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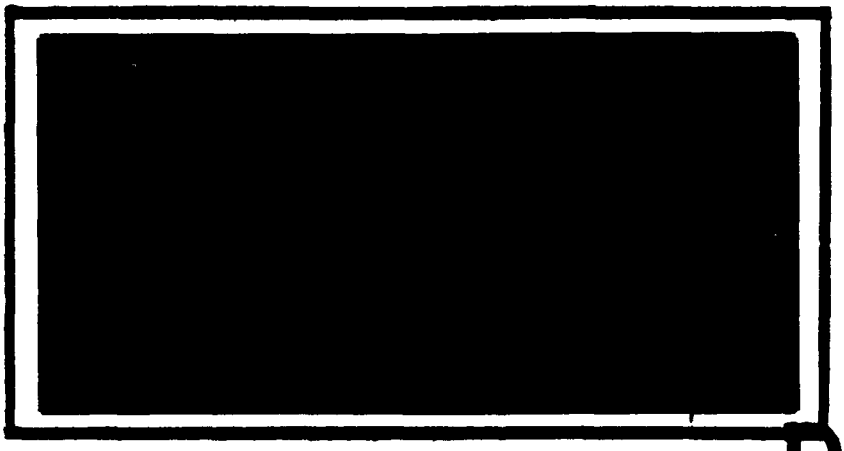

DEPARTMENT OF THE AIR FORCE

AIR UNIVERSITY

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Wright-Patterson Air Force Base, Ohio

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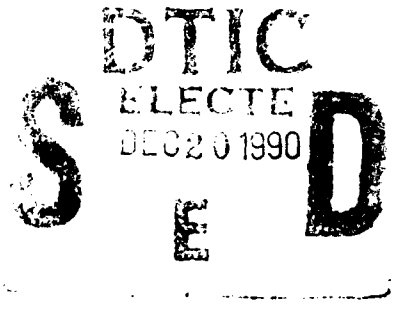
AFIT/GSM/LSY/90S-13

THE IMPACT OF THE ACQUISITION STRATEGY PANEL ON PROGRAM EFFECTIVENESS

THESIS

Scott C. Hardiman, Captain, USAF

AFIT/GSM/LSY/90S-13



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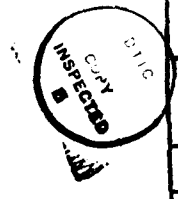

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AFIT/GSM/LSY/90S-13

THE IMPACT OF THE ACQUISITION STRATEGY PANEL ON PROGRAM EFFECTIVENESS

THESIS

Presented to the Faculty of the School of Systems and Logistics

of the Air Force Institute of Technology

Air University

In Partial Fulfillment of the

Requirements of the Degree of

Master of Science in Systems Management

Scott C. Hardiman, B.S.

Captain, USAF

September 1990

Preface

This research was conducted to shed some light on the Air Force's Acquisition Strategy Panel process. From the research, I found that a lot of the early grumblings about the ASP had given way to the feeling that the ASP was something the Air Force was doing right. This success can be traced to the program managers and panel members involved with the process and their genuine desire to "do it right the first time." I hope that this research will serve as an example for other government agencies involved in complex acquisitions. A glossary of acronyms used throughout this document is included as Appendix G.

A thesis is never written in a vaccuum. Accordingly, their are many people to whom I am indebted. The first is my thesis advisor, LtCol Curtis Cook, without whose assistance this document would not have been possible. The Headquarters AFSC ASP Secretariat, headed by Ms Lilian Stone, was of invaluable assistance in identifying the program offices which had been through the process and the documentation related to the ASP process which were considered in the research. I would also like to thank Mr Ed Martin and Mr Jim Witham of the Aeronautical Systems Division ASP Secretariat, and LtCol Pam Casey and her staff of the Electronic Systems Division ASP Secretariat. And I would like to express my sincere thanks to the men and women who took time out of their schedules to participate in the formal interviews.

And finally, I would like to thank a fine young man, Mr C.J. Davis, and the Big Brothers and Big Sisters of Greater Dayton for giving me something to believe in during my stay at AFIT.

Scott C. Hardiman

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ABSTRACT

The Acquisition Strategy Panel (ASP) was implemented by Air Force Systems Command (AFSC) to assist program managers developing strategies to acquire new weapon systems. When it was first implemented, the perception of many program managers was that it was just another bureaucratic exercise. Based on this perception, and amidst calls for streamlining the acquisition process, a thorough examination of the ASP's value was in order. To this end, 29 program managers and panel members with first-hand knowledge of the ASP process were interviewed. Five-point Likert opinion scales were used throughout the structured interviews. The data refuted the early impressions of the ASP by revealing that its recommendations were being implemented, that these recommendations were having positive impacts on the programs involved, and that the ASP was considered a valuable tool by the majority of the respondents. However, this value was primarily of a qualitative nature. The research also revealed several areas in the process which could be improved. These included integrating the ASP into the Program Executive Officer structure and delegating responsibility for production ASPs to lower levels. A total of 14 recommendations were made which have the potential to make a good process better.

THE IMPACT OF THE ACQUISITION STRATEGY PANEL ON PROGRAM EFFECTIVENESS

I. Introduction

One of the first steps in the development and procurement of a new weapon system, once the need for such a system has been established, is the development of an acquisition strategy. The strategy provides an organized and consistent approach to meeting program objectives within known constraints. A sound strategy minimizes technical, schedule, and cost risks in order to achieve program stability. The acquisition strategy develops technological options, explores design concepts, and plans and conducts acquisition activities to attain balanced cost effectiveness. Because of its importance to the overall program, it must be developed as early in the program life cycle as possible. (27:3-1)

Air Force Systems Command (AFSC), the major command charged with procuring new weapon systems for the US Air Force, implemented a process known as the Acquisition Strategy Panel (ASP) to assist the program manager in the development of the program's acquisition strategy. The purpose of the ASP was to bring as much expertise and experience as possible to bear in planning the acquisition strategy. The total program was examined by experts in all of the functional fields of acquisition to insure that the strategy was workable, addressed risk, and was appropriate for the type of work to be performed.

General Issue

As conceived, the ASP served as a valuable program management tool by ensuring that all relevant issues that had the potential to affect a

program were explored. In practice however, some critics contended that the ASP process had become just another bureaucratic square-filling exercise which the program manager had to endure on the way to fielding a weapon system. The truth lies somewhere between these two extremes. The purpose of this thesis was to determine if the ASP was living up to its initial goals. With the demand for streamlined procurement practices growing every day, and with realignment of the procurement hierarchy underway, the contribution of the ASP to program success is subject to scrutiny.

Problem Statement

With the goal of determining whether or not the ASP should be continued or improved, the following specific question had to be answered. What impact did the ASP have on program effectiveness? If the answer to this question showed a negative or marginal impact, recommendations for improving the process or arguments for discontinuance of the ASP altogether would be advanced.

Research Objectives

Preliminary discussions with personnel who have been involved with the ASP process revealed a generally negative picture of the usefulness of AFSC conducted Acquisition Strategy Panels. To develop a more complete and accurate portrayal of the situation, the following investigative questions were asked of personnel with first-hand knowledge of the process.

1. How often was a program manager's strategy redirected by the ASP? What was the overall quality of the recommendations received?

2. Once recommendations had been received, did program managers implement them? Did the process or implementation of the recommendations have an effect on contract award schedule?

3. If the recommendations were implemented by the program manager, did they result in positive, negative, or neutral impacts to the overall success of the program?

4. What kinds of strategic help were program managers getting? What kinds of strategic help did program managers want or need?

Scope and Limitations

This thesis will examined the impact of AFSC-conducted ASPs on program effectiveness. Because of a lack of data in this area, the research was based on interviews with personnel were involved in the process. In practice, the ASP was conducted at three levels. For the purpose of this thesis however, only those personnel involved in the highest level ASPs, or "joint ASPs," were interviewed. A joint ASP is one which is co-chaired by Headquarters AFSC and the program's product division. Personnel involved in lower level ASPs were not interviewed.

Background

The 1980's have seen tumultuous change in the way that the Department of Defense (DoD) and its component services buy new weapon systems and the spare parts to support them. These changes have been brought about because of the acquisition horror stories of the early

80's such as a $9600 allen wrench for the F-16, a $7660 coffee pot for the C-5 transport that could survive conditions which would kill the aircraft's flight crew, a $110 diode estimated to actually cost 9 cents, a $700 hammer, bolts at $17.59 each, and a "toilet seat" for $318 (16:61). With these stories, it is no wonder that there have been calls for changes in DoD procurement policy.

Part of the problem may lie in the complexity of the DoD procurement structure. The defense acquisition system is an extremely large business enterprise involving thousands of personnel, billions of dollars, myriads of procedures and regulations, and the intangible aspect of politics. Management oversight in any form contributes to this complexity. Some of this oversight is necessary and contributes to the overall success of the program while some does not. With all of the calls for acquisition streamlining and reductions in budgets and manpower, the usefulness of the additional oversight created by AFSC-conducted ASPs is questionable.

There has been a lot of emphasis of late on the development of acquisition strategies but little on the actual execution of these strategies (30:59). In his thesis on acquisition strategy development, Bissett recommended that additional study should be conducted to ". . . assess the impact of the program documentation and review process . . . on the strategy options available to the program manager" (3:71). This thesis will attempt to bridge the gap between the planning and the

execution of strategies by focusing on acquisition strategy formulation via AFSC's ASP process and its impact on program effectiveness. The next chapter will probe the role of acquisition strategy planning in program management, the ASP process in detail, and its impact in view of the recent reform issues surrounding defense procurement.

II. Discussion of the Literature

This chapter examines the literature concerning the role of the Air Force (AF) acquisition strategy panel process in the acquisition of major AF weapon systems. First, a general description of the Department of Defense (DoD) major system acquisition process will be given and significant DoD and AF guidance in this area will be highlighted. Next, a look at acquisition strategy development and execution will be taken. This will be followed by a detailed description of the AF's acquisition strategy panel (ASP) process. Finally, major initiatives which may affect future AF acquisition activities will be examined.

Overview of Defense Acquisition

To understand the role of acquisition strategy in the development and fielding of new weapon systems, one must have an understanding of the defense acquisition process. The acquisition of new weapon systems for the nation's military forces has been taking place since the founding of the nation. The term "acquisition" itself, however, was only adopted by DoD in the 1970's to describe the total process of planning and management required to meet the mission needs of DoD (29:20). According to the Federal Acquisition Regulation (FAR), acquisition is defined as

> . . . the acquiring by contract with appropriated funds of supplies or services by and for the use of the Federal Government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, demonstrated and evaluated. (33:Para 2.101)

This definition implies that acquisition is an extremely large process. Indeed, DoD acquisition involves billions of dollars and thousands of personnel each year. The majority of this business is

conducted through large contracts with private firms. Sherman found that the DoD typically is responsible for over three quarters of the federal dollars awarded by contract each year (29:18). Most of this money was spent through a relatively small number of high value contracts.

Accordingly, the DoD acquisition process centers around the awarding and monitoring of contracts with private industry. The process can be broken down into four major tasks for the government's responsible procuring agency. The first of these tasks is the development of an acquisition strategy. This topic will be covered in much more detail in the next two sections of this chapter. Once the strategy has been developed, a solicitation is prepared which seeks sources for the product or service required by the government. Following the solicitation, the source is selected from the firms responding with proposals to fulfill the contract and the contract is awarded. Upon contract award, the procuring agency's task becomes one of administering the contract and monitoring the contractor's performance. Figure 1 illustrates this process. These tasks take place throughout the acquisition life cycle of the system or service being procured and are guided by DoD directives and AF regulations. (31:19-27)

Current DoD and Air Force Acquisition Policy. Major DoD acquisition policies are set forth primarily in DoD Directive (DoDD) 5000.1, Major and Non-Major Defense Acquisition Programs, and DoD Instruction (DoDI) 5000.2, Defense Acquisition Program Procedures. Air Force acquisition policy is established in Air Force Regulation (AFR) 800-2, Acquisition Program Management (along with Air Force Systems

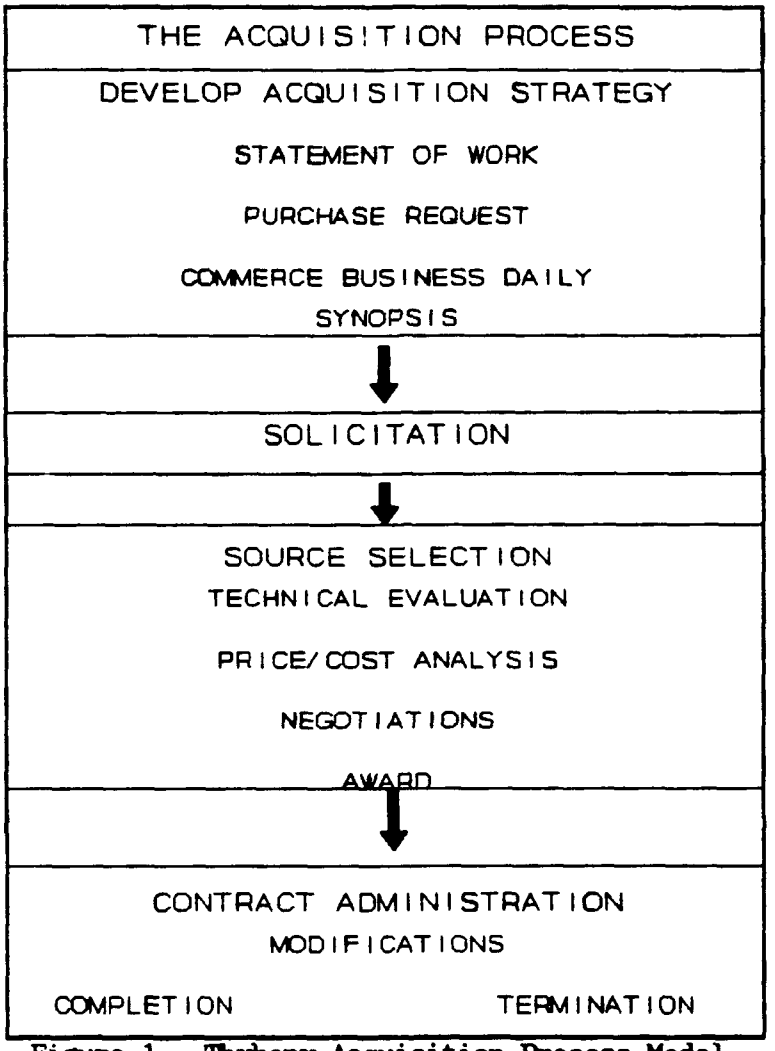

Figure 1. Thybony Acquisition Process Model

Command Supplement 1 to AFR 800-2). These documents have their roots in the Federal Acquisition Regulation (FAR), implemented in April 1984, which guides all federal procurement actions. Numerous other directives and regulations exist which establish more detailed policies. This review will examine only the major policy directives and regulations.

The major DoD directives related to acquisition policy include many of the recommendations of the President's Blue Ribbon Commission on

Defense Management (the Packard Commission).[1] DoDD 5000.1 sets forth the major policies for defense acquisitions while DoDI 5000.2 establishes specific procedures.

The Packard Commission Report called for the streamlining of the defense acquisition bureaucracy and the elimination of wasteful processes where possible, among other things. DoDD 5000.1 streamlines the acquisition chain of command for major programs[2] by imposing only two management levels between the program manager and the Defense Acquisition Executive (DAE). The DAE serves as ". . . the principal advisor to the Secretary of Defense on all matters pertaining to . . ." DoD acquisition programs. Between the program manager and the DAE are the Service Acquisition Executive (SAE), who serves as the top acquisition official in each military branch, and the Program Executive Officer (PEO), who is responsible for administering several major and non-major acquisition programs within the military branch. A program manager (PM) is responsible for managing a specific program within a military branch. The directive also calls on all military branches to streamline their acquisition bureaucracies for both major and non-major programs. It encourages only one management tier between the program manager and the SAE for those programs which do not include DAE oversight. (10:2-3)

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[1]The Packard Commission was chartered in 1986 by the Reagan Presidential Administration to examine and recommend changes to the DoD acquisition process (6:30).

[2]A DoD major program is generally defined as a program that will require at least $200 million in research and development funding and/or a total of at least $1 billion in procurement funding, or other programs as designated by the Secretary of Defense (8:2).

For the Air Force, this has meant removing Air Force Systems Command (AFSC) from the program management chain of command. The PEOs for the Air Force will be assigned to Headquarters USAF while the SAE will reside in the office of the Secretary of the Air Force. AFSC will be concerned primarily with providing the infrastructure and resources the program managers need to adequately manage their programs. Much of this change is just starting to take place as of the writing of this thesis. It remains to be seen how the details will be worked out. This does not, however, change the acquisition life cycle of a major system.

Major System Acquisition Cycle. The current acquisition cycle model is described in DoDD 5000.1. It was developed in 1976 by the Office of Federal Procurement Policy (OFPP) and was implemented DoD-wide with the publication of Office of Management and Budget Circular A-109 that same year. The OFPP model was based upon input received from the Commission on Government Procurement in 1972. (29:224)

Figure 2 illustrates this cycle. The process consists of five distinct phases separated by milestone decision points. It begins with the identification of a specific need for a new system. Once the need has been established, the concepts for meeting the need are explored and defined. The more promising concepts are then demonstrated and validated to determine feasibility. Feasible concepts progress to full scale development in preparation for production. Next, the developed concepts are produced, followed by fielding, and in-service support. Finally determination for retirement, modification or replacement of the system is made. These phases are tied together through continuous analysis of evolving mission requirements. Mission analysis is used to identify deficiencies in a mission area and to find more effective ways

to perform that mission. The milestone decision points, along with criteria established for each point in DoDI 5000.2, are used by the Defense Acquisition Board (DAB) to make a recommendation to the Defense Acquisitiion Executive (DAE) as to whether or not the program should proceed into the next phase of the acquisition. It should be noted that at the time of this writing the DoD acquisition life-cycle was being revised to eliminate milestone V. This revision, however does not affect the overall philosophy of the life-cycle model. (10:3-4)

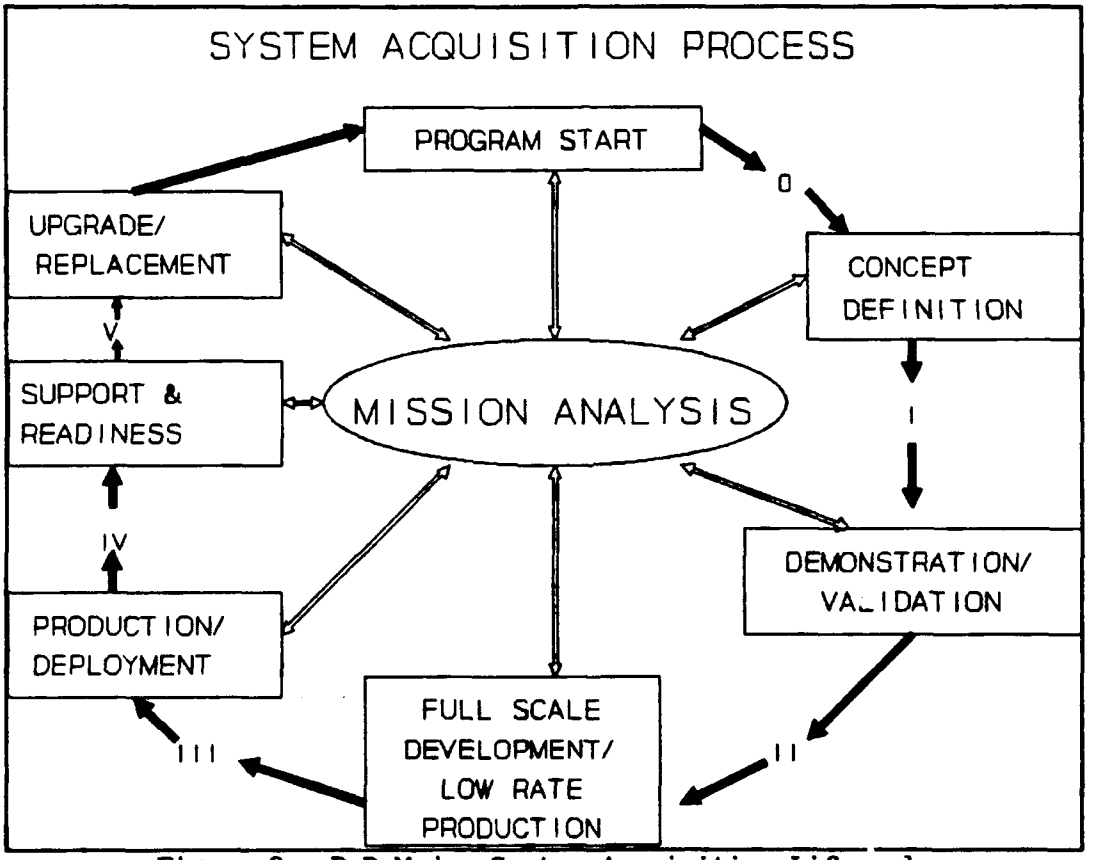

Figure 2. DoD Major System Acquisition Lifecycle

This model was designed to get top level attention on mission need and goal determination; to integrate the needs identification, budgeting, contracting and management processes; to get early direction

for research and development (R&D) efforts; to improve private sector innovation in meeting the nation's needs; to avoid premature commitment to full scale development (FSD) and production; and to provide for the early communication with Congress by relating needs to acquisition. (29:224)

The way these life cycle phases are conducted for each system ". . . delineates a unique and complex acquisition strategy" (29:224). The role of sound acquisition strategy development is discussed in the next section.

Developing Strategies for the Acquisition of Major Systems

The word "strategy" implies long range planning taking all possible scenarios into account. Armies use strategies in planning wars and battles; businesses use strategies in planning long term investments and product lines. And so too must the program manager use strategies to plan for the acquisition of modern weapon systems. These program management strategies are known as "acquisition strategies" in DoD procurement.

What is an Acquisition Strategy? The term "acquisition strategy" itself means different things to different people. Indeed, the Acquisition Strategy Guide published by the Defense Systems Management College states that "there is no common working definition of acquisition strategy or any consistent agreement on its structure and composition, nor is there comprehensive guidance on how to proceed in developing and executing an acquisition strategy" (27:1-1). This lack of a common definition causes ". . . part of the problem of understanding acquisition strategy" among defense procurement

specialists (34:10). In 1976, OMB Circular A-109 defined strategy formulation as the ". . . initial task of a program manager and as a task that requires thinking through all factors relating to the program and treating each so that all program objectives will be met" (29:227). The FAR defines it as the "program manager's overall plan for satisfying the mission need in the most effective, economical, and timely manner" (33 :para 34.004). The DoD defined it in 1980 as "the conceptual basis of the overall plan that a program manager follows in program execution" (27:1-1). A broad definition has also been suggested by Swanson who states that "the term 'acquisition strategy' is simply a more formal name given to the process that every individual . . . uses when deciding how to convert available resources into a desired product or service" (30:59). It has also been referred to as the total roadmap which guides the program manager in the execution of a program (34:11). This last statement will serve as the working definition of acquisition strategy for this thesis.

At this point, it is important to note the difference between an "acquisition strategy" and a "procurement strategy." The distinction lies in their respective objectives. A procurement strategy is concerned with obtaining an optimum source selection while an acquisition strategy is concerned with the broader objective of satisfying mission needs. They are interdependent processes with procurement strategy being a subset of acquisition strategy. (29:216)

While the definition lacks specificity, there is no lack of regulatory reference on the subject. DoDD 5000.1 requires tailored acquisition strategies to identify trade-offs between cost and performance, to identify cost drivers and producibility factors, and to

develop the appropriate business and technical approaches for these issues (10:5-6). DoDD 5000.2 states that the acquisition strategy will be addressed in the System Concept Paper at Milestone I, which is the point at which the program progresses into the Demonstration/Validation development phase (9:7). Guiding Air Force procurement activities is AFR 800-2, which requires that the strategy be documented in the Program Management Plan which is an initial planning document for AF programs (7:4).

