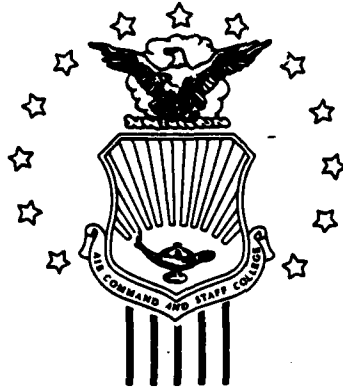


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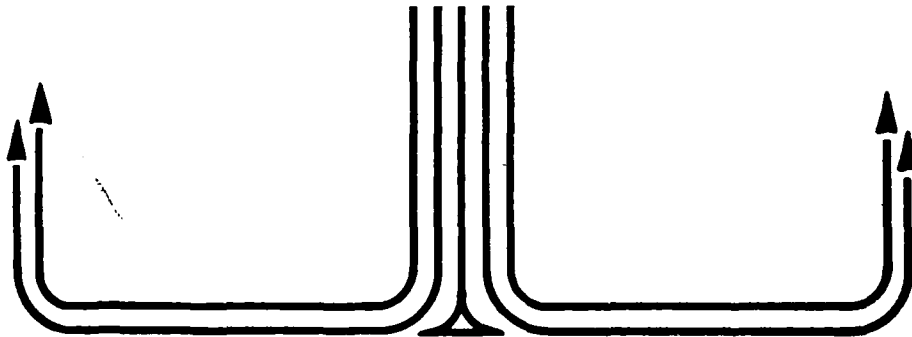


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STUDENT REPORT

MANAGEMENT OF MULTISERVICE
ACQUISITION LOGISTICS PROBLEMS:
AN AIR FORCE PERSPECTIVE

MAJOR SCOTT E. MILLS 88-1845
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REPORT NUMBER 88-1845

TITLE MANAGEMENT OF MULTISERVICE ACQUISITION LOGISTICS
PROBLEMS: AN AIR FORCE PERSPECTIVE

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Submitted to the faculty in partial fulfillment of
requirements for graduation.

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PREFACE

Multiservice acquisition logistics is a dynamic career field which is characterized by unique management problems due to the complexity involved when weapon systems are procured by more than one service. Multiservice Deputy Program Managers for Logistics (DPMLs) must recognize and appropriately address these unique problems if they are to be effective and efficient in managing their program responsibilities. This becomes ever important in today's fiscally constrained acquisition environment as the government initiates an increasing number of joint and/or multiservice system acquisitions.

This study identifies those inherent problems which confront multiservice DPMLs and discusses the adequacy of current guidance (e.g. regulations), procedures, and techniques in addressing each of the problems. Additional recommendations and conclusions are provided which could lessen or eliminate many of these problems thereby enhancing the multiservice DPML's effectiveness and/or efficiency. While this study is applicable to DPMLs of all services, it is written from an Air Force (AF) perspective with most of the data and literature drawn from programs in which the AF DPML was the lead or executive acquisition logistician. The study serves as a reference source and is useful for multiservice acquisition logistics education and training.

The support and guidance of Major Michael White was extremely valuable to the completion of this research study. His insight and thoughtful comments are greatly appreciated.



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ABOUT THE AUTHOR

Major Scott E. Mills received his commission in June 1973 after graduating from the US Air Force Academy with a BS in Life Sciences. He then attended Undergraduate Navigator Training (UNT) at Mather AFB, California, after which he was assigned as a C-141 airlift navigator/instructor navigator at McChord AFB, Washington. In 1977, Major Mills was reassigned to UNT where he served as an instructor navigator and program manager for the UNT Instructor Training School. Subsequent to this assignment, he held an air operations inspector position on the HQ Air Training Command Inspector General team at Randolph AFB, Texas. Major Mills then attended the Air Force Institute of Technology (AFIT) at Wright-Patterson AFB, Ohio, where he completed a MS in Logistics Management. Following AFIT, he was assigned as a Deputy Program Manager for Logistics for the Ground Launched Cruise Missile Program in the Joint Cruise Missiles Project Office, Washington, DC. Major Mills entered the Air Command and Staff College at Maxwell AFB, Alabama, in the summer of 1987.

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REPORT NUMBER 88-1845.

AUTHOR(S) MAJOR SCOTT E. MILLS, USAF

TITLE MANAGEMENT OF MULTISERVICE ACQUISITION LOGISTICS PROBLEMS: AN AIR FORCE PERSPECTIVE

I. **Purpose:** To provide techniques, procedures, and guidance to allow Air Force multiservice Deputy Program Managers for Logistics (DPMLs) to more effectively and efficiently manage the inherent problems which surface in joint and/or multiservice acquisition logistics.

II. **Problem:** Although multiservice acquisition logistics has lately received a great deal of attention in the military systems acquisition environment, many of the inherent problems associated with this career field are not adequately addressed in current guidance (e.g. regulations), procedures, or management techniques. A study is needed to identify the major problems that confront multiservice DPMLs and then analyze how effective and efficient available guidance, procedures, and techniques are in addressing these specific problems. This analysis should define those tools which are well suited for assisting the DPML in overcoming the identified problems, as well as delineating recommendations which would further assist or improve the joint DPML's performance.

III. **Data:** The major problems associated with multiservice acquisition logistics were identified using the results and conclusions from the author's masters thesis entitled

"An Investigation of Joint Service Acquisition Logistics Issues/ Problems and Automated Program Support" written in 1984 for the Air Force Institute of Technology. This thesis statistically validated the following five management problems using data collected from over 50 upper level joint and/or multiservice DPMLs: (1) Coordinating requirements; (2) Ineffective inter-service communication; (3) Management personnel turnover; (4) Inadequate planning; and (5) Geographically dispersed resources. A current literature review was conducted to ensure these problems are still valid in today's multiservice programs. Each of these management problems was then researched against literature and guidance to determine the adequacy of the literature/guidance. Throughout the study, numerous recommendations and conclusions evolved from analyzing the effectiveness and efficiency of the reviewed guidance, procedures, and techniques against the identified problems.

IV. Recommendations and Conclusions: Each of the five identified problems from the author's thesis were confirmed as applicable in today's multiservice acquisition logistics environment. Having knowledge of these problems and understanding methods to overcome them was an overriding theme throughout the literature review and analysis. Education and training is key in gaining this understanding, and the Defense Systems Management College (DSMC) provides an excellent curriculum for multiservice DPMLs to learn joint Integrated Logistics Support (ILS) issues, procedures, and techniques to address the issues. The Air Force DPML Course offered at the Air Force Acquisition Logistics Center (AFALC) offers another learning opportunity for DPMLs but has limited applicability to multiservice issues--a curriculum change to include joint service instruction would greatly enhance the effectiveness of this course. Although a great deal of guidance exists which addresses the problems delineated in this study, consolidation and cross-referencing of joint regulations would facilitate their use and enhance their effectiveness. The draft multiservice regulation for the management and execution of ILS for multiservice acquisitions is very comprehensive and specifically offers DPMLs methods to address joint problems. Finally, several management techniques and procedures are available to reduce and/or eliminate the inherent problems facing joint DPMLs. They include management support systems, staff assistance, lessons learned, self-inspection and audit checklists, operating instructions, continuity books, assignment freezes/extensions, and management information systems (i.e. electronic mail). It is important to recognize that acquisition logistics is dynamic and the above recommended procedures, techniques, and guidance must be tailored to differing situations in order to maximize the multiservice DPML's effectiveness and efficiency.

Chapter One

INTRODUCTION

When more than one military service is involved in the development, acquisition, and support of a new weapon system, there is inherent complexity reflected throughout program management. This complexity often leads to unique management problems that are more pronounced than those encountered in single-service acquisitions. Since "No other aspect of multiservice program management will confront the manager with as many interservice differences as logistics" (7:3-3), multiservice Deputy Program Managers for Logistics (DPMLs) must recognize and address these "unique" problems/issues if they are to be effective and efficient in managing their program responsibilities. This becomes increasingly important in today's dynamic acquisition environment as the government initiates an ever-increasing number of joint and multiservice weapon system acquisitions (14:2-1).

