight process performed in war. The seventh criteria was rarely addressed in the commission reports. Public opinion is hard to measure or assess and can be easily swayed by poor information. For future research this criterion should be eliminated from consideration.

Table 11. Acquisition Oversight Objectives

OBJECTIVES	Acquisition Oversight Hierarchy			
	194	196	197	198
	7	4	7	8
1 Help field what the Warfighter needs when he needs it.	+	-	-	+
2 Matching managerial authority with responsibility.	-	-	-	+
3 Promote flexibility and encourage innovation.	-	-	-	-
4 Foster constant teamwork.	-	-	-	-
5 Balance the Value of oversight and review with its cost.	-	-	-	-
6 Emulate the best practices.	-	-	-	-
7 Preserve the public trust.

Recommendations for Future Research

There are four areas for future research that should be considered. The first relates to the evaluation process used to compare the historical constructs. The second relates to the possible quantitative comparison of the historical constructs. The third relates to the preferred acquisition oversight process. The fourth relates to sister services.

Now that the participants in Acquisition Oversight Process have been identified, the process of evaluating its performance could be enhanced. For instance, a better scale

could be developed for evaluating the constructs accomplishment of these goals.

Different objectives could be identified for evaluation. Another avenue would be to enlist the opinions of experts on these constructs and validate the models.

A further analysis of the cost of Acquisition Oversight could be performed. The Commission reports alluded to various studies on the number of people and the time needed to navigate through the Acquisition Oversight Process. Further comparisons using quantitative reports could reveal the true standings between each historical process. These numerical costs could be compared to relative benefits each construct offers. To assist research in this area, data should be gathered on each MDAP going through the oversight processes.

A comparison of the models developed here could be compared to the actual track a program goes through using available program specific documentation. Through this type of analysis it could be shown whether PMs favored the path outlined in regulations or if they diverted from said path. If the results confirm widespread divergence, further analysis could be on why such divergence is favored. This could lead to further acquisition refinements to accommodate PM choices.

This research centered on the Air Force Acquisition Oversight process as it developed through time. A study could be commenced on Army or Navy Acquisition Oversight processes and a comparison made between the services. There may be evidence that decentralizing the oversight process benefits society.

Bibliography

- (Acker 1993) Acker, David D. *Acquiring Defense Systems, A Quests for the Best*. Fort Belvoir, VA. Defense system Management College Press, 1993.
- (Bair 1994) Bair, Edward T. *Defense Acquisition Reform: Behind the Rhetoric of Reform – Landmark Commissions Lessons Learned*. Fort McNair Washington DC 1994.
- (Barrett 1994) Barrett, Archie D. *Reappraising Defense Organization*. Fort Lesley J. McNair Washington DC National Defense University, 1983.
- (Benson 1996) Benson, Lawrence R. “A Brief History of Acquisition Management in the United States Air Force and its Predecessors.” 36 pages. 1 Aug 2003
<http://www.losangeles.af.mil/SMC/HO/Acq-hist.doc>. June 1996.
- (Bicksler 1991) Bicksler, Barbra A. and others. *The Role of the Office of the Secretary of Defense in the Defense Acquisition Process, Volume 1: Main Report*. Contract MDA 903-89C-0003. Alexandria VA: Institute for Defense Analysis, Feb 1991.
- (Columbia 2003) Columbia Encyclopedia, Sixth Edition, Copyright (c) 2003. War Production Board. 16 November 2003.
<http://www.encyclopedia.com/html/W/WarP1rodu.asp>
- (Defense Link 2003) Defense Link. Secretary of Defense Harold Brown. 11 December 2003 http://www.defenselink.mil/specials/secdef_histories/bios/brown.htm
- (DoD 2003) Department of Defense. *The Defense Acquisition System*. DOD Directive 5000.1. Washington: GPO. 12 May 2003.
- (DoD Budget 2003) Department of Defense. “Fiscal 2004 Department of Defense Budget Release.” Defenselink. No. 044-03. 29 Aug 2003
http://www.defenselink.mil/news/Feb2003/b02032003_bt044-03.html
- (Defense Policy 1988) Defense Policy Panel and Acquisition Policy Panel. *Defense Acquisition: Major U.S, Commission Reports (1949-1988)*. Washington: GPO, 1988.
- (DeReus 2004) DeReus, Darrin MS thesis, *Comparative Analysis on the Cost of Oversight on the New Space Acquisition Policy – A Delphi Method Approach*. AFIT/ENV/GCA/04M-02. Graduate School of Engineering and Management, Air Force Institute of Technology (AU), Wright-Patterson AFB OH, March 2004
- (DSMB 2004) Defense Systems Management Board. *Federal Acquisition Streamlining Act*. Accessed on 24 Jan 2004. <http://www.dau.mil/jdam/contents/fasa.pdf>