The Purpose of Acquisition Strategies. With such a broad definition, the acquisition strategy serves as a road map of the acquisition process for a program, an overall approach to meet broad program objectives, a conceptual framework for conducting the acquisition of a system, and as an integrating mechanism against which functional and business considerations are planned (34:13). The FAR states that the purpose of an acquisition strategy is to provide a

> . . . process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated through a comprehensive plan for fulfilling the agency need in a timely manner and at a reasonable cost. It includes developing the overall strategy for managing the acquisition. (33:para 7.101)

The acquisition strategy is also used as a consensus building tool. It provides a focus for the program team and serves as an agreement between the program manager and the chain of command on how the acquisition will be conducted. Thinking through the total program early on during the development of the strategy can "bring about an objective appraisal in an effort to find the most economical, effective, and efficient manner in which to proceed" (29:313). Wickert, in his Air Command and Staff College Student Report, echoes this thought by stating that a well developed strategy ". . . can provide the basis for

structuring the optimum approach to conduct the business of acquiring new weapon systems" (34:1).

Facing projected cuts in the defense budget and high public interest in stories of mismanagement of programs by the military services, the need for military managers to practice sound management is imperative. A program that starts off on the wrong footing will face increasingly large obstacles. The way to optimize management of a program is to develop a sound acquisition strategy early on and update it as the program progresses through the system life cycle. Wickert found that, among the DoD contractors he interviewed, many believed that sound strategies on the part of the government were key to the success of a program. Indeed, not developing a strategy can lead to crisis management and functional discord among the program team. In an era of limited acquisition resources, "a sound acquisition strategy is paramount to best employ {those} limited resources and solve the problems a program manager faces." (34:1-5)

Requirements for an Acquisition Strategy. To be effective, an acquisition strategy must contain certain elements. These elements encompass a broad range of issues. In his book on government procurement, Sherman states that

> . . . strategic matters require integrative thinking that encompasses market trends, economic forces, public policy developments, source availabilities, source development, competition, and productivity issues, technological change, ethical concerns, economy and efficiency of the process, and the general problem of information flow across organizational boundaries. (29:5)

Thybony breaks down acquisition strategy development and planning into four general areas with the ultimate goal of providing an advance comprehensive plan developed to fill an agency need via contract. These

general areas are the determination of government requirements, the development of a requirement specification, the preparation of a purchase request, and documenting the strategy. Depending on the phase of the program, some or all of the items listed are involved during strategy development. (31:19-22)

Determination of Government Requirements. The determination of government requirements consists of activities such as mission analysis, development of a need statement, the establishment of a contracting office liaison, starting procurement planning, formulating and approving the program, preparing a preliminary cost estimate, preparing the budget authorization and appropriation, and selecting and approving the project. (31:19-20)

Requirement Specification. Development of the requirement specification involves establishing the program management team, developing the statement of work, and developing the functional, performance and design specifications. In addition, a list of required federal and military specifications is prepared, quality and quantity requirements are established, and contractor delivery and performance requirements are established. Other requirements established at this time include special requirements for financial reporting, subcontracting, technical data, transportation, government furnished property, spares provisioning and industrial security. (31:20)

Purchase Request. The purchase request will include information on all of the acquisition requirements, the source list or sole source justification, proposal evaluation and source selection criteria, contract cost estimates, and the citation of funds to be committed. (31:20)

Documentation. Documentation of the acquisition strategy occurs in several reports. Initial strategy is included in the original justification for the program while the program manager's overall strategy for the entire life-cycle of the program is contained in the Program Management Plan (PMP). However, the strategy for the current acquisition phase of the program is found in two important documents. These documents are the Acquisition Plan, prepared by the program manager, and the Procurement Plan, prepared by the contracting officer. (31:21,97)

The Acquisition Plan. The document that discusses the program's overall acquisition strategy for the current acquisition phase is the Acquisition Plan. The requirements for this document are enumerated in section 7.105 of the FAR. This plan is broken down into two major areas, the acquisition background and objectives portion, and the plan of action. (31:97)

The background and objectives portion includes descriptions of the Statement of Need; applicable conditions for the contract; costs, including life cycle cost, design-to cost, and the application of should cost; product capability and performance requirements; delivery or performance period requirements; trade-off analyses; and projected risks. (31:97)

The plan of action describes potential sources; the use of competition; source selection procedures; contracting considerations; budgeting and funding; the product itself; priorities, allocations and allotments; contractor versus government performance requirements; management information requirements; make or buy considerations; test and evaluation; logistical considerations; required government furnished

property and information; environmental considerations; security considerations; significant program milestones and the major participants in the program. (31:97)

Procurement Plan. The contracting officer prepares the procurement plan, which simply documents the procurement portion of the acquisition strategy. This plan includes information concerning the review of the procurement request, the availability of sources, the review and approval of the proposal evaluation and source selection criteria, the source selection plan, the determination of competitive procedures, the selection of the type of contract, the assessment of market conditions, the determination for set-asides, the subcontracting requirements, and the potential for involvement of small and disadvantaged businesses (8A). It may also include the requirements for acquisition from mandatory sources, the procurement history of the item being purchased, an identification of long lead items, and the availability of government furnished property (GFP). In addition, it contains first article acceptance requirements, financial alternatives, identification of special contract provisions and deviations from the FAR, assignment of contract administration functions, and schedule completion times for each task performed under the contract. (31:20-22)

Characteristics of Sound Acquisition Strategy. Although the regulatory guidance specifies that acquisition strategy planning will be done, there is no official guidance on how it will be done. Several unofficial manuals have been published, however, which attempt to describe the formulation and salient features of the acquisition strategy. The National Contract Management Association's Acquisition

Planning for Major Systems states that, in addition to identifying program options, the strategy must also address the management processes that control the acquisition cycle (26:58). Part of the importance of the acquisition strategy lies in the fact that parts of it must be "translated into definitive requirements which can be relayed to industry through contractual agreements" (26:58).

The development of an appropriate acquisition strategy is considered fundamentally important because it ultimately leads to the program manager's attainment of program objectives. The strategy provides an organized and consistent approach to meeting program objectives within known constraints. A sound strategy minimizes technical, schedule, and cost risks in order to achieve program stability. The acquisition strategy develops technological options, explores design concepts, and plans and conducts acquisition activities to attain balanced cost effectiveness. Because of its importance to the overall program, it must be developed as early in the program life cycle as possible. (27:3-1)

As a minimum, the acquisition strategy should address three major concern areas while meeting five essential criteria. The concern areas are strategic, which includes national objectives, the nature of the threat, the need for the program, the technology base, the program's objectives, constraints and priorities, the industrial and political market factors, and critical program issues; technical, which includes design, test and evaluation, production, and deployment; and resource, which includes the personnel and organization required to manage the program, the schedule, the business and financial factors, the management information system, and facilities. (27:3-5-9)

The five criteria that the strategy must meet in order to be effective are realism, stability, resource balance, flexibility, and controlled risk. Realism results in program objectives which can be attained. Without realism, a program may find itself in constant turmoil and crisis and possibly in failure. Realism is achieved by doing as much homework as possible on the characteristics and environment and planning accordingly.

Stability does not allow internal and external influences to seriously disrupt the program. Instability can lead to reduced confidence in program estimates and assumptions, increased government and contractor risk, and reduced morale and motivation. Stability can be achieved through commitment, direction, and advocacy. (27:3-9-14)

Resource balance results in a program in which all of the risks are approximately equal. A lack of balance leads to the overemphasis of one objective at the expense of another, and could ultimately result in not meeting that other objective. Balance can be achieved through the allocation of resources in a way which attains the required level of capability without changes in resource requirements. (27:3-15-16)

Flexibility is the program's ability to absorb changes and failures without adversely effecting resource requirements. Inflexibility can result in an unbalanced and unstable program, unrealistic approaches and spiraling management problems. Flexibility can be achieved by identifying early on those areas where changes and failures are highly probable and developing contingency plans. (27:3-16-17)

Risk is a measure of the probability and consequence of not achieving a defined program goal. Controlling risk can be accomplished

by structuring the acquisition strategy to identify hazards and allow for the development of safeguards to overcome them. (27:20)

A program manager who can develop an acquisition strategy early on which addresses the major concern areas while meeting the essential criteria of good strategy will be well along the way to achieving program success. The sheer scope of the strategy, however, indicates that it cannot be developed in a vacuum. The program manager must fully utilize the functional experts available to him or her. In addition corporate expertise and experience can be brought to bear to assist the program manager by allowing for the input of senior level acquisition personnel. The Air Force has adopted the Acquisition Strategy Panel approach to do this.

Implementation Issues. The information presented in previous sections of this chapter point out the complexity of the acquisition strategy. This complexity has led to several problems in implementation. According to Bissett, in his Naval Post Graduate School thesis, a broad acquisition strategy for most major programs is developed during preparation of the Mission Need Statement (MNS). The MNS is developed at the headquarters level of the military branch and is done prior to the assignment of a dedicated program manager. Major Bissett argues that the program manager (PM) does not actually develop the program's acquisition strategy, but rather is constrained by a broad strategy which he may not like and whose development he did not participate in. At this point the program manager may only be able to expand on the basic strategy which has already been defined. Most of the acquisition personnel that Bissett interviewed ". . . felt that the overall framework for the program had already been developed before the

PM had the opportunity to develop his acquisition strategy." Thus, they ". . . viewed the PM's role as one of implementing the overall strategy developed by higher levels . . ." (3:45-47)

In 1985, Swanson studied the execution of acquisition strategies. His study found execution problems in the areas of schedules, and technologies. Schedule problems included a lack of integrated planning, having to adhere to ambitious schedules that were established outside of the program office and changing lead times which led to delivery delays. The problems faced by program managers the most in the technological area were baseline changes to requirements, technology transfer issues and lower then predicted performance. Other problems cited included cost growth and the turnover of program office personnel. The implication here is that the program manager should consider these problems when developing the program strategy. (30:59-61)

The study also pointed to several strategies associated with successful programs. In the area of cost, the use of multi-year funding, program unique inflation rates and cost realism as a source selection criteria improved strategy execution. The use of the critical path method, concurrent design refinement and testing, and a consensus regarding initial operating capability definition and date all improved strategy execution in the area of schedule performance. To improve the technical aspect of strategy execution, the study suggests the use of tailored and thin requests for proposal, realistic technical risk evaluations to justify the type of contract used, and actual operational experience to change the technical baseline. Organizationally, coordination among the major program participants to ensure realism and overcome organizational and personal bias, and frequent informal reviews

of the acquisition strategy to foster commitment and advocacy among the program participants were suggested as ways to improve strategy execution. (30:61-64)

This section has highlighted the importance and characteristics of sound acquisition strategy. Air Force Systems Command has formalized the process by implementing the Acquisition Strategy Panel (ASP) which is discussed in the next section.

The Acquisition Strategy Panel

In AFSC Regulation 550-21, Commander's Policies: Acquisition Strategy, published in 1987, General Bernard Randolph, former Air Force Systems Command Commander, stated that "Effective, timely acquisition strategy is ... our primary weapon against future program cost, schedule, and management problems" (21:2). Those words emphasized the importance of strategic planning within the command. The role of the command's headquarters staff was made clear when he stated "I consider the initial formulation and maintenance of effective strategy to be key responsibilities of my commanders and my staff" (21:2). To allow for headquarters involvement in program strategy development, the regulation called for the establishment of "Acquisition Strategy Panels" (ASP) as the key tool for defining acquisition strategy in AFSC (21:1). This involvement by the command's headquarters staff is expected to continue under the leadership of the current AFSC Commander, General Ronald Yates, who indicated his support by stating:

> The headquarters . . . has the very real responsibility to . . . develop the early critical program goals in terms of requirements and program acquisition strategies. How these factors are laid out early on ultimately determines the success of a program. (22:14)

The policy statement delineates the essential criteria for all ASPs. Among these criteria are planning for acquisition strategy early in the program life cycle, focusing the best talent available on the development of the acquisition strategy, immediately addressing any issues surfaced during the creation of the strategy to avoid later problems, ensuring that the system fully meets the user's needs, paying special attention to the timing of program phases, and using the end product, the Acquisition Plan, as the roadmap for all future program activity. In the policy statement, it is made clear that this is a responsibility of the headquarters staff, rather than the product divisions or the individual program managers. (21:1-2)

The ASP grew out of the Business Strategy Panel (BSP) which was used by the Air Force until 1987. In 1986, the BSP was changed from a strictly contractual review to a two-session briefing that looked not only at the contractual issues of the program, but also at the program's product assurance and acquisition logistics issues. The ASP, then, is the direct descendant of the two-session BSP. The major difference is that, while the BSP dealt primarily with the contractual and business aspects of the program, the ASP takes a broader perspective by looking at the total acquisition approach, to include engineering, support and test issues. There are other differences between the BSP and the ASP. The chairpersons of the BSP were appointed by regulation while the ASP chairperson is appointed by the AFSC Commander and, thus, works directly for the commander. The BSP relied upon ad-hoc committee membership whereas the ASP's membership is made up of a standing panel. And finally, ASP guidance makes provisions for all programs while the BSP focused solely on major programs. (12)

What is an ASP? Specific ASP guidance is set forth in AFSC Regulation 800-53, Acquisition Strategy Panels. The ASP is a corporate review of a program manager's strategy by a standing panel of top AFSC experts. It provides him or her with advice on the development of an executable acquisition strategy which meets the user's needs. The end product of the ASP is a workable Acquisition Plan. (19:1)

The Purpose of the ASP. The objective of the ASP is to bring "the experience and viewpoints of AFSC's senior acquisition managers (to bear) in a systematic process during the formulation and selection of program acquisition strategies" (19:1). According to briefing charts used by HQ AFSC personnel to explain the ASP process, there are several other objectives. These include the efficient use of the command's resources, the integration of functional disciplines in the program planning and execution process, and the application of lessons learned across the command (12).

The ASP was created in 1987 amid growing concern that program managers were not getting the help they needed in developing complex acquisition strategies. At a workshop on acquisition strategy held at the Defense Systems Management College (DSMC) in 1984, it was felt that ". . . acquisition managers (had) a valid need for guidance to develop sound acquisition strategies for new programs and to adjust the . . . strategies for existing programs as they (proceeded) through the life cycle" (1:13). At about the same time, Bissett noted that "There (appeared) to be a lack of clear direction in the actual development of program acquisition strategies" (3:40). The ASP was an attempt by the Air Force to fill a part of this void.

In addition to needing proper guidance, the program manager also had ". . . a need to incorporate the policies, procedures and strategy of higher levels when considering the options available . . ." in selecting a strategy (3:27). It was often the case that the program manager's strategy did not match the desires of higher level managers. Indeed, a key to the process of selecting the appropriate strategy for a program was ". . . the early identification of higher level strategies, objectives, priorities and policies" (3:39). By involving the higher level headquarters staff in the strategy selection process, it was proposed that many of these concerns would be eliminated.

In an analysis of strategic planning among businesses, Kerzner found that most of the tasks involved lent themselves to being done by the program manager, but there were several which required the expertise and insight of the executive level. These tasks included setting overall objectives by establishing where the firm was at the time and where it wanted to be in the future, and selecting a strategy portfolio which included an analysis of the best course for the firm to take as well as the potential risks and benefits of the strategy. Tasks left to the program manager and his staff included an environmental analysis of the firm's business climate, listing alternative strategies which followed the establishment of objectives by the executive level, listing threats and opportunities, preparing forecasts followed by the selection of the strategic portfolio by the executive level, preparing action plans, and monitoring and controlling the program once selected. (23:471)

While these tasks were broken out between the program manager and the executive level, Kerzner maintains that the program manager involved

in strategic planning should be able to report directly to the executive level and should have the authority required to obtain the resources required. The nature of strategic planning itself requires a close working relationship between the executives and the program manager. Indeed, "Top-management involvement may very well be the single most important variable in strategic planning." (23:470-475) All of the points made by Kerzner fall in line with what the ASP attempts to do for the Air Force.

Another unstated purpose of the ASP may be its use as a vehicle to build a consensus of support for the program. According to Swanson, "the changing program direction imposed on the program manager from outside agencies {was} one of the most difficult challenges for most program managers" (30:62). Bissett, in characterizing the problem, stated that

> . . . the PM must satisfy many organizations and individuals who may not be able to appreciate the overall strategy of the program. As a result, there are many individuals who can say "no" to a particular portion of the acquisition strategy. There are few individuals, however, who can say "yes" to the overall strategy. (3:44)

Bringing many of the headquarters personnel who had the authority to say "no" to a portion of the strategy together in one room to review the strategy at the same time through an ASP could be effective at reducing dissent for the final approved strategy. The approval of an acquisition strategy by the appropriate decision authority could further reduce the problem of dissent by serving ". . . as a formal agreement between the PM and the decision authority relative to how the acquisition {would} be accomplished" (3:62). Additionally, a well documented strategy could be used later in the program to ". . . review the effect of

counterproductive direction" and establish a firm ground for resisting their implementation (30:62).

One of the keys to success is for the PM to have an appreciation of the impact that the political process could have on the program (3:47). Accordingly, another unstated purpose of the ASP may lie in the fact that the headquarters staff, based in Washington D.C., is in a unique position to provide valuable political insight that might otherwise be unavailable to the program manager. This insight, when factored into the early strategy of the program, could result in fewer political problems later on.

The ASP can be seen, then, as a vehicle to fill a perceived gap in strategic direction for the program manager and to incorporate the policies and strategies of higher level decision makers. It could also be used to build a consensus of support for the program early on in order to reduce dissent later in the program life cycle and to provide the program manager with insight into the politics which might affect the program.

Characteristics of the ASP. ASPs will be conducted by AFSC for programs which are forecast to require more than $200 million in research and development funding or $1 billion in production funding, $750 million in modification, maintenance, or service cost, or high visibility or special interest acquisitions as designated by AFSC. An ASP is conducted every time one of these programs approaches a new milestone or phase in the acquisition life-cycle. Additionally, an ASP may be convened at the request of the program manager if the program undergoes a significant change in funding or direction which would cause a fundamental change in its acquisition strategy. ASPs are also

conducted for smaller programs with the panel members being drawn from the product division or program office staffs. Figure 3 illustrates the thresholds and levels at which an ASP may be conducted. (19:1)

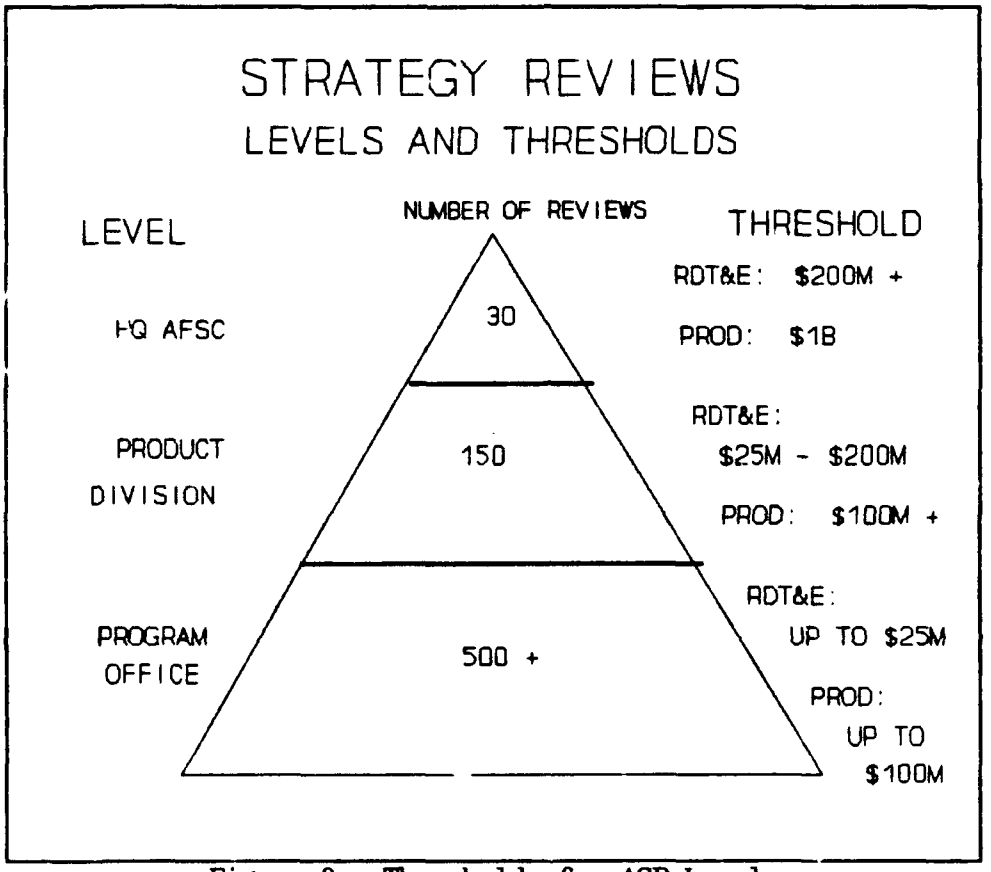

Figure 3. Thresholds for ASP Levels

The ASP is conducted prior to the publication of the formal acquisition plan, but not before the program has been defined in a statement of requirements or the issuance of a Program Management Directive (PMD). The ASP process is conducted in the form of a briefing by the program manager, or his functional experts, to the standing panel members. The briefing includes discussions of requirements, engineering, test, support, budget, and business issues. During the briefings the panel members will provide comments on the approaches being taken by the program office and may suggest alternatives. With

the publication of formal minutes, the program manager is required to follow up with a report to the ASP chairperson on how the recommendations will be resolved. (19:2)

Implementation of the ASP. The ASP is one step in the total acquisition process of a program. While the format of the ASP for major programs is relatively constant, the implementation varies slightly from product division to product division. At Aeronautical Systems Division (ASD), AFSC's largest product division, the ASP is one of several reviews that lead to the release of a request for proposal (RFP) for a particular phase of a program. The ASD process will be illustrated as an example.

