DEFENSE SYSTEMS
MANAGEMENT SCHOOL

PROGRAM MANAGEMENT COURSE
INDIVIDUAL STUDY PROGRAM

CHARACTERIZING PROJECT MANAGERS WITHIN DEFENSE AGENCIES RATHER THAN MILITARY DEPARTMENTS:
WAY AND WHY NOT

STUDY REPORT
PHG 74-1

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STUDY GOALS: (1) To identify defense system project managers in Defense Agencies.
   (2) To identify reasons for and against chartering project managers within Defense Agencies rather than Military Departments.
   (3) To identify problems encountered by this approach.

STUDY REPORT ABSTRACT

A search to identify project managers in Defense Agencies located only one --- the project manager for the Defense Satellite Communications Program Phase II at the Defense Communications Agency.

Reasons for and against chartering program managers at Defense Agencies are explored.

Problems encountered by the single project manager identified are examined.

The value of the data compiled and conclusions reached are assessed.

KEY WORDS: ORGANIZATION ANALYSIS PROJECT MANAGEMENT WEAPON SYSTEMS MILITARY DEPARTMENTS
CHARTERING PROJECT MANAGERS WITHIN DEFENSE AGENCIES RATHER THAN MILITARY DEPARTMENTS: WHY AND WHY NOT

An Executive Summary of a Study Report by

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May 1974

Defense Systems Management School
Program Management Course
Class 74-1
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EXECUTIVE SUMMARY

The project manager in the Department of Defense has been characterized at the Defense Systems Management School as fitting into the Department of Defense organizational hierarchy within one of the Military Departments. The integrative role of Defense Agencies would appear to make it feasible to use project managers within these agencies as well as Military Departments. The purpose of this study is to investigate the rationale for establishing project managers at Defense Agencies through identifying such project managers, identifying reasons for and against establishing such managers within Defense Agencies rather than Military Departments and identifying problems encountered with this approach.

The study was undertaken with two assumptions: that project managers for major defense systems are chartered or otherwise clearly designated; and that the number of major program managers at Defense Agencies is sufficiently large to warrant characterization of project management at that level in terms of their characteristic mode of operation, problems encountered and types of successes and failures.

No research addressing the feasibility of chartering project managers for major defense systems at Defense Agencies could be located.

A search through the Defense Documentation Center and Defense Systems Management School Records as well as liaison with the office of the Secretary of Defense, the Defense Intelligence Agency, Defense Nuclear Agency, National Security Agency and Defense Communications Agency identified
only one project manager for a major defense system who was not located within a Military Department: The Defense Satellite Communications Program Phase II Project Manager at the Defense Communications Agency. He integrates the efforts of an Army project manager for the earth terminal subsystem and an Air Force project manager for the space subsystem, and is chartered by the Deputy Secretary of Defense. While project management is practiced at Defense Agencies, it is characteristically done without a formal charter. Major systems acquisition responsibility is assigned by Defense Agencies to a project manager in one of the Military Departments.

Rationale for chartering a project manager at a Defense Agency may be grouped into the following categories: (1) A project manager at an Agency has a broader view; (2) A project manager at an Agency has fewer procedural hurdles between himself and office of the Secretary of Defense decision makers; and (3) Appointment of a project manager for a project which is an inherent responsibility of an Agency within that Agency avoids fragmenting management responsibilities.

Rationale for requiring all project managers to be within Military Departments may be grouped into the following categories: (1) Appointing project managers within Defense Agencies is likely to result in fail to utilize the structure and expertise in systems acquisition gained by Military Departments; and (2) Streamlined coordination channels can result in incomplete coordination.

Based on the sample size of one Defense Agency project manager, the Defense Satellite Communications Program Phase II Project Manager at the
Defense Communications Agency, problems may be grouped as follows:

(1) Cost growth; (2) Schedule slip; (3) Technical performance; and
(4) Political. The cost, schedule and technical performance problems
generally originated in the subsystem projects being managed by Military
Department project managers, and are therefore independent of the level
of the project manager. It is also likely that the political problems
would have been encountered regardless of the level of the project manager
within the DoD organizational hierarchy.