This chapter begins with a brief description of the purpose and justification for this study and provides background information on multiservice program organization. The DPML's role and responsibilities within such an organization are also highlighted. The chapter concludes with a discussion of the study methodology and associated scope and limitations.

PURPOSE OF STUDY

This study is intended to identify and discuss techniques, procedures, and guidance for DPMLs to more effectively and efficiently manage the inherent problems associated with joint or multiservice acquisition logistics. To accomplish this objective, current techniques, procedures, and guidance (e.g. regulations) are reviewed, evaluated, and discussed in relation to the major problems associated with multiservice acquisition logistics. The study serves as a useful reference source for DPMLs of all services and is intended to act as an educational training aid (handout/source material) for joint-service acquisition logistics instruction throughout the Department of Defense (DOD).

JUSTIFICATION FOR STUDY

The primary purpose for utilizing multiservice acquisitions is to squeeze more out of austere research, development, and production budgets, simplify logistics operations, and improve combat capability (2:17-1). While a number of reasons exist for advocating these type of programs, reduction in logistics requirements is a key factor. For example, standardization across services offers both the potential for reducing support costs and improving the support provided to operating forces (14:2-1). These savings are severely lessened or even negated however, when DPMLs are not knowledgeable of nor take appropriate management attention to overcome the inherent problems which commonly impact multiservice acquisitions. The importance of this research study is further emphasized in the Air University Compendium of Research Projects:

More and more items for the Air Force are being procured through joint service acquisition programs. Current multiservice publications provide the executive service the authority to manage such programs under the policies and procedures of that service. Because of fundamental parochialism in adhering to these policies, these programs often have serious obstacles to overcome in order to provide equipment logistically supportable in each service. A study is needed to define these obstacles and find adequate methods to resolve them (26:58).

BACKGROUND

Literature suggests five general or generic problems/issues which confront DPMLs in managing multiservice acquisition logistics. Inadequate or poor coordination of requirements between the services creates the greatest management challenge, while ineffective interservice communication, inadequate planning, geographically dispersed resources, and turnover of management personnel also create significant problems (23:--). Understanding and applying improved or innovative management techniques, procedures, and guidance can provide DPMLs the wherewithal to more effectively and efficiently manage these persistent problems. As a result, program performance can improve thereby justifying the underlying rationale for multiservice acquisition programs: reduced costs and improved supportability. A brief overview of multiservice organization and the DPML's responsibilities follows to facilitate a better

understanding of the problems and recommended solutions in Chapters Three and Four.

Organization of Multiservice Programs

The general organizational structure for major multiservice system acquisitions differs from that of single-service programs and contributes to some of the program management problems which confront joint DPMLs. The typical structure for single-service acquisitions within DOD is shown in Figure 1. Note the chain of command is well defined within each service and is not complicated by cross-service coordination (13:13-75 - 13-76).

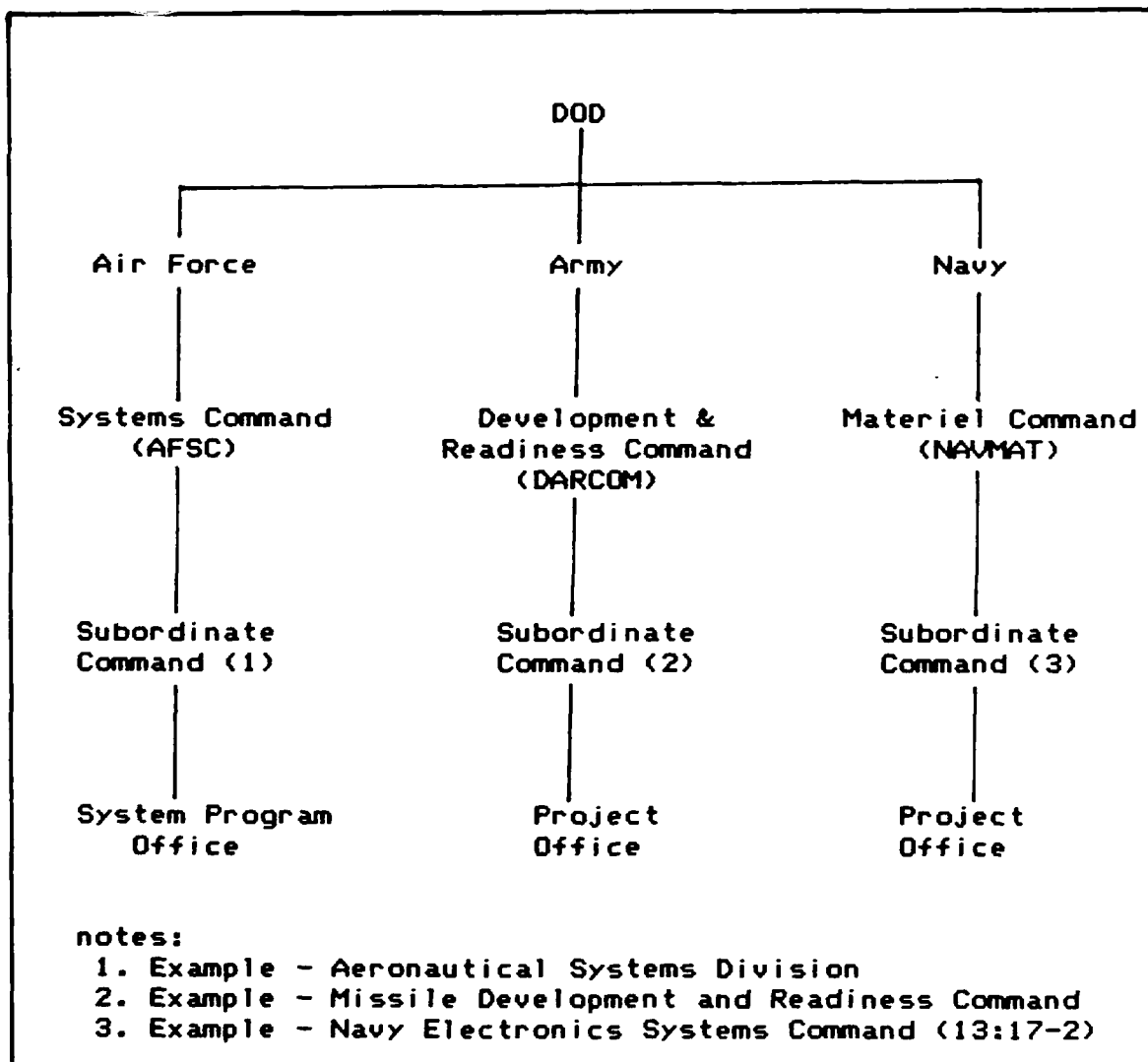


Figure 1. General Organizational Structure for Single-Service Weapon System Acquisitions

Multiservice programs are usually initiated upon approval from the Defense Acquisition Board (DAB) in the form of a memorandum which designates one of the services as the executive or lead service (9:--; 14:6-1). This service is then responsible for chartering and organizing the program office. The typical multiservice structure differs significantly from the single-service organizations depicted above and contributes to many of the problems discussed later in this study. Although multiservice organizational structures vary with program, a general structure is depicted in Figure 2. Note there is a great deal more coordination required between the executive and participating services at all levels of command.