The Acquisition Planning and Review Process. Initially, an Acquisition Review Team (ART) is convened at the program manager's option. This ART Phase I is used to provide product division level advisory assistance to the PM for putting the acquisition strategy together. Upon receipt of the PMD, the ASP is convened to provide a corporate review of the overall program strategy. Its primary output is the acquisition plan. This is followed by the ART Phase II which provides a complete and independent technical and business review of the solicitation prior to release to industry. Next, a Source Selection Management Group (SSMG) is convened to review the PM's source selection plans, standards and policies. At the end of this process, the RFP is released. Figure 4 illustrates this process. (18:5)

The ASP Process. The ASP is mandatory for Air Force major programs. The ASP briefing is scheduled through the product division and major command ASP secretariats. Only appointed panel members, personnel invited by the ASP chairperson, and program office personnel

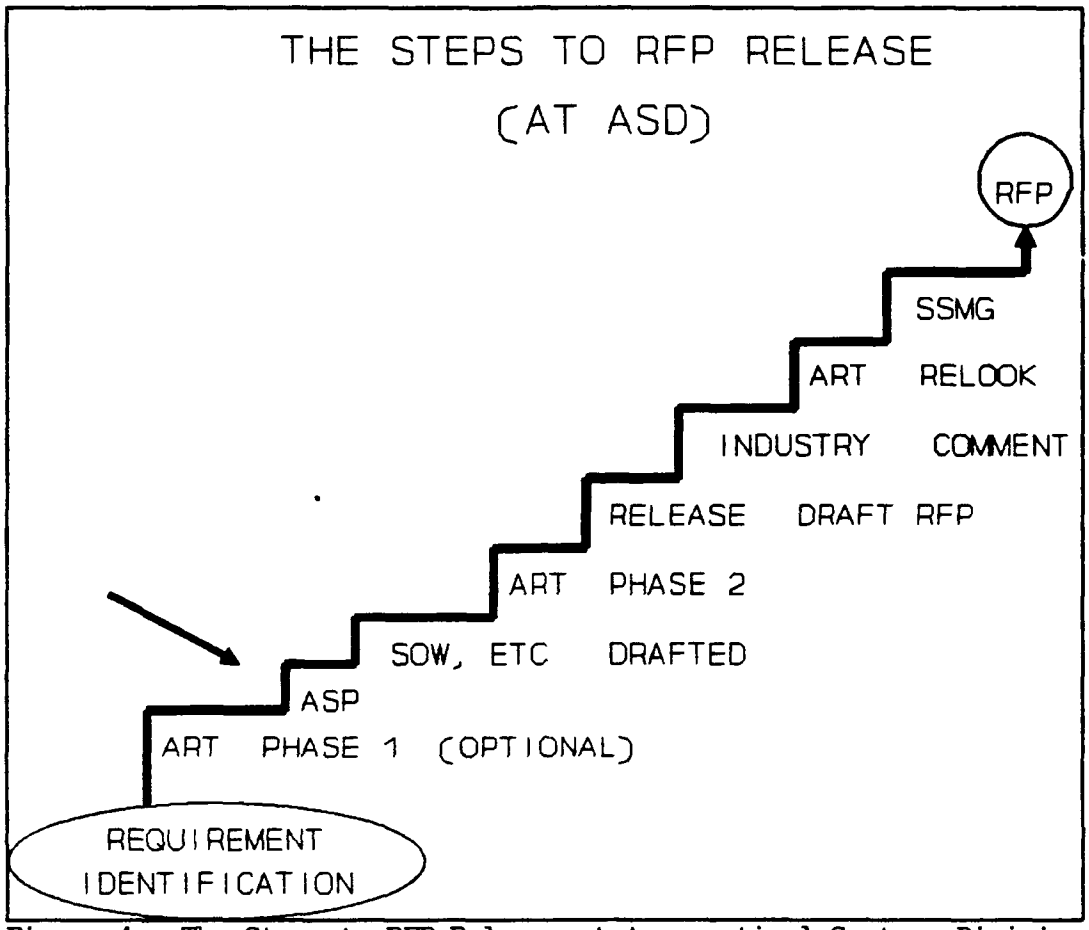

Figure 4. The Steps to RFP Release at Aeronautical Systems Division

attend the ASP. Panel members are appointed by the AFSC Commander. The acquisition strategy briefing is typically presented by the program manager or his designated representative and covers six major functional areas. It includes a detailed discussion of the language the program office expects to use in the solicitation and statement of work which will make up the RFP. Panel members are expected to offer advice and quidance on the strategy as appropriate. Prior to the end of the briefing, recommendations are reviewed for possible inclusion in the ASP minutes. Upon receipt of the minutes, the program manager has 20 working days to resolve how the recommendations will be implemented and respond back to the ASP chairperson in writing. (19:1-2)

The ASP is made up of a standing body of experienced acquisition personnel from both the major command and product division levels. Panel membership at the AFSC level includes the chairperson and representatives from the program management, acquisition logistics, competition advocate, comptroller, contracting, legal, product assurance, engineering, technology, test resources, and computer engineering functions. The currently appointed chairperson of the ASP is the AFSC Principal Assistant to the Deputy Chief of Staff for Contracting. Membership at the product division level parallels that of AFSC. The ASP is co-chaired by the AFSC and product division chairpersons. In addition, representatives from the using command and the Office of the Secretary of the Air Force typically attend the ASP briefings. Other offices which have special interests in specific programs are invited on a case by case basis. Figure 5 illustrates the composition of the panel. (19:2)

Items Covered in the ASP. The acquisition strategy briefed by the program manager is broken into seven major sections. Each of these sections is described in detail in the ASP Presentation Guide published by AFSC. The program manager is expected to roughly follow the guide while tailoring the briefing to his particular program. The first section is a description of the program and its requirements and serves to insure that the program office and user requirements coincide. The second section describes the engineering and technical aspects of the program, specifically the technical risks associated with the program and the strategy for dealing with those risks from a program life cycle standpoint. The third section addresses the program's test resource and facilities requirements as well as the success and failure

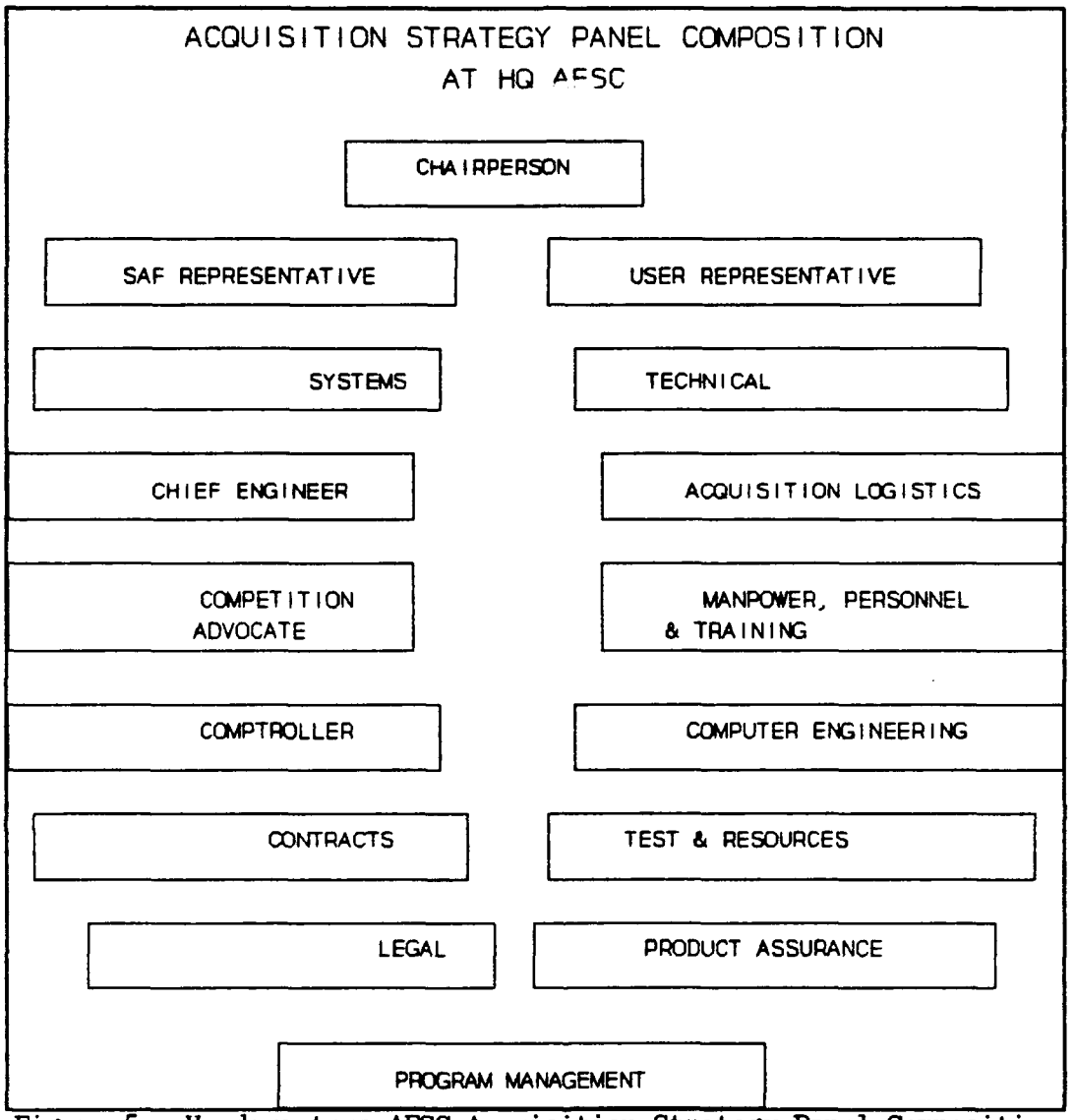

Figure 5. Headquarters AFSC Acquisition Strategy Panel Composition

criteria for the test program. The fourth section deals with support issues which the program will face upon the fielding of the weapon system and is geared toward logistical concerns. The fifth section discusses budget requirements, focusing on funding required and timing for those funds. The sixth section deals with the business aspects of the program by focusing on the source selection and solicitation process as well as business base considerations. The last section is a summary of critical issues present in the program's strategy and recommendations

for action required outside of the program office. Appendix A shows each of the major sections and the specific topics to be covered under each. (13:3-17)

The ASP in Action. The issue of whether or not the ASP adds value for the program manager appears to be a concern of AFSC's. An initiative was undertaken to reduce duplication of effort in the ASP process. The command published a guide for writing effective minutes and produced a videotape discussing the ASP process. The command went on to identify what it considered to be keys to ASP success, as well as challenges faced by the command to insure the ASP's continued value. Finally, the command sought the opinions of program managers to improve ASP effectiveness. The next several paragraphs discuss each of these initiatives in more detail.

One of the initial problems associated with the ASP was that program managers were being forced to present their strategies at two levels, the product division headquarters and AFSC headquarters. The result was duplication of effort and conflicting guidance from the separate panels. In August 1989, based upon input received from the his commanders, the AFSC commander sent a message to all of the product divisions implementing "Joint ASPs" as a way of eliminating the problem. The joint ASPs would be held at the product division with both the AFSC and product division panels in attendance and would be co-chaired by the AFSC and the product division ASP chairpersons. This eliminated the need for the program manager and his staff to travel to AFSC headquarters, thus reducing the amount of travel the program office was required to make, as well as eliminating the problem of conflicting guidance. In addition, General Randolph emphasized that the program

manager was to concentrate on developing his acquisition strategy, not his briefing, by saying "We do not conduct ASPs to produce polished briefings but to assist program directors in forging a strategy to produce an executable program." (2:2)

Another problem was confusion in the ASP preparation process. To remedy the situation, AFSC published a handbook for its panel members, distributed a preparation guide to be used by the affected program offices, began publishing a letter semi-annually which described lessons learned from other ASPs, instituted a training program for new panel members, and conducted visits to the product divisions to discuss ASPs in general. For each ASP, a pre-panel overview meeting was held among the panel members to discuss the issues likely to surface during the ASP itself, an executive summary was presented to the AFSC Commander within 48 hours of the ASP, minutes with recommendations were published and responses to those recommendations were solicited from the program directors. (12)

Since well written minutes of the briefing were considered vital to the usefulness of any ASP, AFSC published a guide to assist personnel responsible for writing those minutes. The minutes served as a track record of the panel's discussion and recommendations. Those recommendations had to either be included in the program's acquisition plan or responded to, in writing, by the program manager. The guide included the basic format for writing minutes, hints on what to write and how to write them well, and examples of the various documentary products of the ASP. The guide called upon the writer of the minutes to review the acquisition plan to insure that the strategy in the plan was consistent with the strategy which was agreed to during the ASP. (14)

To further assist those personnel who were new to the process, AFSC commissioned a videotape which introduced the ASP concept and discussed its features. The tape started with an introduction by General Randolph. In the introduction, he stated that the ASP was a way to bring the right people together at the right time to offer advice, lessons learned and insight to the program manager. He stated that the ASP was not to be viewed as a bureaucratic hurdle, but as a "dynamic creative effort to solve problems." The tape highlighted the way the ASP worked and illustrated the results of some past ASPs through the comments of six program managers who had recently been through the process. (20)

According to AFSC, there were several keys to a successful ASP. These keys included having good people as members of the panel. Panel membership should include functional experts as well as highly experienced acquisition personnel. Also key was the adequate preparation by SPO personnel and panel members prior to the ASP. Discussion during the ASP itself was to flow both ways and should include a discussion of the program's tough issues to be of any real value. Feedback has also been highlighted by AFSC as being vital to the process. (12)

The command has identified several other problem areas which required special attention to ensure that the ASP remained a valuable tool. These included the potential for poor quality panels as a result of a lack of panel membership stability and a lack of representation of all functional areas. Scheduling was another problem which the command felt could be addressed by providing program offices with sufficient lead time to allow for adequate preparation and by coordinating

schedules to allow for participation by personnel from the office of the Secretary of the Air Force. Finally, the command identified follow-on tracking as necessary to ensure that panel recommendations were addressed and that the long-term success or failure of the strategies were evaluated. (12)

In 1988 and 1989, AFSC sought the input of program managers who had been through the ASP process regarding its value and suggestions for improvements. This input was solicited in meetings between command and field personnel at the product divisions. Questions such as "has the ASP process helped the program manager develop a more effective acquisition strategy?" and "are program directors receiving proper level{s} of expertise at field level ASPs?" were asked. While the author found no direct evidence of the results of these discussions, a chart used by command personnel to describe the process to higher level personnel stated that program directors had mixed reactions. According to the chart, "some PD's {were} very positive" while "some {saw the} process as an obstacle." One of the recommendations resulted in the establishment of the joint ASP discussed earlier. (12)

Part of this push to enhance the image of the ASP is evident in a briefing chart addressed to program managers entitled "How should you view ASPs? (Dispelling Misconceptions).0" The chart compared what ASPs were to what they were not. According to the chart, ASPs were a dynamic process, a forum for new ideas, a resource to be used by the program directors, and a consulting service. The chart stated that ASPs were not bureaucratic hurdles, pass or fail exercises, square fillers or miniature inspector general inspections. The chart went on to state

that teamwork between the program office and the panel members was essential. (12)

The previous paragraphs indicate that AFSC was concerned about the image of its ASP process among the working program managers in the field. The public relations campaign embarked upon by AFSC which has resulted in the publication of guides, production of a videotape, and charts presented by the command shows that support for the ASP has been questionable in the past. Many improvements in the process have been made, as evidenced by the implementation of the joint ASP. Indeed, Mrs Darleen Druyun, the AFSC Principal Assistant to the Deputy Chief of Staff for Contracting, received an Executive Achievement Award in 1990 for "her initiative and direction in establishing the Acquisition Strategy Panel concept" (25:20). The question of the value of the ASP to the program manager, however, remains unanswered. The concern demonstrated by AFSC regarding program managers' perceptions of the ASP argues for a closer examination of the process.

An interesting recent development in the strategy review process was contained in a memorandum distributed by the Assistant Secretary of the Air Force (Acquisition) on 4 April 1990. In this memorandum, the assistant secretary called for the "institutionalizing" of a Requirements and Acquisition Program Review process for all Air Force major programs. This process grew out of the success of the "Summit" meetings held to review the B-1B, C-17, Advanced Tactical Fighter, and B-2 aircraft programs. The reviews, to be held between milestones I, II, and III, would have a threefold focus. According to the memo, this focus would include the examination of operating command requirements relative to the projected threat and operational concept, a review of

program progress toward accomplishing those requirements, and the establishment of realistic, achievable and affordable performance goals and thresholds as a function of time. These reviews would be chaired by the Air Force Chief of Staff. (28)

This new review process appears to follow the original objectives of the ASP fairly closely. This will most likely result in further duplication of effort within the Air Force bureaucracy, which is precisely what it cannot afford at this time. Today the DoD and Air Force are being faced with increasing pressure to cut budgets and streamline acquisition processes. With those mounting pressures, the Air Force can ill afford to spend its time in inefficient processes or those which do not provide adequate value for the effort expended. The next section of this chapter discusses some of the pressures currently facing the DoD in general and the Air Force in particular.

The Call for Reform

This section serves as a cursory overview of some of the more recent reform initiatives undertaken by the DoD and the USAF. Those readers with background in this area may go on to the final section of this chapter.

Complaints about the state of both the DoD system and the Air Force system are not rare. The incorporation of many of the Packard Commission Report's recommendations and volumes of legislation imposed by Congress have not quieted the critics. Many insist that the problems persist. At a meeting of the Air Force Studies Board[3] in November of

[3]The board was established in 1962 at the request of the AFSC Commander and is made up of civilian and ex-military personnel with experience in weapons acquisition (17:30).

1987, the acquisition system was characterized as being bogged down by unnecessary administrative bureaucracy and congressional micromanagement (17:30).

There have been other calls for change. These include establishing a centralized DoD buying agency similar to those in use in Britain and France. Proponents of this idea feel that this will result in better weapons for less cost while attracting a professional corps of acquisition officials. Critics argue that the current system produces the best weapons in the world at reasonable cost and should not be changed. Additionally, they argue that a single agency will be no more immune to corruption then the current system and that establishing a separate buying entity will reduce communications with the using commands, possibly resulting in the fielding of ineffective weapon systems. (16:10)

The Air Force has also received its share of criticism when it comes to acquisition. Feeling the heat the most is Air Force Systems Command. There have been calls to eliminate Systems Command altogether (32:80). General Randolph countered that the infrastructure the command is responsible for would be unmanageable by someone in the Pentagon and that AFSC's role as an advocate of new technology through the management of some of the nation's foremost laboratories would be lost (32:81).

The calls for reform have been many and loud. The Department of Defense and the US Air Force are working toward a more effective and efficient acquisition system. These efforts are reviewed below.

DoD and Air Force Reform Initiatives. The allegations of inefficiencies in Air Force and Department of Defense procurement have prompted both to take major steps toward improving the process. Many of

these steps have already been taken, yet more needs to be done. This section will first look at Air Force efforts of the past few years to correct the problems, then examine existing DoD policy on Acquisition Streamlining and conclude with an examination of the far reaching recommendations of the recently completed Defense Management Review.

The Air Force has not been idle in the area of acquisition reform. A streamlined acquisition management structure was implemented following the publication of the Packard Commission report. This structure consists of the Air Force Acquisition Executive (AFAE) who has overall responsibility for the Air Force's acquisition system, the Program Executive Officer (PEO) who is responsible for the implementation of program direction, the program manager who is responsible for the day-to-day management of the program, and the commanders of AFSC and AFLC who are responsible for the allocation of resources (6:40). General Bernard Randolph insisted that he was out of the loop when it came to program decisions and that the streamlined management structure was, in fact, working (24:50). He saw his role as one of setting up the structure, identifying the resources, providing test facilities, and providing the training programs that managers need to carry out their jobs (24:51).

In September 1987, the Department of Defense issued DoD Directive 5000.43, Acquisition Streamlining. This directive has made streamlining an official policy. The overall theme of the directive is to encourage minimizing bureaucratic program requirements which do not add value to the accomplishment of the mission without abandoning government oversight outright (8:2-4).

In 1989, amid growing concern that the results of the Packard Commission were being ignored and that the Goldwater-Nichols Defense Reorganization Act of 1986 was not being implemented, President George Bush directed the Secretary of Defense to develop "a plan to improve the defense procurement process and management of the Pentagon" (5:1). Secretary of Defense Dick Cheney presented his plan on 12 June 1989. This far reaching plan addressed many of the concerns discussed in the previous section of this chapter. While formulating his plan, the Secretary had the goals of maintaining the strength and readiness of the Armed Forces; acquiring needed weapon systems at lower cost, in less time, and at the promised performance; encouraging industry and government to adhere to the highest standards of integrity and performance; and promoting greater public confidence in DoD's management (5:1).

His plan called for bolstering the DoD management structure by giving the Under Secretary of Defense for Acquisition (USD/A) the authority intended by the Packard Commission (5:3). If the recommendations are implemented, a DoD Executive Committee will be formed which will serve as the "senior deliberative and decision making body within DoD for all major defense issues" (5:5). The Defense Planning and Resources Board (DPRB) will manage a revitalized Planning, Programming and Budgeting System (5:5). A major area of emphasis for the DPRB will be realistic long-term planning (5:6). The DPRB will work closely with the Defense Acquisition Board[4] to insure that major programs are adequately planned (5:7).

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[4]The Defense Acquisition Board (DAB) is responsible for setting policy on the acquisition of DoD major systems.

The report also includes detailed plans to institute clear command channels, enhance program stability, limit report requirements, establish small, high-quality staffs, enhance communications with users, and improve system development (5:8). These plans will have profound effects on current management practices with many of them to be implemented in the near term. The changes recommended are not only limited to the DoD and industry. Several concern key reforms in Congress (5:25). The intent of these and Air Force initiatives along the same lines is to provide for a stronger defense while eliminating inefficiencies in the system.

Conclusion

The 1980's have clearly been a time of tumultuous change in the defense acquisition business. Many changes have been instituted and many more are planned. The DoD and its military branches still have a long way to go, as evidenced by Secretary Cheney's defense management plan.

This literature review has attempted to shed some light on the complex issues surrounding defense procurement in general and acquisition strategy planning in particular. The literature has clearly illustrated the need for strategic planning of acquisitions by the DoD. Indeed, it has been found that "effective long range strategic planning in the major systems acquisition process results in successful programs" (3:27).

Unfortunately, the literature also illustrates the cumbersome strategy review process implemented by Air Force Systems Command in the form of the ASP. When looked at in isolation, the ASP may not appear to

be too much of a burden on the program manager. When it is looked at in the context of all of the other reviews which the program manager must deal with, however, that burden appears to grow.

> The impact is that more resources may be devoted to preparing for and attending reviews and briefings, defending program decisions, and responding to queries from higher levels than are devoted to developing and implementing strategic and operational plans. (3:45)

It is the responsibility of higher headquarters staffs to provide the program manager with the assistance he requires, not burden him with cumbersome review processes. The goals of the ASP process are directed the right way. The implementation of the ASP itself, however is more questionable. Strides have been made recently to improve the process, but there appears to be room for further improvement.

Secretary of Defense Cheney concluded that "the American people expect those who manage the nation's defense effort will aim high. And they deserve nothing less" (5:27). The remainder of this thesis will assess the costs and benefits of the ASP process to the program manager and make recommendations for improvements.

III. Methodology

Introduction

The previous chapter described the formulation of acquisition strategies in general and the acquisition strategy panel (ASP) process in particular. It also described the contemporary calls for streamlining of the defense acquisition process and built a case for examining the costs and benefits associated with the ASP process in the hopes of formulating a recommendation for continuing, discontinuing, or improving this process. This chapter describes the methodology used to arrive at those recommendations.

The research was conducted in the form of personal interviews with personnel who had first-hand experience with the ASP process. It began with a literature review of guiding regulations, acquisition strategy planning fundamentals, and trends in acquisition streamlining and reform. Next, the appropriate population was determined and a list of personnel to be interviewed was drawn up. Information gained during the literature review was used to formulate an interview guide. Interviews were conducted in person and via the telephone using this guide. The data generated were then collected and analyzed using a spreadsheet program. Conclusions and recommendations for further research were drawn from these results.

Justification

The aim of this thesis was to isolate one variable in the Air Force acquisition process, specifically the use of the ASP to develop program acquisition strategy, and determine if its use caused a positive, neutral or negative impact on the overall success of a

program. Ideally, the way to resolve this research problem would be to conduct an experiment (15:60) on identical programs, varying the use of the Acquisition Strategy Panel while holding all other variables constant. The results of the programs which utilized the ASP approach could then be compared to the results of those programs which did not use the ASP. Any differences in program effectiveness could then be linked to the use or non use of an ASP.

Unfortunately, this type of experiment would be next to impossible to accomplish due to time, money, and personnel constraints as well as the volatility of the program management process. To complicate the situation further, historical data regarding quantitative benefits resulting from the use of the ASP process was not available.

Accordingly, an *ex post facto* design was deemed most appropriate (15:60); the ASP would have to be judged strictly on the basis of qualitative data in the form of opinions held by personnel involved with the process. Because of the long acquisition life-cycles associated with the fielding of new weapon systems and the relatively recent (1987) implementation of the ASP process, and because the success of an acquisition program can only be measured upon its completion, it would have been next to impossible to prove causation between the use of the ASP and the success of a program. Therefore the research was conducted in the form of a descriptive study based upon structured interviews of personnel with first-hand knowledge of the process. The interviews measured their perceptions relative to the ASP.

Instrument

The final interview guide used during the study was developed based upon the findings of the literature review and the results of three pilot interviews conducted with personnel from Aeronautical Systems Division at Wright-Patterson AFB, Ohio. An introduction which stated the objectives of the study and the nature of the interview was provided at the beginning of the guide. Questions were structured to gather as much quantitative information as possible, given the qualitative nature of the study. To this end, Likert opinion scales were used throughout the interview guide. These scales were of particular use since the goal was to change or improve a process (15:256). For those interviews which were conducted in person, the respondent was given the last page of the guide which solicited further comments that were not discussed during the interview itself. The interview guide is included in Appendix B.