This study has shown that: (1) Chartered project managers for major
defense systems are almost exclusively located at Military Department level;
(2) That a project manager should be placed at a Defense Agency only if
his function directly overlaps the Agency's function and management frag-
mentation and/or service rivalry would result from his establishment with-
in a Military Department; and (3) The number of identifiable major de-
fense system program managers at Defense Agencies is not sufficiently large
to warrant characterization of project management at Defense Agency level.
CHARTERING PROJECT MANAGERS WITHIN DEFENSE AGENCIES RATHER THAN MILITARY DEPARTMENTS:

WHY AND WHY NOT

STUDY REPORT

Presented to the Faculty
of the
Defense Systems Management School
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Class 74-1

by
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This study represents the views, conclusions, and recommendations of the author and does not necessarily reflect the official opinion of the Defense Systems Management School nor the Department of Defense.
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CHARTERING PROJECT MANAGERS WITHIN DEFENSE
AGENCIES RATHER THAN MILITARY DEPARTMENTS:
WHY AND WHY NOT

Introduction

The characterization of a project manager in the Department of Defense presented to program management course 34-1 by the staff and faculty of the Defense Systems Management School has been one of a military officer within one of the three military departments with policies and procedures varying among these departments. The Department of Defense has increasingly centralized control and enlarged the staff responsive to the Office of the Secretary of Defense since Secretary McNamara. Concentration of integrative effort at a level responsive directly to OSD rather than through service secretaries has resulted in establishment of Defense Agencies and numerous other groups whose chain of command is either directly to the Office of the Secretary of Defense or through the Joint Chiefs of Staff to the office of the Secretary of Defense without supervision by military department headquarters. The roles of these agencies are to interrate efforts of the military departments and all other Department of Defense activities in a particular functional area toward the achievement of Department of Defense goals. The integrative roles of these defense agencies would appear to make use of project management techniques and appointment of project managers within these agencies common. This leads one to consider the
possibility of a number of project managers who are not subject to the policies and procedures of any of the individual services, and seek a basis for comparing them to their counterparts within Military Departments.

The purpose of this study is to investigate the rationale used for establishing project managers at Defense Agencies rather than within Military Departments.

In order to answer this question, three specific tasks were undertaken: (1) Identification of project managers at Defense Agencies; (2) Identification of reasons for and against establishing such managers within Defense Agencies rather than within Military Departments; and (3) Identification of problems encountered by these Defense Agency project managers.

Key terms used in this study are defined as follows:


Project Manager: A person who is assigned authority and responsibility for integration of the resources, schedule, and technical performance of a major project, system, or program. This term is used to refer to officials whose title may be program manager, systems program office director, or a similar title as well as those whose official title is project manager.

Major Defense System: A weapons or defense support system which exceeds $0 million dollars in DOD costs, $00 million dollars in
production costs or otherwise meets the criteria for a major program as defined by DoD Directive 5000.1 (1:1)\(^1\)

The study was undertaken with two assumptions: (1) that project managers for major defense systems are chartered or otherwise clearly designated; and (2) that the number of major program managers at Defense Agencies is sufficiently large to warrant characterization of project management at Defense Agency level versus Military Department level in terms of their characteristic mode of operation, problems encountered and types of successes and failures.

Methodology used was as follows: (1) The Defense Documentation Center was queried for documents pertaining to project managers at Defense Agencies or other activities at the level of the Joint Chiefs of Staff or office of the Secretary of Defense; (2) Officials at the Office of the Secretary of Defense were queried concerning project managers in Defense Agencies; (3) Officials at the Defense Intelligence Agency, Defense Supply Agency, Defense Nuclear Agency and National Security Agency were queried concerning project managers in Defense Agencies; (4) Detailed discussions were held with officials at the Defense Communications Agency concerning project management within the Agency; (5) Officials at the Office of the Secretary of Defense, Department of the Army, Chief of Staff of the Air Force, Army Materiel Command and Air Force Systems Command were queried on a non-attribution basis concerning the effectiveness of Defense Agency project management.

\(^1\)This notation will be used throughout this Study Report for sources of quotations and major references. The first number is the source listed in the bibliography. The second number is the page in the reference.
This study is organized as follows: Chapter Two provides the results of efforts to identify project managers in Defense Agencies. Chapter Three presents rationale for chartering project managers at Defense Agencies. Chapter Four treats problems which have arisen in the project identified in Chapter Two. Chapter Five summarizes findings and conclusions.