- (DSB 1993) Defense Science Board. Report of the Defense Science Board on Defense Acquisition Reform. July 1993 <http://www.acq.osd.mil/dsb/reports.htm>
- (Donley 1995) Donley, Michael B. "Problems of Defense Organization and Management." Joint Force Quarterly. 8:86-94 (Summer 1995).
- (EC 2004) Electronic College of Process Innovation. Defense Acquisition Workforce Improvement Act (DAWIA). 24 Jan 2004. <http://www.defenselink.mil/nii/bpr/bprcd/6021.htm>
- (Elliot 1991) Elliot, Deborah A. The Effect of Defense Management Review Decision 904, Stock Funding Depot Level Reparable, on Cash Flow within the reparable support Division of the Air Force Stock Fund. MS thesis, AFIT/GLM/LSM/91S-18, School of Systems and Logistics, Air Force Institute of Technology (AU), Wright-Patterson AFB OH, September 1991.
- (Farrell 1997) Farrell, Theo. Weapons without a cause: The Politics of Weapons Acquisition in the United States. St Martin's Press, Inc, 1997.
- (Fox 1994) Fox, J. Ronald and others. Critical Issues in the Defense Acquisition Culture, Government and Industry Views from the Trenches. Washington: GPO, 1994.
- (GAO 1997) Government Accounting Office (GAO). Acquisition Reform, DOD faces Challenges in Reducing Oversight Cost. Report 19970218-109 Washington: GPO, 1997.
- (GAO Acq Reform 1991) Government Accounting Office (GAO). Acquisition Reform—Implementing Defense Management Review Initiatives. GAO/NASIAD-91-269 Washington GPO, 1991.
- (GAO DoD 2001) Government Accounting Office (GAO). Department of Defense: Status of Achieving Outcomes and Addressing Major Management Challenges. GAO/-01-783 Washington GPO, 2001.
- (GAO Defense Management 1998) Government Accounting Office (GAO). Defense Management: Challenges Facing DOD in Implementing Defense Reform Initiatives (Testimony, 03/13/98, GAO/T-NSIAD/AIMD-98-122). 24 Jan 2004. <http://www.fas.org/man/gao/aimd98122.htm>
- (Harma 2003) Harma, Beryl A. "From the Constitution to FAStA – Origins of Acquisition Reform." Program Manager pages 12-17 (October 1995). 5 June 2003 www.dau.mil/pubs/pm/pmpdf95/harman.pdf.
- (Holbrook 2003) Holbrook, Mark A. An Analysis of the Implementation of Acquisition Reform Initiatives and Contract Cost Variance. MS Thesis, AFIT/GCA/ENV/03-

03. Graduate School of Engineering and Management, Air Force Institute of Technology (AU), Wright-Patterson AFB OH, March 2003.
- (Jones 1999) Jones, Wilbur D., Jr. *Arming the Eagle, A History of U.S. Weapons Acquisition Since 1775*. Washington: GPO 1999.
- (Lorrell 1990) Lorell, Mark and John C. Grasen. *An Overview of Acquisition Reform Cost Savings Estimates*. Project Air Force RAND study. Santa Monica CA. University Press, 1990.
- (McNaugher 1989) McNaugher, Thomas L. *New Weapons, Old Politics, America's Military Procurement Muddle*. Washington: The Brookings Institute, 1989.
- (NASA 2003) NASA. *Sputnik and The Dawn of the Space Age*. 24 November 2003, <http://www.hq.nasa.gov/office/pao/History/sputnik/>
- (Neal 2004) Neal, Monroe MS thesis, *Establishing a foundation to capture the Cost of Oversight for a major Defense Program within the Information Technology (IT) Acquisition Community*. AFIT/ENV/GCA/04M-06. Graduate School of Engineering and Management, Air Force Institute of Technology (AU), Wright-Patterson AFB OH, March 2004
- (OSD History 1978) Office of the Secretary of Defense Historical Office. *The Department of Defense 1944-1978*. Washington: GPO 1978.
- (PAT 1994) Acquisition Reform Process Action Team. *Reengineering the Acquisition Oversight and Review Process*. Final Report to the Secretary of Defense; Volume One. Unpublished Report, 1 June 2003, <http://emissary.acq.osd.mil/acqref/pat2.nsf/0/361d5d0b0133f53e852561e000471204?OpenDocument>.
- (PBRC 1986) President's Blue Ribbon Commission on Defense Management. *A quest for Excellence—Final Report to the President*. Volume One. Washington DC GPO, June 1986.
- (Perry 1994) Perry, William. "Mandate for Change" Memorandum published February 1994. Website accessed 30 Aug 2003 <http://www.dau.mil/jdam/contents/mand24.pdf>
- (Rousseau 2004) Rousseau, Garry MS thesis, AFIT/ENV/GCA/04M-09. Graduate School of Engineering and Management, Air Force Institute of Technology (AU), Wright-Patterson AFB OH, March 2004
- (Srull 1998) Srull, Donald. "Introduction of Independent parametric Cost Estimating" in *The Cost Analysis Improvement Group: A History*. Ed. Donald Srull. McLean VA: Logistics Management Group, 1998.