Structure of the Questions. Each question was structured in one of three ways. The first type asked for specific information. Question 4 serves as an example of this type. It asked each respondent to specify the dollar value of the contract discussed at the ASP. The second type quantified the respondents' opinions through the use of five-point Likert opinion scales. In each of these cases, the respondents were also given the opportunity to embellish upon the specific issue. The last type consisted of open ended questions which the respondents were asked to answer in any way they felt was appropriate. For example, question 23 asked the respondent to finish the statement "the greatest benefit of the ASP is:."

The first type of question was used where specific information was required from the respondent. These were used when the goal was to find demographic information or assess the costs and benefits associated with the ASP.

The second type was used when the opinions of the respondents relative to a particular aspect of the ASP were sought. These Likert scale questions asked the respondents to rate their reactions to statements relative to a five-point scale. A one on the scale indicated that the respondent strongly disagreed with the statement. A two indicated the he or she moderately disagreed with the statement. If the respondent felt neutral, a three was recorded as the response. Moderate or strong agreement with the statement was recorded as a four or five, respectively. The respondents were then asked if they wanted to add any comments to their responses.

The last type, the open ended statements, were used to reduce the effect of bias introduced by the interviewer. The open ended format were considered the most effective in cases of high sensitivity (4:167). Accordingly, these were reserved for the most sensitive of the issues covered by the guide. In each case, the respondent was asked to respond in any manner they felt appropriate, to include a non-response.

Categories of Questions. The questions used in the guide fell into four distinct categories. The first category asked the respondents to provide demographic information. The second category sought information regarding preparation for an ASP briefing. The next category dealt with the conduct of the panel briefing itself. The last category sought information on general impressions regarding the overall ASP process.

Questions Concerning Demographics. The first four questions of the guide gathered demographic information. The relationship of the respondent to the ASP process was ascertained in question 1. Question 2 captured the time frame in which the respondent was involved with the process. The first part of the question was geared primarily toward panel member respondents since their involvement would have been over a period of time rather then at a specific point in time. The second part of the question was geared toward program management personnel. Many changes have occurred in the ASP process since its inception in 1987. Therefore, the point in time in which a program manager was involved may have had an affect on his or her perception of the process. Also affecting the PM's perception may have been at what point in the program's life-cycle the ASP occurred. The literature pointed out that strategy development was vital in the early stages of a program. The ASP, however is conducted repeatedly over a program's life-cycle and, thus, a valid question is what utility the ASP has in the latter phases of a program's life.

The third question was geared specifically at program managers and simply categorizes the programs by the dollar value of the contracts under consideration during the ASP. This was used to determine if program size affected the PM's perceptions of the process. The last question served as a check to insure that the only ASPs considered in the study were joint ASPs which involved Headquarters AFSC personnel. This is discussed more fully in the "Population and Sample" section of this chapter.

Questions Concerning Preparation and Guidance. In the previous chapter, the complexity of the ASP was illustrated. Appendix A

shows all of the topics which the PM is expected to cover during the briefing. It follows that the process of preparing for the ASP could be expected to be a large task. How well prepared the PM was for an ASP and how much difficulty he or she had in the preparation process could have an impact on the success and, consequently, his or her attitude toward the ASP. In terms of costs and benefits, the costs associated with the process would come primarily in the area of preparation for the ASP.

The first of the preparation questions served as an overview and asked the respondent if he or she agreed that preparation for the ASP was straightforward. In the literature review, many items were discussed which were produced by command and product division headquarters to assist the program manager in preparing for the ASP. The second question asked the respondent if they agreed that each of these items was helpful during the preparation process. Provision was made for respondents who answered that they did not use the item or were unaware that the item existed. As a follow up question, respondents were asked if there were any other items which were not mentioned that were of use in preparing for the ASP.

Question 4 asked the respondents to quantify the amount of effort that went into preparation. During the course of the preliminary interviews used to develop the guide, a program manager stated that the mere act of preparing for the ASP served to alter the program's strategy and solidify the program office's position relative to the acquisition strategy. As a result, question 5 in the guide asks the respondent if he or she agreed with the statement that the preparation process

resulted in an altered program strategy. Question 6 asked the respondent for open-ended comments on the preparation process.

This section was geared primarily to program managers and, as such, was not appropriate for the panel member respondents. Accordingly, panel members were not asked to respond to this section. They were, however, asked how much and what types of preparation they went through prior to each ASP they participated in. The results of this question were recorded in space provided at the end of the guide.

Questions Concerning the Conduct of the ASP. This section of the guide asked the respondents for their views regarding the way the ASP was actually conducted. Many of these questions got to the heart of the research objectives discussed in Chapter I.

The literature review pointed to the fact that AFSC was concerned with how the PMs were viewing the process. One concern was that teamwork on the part of the PMs and the panel members was vital to the overall value of the ASP. Question 7 asked the respondents if they agreed with the statement that the panel was conducted in a non-confrontational way, as this would be important to the teamwork aspect of the process. Question 8 followed the same theme. Since the command did not want the PMs to view the process as a "square-filling" exercise, respondents were asked if they agreed with the statement that the comments received from the panel members were constructive.

Question 9 dealt directly with research objective number 1 by asking the respondents if they agreed that the ASP redirected overall program strategy. The literature review also highlighted the importance of written documentation of the agreed upon acquisition strategy. The command showed its concern by publishing a guide on writing minutes.

Since much of what was said during an ASP had a direct impact upon the program's overall strategy, close coordination between the written minutes and the verbal discussion during the ASP was vital. Question 10 addressed this issue by asking the respondents if they agreed that the written minutes paralleled the oral comments made during the briefing.

Research objective number 2, regarding the implementation of ASP recommendations, was dealt with through question 11 of the guide. Questions 12 and 13 asked the respondents if the recommendations of the panel had positive or negative effects on the program respectively and, as such, resolved research objective number 3. Question 14 asked the respondents to quantify any benefits resulting from recommendations of the ASP. This information could then be compared to the amount of effort expended in preparation to yield a cost/benefit analysis of the ASP.

One portion of the literature review referred to the potential benefit of the ASP as a consensus building vehicle. Question 15 asked the respondents if they agreed that the ASP built a consensus of support for the program. The pay-off in consensus building would be expected to be reduced oversight or redirection of the strategy later in the program's life-cycle. Question 15a addressed this issue. The literature review also pointed out that the PM may have had little control over the formulation of the program's basic acquisition strategy. If this was the case, the value to the PM of going through an ASP would be expected to be relatively limited. Question 16 asked the respondents if they agreed that the strategy was developed prior to the assignment of the PM.

Questions Concerning Overall Impressions. The last series of questions focused on the respondents general impressions of the total ASP process. This section included the open-ended questions in which the respondents were asked to answer in any way they felt was most appropriate.

The literature review showed that the ASP was to be viewed as a tool for the PM to use in the development of the program's acquisition strategy. The usefulness of this "tool" then, would be limited if the ASP was conducted in a less than totally professional atmosphere. Question 17 asked the respondents if they agreed with the statement that the ASP was conducted in a professional manner by all participants. Another issue that was uncovered during the preliminary interviews was the belief that the ASP did not have to be conducted at the Headquarters AFSC level. The feeling was that the ASP would be just as effective if held at the product division without the involvement of AFSC panel members. This theme served as the motivation for questions 18 and 19. The questions asked the respondents if they agreed with the statements that the comments of product division panel members and AFSC panel members, respectively, were constructive. The thought here was that if both sets of panel members were offering constructive comments then the argument that both were necessary was valid.

Question 20 asked the respondents to rate the total ASP process on a scale of one to five with one being lowest and five being highest. Since it did not deal with any one specific issue of the ASP process, this question served to summarize the respondents' feelings toward the ASP. Low opinions concerning the issues highlighted in previous questions combined with a high average score on this question would

argue for making improvements to the process. Low opinions concerning the detailed issues combined with a low average score on this question would argue for discontinuing the process. And high opinions on the issues coupled with a high average score on this question would argue for continuing the process without need for making improvements.

The last three questions were open-ended. Question 21 asked the respondent to state what he or she felt was the greatest benefit of the ASP. Question 22 asked the respondent to state what he or she felt the greatest problem was with the ASP. And question 23 asked the respondent how the ASP process could be improved. In each case the respondents were told that a non answer would be appropriate if they did not feel that there was a benefit, a problem, or a way or need to improve the ASP. These questions were included primarily to allow the respondents to comment on areas which may have been neglected by the author. They gave the respondents an opportunity to express themselves in ways that were not allowed elsewhere in the interview guide due to the structuring of the questions. These questions also tie directly to the research objectives of this study, namely to determine the value (question 21) of the ASP relative to its costs (question 22) and to seek areas in the process needing improvement (question 23).

Validity, Reliability and Practicality of the Instrument. The "goodness" of a research instrument is measured in terms of its validity, reliability, and practicality. It is considered valid if it actually measures what it was supposed to measure. Likewise, it is considered reliable if the measurement procedure is accurate and precise. And, it is considered practical if it is economical, convenient, and easily interpreted. (15:94)

If the research findings can be generalized across persons, settings or times, the measurement tool is said to be externally valid (15:94). The purpose of this research was to examine a very specific aspect of the Air Force acquisition process and, as such, was not intended to be generalized across broader populations or settings. Since the main thrust of the research was to suggest improvements to the ASP process, the external validity of the research instrument was not an issue. Therefore, the conclusions and recommendations of this thesis only apply to the Air Force's ASP process. Because of this, inferences based upon the findings of this thesis should be applied to broader populations and settings only after very careful consideration.

The internal validity of the instrument refers to "the extent to which differences found with a measuring tool reflect true differences among those being tested", and is comprised of content, criterion related, and construct validity (15:94). Content validity of the instrument was assured in three ways. The first of these was the depth of the literature review which pointed out many of the areas which needed to be considered in any study of the ASP process. Preliminary interviews were used to uncover issues that were not brought out in the literature review. And finally, each respondent was asked if there were any other issues they felt were important which were not covered during the interviews. In addition, those who were interviewed in person were given a form with the author's address on which they could record at a later date any further thoughts on the subject which they felt were relevant to the study.

The question of the instrument's criterion related validity was an elusive one. The major dilemma in conducting this research was that it

was virtually impossible to determine the effect of the ASP on the degree of success experienced by a major acquisition program. The author, in the process of designing the research instrument, found no sources of information which would point conclusively to the effect of the ASP on program success. Without such information, the only option open was to perform an opinion study with personnel involved in the process. However, to increase the criterion related validity of the instrument, question 14 of the instrument asked the respondents to provide quantitative data regarding the benefits of the ASP. While this may be a weak area of the study, it is hoped that readers of this research will find value in the findings when applying them to the current ASP process.

Many of the questions in the instrument were interrelated to ensure construct validity. It was expected that respondents answering positively to questions 8 and 12 or negatively to question 13 would also rate the overall ASP process highly in question 20. By the same token, those responding negatively to questions 8 and 12 and positively to question 13 would be expected to rate the overall process poorly in question 20.

The reliability of the instrument is a necessary, but not sufficient condition for its validity (15:98). Reliability means that the instrument is free of random or unstable error. In this case, reliability was measured in terms of its stability, which refers to its ability to elicit the same response from the same respondent with the same instrument. This was done by adding "Question 0" to the guide. Question 0 was placed in order after the demographic questions, but before any of the other questions and was a rephrasing of question 20.

The degree to which the respective answers were similar served as an indicator of the instrument's reliability. This approach was chosen because the ranks and positions of the personnel interviewed made it nearly impossible to re-interview them several weeks later. That translated to the less than optimal result of reliability being measured at the same time that the interview was conducted. The statistical analysis used to test for stability of the instrument is discussed in the "Statistical Tests" section of this chapter.

A research instrument is considered practical if it is economical, convenient and interpretable (15:100). The research, conducted in the form of in-person and telephone interviews, was economical to perform because of the small population size involved (less than 40 individuals). These interviews were convenient in that they allowed for direct feedback from the respondents and resulted in an extremely low non-response rate while minimizing the difficulty in conducting them. It is hoped that the documentation included in this thesis will make it readily interpretable for interested persons in the future.

Population and Sample

As was pointed out in the "Scope and Limitations" section of Chapter 1, this thesis was concerned with the impact of Joint ASPs on program effectiveness. Joint ASPs were defined in Chapter II as those involving AFSC and product division panel members and were reserved for major or special interest programs as designated by the Secretary of the Air Force. Consequently, the population of interest was limited to Air Force personnel with first-hand knowledge of the Joint ASP process. The major focus was on program managers since they would be in the best

position to determine the effect of the ASP on their programs. They also would have a perspective of the ASP in terms of the effort that went into their preparation. It was expected that many of the program managers who participated in ASPs prior to 1988 would have already left the service or moved on to other jobs. Thus, the emphasis was placed on interviewing program managers who had participated from 1988 on.

To get a balanced view, the opinions of the AFSC panel members were considered important to the research. Their views were expected to shed some light on objectives and benefits of the ASP which were not discovered during the literature review and which may not have been apparent to the program managers. Their views were compared to those of the program managers to point out areas of miscommunication and, thus, were very useful in making recommendations for improvements to the process. Product division panel members were not singled out for interviews because of the focus on Command involvement in the ASP. Several of the program managers interviewed, however, were also members of their product divisions' standing ASP panel membership and spoke from both perspectives.

Figure 3 in Chapter II showed that the total number of Headquarters AFSC ASPs (or Joint ASPs) conducted up to that point numbered approximately 30 and therefore, the maximum number of program managers that would be interviewed would not exceed 30. Figure 5 in the same chapter showed that there were approximately 11 standing panel members at the Headquarters AFSC level. Turn around of personnel and organizational changes further reduced the size of the population. This resulted in a total population size of less than 15 personnel. With such a small population, random sampling was next to impossible. As a

result, it was decided that as many personnel as possible would be contacted for an interview. Appendix C lists the programs involved in the Joint ASP process from which contacts were attempted.

Data Collection Plan

The small population involved made it possible for all of the interviews to be conducted in-person or over the telephone. Each interview was conducted by the same interviewer using the same interview guide to minimize variations in question phraseology. The interviews lasted from one-half hour to one hour and were set up in advance so that the respondent was aware of the subject matter. Each interview began with an explanation of the objectives of the research and the types of questions that would be asked. The respondents were asked to provide additional information for each of the questions as they saw fit. At the end of the interviews, the respondents were asked if they had any other comments which they wanted to add at that time. In addition, those who were interviewed in-person, were given a form to fill out and mail if any other ideas regarding the ASP occurred to them after the interview was concluded.

The goal was to perform as many in-person interviews as possible since this would allow the interviewer to gain as much detail and depth from the respondent as possible (15:160). This method also allowed the interviewer to probe for additional information and adjust to the needs of the respondent (15:161). The problems with this type of interview is its cost and the possible introduction of bias by the interviewer. The problems of bias were discussed earlier. Cost precluded the interviewer from performing all of the interviews in-person. Program managers from

Aeronautical Systems Division (ASD) at Wright-Patterson AFB, Ohio, were interviewed in person because of the division's proximity to the Air Force Institute of Technology. In addition, two Temporary Duty (TDY) trips were conducted in support of this thesis. The first trip was to Electronic Systems Division (ESD) at Hanscom AFB, Massachusetts, where ESD personnel were interviewed. The second trip was to Air Force Systems Command Headquarters at Andrews AFB, Maryland. This trip allowed for face-to-face interviews with the AFSC ASP panel members.

The balance of the respondents were interviewed over the phone. These included personnel from Munitions Systems Division (MSD) at Eglin AFB, Florida; Human Systems Division (HSD) at Brooks AFB, Texas; Space Systems Division (SSD) at Los Angeles AFB, California; and Ballistic Systems Division at Norton AFB, California. Telephone interviews are considered almost as good as face-to-face interviews since there are no meaningful differences in response bias between the two types (4:13). The greatest benefit, however, is this method's reduced cost as compared to face-to-face interviews (15:169).

Statistical Tests

The majority of the quantitative data gathered in this research was in the form of opinion rankings based upon a five-point Likert Scale. This data is considered to be ordinal level, and as such is limited to the use of the median and percentile as the measures of central tendency and dispersion, respectively (15:90).

The stability of the instrument was tested by comparing the results of question 20 with those of question 0 through the use of the "paired t-test". This test is appropriate when there is only one set of

individuals and two observations are made on each individual (11:343). The assumptions required to carry out this test are that the data consist of *n* independently selected pairs with the differences in the pairs, D, being normally distributed. The null hypothesis, Ho, is that the mean of the differences is equal to 0, and the alternate hypothesis, Ha, is that the mean is not equal to 0, indicating that the pairs of data do not have the same distribution (11:344). In this case, a two-tailed test is appropriate and Ho will be rejected in favor of Ha if

$$t_{obs} \geq t_{\alpha/2,n-1} \quad \text{or} \quad t_{obs} \leq -t_{\alpha/2,n-1} \qquad (11:345) \qquad (1)$$

where t_{obs} is the observed t-value and $t_{\alpha/2,n-1}$ is the critical t-value, which was found using Table A.5 of Devore (11:635). The observed t-value was calculated using the Statistix II software package. The results of the stability test are discussed in Chapter 4.

Because ordinal level data was used, the construct validity of the instrument was evaluated by cross tabulation of the relevant data. The cross tabulations were used to show if the related data followed the trends hypothesized earlier in this chapter.

Summary

This chapter has discussed the methodology which was used during the course of this research. An opinion survey of personnel knowledgeable in the ASP process was conducted through face-to-face and telephone interviews using a structured interview guide. The findings of the research are documented in the next chapter.

IV. Findings

Introduction

The previous chapters set the stage for the research which was conducted during this thesis. The interviews, which comprise the body of data for this thesis, were conducted over a two month period. The data gathered during those interviews is summarized in the sections which follow. Each of the interview questions will be discussed separately with the quantitative data being presented first followed by a summary of the comments received on each question.

Numerous attempts were made to contact specific personnel for the interviews. Many of these personnel had moved on to other jobs or had retired from the Air Force. A total of 29 interviews were conducted and included in the data base. Of the 29, 9 were conducted over the telephone while 20 were conducted in person. Each person was asked the same questions but allowed to embellish in any words which they thought were appropriate.

As discussed in Chapter III, each question posed in the interview guide fell into one of three structural categories. Several of the questions were posed as statements of opinion with the respondents being asked to state their level of agreement with the statement. The levels were recorded on a five-point Likert scale with a one indicating strong disagreement with the statement, a three indicating neither agreement nor disagreement, a five indicating strong agreement, and a two or four indicating moderate disagreement or agreement, respectively. The results of questions of this type will be discussed both in terms of the scale and the respondents' comments.

The data was compiled and analyzed using a spreadsheet developed with the Quattro software package. The spreadsheet information is included in Appendix D. It depicts the raw data and the calculated values used throughout this chapter. Some of the demographic information is not included in the appendix to guarantee the anonymity of the respondents.

Reliability of the Instrument. As discussed in Chapter 3, a test of the instrument's stability of was conducted. This was done by comparing the responses of two similar questions, questions 20 and 0, through the use of a paired t-test. Appendix E documents this test. Because different wording was used in each question to evoke two responses to the same issue, and because one question was asked at the beginning of the interview while the second was asked at the end, the data pairs were considered to be independent. Likewise, a Wilke-Shapiro test of the paired data showed that the distribution of the differences was found to approximately follow a normal distribution. The two conditions provide the basis for using the paired t-test. Using a 95% confidence level, the critical t-value was found to be 2.056 from Table A.5 of Devore (11:635) and the observed t-value was found to be 1.73. Accordingly, the distributions of the responses to the two questions were found to be equivalent and, thus, the instrument was found to be stable and reliable.

Construct Validity of the Instrument. In Chapter III, it was also pointed out that the instrument's construct validity could be tested by cross-tabulating the responses of questions 8, 12, and 13 with the responses to question 20. The results of these cross-tabulations can be seen in Appendix F. High responses to questions 8 and 12 were expected

to result in high responses to question 20. Likewise, low responses to questions 8 and 12 were expected to coincide with low responses to question 20. On the other hand, responses to question 13 were expected to inversely coincide with responses to question 20. Of the 25 respondents giving question 8 a resonse of 4 or 5, 20 responded with a 4 or 5 to question 20. The 3 who responded to question 8 with a 3 or lower gave question 20 a response of 2 or 3. With regard to question 12, of the 20 who responded with a 4 or 5, 15 also gave question 20 a score of 4 or 5. Of the 5 who responded with a 3 or less, 3 also gave question 20 a score of 3 or less. Question 13 followed the opposite pattern. Of the 19 scoring question 13 with a 3 or less, 18 gave question 20 a score of 3 or higher. The results follow the expectations for high construct validity.

Demographic Information

The majority of the personnel interviewed (18) were program managers or project officers on programs which had been through the ASP process. Three of those interviewed were assigned to a product division ASP secretariat while the remaining eight were Headquarters AFSC ASP panel members. The interviews included eight personnel from Aeronautical Systems Division (ASD) at Wright-Patterson AFB, Ohio; one person from Ballistic Systems Division (BSD) at Norton AFB, California; six personnel from Electronic Systems Division (ESD) at Hanscom AFB, Massachusetts; 1 person from Human Systems Division (HSD) at Brooks AFB, Texas; two personnel from Munitions Systems Division (MSD) at Eglin AFB, Florida; and three personnel from Space Systems Division (SSD) at Los Angeles AFB, California.

Those interviewed included ten civilian employees of the Air Force and 19 military personnel. The civilians included four members of the Senior Executive Service (SES) with the remainder ranging from GM-13 to GM-15. The military personnel included two brigadier generals, six colonels, seven lieutenant colonels, three majors and one captain. The panel members had served on the AFSC panel an average of 2.25 years, with five having been on the panel since its inception in 1987.

In Chapter 2, the dollar thresholds required for a Joint ASP were said to be $200 million in research and development (R&D) funding and/or $1 billion in production funding or were of special interest. Of the 18 programs included in the interviews, seven fell below the established thresholds, implying that they were special interest programs. The average R&D costs of all 18 programs was $340 million and the average production contract was for $2,450 million. The literature also stressed the importance of developing acquisition strategies early in a program's life. Only three of the eighteen programs involved in the study were in the concept exploration or demonstration validation phases while the remaining 15 programs were in full scale development or production at the time of their respective ASPs. Figure 6 shows the distribution of the programs by acquisition phase.