Training in project managership has been provided by the Defense Systems Management School faculty at Defense Agency level (Commander Ed Grant - National Security Agency). Records of chartered program managers are maintained by the Defense Systems Management School staff. No research addressing the feasibility of chartering project managers for major defense systems at Defense Agencies could be located from any source.
A search through Defense Documentation Center data records revealed no charters for Defense Agency project managers.

Telephonic contact with the Office of the Secretary of Defense provided the following information: (1) Although the basic mission of each Defense Agency places it in an integrative role, virtually every major program has been assigned by the Agencies to one of the Military Departments. (2) Defense Agencies themselves are in the best position to describe their project management actions. (3) The Office of the Secretary of Defense looks to the Defense Systems Management School as a repository of records and data on locations and functions of project managers.

Telephonic contact with the Defense Intelligence Agency, Defense Nuclear Agency and National Security Agency indicated the following: (1) None of these Agencies had project managers whose projects could be discussed without special access security measures. (2) Major projects were pursued within the authority of the Agency's "charter" (a Department of Defense Directive assigning the Agency mission, functions, authority and responsibility) rather than a specific charter to an individual project manager. (3) In nearly every case, Military Departments are assigned specific project management responsibilities for the projects. (4) No Agency major defense system project manager could be identified.

Telephonic contact with the Defense Supply Agency indicated that major projects are normally assigned to a specific service with the project manager...
in that service coordinating total requirements and development of the
project throughout the Department of Defense with the staff of the Defense
Supply Agency monitoring his progress. No Agency major defense system
project manager could be identified.

The Defense Communications Agency provided the following information:
(1) One project manager is currently chartered within the Agency: the
Defense Satellite Communications Program Phase II Project Manager. His
charter (2:all) was issued under the provisions of Department of Defense
Directive 5010.14 dated 1965 (3:all) and has not been updated since DoD
Directive 5000.1 superseded 5010.14 (Jul 71). The project manager named
in the charter has been replaced. The charter's language is considered
to be broad enough to negate a requirement for update. The project man-
ager's chain of command is as follows: Deputy Director, Plans and Programs,
Defense Communications Agency; Director, Defense Communications Agency;
Joint Chiefs of Staff (Primary interface is with the Director, Communications-
Electronics, J-6); and Office of the Secretary of Defense (Primary interface
is with the Director, Telecommunications Command and Control Systems,
formerly the Assistant Secretary of Defense, Telecommunications). The
earth terminal subsystem of the Defense Satellite Communications System
is the responsibility of the Army Satellite Communications Agency, Army
Electronics Command, Army Materiel Command, operating under a project
management charter (4:all). The space subsystem of the DSCS is the res-
ponsibility of the Space and Missile Systems Organization, Air Force Systems
Command, operating under a Program Management Directive (5:all).
(2) Project managers for the Automatic Voice Network (AUTOVON) and Automatic Digital Network (AUTODIN) were formerly chartered within the Agency, but these systems have moved past procurement into their operational phases. The Agency has used its charter (6:all) as authority for its integrative role in other defense systems rather than issuing a separate charter for each individual who performs the functions of a project manager.

Inquiries throughout the Defense Systems Management School faculty and staff identified no major defense system project managers outside Military Departments. There are several examples of project managers in one Military Department who develop and/or field a system in coordination with Defense Agencies and other Military Departments with their chain of command through their service secretary, but no major system project managers above Military Department level.
CHAPTER THREE

RATIONALE FOR CHARTERING PROJECT MANAGERS AT DEFENSE AGENCIES

Rationale for chartering a project manager at a Defense Agency may be grouped into three categories: (1) A project manager at an Agency has a broader view; (2) A project manager at an Agency has fewer procedural hurdles between himself and Office of the Secretary of Defense decision makers; and (3) Appointment of a program manager for a project which is an inherent responsibility of an Agency within that Agency avoids fragmenting management responsibilities.

Rationale for requiring all project managers to be within Military Departments may be grouped into two categories: (1) Appointing project managers in Defense Agencies is likely to result in failure to utilize the structure and expertise in systems acquisition gained by the Military Departments; and (2) Streamlined coordination channels can result in incomplete coordination.

Proponents of chartering project managers at Defense Agency level point out the broader view at that level in terms of planning and indifference to interservice rivalry.