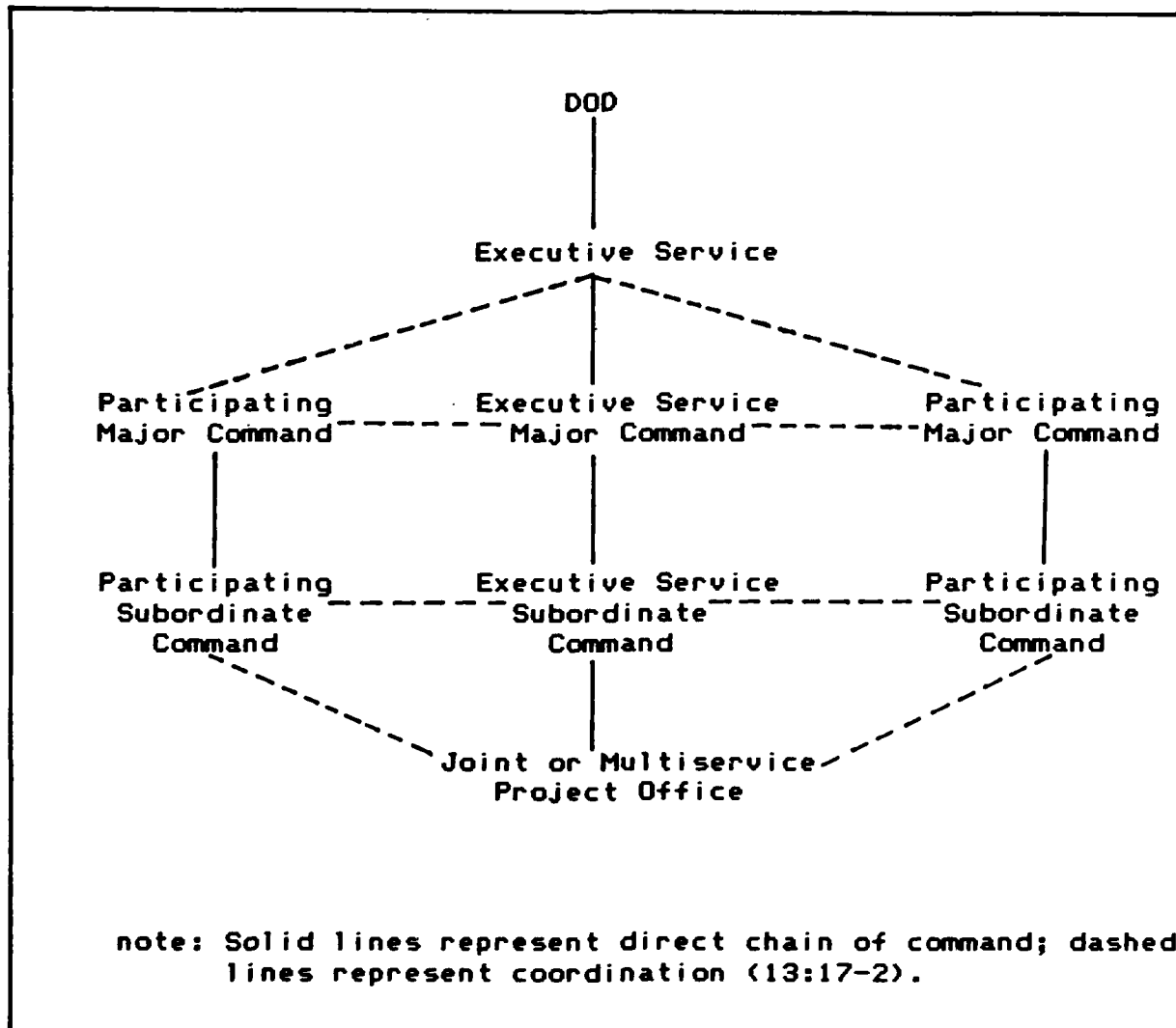


Figure 2. Multiservice Acquisition Organizational Structure

Once participation in a multiservice acquisition is officially confirmed and the organizational structure is established, the designated integrated logistics support (ILS) representative (e.g. DPML) of the executive service begins to develop and implement the ILS strategy in conjunction with the participating service(s) (13:2-2). ILS is defined as "the composite of elements necessary to ensure the effectiveness and economics of a system for its programmed life cycle" (5:26). A brief description of the executive service DPML's responsibilities reflects the importance of coordination in multiservice programs.

DPML Responsibilities

The DPML is responsible for the total ILS program and supports the program manager in all matters related to ILS. The executive service DPML's primary responsibilities in a multiservice program include

- (1) ensuring that the participating service(s) designate an ILS focal point/manager,
- (2) preparing an ILS Joint Memorandum of Agreement (JMOA) in conjunction with the participating service(s),
- (3) coordinating with and including participating service(s) in all major ILS program decisions, actions, and planning efforts,
- (4) ensuring procedures for determining source of funding for participating service-unique ILS requirements are included in the JMOA,
- (5) ensuring planning, solicitation, and contractual documents include ILS requirements and in conjunction with participating service(s), identify work unique service requirements, maintenance and support concepts, and data requirements for contractual application, and
- (6) identifying, controlling, and documenting an executive service maintenance and support concept, and ensuring the planning process accommodates commonalities and legitimate differences between service concepts (12:2-1).

METHODOLOGY

The methodology employed for this staff analysis involves two major aspects. The first is the identification and discussion of the major inherent problems associated with multi-service acquisition logistics. Second, the study determines the adequacy of present techniques, procedures, and guidance for addressing these problems. Additional management considerations are also reviewed for applicability to resolving the stated problems. The study provides recommendations to allow DPMLs to more effectively and efficiently manage within the multi-service acquisition environment.

Management Problems: Identification/Validation

The major management problems associated with multiservice acquisition logistics were identified using the results and conclusions from the author's masters thesis entitled "An Investigation of Joint Service Acquisition Logistics Issues/Problems and Automated Program Support" written in 1984 for the Air Force Institute of Technology. This thesis statistically validated five "general" acquisition logistics management problems using data collected from over 50 upper level joint and multiservice DPMLs. The data was collected using a structured questionnaire/survey which was developed from an extensive literature review and interviews conducted with knowledgeable program managers located at the Air Force Acquisition Logistics Center (AFALC) at Wright-Patterson AFB, Ohio. The survey used Likert scales to determine the level of agreement/disagreement of respondents to a number of general, ILS, and operations and support (O&S) problems. Data collected from the surveys was then evaluated using a statistical Whitney t-test to conclude with a 90 percent confidence level that the general problems identified in Table 1 created the most difficulty for DPMLs in managing joint or multiservice acquisitions (25:--).

Management Problem/Issue	survey t-statistic
1. COORDINATING JOINT SERVICE REQUIREMENTS	13.9116
2. INEFFECTIVE INTERSERVICE COMMUNICATION	9.5273
3. MANAGEMENT PERSONNEL TURNOVER	8.4196
4. INADEQUATE PLANNING	4.8176
5. GEOGRAPHICALLY DISPERSED RESOURCES	4.5479

Table 1. Multiservice Acquisition Logistics Problems

Each of the problems identified in Table 1 has a corresponding t-statistic computed using the Whitney statistical test. The higher t-statistics indicate a greater level of respondent (e.g. DPML) agreement with the stated issue. These five management problems serve as the basis for this study. A review of current literature was conducted to ensure the validated problems from this data are still valid and applicable in today's multiservice programs.

Addressing the Problems

The five validated acquisition logistics management problems from Table 1 were each individually researched and analyzed to determine whether current management tools are available to address them. Specific methodology called for ascertaining the effectiveness and efficiency of current techniques, procedures, and guidance in addressing these specific problems. Literature (books, manuals, and periodicals) was researched to analyze current and potential procedures which could alleviate or lessen each of the identified problems. Department of Defense and Air Force regulations were reviewed to determine the adequacy of guidance in addressing the problems. Techniques are included from personal experience of the author who recently served as a DPML in a major joint-service program.