Questions Concerning Preparation and Guidance

The questions in this section of the interview guide dealt with the program manager's efforts to prepare for the ASP. They attempted to capture the amount of effort expended in preparation, the relative ease of preparation, items that were helpful in preparing for the ASP, and suggestions for improving the preparation process. Headquarters AFSC

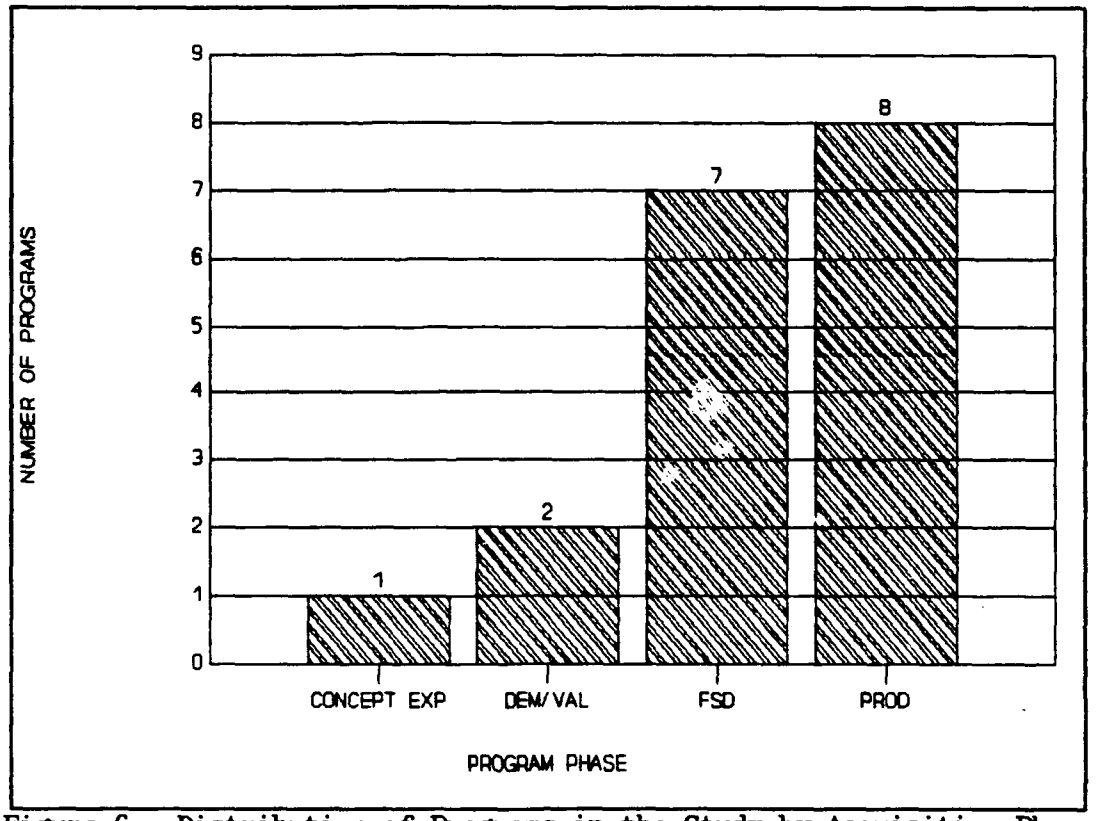


Figure 6. Distribution of Programs in the Study by Acquisition Phase

panel members were not asked the questions in this part of the guide, but were asked what forms of preparation they went through prior to an ASP. Their comments are discussed toward the end of this section.

Question 1: Preparation for the ASP was Straightforward. Question 1 asked the respondent if he or she agreed with the statement that preparation for the ASP was straightforward. In some cases, the respondents did not understand what was meant by the term "straightforward". In those cases, the interviewer explained that the term meant that preparation, while possibly requiring a lot of work, did not involve confusion or false starts. Nearly two thirds of those responding did not feel that preparation for the ASP was a straightforward process, answering with a strongly disagree, disagree, or a neutral. Only one third agreed (24%) or strongly agreed (10%) that

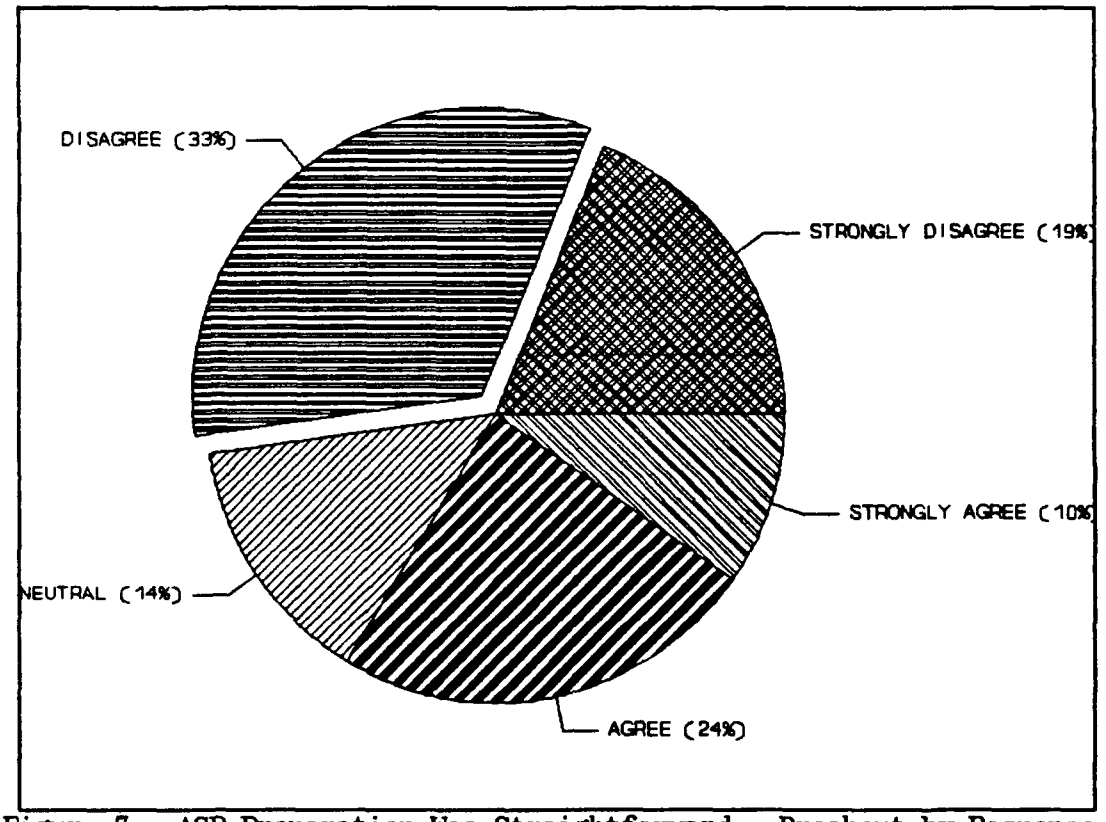


Figure 7. ASP Preparation Was Straightforward - Breakout by Response

preparation was straightforward. Figure 7 shows the breakout of responses.

Each of AFSC's product divisions has different infrastructures to deal with assisting their program managers in preparing for the ASP. Of interest was the breakout of this question by product division. Figure 8 is a stacked histogram of the responses to this question broken out by product division. The largest grouping of ASD program managers agreed that preparation was straightforward while the largest grouping of other product division program managers was in the disagree category. While this may imply that the larger product divisions have made it easier for their program managers by providing more resources to help them prepare, the result may be biased by the fact that these product divisions have more personnel with ASP experience which could be passed on to other

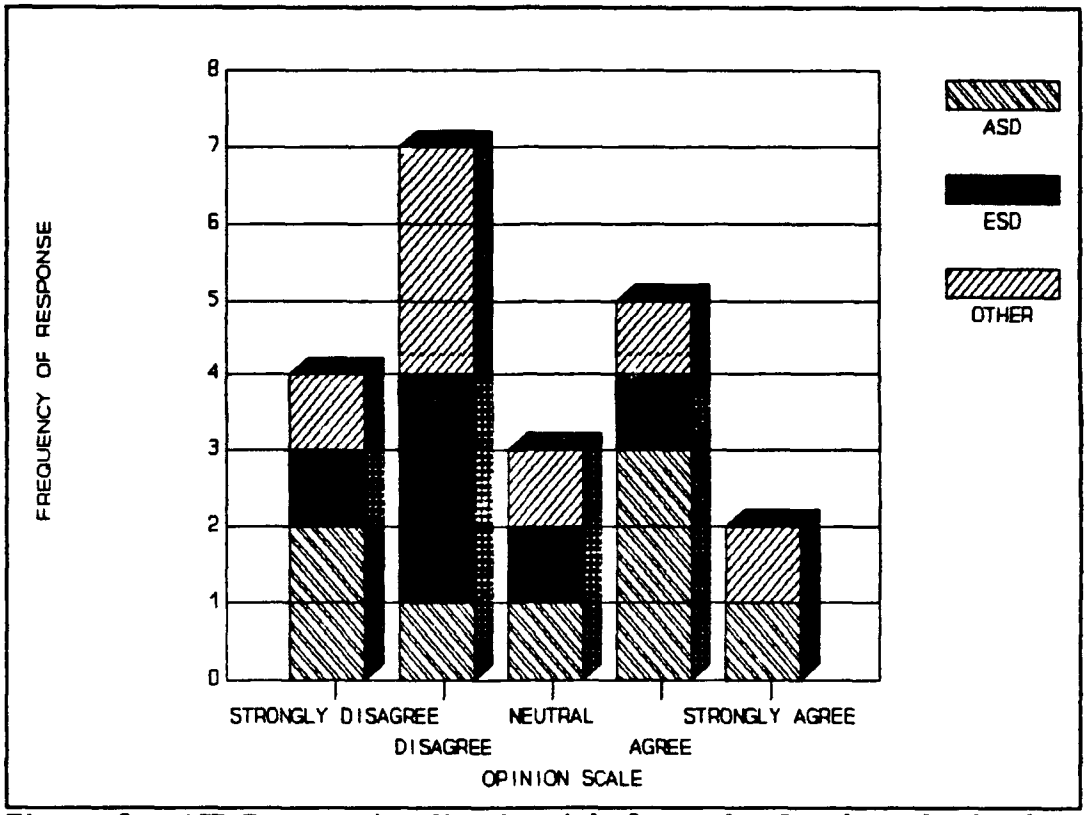


Figure 8. ASP Preparation Was Straightforward - Breakout by Product Division

program managers within the product division.

Questions 2 and 3: Tools to Help Prepare for the ASP. These two questions dealt with the ASP preparation tools that were available to the program managers. Question 2 listed eight preparation tools and asked the program managers if each item was helpful in preparing for the ASP. Question 3 asked the program managers what other tools they used to prepare for the process.

The literature review pointed out several tools that were available to the program manager to make ASP preparation easier. These included AFSC regulations, product division regulations, product division handbooks which included the AFSC ASP Preparation Guide, a video tape, command and product division ASP secretariats, the DSMC

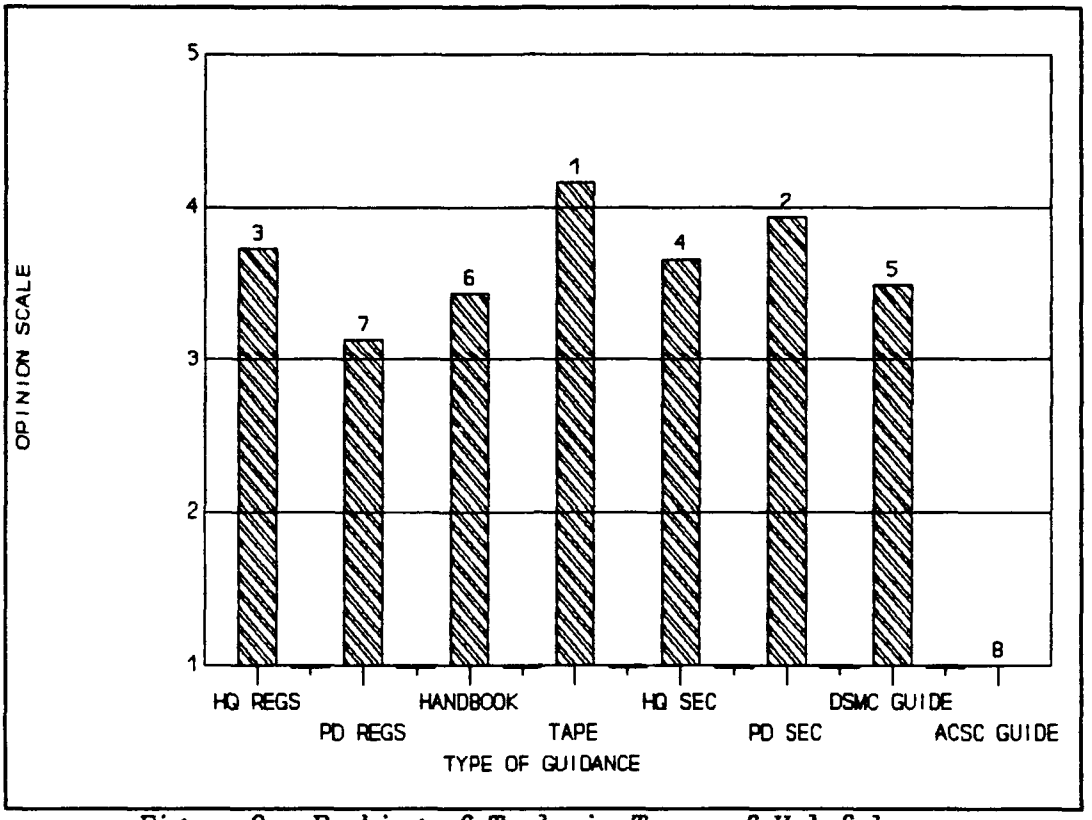


Figure 9. Ranking of Tools in Terms of Helpfulness

Acquisition Strategy Guide, and an ACSC Acquisition Strategy Guide. For each of these items, question 2 asked the program managers to indicate their level of agreement with the statement that the item was helpful in preparing for the ASP. If they could not respond on a particular item, they were asked if they had known about the item but chose not to use it or if they were simply unaware that the item existed.

Figure 9 ranks the tools in terms of the average responses to the questionaire statement. While the use of an average is not, strictly speaking, statistically "correct", it is helpful in giving some indication of the relative rankings of the items. Figure 10 shows the percentage of respondents who did not use or were unaware of the item. It should be noted that the average responses depicted in Figure 9 represent the opinions of those respondents who actually used the item.

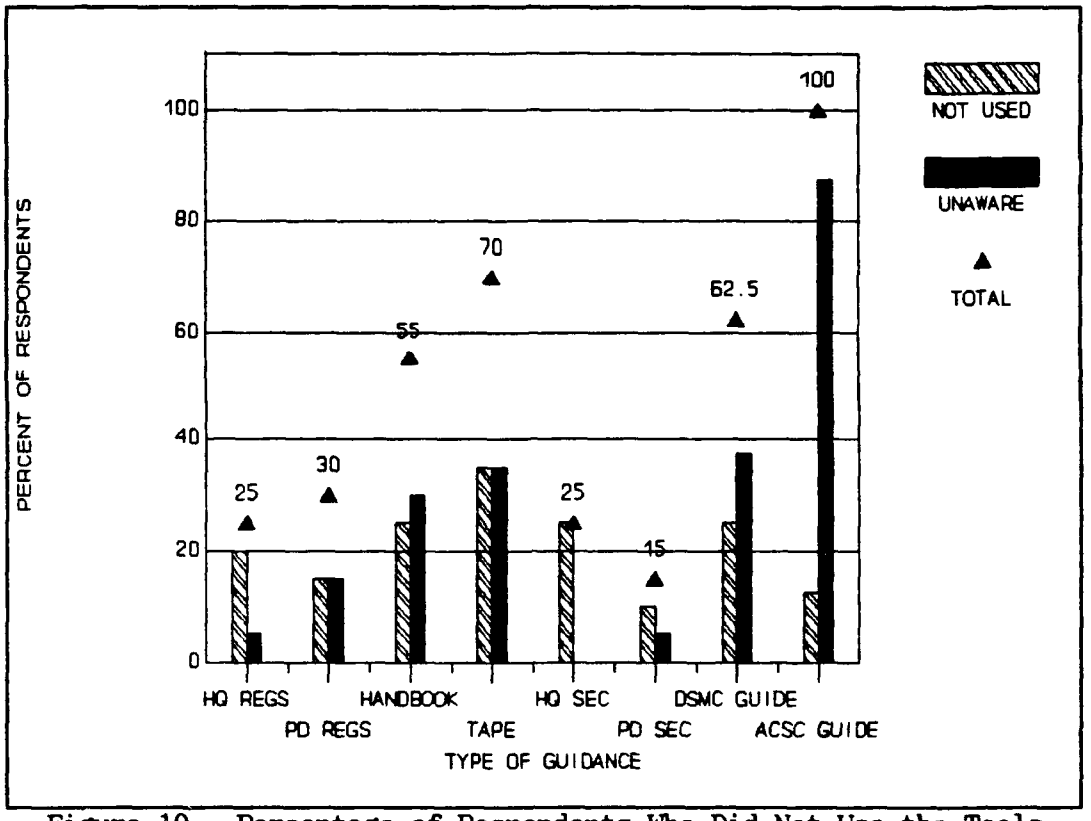


Figure 10. Percentage of Respondents Who Did Not Use the Tools

The item that appeared most helpful, the AFSC Video Tape, was only used by 30% of the program managers. However, the product division ASP secretariats, which were ranked second in terms of helpfulness, were used by 85% of the program managers. Command regulations concerning the ASP were ranked third and were used by 75% of the respondents. Ranked fourth in terms of helpfulness was the Headquarters AFSC ASP secretariat which was used by 75% of the program managers. The DSMC Acquisition Strategy Guide was ranked fifth, but was used in only 37.5% of the cases. The product division handbooks were ranked sixth and used in only 45% of the cases. In this case, all of the SSD and HSD personnel interviewed indicated that they were unaware of a handbook, implying that those two product divisions may not have had a handbook. Product division regulations concerning the ASP were used in 70% of the cases,

but were ranked 7th in terms of helpfulness. Finally, the ASC Acquisition Strategy Guide was not used by any of the personnel interviewed. It should be noted that the two guides (ACSC and DSMC) did not deal specifically with preparing for an ASP but served as a guide to preparing program strategy.

Question 3 asked the program managers to describe any other items that helped them prepare for their respective ASPs. Six program managers stated that the passing on of experience gained by other program managers who had been through the ASP process was very helpful. The lessons learned packages published by AFSC every six months were singled out as being very helpful by four program managers. Direct contact with command panel members was very helpful for two of the program managers. Other items which were mentioned by one or more program managers were examples of charts used in previous ASPs and the experience gained in developing strategies for other programs. It should be noted that the ASP Preparation Guide published by the command was considered helpful and was included as part of the product division handbooks.

Question 4: Amount of Effort Spent Preparing for the ASP. All of the program managers were asked to estimate the amount of labor which went into preparing for the ASP. The program managers were asked not to include the effort which would normally be used to develop their programs' acquisition strategies. All of the respondents had to estimate this figure as specific records were not kept. Many had problems breaking out ASP preparation labor from the normal effort of developing program acquisition strategy. Accordingly, the figures obtained varied widely from program to program.

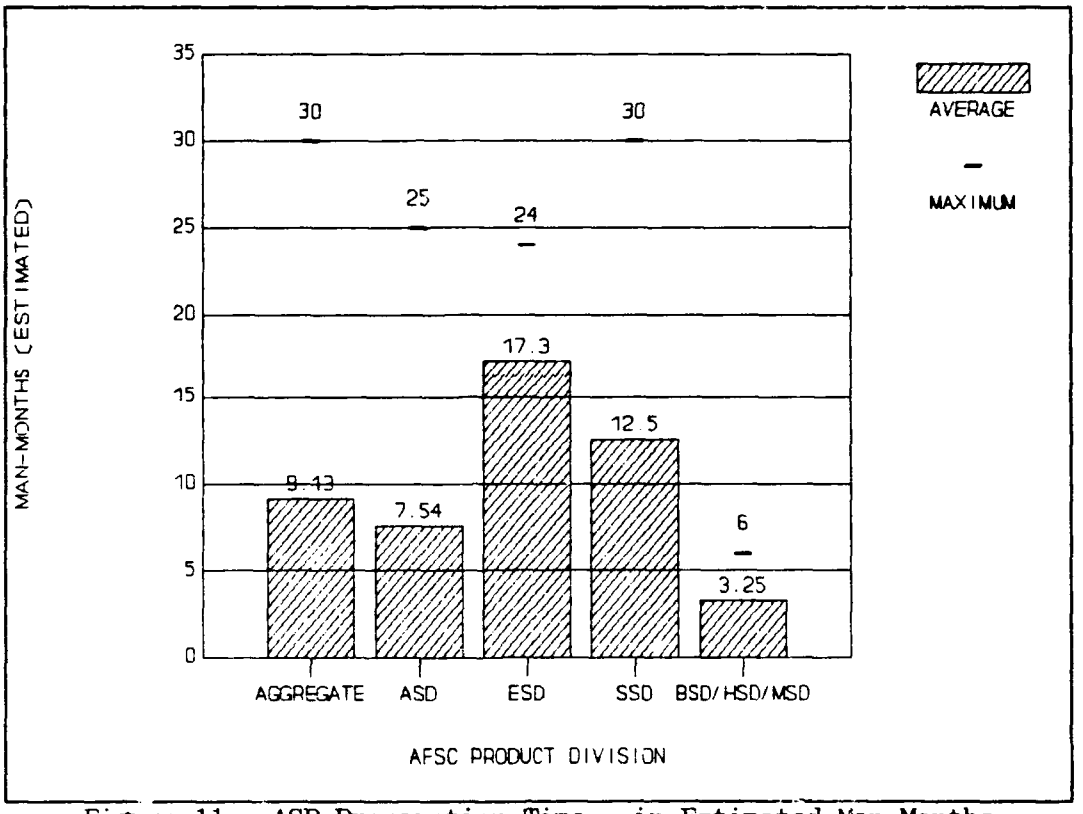


Figure 11. ASP Preparation Time - in Estimated Man-Months

Figure 11 shows the average and maximum ASP preparation times by product division. ASP preparation time ran from a minimum of 0.25 man-months to a maximum of 30 man-months with an average of 9.13 man-months. ESD and SSD had the highest averages with 17.3 and 12.5 man-months, respectively. ASD programs showed an average preparation time of 7.54 man-months, while the smaller product divisions averaged 3.25 man-months. There was no discernable trend in preparation time as compared to program size, which was indicated by contract value.

Question 5: ASP Preparation Resulted in an Altered Strategy. This question asked the respondent to state his or her level of agreement with the statement that preparation for the ASP resulted in an altered program strategy. The results were split fairly evenly with 40% agreeing or strongly agreeing that preparation for the ASP altered

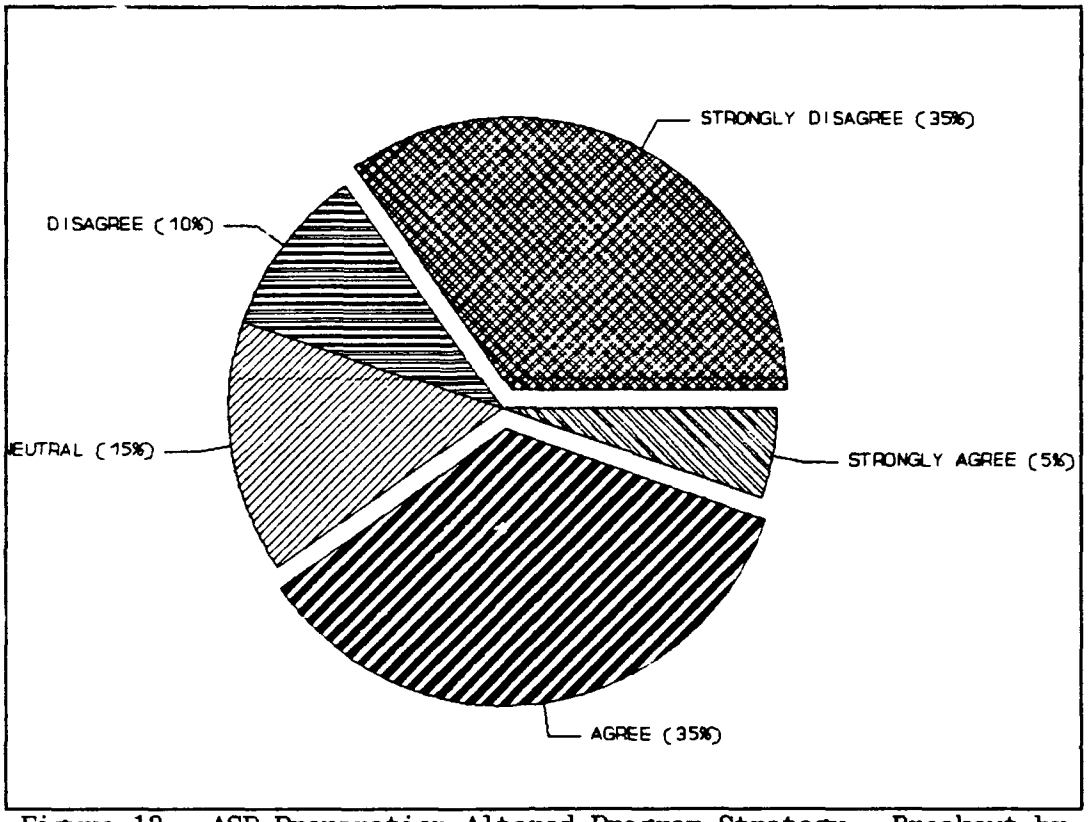


Figure 12. ASP Preparation Altered Program Strategy - Breakout by Response

program strategy while 45% disagreed or strongly disagreed. The two highest scoring categories were strongly disagree and agree, each with 35% of the responses. Therefore, it is very difficult to make a case either way with regard to this statement.