An example of this broader view of planning is the staff relationship of the project manager in the Defense Communications Agency to the staff planners there. All Military Departments and Defense Agencies have access to and base plans on the Joint Intelligence Estimate for Planning (JIEP), Joint Long-Range Directive Intelligence Document (JLREID), Joint Long-Range Strategic Study (JLRST), Joint Strategic Objectives Plan (JSOP).
Joint Strategic Capabilities Plan (JSCP) and Joint Research and Development Objectives Document (JRDO). Based on these plans and documents, the Defense Communications Agency plans to provide for the evolutionary development and improvement of the Defense Communications System (which includes the Defense Satellite Communications System) within national and Defense Department objectives. This is planning which includes resources of the three military Departments in the functional area of telecommunications.

Short term planning, essentially a dynamic communications requirements model, is continuously in process based on day-to-day changes in user telecommunications requirements. Subsystem/project plans covering a 0-5 year time frame are the backbone of near term agency planning. These subsystem/project plans address a single project or related group of projects, considering funding, schedule, responsibilities, etc. They are normally used for minor telecommunications projects as defined in DoD Directive 4630.1 (7:1). Long term planning for telecommunications requirements satisfaction culminates in a multi-volume document known as the Defense Communications System Plan which addresses planning factors (guidance, objectives, etc), the present Defense Communications System (DCS), the future DCS, required research and development and near term improvements. The planning schedule is in consonance with the Department of Defense Planning, Programming and Budgeting System as well as the cycle for the Joint plans cited above.

The interaction between planners for the DCS and the project manager for the Defense Satellite Communications System is continuous. Phasing
of short term requirements utilizing the existing satellite system are impacted by R&D testing for the new Phase II system. Near term requirement satisfaction must be geared to improving system capability. Long term and R&D requirements drive satellite system technical performance requirements as well as being driven by the success of the program manager in integrating cost, schedule, and technical performance of the system. This interaction is enhanced by both planning and project management functions being structured organizationally in the same directorate of the Defense Communications Agency.

Although the project manager himself is normally a member of one of the Military Departments, his position in the Agency’s structure forces him to treat inter-service rivalry with indifference. In the case of the Defense Satellite Communications System program manager, he is a Navy 06 and reports to an Air Force 07 who reports to an Army 08. In addition to this organizational structure incentive, the project manager must depend on funds being made available in more than one Military Department budget without which his project cannot possibly succeed.

Despite procedures established within each service to expedite coordination on project management actions, project managers in Military Departments are usually required to brief and coordinate such actions through command to agency division level, material or systems command level and department headquarters/service secretary level prior to coordination at Office of the Secretary of Defense level. In contrast the route to the office of the Secretary of Defense for a project manager at the Defense
Communications Agency, for example, is through the Agency Director and Joint Chiefs of Staff. It is recognized, however, that successful project managers usually thoroughly coordinate their actions regardless of their position in the organizational structure.

Defense Agencies have been established at a level in the Department of Defense organizational hierarchy which enhances their responsiveness to the Joint Chiefs of Staff and Secretary of Defense. They have been assigned integrative mission which normally require them to integrate a function in all three Military Departments as well as other Department of Defense activities. If a project manager is chartered to manage one of these functions, his responsibility and the responsibility of the Agency assigned the function overlap. If the project manager is not located within the Agency's organizational structure, then the hierarchy in which he is assigned must assume responsibility for management of his function. This, of course, leads to both duplication of effort between the program manager's hierarchy and the Agency's hierarchy and fragments management of the function.

Since nearly all the chartered major defense system project managers are structured within the Military Departments, it would appear that the bulk of the experience, expertise and procedures required to insure good project management in the Department of Defense are concentrated in the Military Departments. To charter a major defense system project manager in a Defense Agency would be to impose his project on a management structure with, at best, a much lower volume of major system project management day-to-day.
business, and experience. It should be remembered, however, that Defense Agency military personnel are drawn from Military Departments and that a portion of the expertise and experience of each Military Department is therefore available to each Defense Agency.

The streamlined coordination route from a Defense Agency to the Department of Defense can counter the advantage of expeditious processing with a disadvantage of bypassed expertise and check and balance procedures required within Military Departments. While the action may get to the Office of the Secretary of Defense sooner for a decision from a Defense Agency, an important point or conflict could well be missed which would have been caught in the Military Department review process.