SCOPE AND LIMITATIONS

This study limits its review, discussion, and analysis to resolving the major problems which confront multiservice DPMLs. Specific problems/recommendations associated with individual elements of ILS and O&S of deployed weapon systems are beyond the scope of this paper. Although this study is relevant to acquisition logistics managers of all services, it is written from an Air Force (AF) perspective. This is due to the fact that the data obtained for the research was gathered solely from AF DPMLs serving in joint/multiservice programs in which the AF was the executive or lead service. The primary focus of the research is to provide recommendations to allow multiservice DPMLs to more effectively and efficiently manage major problems which typically confront their programs.

Chapter Two

MULTISERVICE ACQUISITION LOGISTICS PROBLEMS

This chapter reviews and discusses each of the five "general" problems which commonly confront DPMLs in managing acquisition logistics for multiservice programs. Specific attention was directed toward ensuring that these problems still exist today and result in reduced ILS program management effectiveness and/or efficiency. The problems are presented in order of importance relative to the statistical research findings of the author's 1984 research thesis.

COORDINATING REQUIREMENTS

As expressed in the General Accounting Office's (GAO) report entitled Joint Major System Acquisitions: An Elusive Strategy, "problems associated with obtaining and maintaining agreements on joint programs is the number one problem" (7:58). No other aspect of a joint or multiservice program is more critical to the program's success than the statement of joint operational requirements. The fact that there is significant commonality in the services' requirements supports the basic premise that a multiservice effort will be beneficial to the DOD, both economically and performance wise. The challenge, therefore, is to develop a set of requirements that will satisfy the operational needs of all participating services without compromising individual service needs (14:3-1). This is no easy task and often presents problems, especially for acquisition logisticians (e.g. DPMLs).

Because missions, operating concepts, and operating environments differ from service to service, so also do the policies, practices, and procedures for implementing ILS. Differences in practically every aspect of support (i.e. organizational structures, types of support available at each maintenance level, occupational skills, training, facilities, test equipment, and support equipment) create severe difficulties in the coordination of these requirements. The differences, though not so great as to preclude a joint effort, can reduce the overall supportability of weapon systems when requirements are not properly addressed and coordinated (14:9-2). Reduced supportability ultimately results in increased costs and/or reduced performance brought on by having to tailor or revise logistics requirements because the original requirements were

either poorly coordinated or changed later without proper coordination and approval (23:--). There also often exists a tendency for each service to overstate or overspecify requirements to ensure from a funding standpoint that its needs will be met. This too is extremely inefficient because the participating service(s) will then change requirements later in the program thereby compounding the planning, programming, and contracting strategies. Lately, multiservice requirements problems have received increased attention due to impending budget constraints and the fact that logistics accounts for the great majority of the total life cycle cost of a weapon system.

This increasing emphasis was seen most recently in former Secretary of Defense Caspar Weinberger's FY 1987 Annual Report to Congress in which he stated that the main objectives of the newly formed Joint Requirements Management Board (JRMB) include: "surveying multiservice mission requirements for common functions; resolving unnecessary differences in requirements and specifications; integrating requirements to get more economical production rates and more competition; and developing common simplified training and logistic support bases" (20:104; 24:16). Coordination of multiservice requirements continues to present great management challenges for DPMLs in today's joint-service acquisitions. Very often this problem is further complicated by ineffective interservice communication.

INEFFECTIVE INTERSERVICE COMMUNICATION

Interservice communication was validated as the second major problem confronting DPMLs in the author's research thesis on joint-service programs. This issue is attributable to differences in service terminology, weak interservice and personal relations, parochial ways of expressing and attaining service needs, and in many cases lack of knowledge or inability to communicate with the appropriate person(s) (25:14). Unlike many interservice issues, logistics issues are not normally resolved by escalation to a higher headquarters or authority. Logistics problems concern nitty-gritty details that must be worked out between functional specialists, each of whom has narrow interests and is convinced that his/her way is the only way to perform the task (14:9-2). The joint DPML must therefore devote greater attention to details that are normally handled as routine in single-service acquisitions. This requires "big picture" management and the ability to integrate a large number of diverse functions using improved communication and cooperative skills (13:15).

In a recent 1987 AFIT research project (by Bayless) conducted using survey interview data from senior acquisition

logisticians and DPMLs, the respondents also confirmed that one of the main barriers to effectively implementing ILS was lack of communication or cooperation due to working relations between logistics personnel and functional specialists. Although this barrier was not analyzed with specific respect to multiservice managers, many of the respondents either worked in or had prior experience in multiservice programs. This infers the problem is applicable to joint DPMLs, and accordingly, degrades effective ILS program management in multiservice acquisitions as well as single-service programs (22:35). This lack of communication is often exasperated or at least influenced by the third major problem of this study, frequent turnover of management personnel.

MANAGEMENT PERSONNEL TURNOVER

The nature of military assignments is such that most managers remain in a position no longer than four years, and often significantly shorter. While this high turnover of management (relative to comparable civilian positions) creates problems in single-service programs, they are compounded in multiservice acquisitions due to the added complexity and time required to become knowledgeable of joint-service methods, agencies, procedures, structures, etc. Without prior joint-service acquisition experience, it takes the average DPML a great deal longer to become familiar with the participating services' procedures, regulations, and points of contact. The joint DPML is faced with the responsibility of ensuring all services' needs are met. To effectively accomplish this, he/she must possess an in-depth knowledge of multiservice program management which in most cases is only achieved through practical experience. Often, by the time a joint DPML has gained this experience, it is time for reassignment. The resulting loss of experience and continuity, although difficult to quantify, decreases program effectiveness by increasing the time required to develop, coordinate, and approve plans, agreements, and contracts.

The Bayless research also identified manpower continuity as a significant constraint that impacts DPML management. Several DPMLs criticized the "revolving door" of personnel turnovers which allowed experienced managers to leave a program without regard to their criticality or timing as it relates to significant milestones (22:59-60). Others suggested that assignments be frozen until major acquisition milestones had been met to overcome the devastating effects which result when a DPML vacates at a critical time in the program (22:86). This is especially true during early acquisition phases when inadequate planning can have negative long-term impacts.

INADEQUATE PLANNING

According to the Joint Logistics Commander's Guide for the Management of Joint Service Programs, the single most important task facing the DPML is milestone planning--a good milestone-planned program will save countless program dollars and man-hours (14:9-2). Planning in multiservice programs appears to be one of the most ignored areas of management and creates significant problems for DPMLs. This is attributed partly to the complexity of requirements levied on joint program managers and partly on not recognizing the importance planning plays in transforming requirements into operationally fielded and supported weapon systems. The Joint Logistics Commanders (JLC) provided their assessment of the importance for proper ILS planning by stating:

We perceive a well planned and executed Integrated Logistics Support (ILS) Program to be equally important in the acquisition of weapons systems and equipment as maintaining cost, schedule, and performance parameters. This is particularly true for systems being developed for use by more than one service. Continuous attention and commitment to ILS planning and adequate funding by all participants are absolutely essential if we are to field systems which are supportable and can be maintained by the intended users (15:--).

ILS planning problems are not unique to multiservice programs. They are, however, compounded by the diverse and varied requirements levied by the participating services. Many DPMLs are neither knowledgeable of nor prepared organizationally to fulfill service-unique planning requirements that must be addressed early in the acquisition cycle. More than any other single factor, careful initial planning is the trademark of a successful program. The hard learned lessons of past acquisitions reveal planning must include all phases and related activities from inception to operational support (6:26). Problems encountered due to poor or inadequate joint ILS planning are numerous but are often characterized by:

- (1) Maintenance planning difficulties
- (2) Support equipment differences
- (3) Technical order incompatibilities
- (4) Reprocurement data shortcomings
- (5) Provisioning omissions
- (6) Supply support shortages (20:--)

Failure to plan for adequate logistics support early in the acquisition cycle may increase program costs and result in fielded systems that are not logistically supportable. For this reason, the Air Force Acquisition Logistics Center (AFALC) has

reemphasized to all DPMLs the need for aggressive involvement in the planning process. Additionally, the Defense Systems Management College (DSMC), Ft Belvoir, VA, has increased its education and training emphasis on multiservice ILS planning for joint-service DPMLs due to the long-term cost savings derived from well executed planning (8:13-14). Literature confirms that comprehensive and coordinated planning are still essential to effective/efficient multiservice ILS program management, and one of the main obstacles to achieving this is ineffective or poor communication between the executive and participating services.