Many of the program managers, when asked to comment on this question, stated that the majority of changes which occurred during the ASP preparation process did not deal directly with the program strategy, but were primarily procedural in nature or minor changes. Several stated that the formal preparation required for the ASP helped to solidify the program office position by surfacing disconnects between functional disciplines and the program office. This forced the parties to resolve the problems sooner then they would have under other

conditions. One stated that the checklist nature of ASP preparation helped fill in holes in the strategy while another stated that it helped the program office focus on the risk of the program. And another program manager stated that the contract type for the program was changed because of issues discovered during ASP preparation.

Question 6: Other Comments on Preparation. This open-ended question asked the program managers if they had any other comments on ASP preparation or suggestions for changing the preparation process. Many of their comments dealt with the structure of the ASP briefings. Several of the program managers stated that, while they understood that the panel members needed specific information, they felt that the program manager should have had more flexibility in how the topics were presented. One stated that the focus by the program manager should have been on substance over form while another stated that the program manager should not allow the regulation to capture him, but rather, the program manager should capture the intent of the regulation. Several stated that the briefing should be scaled and tailored to the specific program. One suggested that a tutorial regarding the specifics of the program be given to the panel members in advance of the briefing so that the ASP could focus directly on strategic issues.

The headquarters panel members were also asked this question. Many of their comments fell along similar lines. The Panel Chairperson, Mrs Druyun, stated that one of the hardest items to assess in an ASP was a program's risk. At the time of this writing, the command was looking at ways to incorporate a NASA risk model to help the program managers develop consistent risk assessments. Along this line, another panel member stated that the programmatic and technical risk must be

understood as well as the consequences of failure in a particular area. This would allow for the early anticipation of problems and help the panel members focus on the most critical areas. Three of the panel members stated that open communication was critical to the success of the ASP since this would allow for the discussion of the critical program issues. Finally, several program managers and panel members stated that the best way for a program manager to prepare for an ASP was to sit through one several months prior to his or her ASP.

While the preparation task seemed focused on the program office staff, the panel members also prepared for each ASP. Several program managers and most of the panel members stated that adequate preparation by the panel members was as vital to the success of a particular ASP as the preparation done by the program office. Panel member preparation for each ASP involved gathering as much information regarding the program as possible. This included pre-briefings by project officers; reviews of program guidance, documentation and reports; and the evaluation of contractor history and performance. A problem which faced the headquarters panel members was that the narrowing role of AFSC was making it harder to obtain information and thus, preparation for the ASPs was becoming much more difficult. One panel member summed up the importance of preparation by stating that the worst thing for a panel member to do was to walk into an ASP "cold."

This section has focused on preparation for the ASP with regard to the amount of effort expended and the ease of preparation. Both program managers and panel members emphasized the importance of adequate preparation by stating that thorough preparation resulted in the most successful ASPs in terms of value to the program manager. The next

section focuses on what happens after the preparation process, namely the conduct of the ASP briefing itself.

Questions Concerning the Conduct of the ASP

This part of the interview guide concentrated on the way in which the ASP was conducted. Also of interest were the issues of implementation of ASP recommendations and the impact of those recommendations on the programs. Panel members as well as program managers were asked the questions in this section.

Question 7: The ASP was Conducted in a Non-Confrontational Way. Respondents were asked to state their level of agreement with the statement "the ASP was conducted in a non-confrontational way". The results are illustrated in Figure 13. Only three percent of the respondents were neutral on this issue. The majority of the respondents (82%) strongly agreed or agreed that the ASP was non-confrontational. Only 14% disagreed with the statement while 3% strongly disagreed.

Several program managers stated that there was a small degree of confrontation but that this was controlled quickly. One program manager stated that while there was some confrontation, he felt that it was constructive. Another felt that panel members were too politically oriented and were non-committal. And finally, a program manager stated that some of the advice from certain panel members was outside of their specialty and that, in some cases, certain panel members became antagonistic.

Panel member respondents also commented on this issue. One stated that about two thirds of the panel briefings were non-confrontational while one third were confrontational. This panel member felt that the

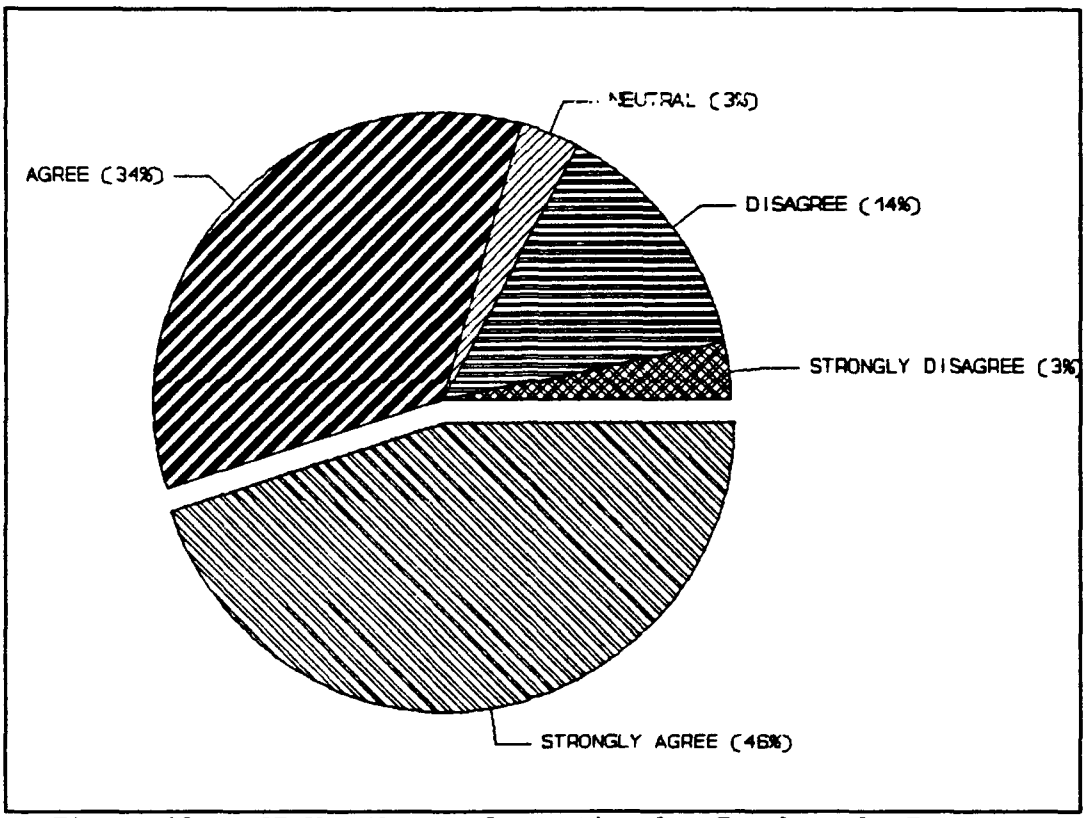


Figure 13. ASP Was Non-Confrontational - Breakout by Response

confrontation was due to the fact that the panel was not "wedded" to the programs, whereas the program managers may have been more attached to them. He also stated that the panel could feel insulted if the program offices tried too hard to educate the panel members. Another panel member stated that the issue of confrontation was very "personality driven" on both sides of the table. He went on to state that the panel members tended to be dedicated to their specialties and that if a program manager did not address a member's particular area of interest, the "functional zealot" (panel member) would voice dissatisfaction. One stated that the ASP was "as confrontational as a program manager wanted to make it". One characterized the ASPs as starting "somewhat confrontational" followed by a lessening of tensions as they progressed.

And finally, another panel member stated that the ASP was a "waste of time" if it was confrontational.

The ASP Chairperson, Mrs Druyun, stated that the issue of confrontation was a high priority of hers. She felt that teamwork on the part of the panel members and the program office personnel was key to the value of the ASP. Mrs Druyun explained that the panel members did not "have a monopoly on ideas" and that their role was to offer advice, not confrontation. She believed that the attitudes of the co-chairpersons were crucial in ensuring that the ASPs did not become confrontational.

Question 8: Panel Member Comments Were Constructive. Again, this issue was posed as a statement to which the respondents were to indicate

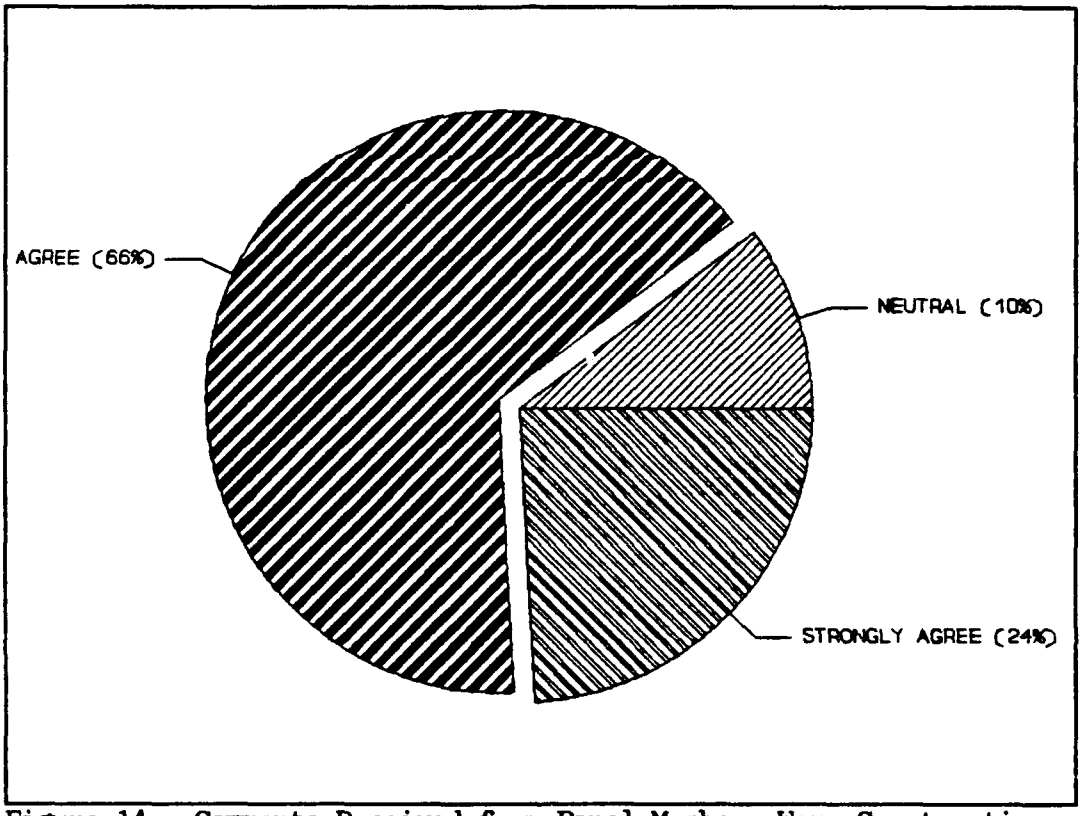


Figure 14. Comments Received from Panel Members Were Constructive - Breakout by Response

their levels of agreement. Figure 14 depicts the breakout of responses. Two-thirds of the respondents agreed that the comments of panel members were constructive. Nearly a quarter of the respondents strongly agreed with the statement while the remaining 10% were neutral. None of the respondents disagreed or strongly disagreed with the statement.

Figure 15 shows the histogram of responses to question 8 as broken out by product division. The majority of the program managers, represented by the product division blocks, agreed with the statement while the majority of panel members strongly agreed with the statement.

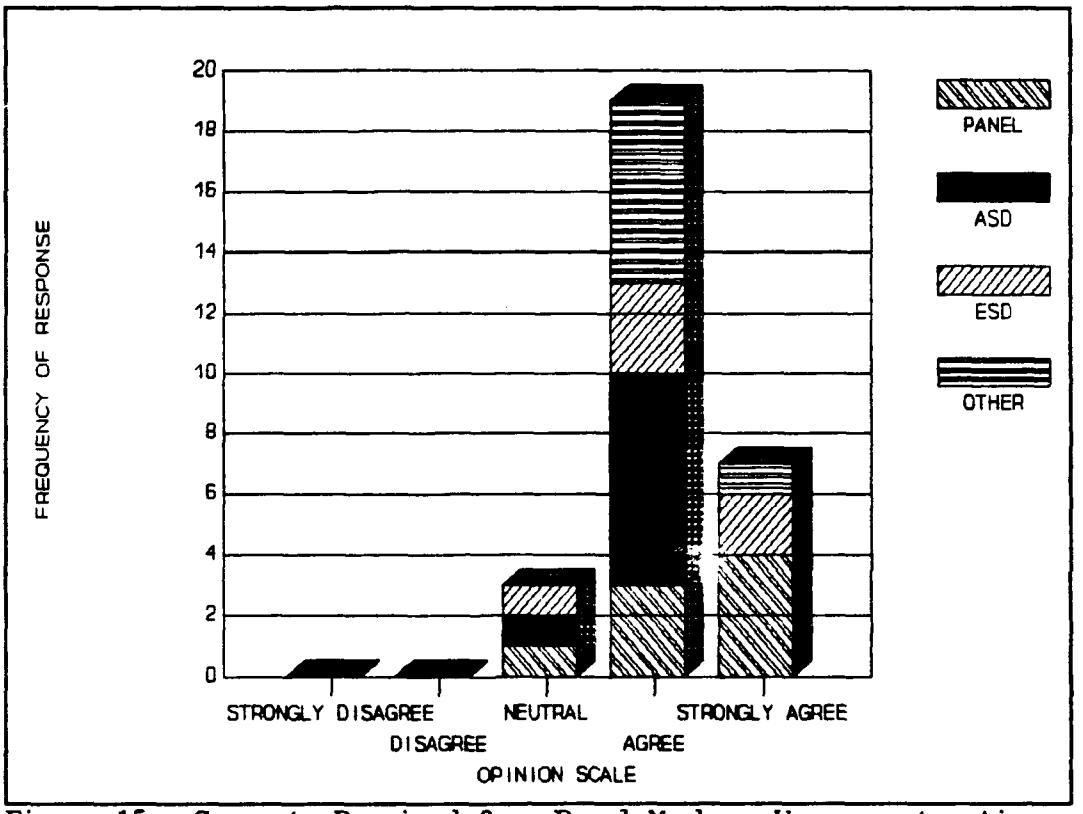


Figure 15. Comments Received from Panel Members Were constructive - Breakout by Product Division

This indicates a slight difference in perception between the program managers and the panel members. None of the ASD program managers strongly agreed with the statement but three of the smaller product division program managers did.

Six of the program managers commented that the majority of the comments received from panel members were constructive, but that some of the comments were not. One described the non-constructive comments as "fliers" while another stated that there were always some "straphanger comments". Another reported that, while the majority of the comments were very helpful, one of the panel members made concluding comments that were "off-the-wall". Three program managers reported that many of the comments were educational in nature, in that the panel members

sought more information on the specifics of the programs rather than their strategies. One of these program managers characterized the comments as "mundane". Finally, one program manager stated that the comments served as a good "sanity check" and that if the program manager could not counter the comments, he or she probably hadn't prepared adequately for the briefing.

The comments of panel members regarding this issue were similar to those of the program managers. Most felt that the majority of the comments by panel members were constructive, but that there were some which were not. Two panel members stated that some of the comments "were not focused" or were "off the track." One stated that about 50% of the comments were constructive. He reported that some of the panel members did not say anything during the course of an ASP while others were known for "championing causes." Another reported that while the panel members always "intended the comments to be constructive", sometimes they fell short due to a "lack of total insight into the program." The panel chairperson stated that most of the comments were very constructive, but that some were "not always as constructive as I'd like."

Question 9: The ASP Redirected Program Strategy. The respondents were given the statement "the ASP redirected overall program strategy" and asked to indicate their levels of agreement with it on the five-point scale. Figure 16 illustrates the breakout of responses. None of the respondents were neutral on this issue. An overwhelming 82% of the respondents either disagreed or strongly disagreed with the statement. The remaining 18% agreed or strongly agreed with the statement.

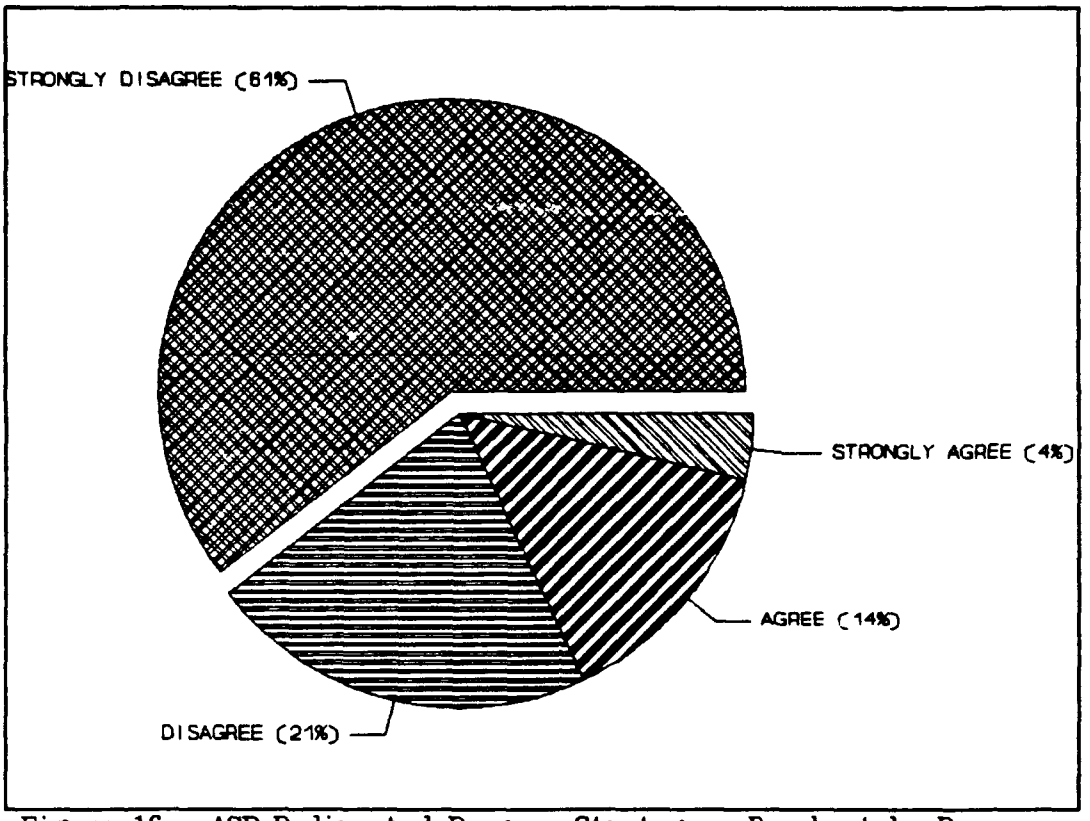


Figure 16. ASP Redirected Program Strategy - Breakout by Response

It was interesting to note that six out of eight of the panel members were quick to point out that the ASP was advisory only and that it gave recommendations, not redirection. The program managers, on the other hand, were not as concerned with the terminology of the statement. Many stated that the ASP did redirect or refine minor elements of the strategy but did not overturn the overall strategy. One program manager stated that there was "no question" that the ASP redirected his program's strategy but that the redirection was positive. Several commented on the types of recommendations that were received. These included recommendations on the terms and conditions of the contract, the fee structure, procedural issues on contractor teaming, and scheduling for the Defense Acquisition Board (DAB). Two program managers reported that recommendations which affected outside

organizations were not adopted by those organizations and thus, the ASP recommendations were non-binding. One panel member stated that the ASP redirected a program's strategy only if it was "basically flawed." The ASP chairperson stated that the strategy would be redirected only if it violated statutory requirements.

Question 10: The Effectiveness of the ASP Minutes. The respondents were asked to express their level of agreement with the statement "written minutes of the ASP briefing paralleled oral comments made during the briefing". Figure 17 depicts the response to the statement. Only 11% were neutral or disagreed with the statement. The remaining 89% either agreed or strongly agreed with it. The respondents were also asked to informally comment on the timeliness of the minutes.

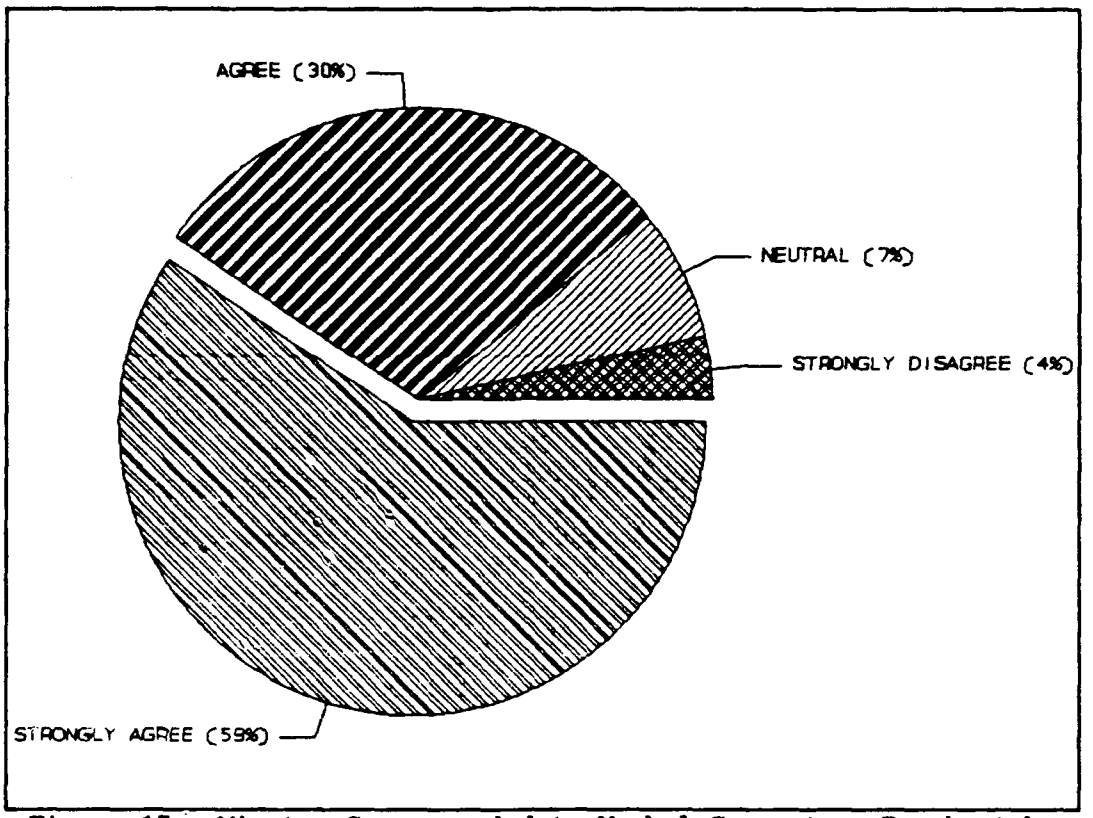


Figure 17. Minutes Corresponded to Verbal Comments - Breakout by Response

Seven program managers made positive comments about the minutes. They stated that the minutes were timely, contained no surprises and were well coordinated. One of these stated that the minutes were "crafted in a way that would not change any major tenets of the strategy". Four program managers made negative comments. Two of these reported that there were "some minor problems" and that the minutes were "not as detailed" as the comments, while two stated that the minutes were not timely.