The summation of this rationale appears to be that a project manager should be placed at a Defense Agency only if his function directly overlaps the Agency's function, and management fragmentation and/or service rivalry would result from his establishment within a Military Department. Defense Agency Project Managers must insure completed coordination to preclude problems which might otherwise go unidentified until their rectification is impossible or extremely difficult.
CHAPTER FOUR
DEFENSE AGENCY PROJECT MANAGEMENT PROBLEMS

Based on the sample size of one Defense Agency project manager, the Defense Satellite Communications System Project Manager at the Defense Communications Agency, problems may be grouped as follows: (1) Cost growth; (2) Schedule slip; (3) Technical performance; and (4) Political.

Addressing these problems in reverse order, perhaps the political problems encountered by the project were among the first major ones. Harries were: Why can't the Department of Defense lease the satellite service it requires commercially? (hardening, anti-jam, control of earth terminals, special modes of operation); Why can't the Department of Defense lease satellites or satellite transponders and develop only earth terminals? (same as above) Why can't the Department of Defense lease earth terminals rather than buy them? (same as above) Are we fostering military competition with industry? (President Nixon: "The Defense Satellite Communications Program is unique and vital to the nation"). These political problems would have probably beset the program regardless of the location of the project manager in the organizational structure.

Technical performance of the initial system (Phase I) was limited by the number and quality of available channels, low reliability of earth terminals, and limitations of satellite availability. The launch of two Phase II satellites improved quality and satellite availability for a short period, but both satellites eventually failed. Two additional satellites, recently launched after a delay for investigation of the reason for the
failure of the first two satellites, are performing well. Earth terminals are being modified to improve reliability, and in some cases, replaced. Technical performance of the earth terminal and space subsystems are the responsibility of project managers in the Army and Air Force, and cannot be cited as totally the responsibility of the Defense Agency project manager.

Schedule slips have been attributed to technical performance problems, operational requirements, etc.

All the above problems have probably impacted on cost growth. Cost ceilings were changed by the Deputy Secretary of Defense in May 1970 (8:1), and may require further adjustment.
Chartered Project Managers for major defense systems are almost exclusively located within the DoD organizational structure at Military Department level.

While project management is practiced at Defense Agencies it is characteristically done without a formal charter. Major systems acquisition responsibility is assigned by Defense Agencies to a Military Department.

The one chartered project manager identified at a Defense Agency, the Project Manager for the Defense Satellite Communications Program, Phase II at the Defense Communications Agency has cogent reasons for his position in the organizational structure, and integrates the efforts of project managers in two services who manage subsystems of the Defense Satellite Communications System.

The cost, schedule, technical performance problems which beset the Defense Satellite Communications Program are not the result, directly, of placing the project manager at Defense Agency level, and cannot be compared with other similar project managers since there are none.

This study has shown that project managers in Defense Agencies are difficult to identify. Research to tie the dollars expended by Defense Agencies to specific projects did not yield interesting results, but would probably require a more detailed, audit oriented effort than would be possible with Defense Systems Management School manpower and time constraints.
This study has shown that the number of identifiable major defense system project managers at Defense Agencies is not sufficiently large to warrant characterization of project management at Defense Agency level versus Military department level in terms of their characteristic mode of operation, problems encountered, and their types of successes and failures.

The primary use foreseen for this study is as background for Defense Systems Management School instructors in the early portion of the Overview of Systems Acquisition Management course where the project manager's position in the Military Department and Department of Defense organizational structure is addressed.
   A statement of Department of Defense policy concerning the Acquisition of major defense systems.

   The charter for the project manager at the Defense Communications Agency.

   A statement of Department of Defense policy concerning project management before it was superseded by 1. above.

4. Department of the Army, Charter, 13 Army Satellite Communications Project Manager, 10 Dec 71
   The charter for the project manager at the US Army Satellite Communications Agency, signed by the Secretary of the Army.

   The PMD for Air Force responsibility in development of Phase II of the DSCS, signed for USAF by the Director of Space, DCS/R&D

   The charter for the Defense Communications Agency

   A statement of Department of Defense Policy concerning the classification and submission of major requirements.

   A memo which raised the cost thresholds on the satellite system