GEOGRAPHICALLY DISPERSED RESOURCES

Multiservice acquisition logistics program managers often experience problems which are caused or increased by geographically dispersed resources. Physical separation of personnel and offices within and across service lines, including separate logistics support locations, hamper effective program management (23:--). The joint DPML faces unique difficulties in coordinating various requirements and plans between participating services simply due to the increased number of diverse and physically separated organizations with which he/she must work. In many cases, it is virtually impossible to meet together with all appropriate personnel as often as is required to effectively plan and implement the various logistics requirements in the appropriate planning documents.

This problem is further compounded by present funding/travel restrictions and cutbacks which reduce the DPML's ability to meet with multiservice logistics managers which are physically stationed at various locations throughout the US or overseas. Geographically dispersed resources additionally impact effective and efficient program management for the joint DPML in time management. It is not unusual to spend precious hours contacting participating service managers at diverse locations to clarify and/or coordinate changes. It is not only difficult to contact the appropriate individual but also nearly impossible to acquire a timely concurrence. Although physical separation of resources creates very similar problems for single-service acquisition logistics, it is important to realize that these problems are greatly magnified in the multiservice arena due to the greater diversification and separation of participating service support organizations (see Figure 2).

Having reviewed and confirmed the currency of the five major problems which impact multiservice program management for AF DPMLs, the study now turns its attention to address these problems.

Chapter Three

ADDRESSING THE PROBLEMS

This chapter analyzes and discusses guidance (i.e. regulations), procedures, and techniques available to multiservice DPMLs for addressing each of the five validated management problems identified in Chapter Two. The analysis includes a subjective evaluation of the current adequacy (effectiveness and/or efficiency) of regulations and procedures. Techniques to improve multiservice DPML management are also investigated. Since the majority of acquisition program guidance is contained in regulations, the analysis begins with a discussion of Air Force, multiservice, and DOD regulations as they pertain to DPML multiservice program management problems.

GUIDANCE/REGULATIONS

There are a multitude of regulations concerning the management of ILS for joint/multiservice program managers. This alone creates inefficiencies since DPMLs must reference a number of different regulations which are poorly cross-referenced. The three main categories of regulations reviewed for this study as they relate to adequacy, effectiveness, and efficiency are: Air Force regulations; multiservice regulations; and Department of Defense directives and instructions. The applicable Air Force regulations are primarily the responsibility of Air Force Systems Command (AFSC) and Air Force Logistics Command (AFLC).

Air Force Regulations

Overall policy for the management of multiservice systems, programs, and projects is contained in AFSCR/AFLCR 800-2, Acquisition Management. Although written and maintained by the AF, this regulation is a joint-service directive which implements the Joint Logistics Commander's (JLC) memorandum of agreement, and details the responsibilities of the executive and participating services. This regulation delineates broad program management responsibilities but does not specifically address any of the DPML management problems discussed earlier in this study. It does however state that "the procedural guidance of the executive service in joint programs will be followed except as changed by mutual agreement" (17:15-1). This is significant because it portends that the executive service's regulations will

contain all the necessary guidance for effective multiservice acquisition program management. The primary AF regulation which should satisfy this requirement for DPML responsibilities is AFLCP/AFSCP 800-34, Acquisition Logistics Management.

AFLCP/AFSCP 800-34 states that when the AF is designated the executive service in a joint program, the DPML responsibilities are the same regarding Air Force requirements as they would be on an AF-only program. It directs the DPML to accommodate the participating services by either modifying the other services' management methods and requirements to accept AF procedural guidance, or by developing joint agreements to cover service peculiarities (16:15-1). Although AFLCP/AFSCP 800-34 is extremely well detailed in its guidance and application for the various functions and required interfaces involved for single-service acquisition logistics management, it is considerably lacking in providing joint guidance. For example, Chapter 15 of this regulation, entitled "Multi-Service Programs", is very general in nature and does not cover any management problems or "peculiarities" typically encountered between the executive and participating services. The chapter recognizes the importance and trend toward joint-service programs yet does not detail what some of these "peculiarities" might include, nor how best to manage them other than developing special "agreements" (16:15:1). In other words, the guidance recognizes that inherent problems exist in joint program management, but neither delineates what the DPML should expect, nor how to address it. Fortunately, a draft multiservice regulation is undergoing coordination which will alleviate this shortcoming.

Multiservice Regulations

The Joint Logistics Commander's, Joint Policy Coordination Group for Multiservice ILS recently tasked the US Army Materiel Command to develop joint guidance for multiservice ILS management. The resulting regulation is currently in draft and undergoing coordination for final approval. The regulation is entitled Logistics Management and Execution of Integrated Logistic Support (ILS) Programs for Multiservice Acquisitions, and the Air Force designation will be AFR 800-43. The document will apply to all the Department of Army, Navy, and Air Force commands, agencies, and activities involved in multiservice acquisition, whether serving as the executive or participating agent. It will prescribe the policies and assign responsibilities for the management and execution of ILS programs for all multiservice acquisitions (12:--). The draft for this regulation was reviewed for this study to determine the extent to which it addresses the validated management issues contained herein since this regulation is soon to be the key guidance for multiservice ILS management.

The new multiservice ILS draft regulation is well prepared to provide the general and specific guidance for addressing many of the problems which are characteristic of joint programs. It contains three main chapters which address general program information, responsibilities, and program management and execution. Chapter Two specifically directs DPMLs to plan for and coordinate the differences between participating service requirements with specific examples of what to expect. This chapter also emphasizes the importance of multiservice planning and how to accommodate commonalities as well as differences between the services' needs. The regulation also provides in-depth ILS planning at its Appendix B, "Joint Integrated Logistic Support Plan (JILSP) Guidance." The regulation further recognizes the problem of ineffective interservice communication by requiring DPMLs to maintain program listings of key ILS points of contact (POC) across services lines. Two areas (problems) which are not addressed and would improve the effectiveness of this regulation if included are: guidance on minimizing impacts due to geographically dispersed resources and overcoming problems encountered due to management personnel turnover. Emphasizing and including methods to maintain continuity would further enhance the guidance within this regulation (12:--).

An additional multiservice regulation which is extremely useful for DPMLs in managing problems associated with geographically dispersed resources and problems due to lack of experience (personnel turnover) is the Joint AMC/NMC/AELC/AESC Commanders (JLC) Integrated Logistics Support (ILS) Points of Contact List for Multiservice Acquisitions, the AF designator being AFLCP/AFSCP 800-36. This compendium of ILS focal points was prepared for joint-service ILS managers as they work with each other to acquire weapon systems and equipment. The ability to find a POC to initiate necessary coordination is the first action that must be taken on any job, and this annually updated listing provides an extensive listing of all services' key ILS focal points (11:i).

Department of Defense Guidance

DOD Directive (DODD) 5000.39, Acquisition and Management of Integrated Logistics Support for Systems and Equipment, is the Department of Defense's primary regulation governing acquisition logistics. This directive establishes policy and responsibilities, including manpower planning, as an inherent part of major system acquisitions, including single component, multi-component, and international acquisitions to meet system readiness goals within established cost, schedule, performance, manpower, and other logistics constraints (19:--). DODD 5000.39 is not nearly as detailed as the related AF and multiservice regulations, nor does it expound on any of the specific problems identified in this study. It does, however, identify some specific considerations which have a direct bearing on minimizing

joint DPML management problems. For example, it establishes the need for creating career fields and career development programs for ILS managers. "Increased education and training not only reduces the impacts which result from personnel turnover, but also increases the DPML's understanding of multiservice requirements and planning" (19:--). DODD 5000.39 also underlines the requirement for appropriate resource allocation of participating DOD components in multicomponent acquisition programs. This has a direct influence on overcoming some of the multiservice ILS problems which are attributable to geographically dispersed resources.