Five of the panel members made positive comments regarding the minutes. One panel member stated that the minutes were "a good review process" while another stated that the write-ups of action items were particularly good but that the descriptive items were a little less so.

While three scored the statement highly, they also pointed out some problems with the minutes. One stated that the inflections and intensity of the comments could not be captured by the minutes. Another stated that, since the minute takers were typically procurement specialists, they did not know how to take shorthand which resulted in some misquotes. The panel chairperson stated that, in an attempt to ensure that the minutes accurately reflected the comments made at the briefing, draft minutes were sent to all of the panel members and field personnel for coordination.

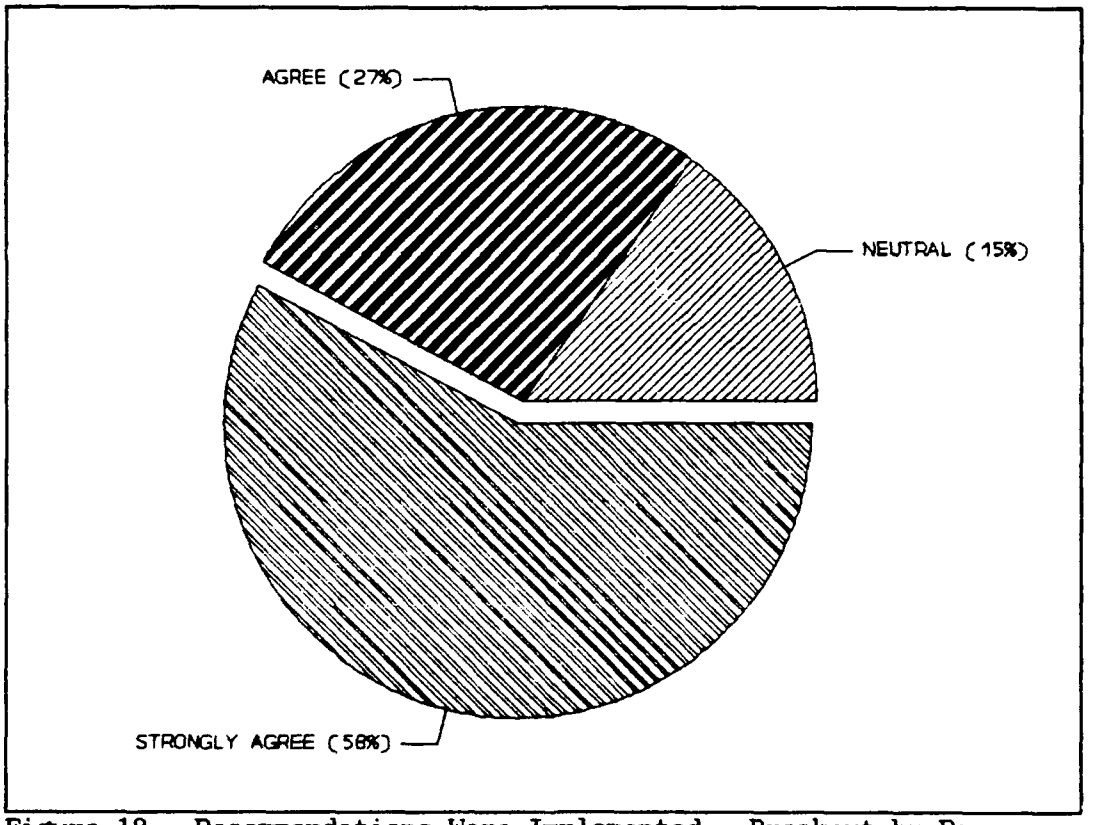


Figure 18. Recommendations Were Implemented - Breakout by Response

Question 11: Implementation of ASP Recommendations. The respondents were asked to express their levels of agreement with the statement "direction received from the ASP has been implemented". As indicated in the discussion of question 9, several respondents had

problems with the use of the word "direction". In those cases, the interviewer substituted "direction" with "recommendation" in the statement. None of the respondents disagreed or strongly disagreed with the statement. Those who agreed or strongly agreed made up 85% of the responses while the remaining 15% were neutral. Figure 18 depicts the breakout by response.

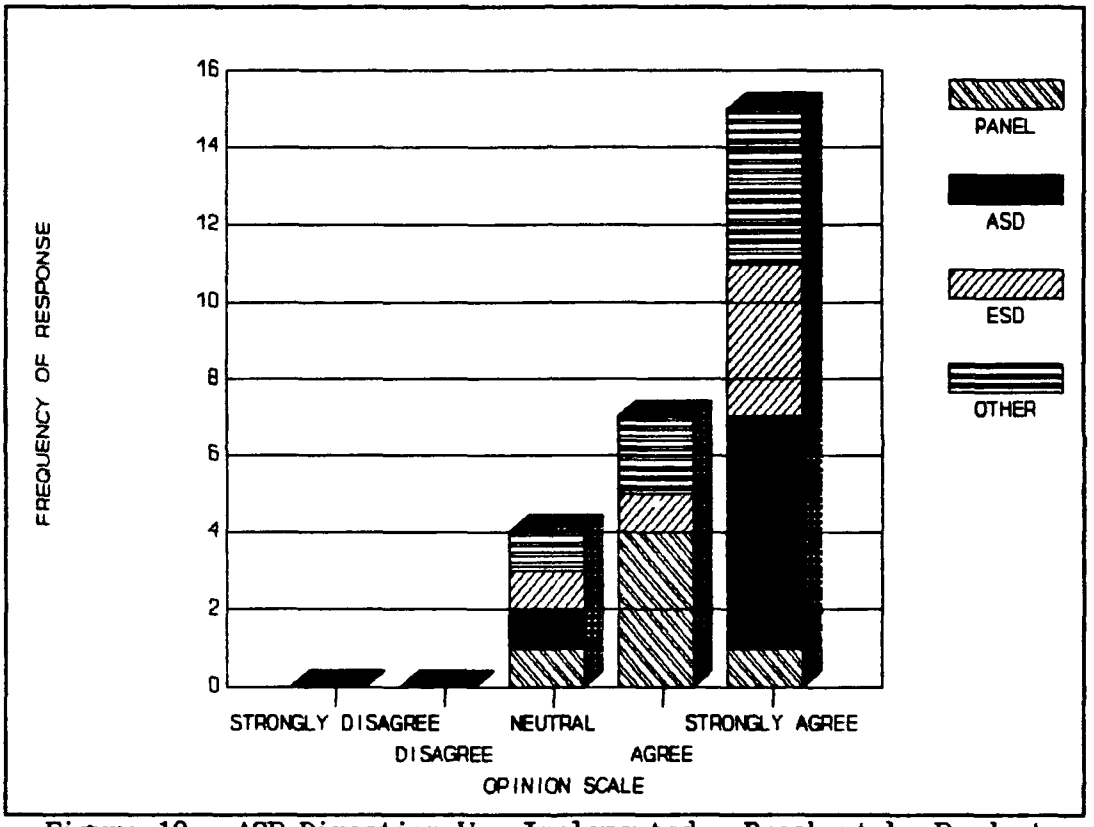


Figure 19. ASP Direction Was Implemented - Breakout by Product Division

Figure 19 illustrates the histogram of responses to question 11 broken out by product division. The majority of program managers strongly agreed with this statement while the majority of the panel members agreed. This indicates a difference in perception between the program managers and the panel members. ASD program managers' responses

were more closely grouped with the strongly agree category than were the responses of the smaller product division program managers.

One program manager stated that while the direction was implemented, the program ended up not being funded by the user and thus, the program was not continued. In this case, it was interesting to note that the user attended the ASP and expressed support for the program but later decided not to fund it. Several program managers stated that there was some "give and take" on the implementation of recommendations and that they did not feel they had to implement the recommendations if they had strong reservations about them.

The panel members felt that the practice of closing action items ensured that the recommendations were implemented or "rationalized away". One panel member stated that the recommendations were "implemented by the guys who needed to" and that they were acted upon in good faith. Another felt that, while the recommendations were not explicitly said to be binding, the positions and expertise of the panel members served to make them implicitly binding.

Questions 12 and 13: The Impact of ASP Recommendations. In question 12 the respondents were asked to express their levels of agreement with the statement "if ASP recommendations were implemented, some or all had a positive impact on the program" while question 13 asked them to do the same with the statement "if ASP recommendations were implemented, some or all had a negative impact on the program". Figure 20 depicts the distribution of responses to these questions. The majority of responses to question 12 fell in the agree category while the majority of responses to question 13 fell in the strongly disagree category.

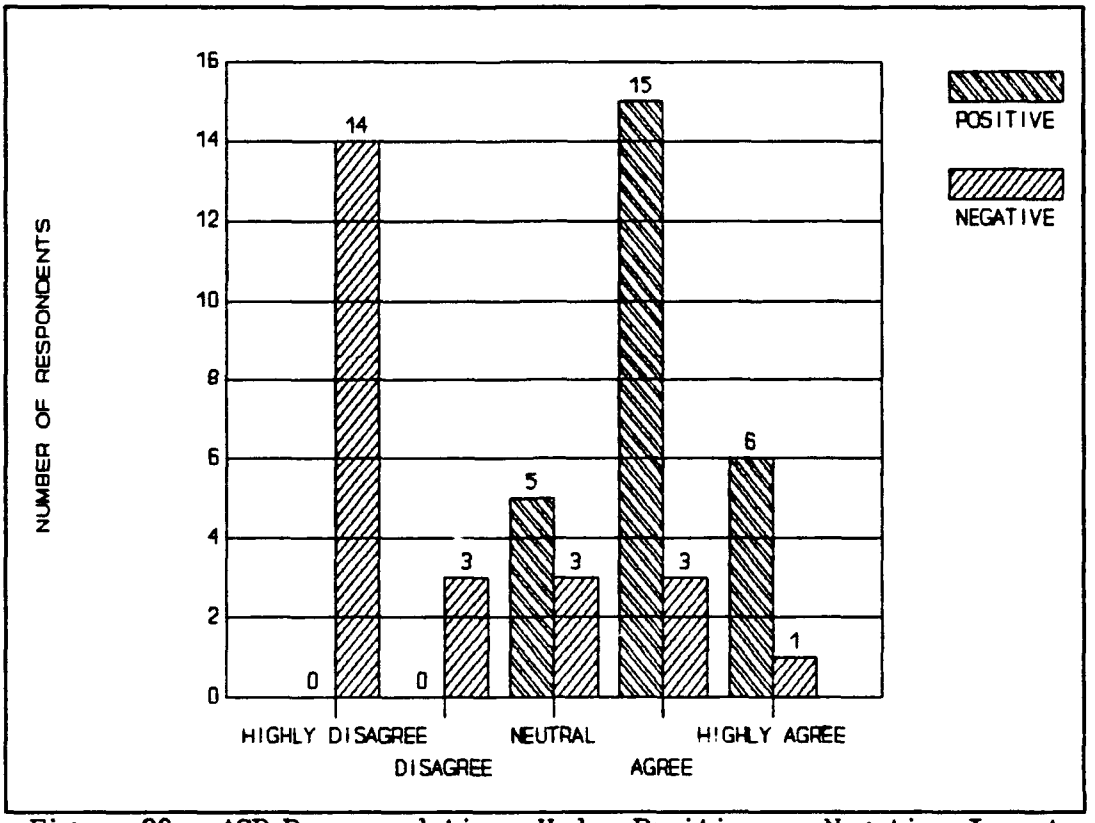


Figure 20. ASP Recommendations Had a Positive or Negative Impact

The general consensus was that the recommendations which were implemented had a positive impact. None of the respondents disagreed or strongly disagreed with the statement in question 12. Five were neutral, while 15 agreed and 6 strongly agreed. Four respondents agreed or strongly agreed with the statement in question 13, while three were neutral, three disagreed and 14 strongly disagreed. There was not much variation between program managers and panel members, nor among product divisions.

Those responding favorably to question 12 were asked what the positive impacts were to their programs. Two program managers stated that the "weight of the ASP" resulted in SPO direction carrying more priority with the contractors. One stated that the ASP chairperson stood behind the SPO desire tc reduce paperwork and that her support

eliminated any lateral fights between the program office and functional offices. Another stated that the ASP recommended deleting a requirement for work measurement standards on the contract, saving an unknown amount of money and work. Yet another stated that the ASP shed some light on ways to mitigate risk due to a tight schedule. Two program managers stated that it was difficult to assess the benefits of the ASP. One stated that he would not have implemented the recommendations if they did not have a perceived positive benefit. And finally, a program manager reported that, even after his program's ASP, DoD turned over control of the program to another DoD organization.

Panel members consistently reported that it was difficult to assess the impact of their recommendations upon a program, positive or negative. Many stated that their intent was to make positive recommendations and that the issue of negative impacts had to be looked at in terms of time horizons. On a short term basis, they felt that their recommendations could have a negative impact due to the increased workload of implementing them, but that in the long term, the recommendations should have a positive impact.

Question 14: Quantitative Benefits Resulting from the ASP. The program managers were asked to quantify, if possible, the benefits they experienced due to the implementation of ASP recommendations. Only one out of 18 program managers was able to quantify a benefit and even this case was difficult to prove. In his case, the original strategy called for a dual-source production effort. The ASP recommended, based on the past performance of the single contractor through FSD, that the production contract be awarded single-source. This resulted in a $10 million savings which would have otherwise been required to bring a

second source on-line. However, potential savings based on improved pricing due to a second source were not considered in the savings figure.

Most program managers reported that there were benefits, but that they were not easily quantifiable. The benefits came in the areas of making the PMs' jobs easier by passing along lessons learned, and the political aspect of consolidating the Air Force position on the programs. One program manager reported that the ASP recommendation to request structural assessment data ahead of time resulted in less time being spent in the source selection process, and that another suggestion avoided a "premature dismantling of the competitive field". One reported that the ASP helped sell a multi-year funding proposal to outside organizations. One reported that the ASP helped to streamline the program's paperwork trail. Another program manager reported that the ASP approval of a key change in strategy eliminated the need for PMD updates, expediting implementation of the change. And finally, a program manager stated that a non-quantifiable benefit of the ASP was that it served as a venue to "try out ideas in front of smart people".

Question 15: The Consensus Building Aspect of the ASP. This issue involved two statements. In the first, the respondents were asked to express their levels of agreement with the statement "the ASP process served to build a consensus of support for the program". Those who agreed with this statement were then asked to express their level of agreement with the statement "this consensus of support served to reduce oversight or redirection later in the acquisition life-cycle". Figure 21 depicts the response to the first statement, while Figure 22 does the same for the second statement.

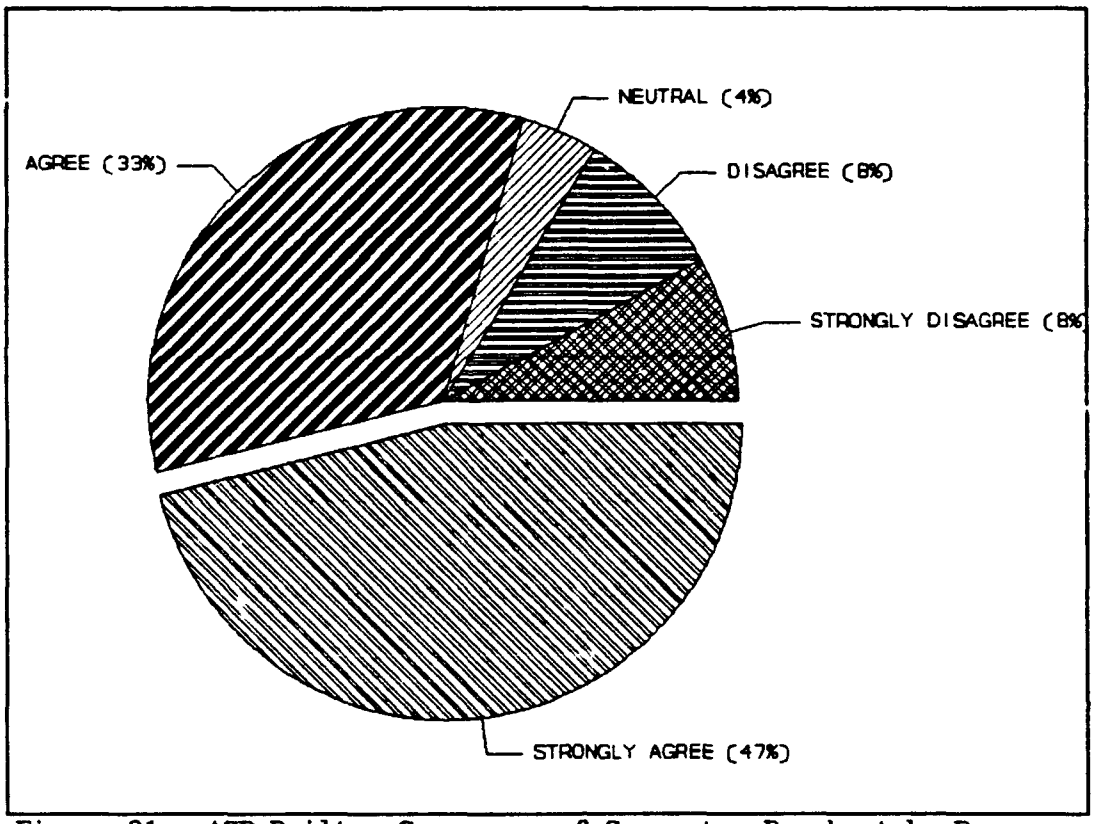


Figure 21. ASP Built a Consensus of Support - Breakout by Response

For the first statement, 80% agreed or strongly agreed that the ASP built a consensus of support for the program. Four percent were neutral and 16% disagreed or strongly disagreed with the statement. On the second statement, which was only used for respondents who answered with a three, four, or five on the first statement, 62% agreed or strongly agreed, while 38% disagreed or strongly disagreed with the statement. None of the respondents were neutral with regard to the second statement.

On the positive side of the consensus building issue, one program manager stated that this was "the biggest plus in the whole thing (the ASP process). Another reported that it was "easy to keep trucking along" once the consensus was built and that the high level of involvement by the using command was beneficial. One stated that the

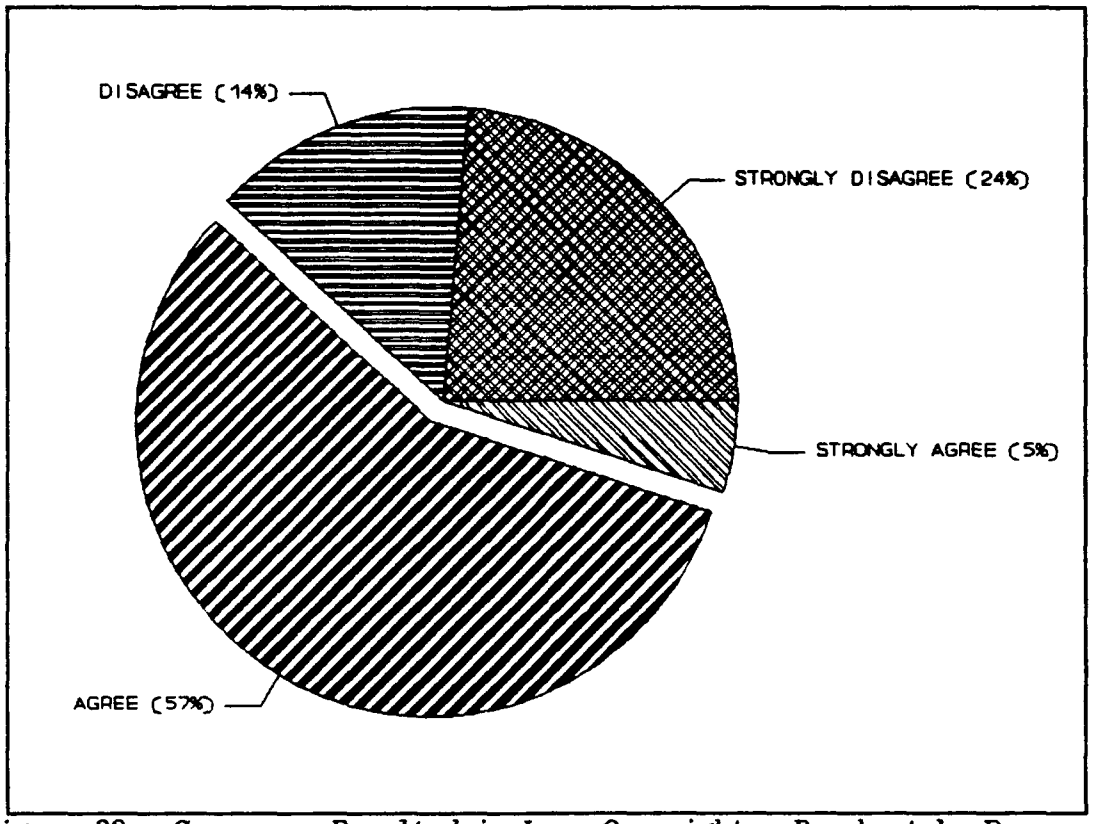


Figure 22. Consensus Resulted in Less Oversight - Breakout by Response

consensus was of use in some areas, but that the ASP could not ensure stability at all levels. Others reported that the ASP "built a consensus for the paperwork, but nothing more" and that there was no "consistency on issues that could be delegated". Several commented that, while the ASP did serve to build a consensus of support for the program, the majority of the oversight and redirection experienced by a program came from outside of AFSC and, accordingly, the consensus built by the ASP could not affect the amount of redirection or oversight.

Two of the panel members equated the term "consensus building" with advocacy for a program which they emphatically stated was not a role of the command headquarters. Four of the panel members were in agreement with the program managers who stated that the ASP built a consensus but that the consensus had little to do with redirection or

oversight of the program. According to the panel chairperson, the consensus building aspect was an important part of the ASP process. She stated that the ASP "facilitated the paperwork flow" and that the attendance of the user and the program element monitor (PEM) could help build a consensus that went beyond the headquarters.