(USD(A&T) Report 1995) Under Secretary of Defense for Acquisition and Technology (USD(A&T)). Roles of the Road, A Guide for Leading Successful Integrated Product Teams. November 1995 unpublished manuscript, 1 Aug 2003
www.ntsc.navy.mil/Resources/Library/Acqguide/GUIDE.HTM.

(10 USC 2430) United States Congress. 10 USC 2430. "Laws in effect as of January 2, 2001" 20 Jun 2003 <http://wais.access.gpo.gov>

(USC 2004) United States Congress. Government Performance and Results Act of 1993. 103rd Congress, 1st Session. 24 Jan 2004
<http://govinfo.library.unt.edu/npr/library/misc/s20.html>

(US Organization 1998) U.S. Organization Chart Service. Department of Defense 1947-1998 Fact Book. La Jolla CA GPO January 1998

(White House 2004: Reagan) The White House. Biography of Ronald Reagan. 2 Jan 2004 <http://www.whitehouse.gov/history/presidents/rr40.html>

(White House 2004: Bush) The White House. Biography of George Herbert Walker Bush. 2 Jan 2004 <http://www.whitehouse.gov/history/presidents/gb41.html>

REPORT DOCUMENTATION PAGE

*Form Approved
OMB No. 074-0188*

The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1. REPORT DATE (DD-MM-YYYY) 03-23-2004		2. REPORT TYPE Master's Thesis		3. DATES COVERED (From - To) Aug 2002 - Mar 2004	
4. TITLE AND SUBTITLE ESTABLISHING A FRAMEWORK FOR THE OVERSIGHT OF MAJOR DEFENSE ACQUISITION PROGRAMS - A HISTORICAL ANALYSIS				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Kuderik, Diane, I. K., Captain, USAF				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAMES(S) AND ADDRESS(S) Air Force Institute of Technology Graduate School of Engineering and Management (AFIT/EN) 2950 Hobson Way Building 641 WPAFB OH 45433-7765				8. PERFORMING ORGANIZATION REPORT NUMBER AFIT/GCA/ENV/04M-04	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Defense Acquisition University (AETC) Defense Systems Management College School of Program Management 9820 Belvoir Rd, Building 226, Room 115 Ft. Belvoir, VA 22060-5565 Attn: Lt Col John Driessnack				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED.					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT The Department of Defense (DoD) has budgeted over \$134.5 billion for Fiscal Year 2004 for Acquisition, yet little is written about the personnel responsible for managing and evaluating Major Defense Acquisition Programs (MDAP), that is those who perform Acquisition Oversight. The Acquisition Oversight process has not been studied in a disciplined manner. Congress, past Administrations, and the DoD Inspector General have commissioned several studies on the Acquisition Oversight Process. Recommendations were considered and implemented such that the process evolved to where it stands today. Over 40 years separate the first iteration with the latest version. Commission reports, countless studies, and historians agree on the need for oversight in military acquisitions; they agree that the system takes too much money, takes too long, and does not perform as well as most would wish; yet they disagree on who should perform oversight. This thesis reviewed relevant literature to model historical oversight hierarchies. Then expert opinions were gathered from the studies mentioned above, on how well the oversight process modeled preformed. As expected, the oversight process has improved over time but further improvements are currently being sought. Those seeking improvement would do well to study past processes and learn from their mistakes.					
15. SUBJECT TERMS Acquisition History, Acquisition Reform, Oversight of Major Defense Acquisition Programs, Comparative Study of Acquisition Oversight Process					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
REPORT	ABSTRACT	c. THIS PAGE			Michael A. Greiner, USAF (ENV)
U	U	U	UU	121	19b. TELEPHONE NUMBER (Include area code) (937) 255-3636, ext 4588, e-mail: michael.greiner@afit.edu

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std. Z39-18