The regulations and directives discussed above provide sound guidance for the AF DPML serving in a multiservice program; however, several important observations bear attention. First, most of the problems which were discussed in Chapter Two are not adequately addressed in any of the reviewed regulations. Accessibility to a number of distinct and separate (although related) regulations is necessary to successfully understand and manage joint ILS acquisition. This often presents problems in smaller program offices in which the administration simply does not have the resources to acquire nor maintain a large and diverse publications library.

Another problem which also degrades the usefulness of multiservice guidance in overcoming the inherent problems facing DPMLs is a lack of knowledge of which regulations to reference for specific problems. This was confirmed by the Bayless research study which concluded that most DPMLs felt that the existing guidance was "confusing, conflicting, and required tailoring" in order to make it useful (22:87). This problem is partially due to minimal cross-referencing in existing multiservice guidance. It is often difficult and very time consuming to determine which regulations are related, available, and best suited for the different issues. This means that joint DPMLs must either be extremely knowledgeable of the numerous joint ILS regulations or spend a great deal time (which reduces his/her efficiency) researching for specific needs.

Finally, multiservice acquisition logistics is a dynamic management career field which is constantly changing. This necessitates frequent updates to applicable regulations if the guidance is to remain current and effective. This is a problem in joint-service publication management because of the excessive time it usually takes for coordination of changes between services. Periodic update cycles with specified coordination suspenses would lessen this problem and enhance the currency and adequacy of joint guidance. Consolidation of several of the regulations would additionally reduce the administrative workload required to maintain these regulations and save time for DPMLs when referencing joint ILS guidance. Regulations are key tools for addressing many of the multiservice related problems, but

several management procedures and techniques can effectively complement the guidance.

EDUCATION / PROCEDURES / TECHNIQUES

Success of virtually any program can be attributed to knowledgeable managers and effective implementation of established procedures. To obtain the maximum benefit of all resources at a minimum overall cost, the DPML must possess the "know how" and have an acceptable course of action (procedures/plan) which outlines the best approach for the numerous events in the life cycle of an acquisition program (6:25). This section provides an assessment of education and training opportunities for DPMLs and discusses procedures/techniques available for DPMLs to overcome/minimize management problems. Areas specifically addressed are: (1) Education and Training; (2) Management Support Systems; (3) Lessons Learned and Staff Assistance; and (4) Management Techniques/Tools. Education is of utmost importance to prepare program managers for and refresh them of their responsibilities and is discussed first (6:26).

Education and Training

Upon assuming command, General Randolph set three basic objectives for AFSC which included "increasing our acquisition expertise by emphasizing professional education" (10:81). Nowhere is this more critical than in the management of ILS in multiservice system acquisitions. Since the nature of the joint DPML's job is to integrate the activities of a myriad of functional experts across service lines, he/she must have a broad perspective and knowledge of the extra complexities involved to reduce the aforementioned management problems. In order to keep step with the rapidly changing defense systems acquisition business, the Defense Systems Management College (DSMC) has undertaken the most extensive restructuring in its history, and acquisition logistics is thoroughly integrated in the DSMC curriculum (6:14).

The DSMC curriculum provides multiservice students with an understanding of ILS support policies, procedures, practices, and management issues as they relate to the defense system acquisition process. Special emphasis is also placed on logistics-related support techniques (i.e. integrated support planning, requirements formulation, and specialized acquisition logistics education) under the broad context of the systems acquisition process. Since DSMC is a multiservice school, the courses are not tailored to service-unique requirements but rather toward DOD in general. The courses enhance the ability of participants to understand and recognize the functional integration necessary throughout the systems acquisition life

cycle. Although there is no specific DSMC course on multiservice problems, many of the ILS courses discuss joint problems via seminars and case studies (6:15). DSMC provides a valuable educational opportunity for multiservice DPMLs to improve their management expertise by gaining an improved perspective of joint service acquisition problems and how to better deal with them. Unfortunately, the Air Force's course for DPMLs located at the Air Force Acquisition Logistics Center (AFALC), Wright-Patterson AFB, Ohio, does not emphasize multiservice DPML program management as does DSMC.

The AFALC DPML curriculum consists of 80 hours which includes over 30 courses on virtually every aspect of ILS and DPML management except multiservice programs. The 2-week course is extremely comprehensive for the AF single-service DPML, and it greatly enhances his/her effectiveness and efficiency. The curriculum also includes a two hour course on current acquisition logistics issues which addresses specific problems due to requirements formulation and planning--two of the major problem areas which typically impact multiservice DPMLs. The AFALC DPML course is an extremely important educational opportunity for all AF DPMLs for improving program management effectiveness; however, it would provide even greater benefits if tailored to include instruction on multiservice management considerations and issues, since a number of DPMLs who attend the course are normally assigned (or will be assigned later in their careers) to joint or multiservice programs. (21:--).

Management_Support_Systems

The Standard Integrated Support Management System (SISMS) was developed and sponsored by the Joint Logistics Commanders to provide a uniform approach to planning and managing the logistics support of multiservice programs. It has been implemented by regulation or instruction in all services, with the AF guidance contained in AFLCR/AFSCR 800-24, Standard Integrated Support Management System. This regulation directs that SISMS be used for all multiservice programs. The intent of SISMS is to define joint operating procedures for those logistics functions which are not standard across services. An abbreviated SISMS table of contents is presented in Table 2. Each chapter describes policies, references, responsibilities, and data items (14:9-4).

As reflected in Table 2, SISMS can provide a comprehensive and detailed management tool for DPMLs which can significantly reduce problems encountered in joint-service management, especially problems due to requirements determination and planning. DPMLs should strongly consider SISMS as the guide for developing support management systems for joint programs--the SISMS approach is more likely to meet the needs and solve problems in multiservice programs than service-peculiar approaches (14:9-4). Unfortunately SISMS is not well known

within the joint logistics environment. The researcher's 1984 survey of over 50 AF multiservice acquisition logistics managers reflected that only 52 percent of the respondents were either familiar with or used SISMS (25:76). Future acquisition logisticians could significantly reduce many of the problems caused by service peculiarities by becoming knowledgeable of and using the SISMS guide.

CHAPTER 1	- INTRODUCTION AND CONCEPT
CHAPTER 2	- INTEGRATED LOGISTICS SUPPORT MANAGEMENT
CHAPTER 3	- LOGISTICS SUPPORT ANALYSIS POLICY AND GUIDANCE
CHAPTER 4	- PROVISIONING POLICY AND PROCEDURES
CHAPTER 5	- SUPPORT EQUIPMENT (SE)
CHAPTER 6	- GOVERNMENT FURNISHED EQUIPMENT (GFE)
CHAPTER 7	- INVENTORY MANAGEMENT PROCEDURES
CHAPTER 8	- PACKAGING/HANDLING/STORAGE/TRANSPORTATION
CHAPTER 9	- FACILITIES DETERMINATION AND PLANNING
CHAPTER 10	- PREOPERATIONAL SUPPORT
CHAPTER 11	- CONTRACTOR ENGINEERING AND TECHNICAL SERVICES
CHAPTER 12	- INTERSERVICE DEPOT MAINTENANCE
CHAPTER 13	- THE TRAINING PROGRAM
CHAPTER 14	- CONFIGURATION MANAGEMENT
CHAPTER 15	- DATA ACQUISITION MANAGEMENT
CHAPTER 16	- TECHNICAL MANUALS ACQUISITION MANAGEMENT
CHAPTER 17	- ENGINEERING DRAWINGS
CHAPTER 18	- DATA EXCHANGE FOR PRODUCT IMPROVEMENT
CHAPTER 19	- DATA ELEMENT DICTIONARY
CHAPTER 20	- BUDGETING AND FUNDING
CHAPTER 21	- PROCUREMENT
CHAPTER 22	- ENGINEERING RESPONSIBILITY (14:9-5)

Table 2. SISMS Table of Contents

Lessons Learned and Staff Assistance

The concept of "lessons learned" application should be a significant element in any acquisition program. Timely and effective application of lessons learned has its greatest potential for dollar savings through the identification of potential problems and implementation of effective action to avoid deficiencies (14:20-1). Lessons learned files are especially applicable to joint DPMLs for improving their management of the multiservice acquisition logistics problems identified in this study. Recommendations and techniques to avoid and/or overcome difficulties encountered in joint requirements determination and planning are especially useful to the DPML in the early phases of the acquisition cycle. Lessons

learned are also an effective tool to reduce the impacts which result from the turnover of management personnel and the resulting loss of continuity.

The AF Lessons Learned Program is managed by AFALC and is governed by AFLC/AFSCR 800-37, Joint AELC/AESC Lessons Learned Program. The AFALC lessons learned organization can provide an effective service to the DPML by providing packages of lessons when requested. Due to the large number of programs that are ongoing at any given time, it is up to the individual DPML to be aware of the lessons learned repository and to request support during key program points. It is also incumbent upon joint DPMLs to provide inputs to the repository to keep the data base current and well referenced (18:--).

Another management aid which should be mentioned as an available tool for DPMLs to alleviate problems associated with multiservice acquisition management is use of staff assistance. The Program Management Assistance Group (PMAG) is an internal consulting service used by the AF for early problem identification purposes. Unlike the Inspector General, the PMAG is solution-oriented, not compliance-oriented. The program manager is the one who requests or initiates PMAG involvement by requesting assistance from the PMAG at HQ AFSC. PMAG functional experts then work with the program office to provide management assistance in the form of findings and assessments which have limited distribution and no formal follow-ups (9:--).

Management Techniques

This chapter concludes with a brief discussion of several management techniques which may be useful to joint-service DPMLs. The techniques discussed are drawn from a literature review and from personal observations of the researcher who served as a DPML for 3 years on a major joint-service weapon system acquisition. Since time is considered by many as the manager's most precious resource, these techniques are provided as a means to save time by eliminating or reducing ILS management problems.

One of the most commonly overlooked and rarely used management tools within a program office are operating instructions (OIs). A well organized and detailed set of OIs provide extremely valuable information on the best approach to handle many issues. OIs are one of the first sets of instructions a newly assigned DPML should familiarize himself with in order to bridge the gaps which result from loss of continuity due to personnel turnover. Another key set of instructions which DPMLs should periodically review and update as necessary are self-inspection (SI) checklists. SI checklists also familiarize a new DPML with functional responsibilities and serve as a checklist to ensure the numerous milestone tasks involved in

planning are accomplished at the appropriate time. Many program managers have found that program continuity books also work well for familiarizing new subordinates with the tasks and nuances of their jobs. A recent article in *Logistics Spectrum* entitled "Auditing Acquisition Logistics" proposed a novel tool to enhance DPML management through the use of audit checklists. Since acquisition logistics is such a complex task which requires the ability to look ahead and ask the right questions, the author proposed and developed an acquisition logistics checklist to serve as a periodic audit (3:13). This extremely comprehensive checklist covers management and organizational issues, system operational requirements, planning, life cycle cost, contractual requirements, source selection criteria, logistics information management, and includes sections for each of the ILS elements. Multiservice DPMLs may use the checklist as is or treat it as a strawman for use in tailoring a checklist to their specific program (4:--).

Most of today's multiservice system program offices have access to a management information system (MIS). An MIS is "an assemblage of facilities and personnel for collecting, sorting, retrieving, and processing information that is used or desired by one or more managers in the performance of management duties" (1:4). The joint DPML can greatly benefit from utilizing an MIS to set up electronic mail to improve interservice communication lines and to facilitate requirements coordination between geographically dispersed resource locations. Management personnel turnover problems could also be compensated for by maintaining corporate memory on a MIS permanent database.

This chapter has presented an investigation of various regulations, education and training opportunities, management procedures, and techniques which are useful to multiservice DPMLs for addressing the inherent problems often experienced in the joint acquisition environment. Chapter Four will summarize this information and provide recommendations and conclusions.

Chapter Four

IMPROVING DPML MANAGEMENT IN MULTISERVICE ACQUISITIONS

Chapter Four presents considerations for improving multiservice DPML management. Many of the inherent problems associated with joint program management can be reduced or eliminated by understanding, applying, and improving the guidance, procedures, and techniques available to DPMLs.

WHAT WORKS WELL?

Much of the guidance reviewed for this study is effective in minimizing or overcoming several of the identified problems within this study. For example, the new multiservice regulation (e.g. AFR 800-43) which was directed by the JLC Joint Policy Coordination Group is undergoing final coordination and will be published shortly. This regulation is a significant improvement over past joint guidance and should overcome many of the problems associated with coordinating requirements and inadequate planning. It is augmented by AFSCP/AFLCP 800-36 which is extremely useful in providing a detailed compendium of all the services' acquisition logistics organizations and key points of contact. This compendium is an especially valuable reference for minimizing the problems caused by geographically dispersed resources and turnover of personnel. Finally, although AFSCP/AFLCP 800-34, Acquisition Logistics Management, devotes little if any attention to multiservice management, it does provide the guidance for lessons learned. The lessons learned program and database are extremely beneficial to all DPMLs (single or joint-service), and most helpful in overcoming problems encountered due to inadequate planning during the early phases of a program. Another area which has improved recently and provides benefits for joint DPML management is education and training.

DSMC has recently placed greater emphasis on teaching all aspects (including problems) associated with joint-service acquisition logistics. DSMC curriculum changes which placed increased attention on ILS subjects, provide DPMLs who attend the course the knowledge to better address coordination of joint requirements, inadequate planning, and problems caused by poor interservice communication. DPMLs assigned to or destined for assignment to a joint or multiservice program office should make

every effort to attend the appropriate DSMC courses to increase their knowledge and understanding. This will better equip them to meet the inherent complexities unique to the joint acquisition environment.

Several available management procedures and techniques, while nondirective in nature, also provide DPMLs an array of effective tools to address many of the aforementioned problems. This study discussed implementation and use of program operating instructions, self-inspection checklists, continuity books, and audit checklists; all of which can serve as valuable management aids if properly maintained and used. Implementation and use of the Standard Integrated Support Management System (SISMS) Guide can also alleviate several of the problems discussed in this study. Management information systems are especially helpful in overcoming the problems due to geographically dispersed resources and ineffective interservice communication by providing an exchange of data and information between offices using electronic mail. Finally, many DPMLs should consider and take advantage of staff assistance. The Program Management Assistance Group (PMAG) is well equipped to provide insight and help to improve overall management effectiveness and efficiency using a low threat nondirective approach. All of the above techniques, procedures, and regulations are well suited to enhance the multiservice DPML's effectiveness and efficiency--the key being a greater understanding of how to best apply these "tools" to overcome inherent problem obstacles.

AREAS FOR IMPROVEMENT

Several of the management procedures, techniques, and regulations discussed in this study are either inadequate or do not properly address many of the multiservice issues affecting joint DPMLs. While some of these shortcomings are the responsibility of higher headquarters, others can be resolved by individual DPMLs. Regardless of which category these inadequacies fall in, having knowledge of them and taking appropriate action to minimize their impacts will improve the DPMLs overall effectiveness and efficiency.

As stated earlier, multiservice regulations have improved significantly in their ability to provide sound and thorough guidance for multiservice requirements coordination and planning. These regulations, however, along with the current AF and DOD joint directives, could be significantly enhanced if standardized and consolidated. Much of the information in the different regulations is either redundant, conflicting, or confusing because of parochial service terminology. Better cross-referencing of all joint guidance would improve DPML efficiency by facilitating reference and thereby saving time. Additionally, establishing revision cycles with specific suspenses could

provide timely updates on those regulations requiring coordination by more than one service and would in turn improve their currency and usefulness. Most importantly, it is essential that the DPML be knowledgeable of what is available in joint guidance and ensure that he/she has timely access to the myriad of multiservice regulations and directives.

One way that multiservice DPMLs can become more knowledgeable of joint guidance is through education and training. Although DSMC has made great strides in improving curriculum in this area, not all AF DPMLs normally have the opportunity to attend this school. Conversely, most AF acquisition logistics managers do attend the AFALC DPML Course. As mentioned in Chapter Three, this course's curriculum does not include any subjects covering multiservice program management and/or associated considerations (e.g. problems). Including some hours of instruction on multiservice ILS management in the AFALC DPML Course would appear to greatly enhance the AF joint DPML's understanding of how to overcome many of the problems previously discussed in this study.

Procedures and innovative techniques must be understood and appropriately applied if the DPML is to be effective in fulfilling his/her responsibilities. Since procedures and techniques are often used or ignored at the discretion of individual managers (i.e. DPMLs), two key points should be re-emphasized under "areas for improvement." The first is that many of the procedures and/or techniques discussed in this study are well suited to address joint acquisition logistics problems but must be understood and utilized to be effective. The second point is that no one procedure or technique will necessarily satisfy all or even a number of the problems. The successful DPML will be the one who is flexible, innovative, and calls upon a variety of management tools to address the inherent problems caused by the complex nature of multiservice program management. Table 3 summarizes the guidance, procedures, and techniques which are either available or recommended as most appropriate for each of the five validated problems of this study.

PROBLEM	SOLUTIONS/RECOMMENDATIONS
1. Coordinating Requirements	<p data-bbox="806 1486 1278 1514">Multiservice Regulations:</p> <ul style="list-style-type: none"> <li data-bbox="844 1520 1166 1547">● Use AFR 800-43 <li data-bbox="844 1551 1318 1579">● Use AFLCP/AFSCP 800-36 <p data-bbox="806 1614 1235 1642">Education and Training:</p> <ul style="list-style-type: none"> <li data-bbox="844 1646 1367 1707">● Attend Defense Systems Management College (DSMC) <li data-bbox="844 1711 1351 1738">● Revise AFALC DPML Course

Table 3. Problem Solution Summary

PROBLEM	SOLUTIONS/RECOMMENDATIONS
1. Coordinating Requirements (continued)	<p>Management Support Systems:</p> <ul style="list-style-type: none"> ● Implement SISMS Guide ● Use Management Information Systems (MIS) ● Use Electronic Mail <p>Procedures/Techniques:</p> <ul style="list-style-type: none"> ● Reference Lessons Learned (AFLCP/AFSCP 800-36) ● Utilize Staff Assistance ● Operating Instructions, Self-Inspection/Audit Checklists
2. Ineffective Interservice Communication	<p>Multiservice Regulations:</p> <ul style="list-style-type: none"> ● Reference AFSCP/AFLCP 800-36 (POC Compendium) <p>Education and Training:</p> <ul style="list-style-type: none"> ● Attend DSMC <p>Management Information Systems:</p> <ul style="list-style-type: none"> ● Use Electronic Mail <p>Procedures/Techniques:</p> <ul style="list-style-type: none"> ● Reference Lessons Learned
3. Personnel Turnover (Continuity)	<p>Multiservice Regulations:</p> <ul style="list-style-type: none"> ● Use AFSC/AFLCP 800-36 ● Use AFR 800-34 ● Cross-reference regulations <p>Education and Training:</p> <ul style="list-style-type: none"> ● Attend DSMC ● Attend AFALC DPML Course <p>Procedures/Techniques:</p> <ul style="list-style-type: none"> ● Freeze assignments beyond critical milestones ● Reference Lessons Learned ● Operating Instructions, Self-Inspection and Audits ● Utilize PMAG ● Continuity Books

Table 3. Problem Solution Summary

PROBLEM	SOLUTIONS/RECOMMENDATIONS
4. Inadequate Planning	<p data-bbox="839 310 1285 338">Multiservice Regulations</p> <ul data-bbox="877 344 1344 468" style="list-style-type: none"> ● Use AFR 800-43 ● Use AFSCP/AFLCP 800-36 ● Consolidate and cross-reference regulations <p data-bbox="839 501 1265 529">Education and Training:</p> <ul data-bbox="877 535 1377 621" style="list-style-type: none"> ● Attend DSMC ● Revise AFALC DPML Course curriculum <p data-bbox="839 655 1339 682">Management Support Systems:</p> <ul data-bbox="877 688 1323 747" style="list-style-type: none"> ● Implement SISMS Guide ● Utilize MIS <p data-bbox="839 781 1245 808">Procedures/Techniques:</p> <ul data-bbox="877 814 1433 961" style="list-style-type: none"> ● Use Operating Instructions, Self-Inspection/Audit Checklists ● Utilize PMAG ● Reference Lessons Learned
5. Geographically Dispersed Resources	<p data-bbox="839 1031 1301 1058">Multiservice Regulations:</p> <ul data-bbox="877 1064 1344 1087" style="list-style-type: none"> ● Use AFSCP/AFLCP 800-36 <p data-bbox="839 1121 1339 1148">Management Support Systems:</p> <ul data-bbox="877 1155 1356 1178" style="list-style-type: none"> ● Use MIS Electronic Mail <p data-bbox="839 1211 1245 1239">Procedures/Techniques:</p> <ul data-bbox="877 1245 1400 1304" style="list-style-type: none"> ● Reference Lessons Learned ● Use MIS

Table 3. Problem Solution Summary

RECOMMENDATIONS AND CONCLUSIONS

This study reviewed and discussed five unique problems which commonly confront multiservice DPMLs. Several Air Force, multiservice, and DOD regulations were then investigated to determine how effective and/or efficient they were in addressing each of the five validated problems. Management procedures and techniques were also researched to find other methods or "tools"

which DPMLs could use to address the problems. Several conclusions and recommendations can be drawn from the research.

Knowledge of the many aspects of multiservice acquisition logistics was an overriding principle for overcoming most of the problems identified in this study. DSMC provides an excellent course for acquisition program managers which specifically addresses joint ILS issues and problems. The AF DPML course managed by AFALC is another valuable training opportunity but has limited applicability to multiservice issues. A curriculum revision to include a joint-service course would greatly enhance the overall effectiveness of this DPML course.

The guidance reviewed for this research indicated that the most effective regulation for addressing the key issues of this study will be the new joint regulation entitled Logistics Management and Execution of ILS for Multiservice Acquisitions. This regulation is by far the most comprehensive of all the guidance reviewed and specifically addresses many of the common issues and problems which confront joint DPMLs. Most of the other regulations reviewed are rather broad in application and could be improved by consolidating their redundancy and improving cross-referencing between them.

Finally, several management procedures and techniques surfaced with the potential to reduce or eliminate joint ILS problems and are listed in Table 3. While solutions or recommendations are presented for each of the problems, it is important to recognize that multiservice acquisition logistics is dynamic, and many of the recommendations should be tailored to different situations and problems.

Multiservice Deputy Program Managers for Logistics will continue to face numerous management problems due to the inherent complexities involved when more than one service procures a weapon system. It is therefore essential that joint DPMLs understand and apply the guidance, procedures, and techniques which can minimize or eliminate these problems if they are to be effective and efficient in fulfilling their responsibilities.

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