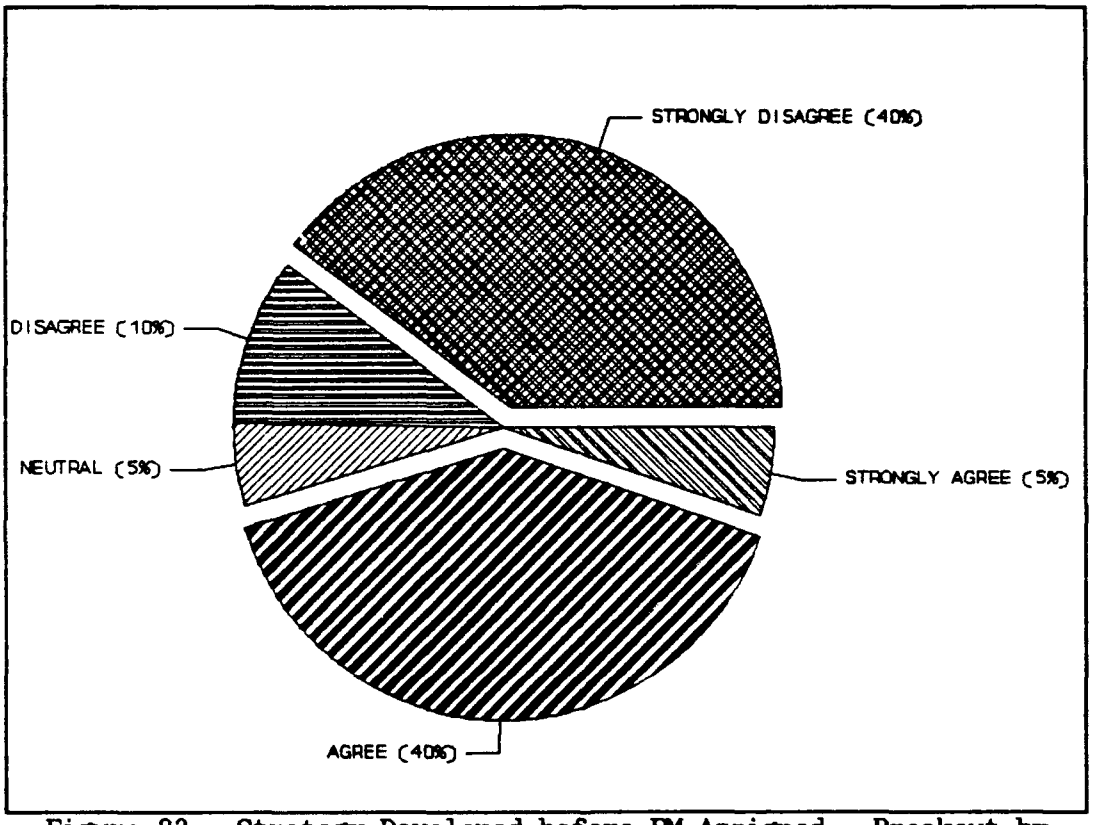


Figure 23. Strategy Developed before PM Assigned - Breakout by Response

Question 16: Program Manager Control of the Strategy. This question asked the respondents to express their levels of agreement with the statement "the basic program strategy was developed prior to the assignment of the program manager." Figure 23 depicts the response to this statement. The results were mixed with 45% agreeing or strongly agreeing with the statement and 50% disagreeing or strongly disagreeing. The remaining 5% were neutral. All three of the program managers with

programs in the early stages of the acquisition life-cycle (concept exploration and demonstration/validation) agreed or strongly agreed with the statement, indicating that they felt they had a little control over their strategies. In four out of six FSD programs however, the program managers answered with a strongly disagree, indicating that they felt they did have control over their strategies. This attitude changed for program managers with programs going into production. Three out of four agreed with the statement.

Four program managers reported that, while they had some broad guidelines as to what the strategy should have been, they had a lot of flexibility with the strategy. One stated that the basic framework was laid out, but that he had flexibility in the implementation of the strategy. Another stated that there was a lot of flexibility, but that often the program manager was "locked in by inertia". On the other hand, four stated that the program manager had only very limited control over the program's strategy. One of these program managers stated that a program manager was lucky if "he controlled 10% of the strategy" while another felt a program manager had control of about 20% of the strategy. And most of these program managers felt that their control was more in the area of their strategys' detailed implementation. Another stated that a program manager was "duty bound" to change it if he or she did not agree with it. The comments of panel members paralleled those of the program managers.

Questions Concerning Overall Impressions

The previous section concerned itself with the actual conduct of the ASP. This section deals with the total ASP process. The first four

questions of this section follow the opinion statement structure while the last three are open-ended.

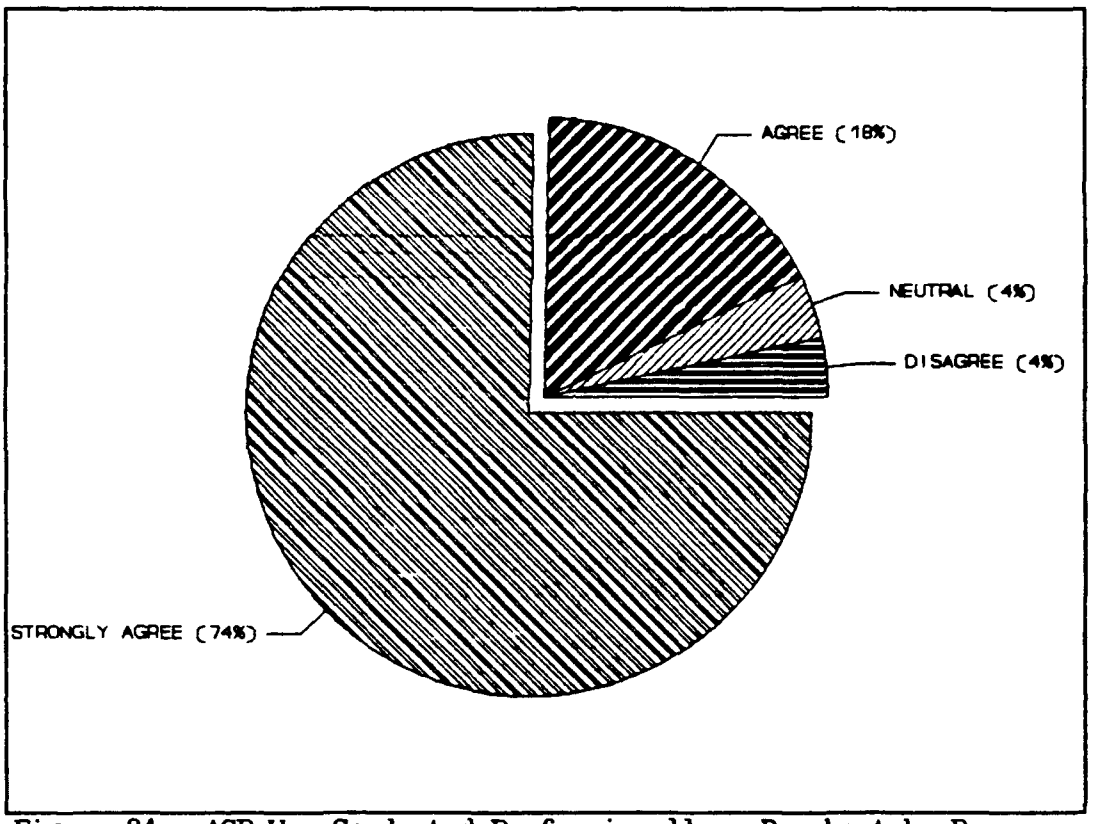


Figure 24. ASP Was Conducted Professionally - Breakout by Response

Question 17: Professionalism of ASP Participants. The respondents were asked to express their degrees of agreement with the statement "the ASP was conducted in a professional manner by all participants". The respondents overwhelmingly agreed with the statement, with 92% agreeing or strongly agreeing. Of these, 74% strongly agreed with the statement. Only eight percent were neutral or disagreed and none of the respondents strongly disagreed. Figure 24 depicts the breakout of responses to this statement.

One program manager noted that some of the participants did not get what they wanted and were visibly upset while another stated that there was some functional infighting among the product division

participants. One of the panel members stated that there were instances where "the arrogance of field program managers came through". It should be noted however that most of the respondents stated that a lack of professionalism was not a problem. One panel member stated that even when the briefings became somewhat confrontational, they were conducted professionally. And another panel member summed it up by saying "I haven't seen a fist fight yet."

Questions 18 and 19: The Value of Product Division and AFSC Comments. Question 18 asked the respondents to express their degrees of agreement with the statement "the recommendations of product division panel members were of value to the program manager", while question 19 asked them for their levels of agreement with the statement "the recommendations of AFSC panel members were of value".

As a group, the respondents reported that both the product division and the AFSC panel member recommendations were of value, but that the AFSC recommendations were of slightly more value than those of the product divisions. Program managers scored the product division recommendations slightly lower than they scored the AFSC recommendations. AFSC panel members followed the same trend, giving their remarks a slightly higher score than those of the product divisions. ASD program managers felt the product division recommendations were of more value than those of AFSC. ESD program managers considered the recommendations of both groups to have the same value. The other product division program managers, however, scored the AFSC recommendations higher then those of the product division.

The respondents were then asked to comment on whether the ASP needed to be made up of AFSC and product division personnel or if it

could be conducted without one of those parties. Ten of sixteen program managers that commented on this issue argued for the continued involvement of both the command and the product division. Most of these contended that the two groups brought specific benefits to the ASP that the other group could not. Among the benefits of AFSC involvement, according to these program managers, were the independence of the AFSC panel members from the program which, in turn, gave them a more objective viewpoint, and their broader view of a program. The product division members were considered to have more experience with the intricacies of the type of weapon system being discussed. Three out of the 16 program managers commenting on this issue stated that the ASP could be held just as effectively at the product division level. And the remaining three stated that the ASP could be conducted without product division involvement.

Only one of the AFSC panel members interviewed felt that the ASP could be conducted just as effectively at the product division level. The rest all argued for continued AFSC involvement in the process. Among the benefits that they cited were their ability to apply lessons learned across the product divisions, their proximity to the political thinking in Washington as well as the Air Staff and Office of the Secretary of the Air Force, their broad experience, and their lack of parochialism with respect to specific programs. Many of the panel members stated that the synergism possible with command panel membership was greater than that of product division-only membership.

Question 20: Rate the Overall ASP Process. This question asked the respondents to rate the total ASP process on a scale of one to five, with a one being the worst possible rating and a five being the best

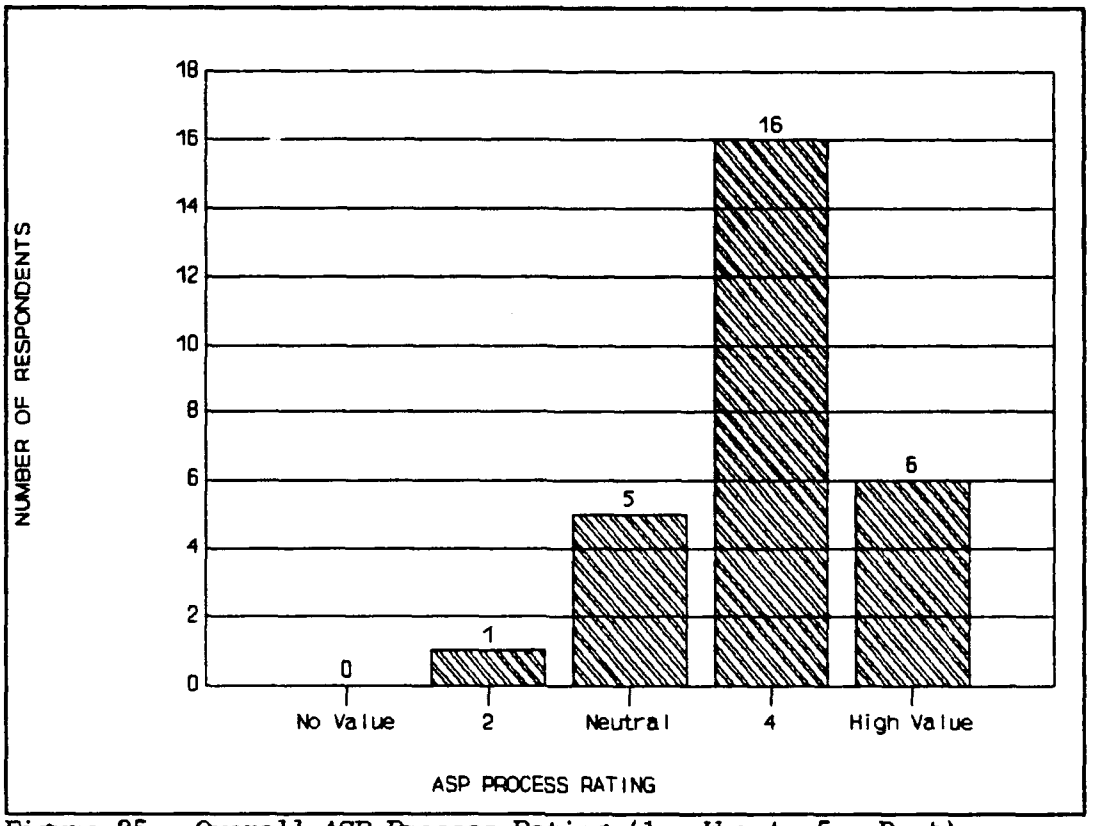


Figure 25. Overall ASP Process Rating (1 - Worst, 5 - Best)

possible rating. Figure 25 illustrates the frequency distribution of the responses. Only one of the respondents gave the ASP a rating of two or lower, while 22 of the respondents gave it a four or five. The remaining five respondents gave the ASP a three. Table 1 depicts the responses to this question as cross-tabulated with the program phase in which the ASP occurred. While it is difficult to evaluate the ratings of the two respondents in the concept exploration and demonstration/validation phases, it is interesting to note that four out of seven FSD program managers rated the ASP with a four. Along the same lines, five out of eight of the production program managers rated the process with a four.

Table 1: Cross Tabulation of Question 20 by Program Phase

Program Phase	ASP Process Rating 1	2	3	4	5	Row Total
Concept Exp	0	0	0	0	1	1
Dem/Val	0	0	0	1	0	1
FSD	0	0	3	4	0	7
Production	0	1	1	5	1	8
Column Total	0	1	4	10	2	17

Question 21: The Greatest Benefit of the ASP. The respondents were asked to finish the open ended statement "the greatest benefit of the ASP was . . ." in any manner they felt appropriate. Only one program manager felt that there was no benefit derived from the ASP and that the ASP was not worth the effort. All other program managers felt that there was some benefit to the ASP. Five of the program managers stated that the greatest benefit was that the ASP served as a "sanity check" which legitimized the strategy planning process. The panel, by being somewhat removed from the program, was able to view the strategy from a more objective viewpoint then program office personnel.

Another five stated that the greatest benefit was that the ASP served to "bring a wide spectrum of managers together" to consolidate the program's strategy. It forced a "walk-through" of the decision tree which led to the particular strategy selected for a program and it forced the program manager "to get his act together" across all of the functional disciplines. Two program managers stated that it forced discipline into the acquisition strategy planning process. And three program managers reported that the lessons learned from other programs brought to light by the panel members were the greatest benefit of the ASP.

Five of the panel members stated that they felt the greatest benefit was the "real-time application of lessons learned across the command. Another panel member stated that the synergistic affect of agreement on the initial strategy was the greatest benefit. One felt that its greatest benefit was that it forced a resolution of the users' requirements for the systems. And another stated that it allowed the program manager to refocus his or her efforts, if required, earlier than would be possible otherwise. A panel member added that "any problem resolved in the planning stages makes a ten-fold savings in effort expended if left until later in the program". He stated that this was a significant return on investment for the effort required to prepare for the panel.

Question 22: The Greatest Problem with the ASP. This question asked the respondents to finish the open-ended statement "the greatest problem with the ASP is . . ." in any manner that they felt appropriate. One program manager felt there were no major problems with the ASP. Five program managers stated that the greatest problem was with the scheduling of the briefings because of the high levels of the personnel involved. Four felt that the greatest problem was the amount of preparation required for the briefings, with one stating that the level of the briefing led product division personnel outside of the program office to "go bonkers" with briefing requirements that AFSC did not necessarily need.

Three stated that the greatest problem was in the amount of information required in the briefings. One of these program mangers felt that much of the information was not relevant to the program's strategy, while two felt that the presentation format for the briefings

was too rigid. Two program managers stated that a lack of in-depth understanding with regard to the specifics of their programs on the part of some of the panel members reduced the value of the ASP. And another complained that the panel failed to "sustain and establish an AFSC support position" for the program following the approval of its acquisition plan.

One panel member felt that there were no major problems with the ASP. Two stated that the biggest problem was with program managers who were less then fully open. They felt that this could lead to the approval of a strategy which may not be the best for a particular program. One echoed the concerns of program managers who felt that preparation time was the biggest problem. Another stated that the advisory nature of the ASP could lead panel members to feel that they were not "stake-holders" in a program. One felt that inadequate preparation by panel members was a problem which resulted in their "not understanding the particular program well enough". The panel chairperson stated that the biggest problem with the ASP was the lack of a common definition of risk which could lead to inconsistent decisions being made. And another panel member felt the major problem was that the ASP currently treats all programs the same, regardless of acquisition phase, while the ASPs' utility diminished for programs in the latter stages of the acquisition life-cycle.

Question 23: Improvements to the ASP Process. This question asked the respondents to finish the statement "the ASP could be improved by . . ." in any manner they felt appropriate. Five of the program managers commented that the make up and preparation of the panel were areas which could be improved. One suggested that the members be picked for their

ability to make positive contributions to the strategy planning process, while two stated that the panel members needed to be better prepared for each ASP. One commented that there were too many panel members and another felt that the process was "demeaned" when substitutes attended the briefings in place of the appointed panel members. He further stated that ASP participation should be considered a primary duty of the panel member, not an additional duty.

Four program managers felt that the process could be improved by allowing for greater flexibility in the content and format of the briefings. One of these program managers stated that the interactive nature of the ASP needed to take precedence over the formal presentation aspect, while another felt that ASP preparation and guidance needed to be kept current with the latest developments in acquisition regulations and guidance.

Two program managers felt that the criteria for holding an ASP at the headquarters AFSC level should be based upon the range of decisions available relative to a program's strategy with one stating that the process needed to be de-emphasized or delegated for programs going into production and discontinued altogether for programs in follow-on production contracts. One program manager stated that all ASPs should be delegated to the product division while splitting it into two sessions. One session would identify the issues facing a program relative to its strategy while the second would address those issues. Another program manager felt that responsibility for the ASP should be passed on to the program executive officer (PEO) which would result in placing approval of a program's strategy at the same level as its

decision making. And finally, a program manager suggested the use of video tele-conferencing to conduct the ASPs.

Two panel members felt that providing more preparation time for all panel members would improve the process. Two panel members stated that the issue of adequate risk assessments needed to be addressed. Another panel member felt that the ASP should be used on an ad hoc basis for programs with specific problems, as requested by the program manager, while one stated that the ASP should be emphasized for programs going through milestones 0, 1, and 2 and de-emphasized for all other programs. And finally, another panel member felt the process could be improved through greater openness by all parties and a freer exchange of information.

Other Comments

Several respondents made other comments during the course of the interviews. Two respondents felt that the key to a good ASP was not the quality of the briefing charts, but the make-up of the ASP team. Another stated that the ASP was necessary as a vehicle to bring AFSC corporate wisdom to bear and that its importance lay in the early stages of a program where the consequences of poor decisions would be greatest. He also stated that ASPs were important for less than major programs because of the relative inexperience of those program managers. One respondent felt that program managers would be best served by stopping and asking questions during the briefing rather then letting "the charts run the briefing".

Another respondent felt that the ASP was too political and that it should make independent recommendations. One stated that the ASP was

not a problem, but that coordination of the acquisition plan was. He felt that there was much more value in briefing the strategy through the ASP then coordinating it through the bureaucracy in the acquisition plan. And one respondent, commenting on the acquisition process in general, argued that there needed to be a better mechanism for forwarding changes in acquisition guidance to the program managers. Finally, many of the program managers felt that AFSC's implementation of a Joint ASP was extremely beneficial and should not be reversed.

Summary

This chapter has summarized the results of the interviews conducted for this thesis. These results have shown that the ASP is adding value for the program manager. However, there appears to be room for improvement. Conclusions based upon the findings discussed in this chapter, recommendations for improvement of the ASP process, and recommendations for further research are discussed in the final chapter of this thesis.

V. Conclusions and Recommendations

Introduction

Chapter II of this thesis built a case for examining the ASP process. Chapter III discussed the methodology which was used to conduct the research and Chapter IV discussed the results of that research. Chapter I stated the goals of the research, namely to determine if the ASP process was adding value for the program managers charged with developing and fielding weapon systems for the Air Force, and to suggest ways to improve the process. This chapter ties together the discussions of Chapters II, III, and IV to satisfy the objectives listed in Chapter I.

Conclusions

This section discusses the implications of the research findings with regard to the research objectives, the research problem statement, ASP preparation and conduct, and the overall ASP process. The next section will discuss methods to improve the process.

Research Objective 1. The first research objective was to determine how often program acquisition strategies were redirected by the ASP. The research showed that acquisition strategies generally were not redirected as a result of the ASP process. The ASP did, however, make recommendations which typically resulted in minor changes to overall acquisition strategy. Many of the respondents stated that the major benefit of the ASP was not that it redirected strategy, but rather, that it served as a sanity check. This translated into contractor and other outside personnel placing more credibility in a

program's strategy because it had been "blessed" by the AFSC panel of experts.

Several panel members worried about the use of the term "redirection" and pointed out that the ASP "advised" program managers only. This preoccupation with the terminology obscured the basic fact that the ranks and positions of the panel members, as well as their roles with regard to other aspects of the programs, served to make their recommendations extremely difficult to ignore. Many program managers stated that they felt they could argue with what they considered to be flawed panel recommendations. However, the panel members need to understand the import of the comments they make at ASP briefings. While they may feel that the "advisory" nature of the ASP may shield them from responsibility for their own statements, their statements do, in fact, carry an implicit authority and weight which the program managers can not ignore.

This research objective also sought to determine the quality of the recommendations received by the ASP. The findings showed that the respondents overwhelmingly felt the comments received during the ASP were constructive when looked at in aggregate. Several respondents, however, indicated that a few of the comments were not constructive at all. And there were indications from panel members that there were certain panel members who were known for either not saying anything during an ASP or for consistently making "off-the-wall" comments.

Research Objective 2. The second research objective was to determine if the recommendations made by the ASP were being implemented or if they were being ignored. The research showed that the recommendations were indeed being implemented. None of the respondents

felt that the recommendations were not being implemented. The fact that the majority of the program managers agreed that the recommendations were being implemented suggests that the ASP is not strictly advisory and that, implicitly, it is directive in nature.

Research Objective 3. The third research objective was to determine whether the recommendations that were implemented had a positive or negative impact on the programs. The findings showed that the recommendations which were implemented did have positive impacts on the programs. This was illustrated by the fact that the majority of respondents "agreed" that the recommendations had positive impacts and "strongly disagreed" that the recommendations had negative impacts. Many of these positive impacts, however, did not deal directly with strategic issues, but came in the form of increased program office credibility with contractors and functional offices as a result of the strategies having been supported by the expert panel.

As discussed earlier in this thesis, a primary problem in conducting this study was that there was no baseline for comparison to determine the effects of ASP recommendations. The findings of question 14 illustrated this shortcoming. Only one of the program manager respondents was able to identify quantitative impacts of the ASP and even this one was questionable. Therefore, the topic was dealt with in terms of the program managers' and panel members' feelings on the subject. The responses regarding impacts also had to be couched in terms of time horizons. As might be expected, implementation of the recommendations could easily result in negative impacts in the short term, yet yield positive impacts in the long term, which many program managers felt to be the case.

Responses to questions 15 and 15A of the interview guide showed that the ASP was also useful in building consensus for programs, but that this consensus did not necessarily lead to a reduction of oversight or redirection of the programs later in their life-cycles. The consensus building aspect of the ASP could, however, be considered a positive impact on the program since it did typically reduce the amount and the coordination time of paperwork. User participation in the ASP was considered to have the positive impact of giving both the users and the program managers a greater understanding of each others requirements and objectives for the programs.

Research Objective 4. The fourth research objective was to determine what types of strategic planning help the program managers were getting and to determine what type of help they needed. The literature review contained in Chapter II satisfies these objectives. Clearly, the ASP is one form of assistance which the program managers are receiving. The ASP falls in line with the recommendations of Bissett and Kerzner that personnel responsible for acquisition strategy development be given access to senior level personnel responsible for acquisition policy. Among the other forms of assistance available to program managers were the DSMC and ACSC Acquisition Strategy Guides. AFSC and product division personnel also provided PMs with assistance in developing strategies and ASP briefings. Regulatory guidance was also available on the subject. However, the key ingredient, according to the literature review, was top level involvement in strategy development.

Research Problem Statement. The ultimate goal of this research was to determine if the ASP had an impact on program effectiveness. Because of the lack of "hard" data on the subject, this was measured

qualitatively. Responses to question 20 of the interview guide showed that 22 out of 28 respondents rated the process highly. Of the remaining six, five were neutral and only one gave the ASP a rating below neutral. The results, then, indicate that the ASP does indeed add value for the program managers. These responses were given in the context of weighing all aspects of the ASP, including the amount of time and effort that went into their preparation.

Demographics. A large portion of the programs involved in this study were in the production phase of the acquisition life-cycle. The literature review, however, pointed out that the importance of acquisition strategy planning lay in the early phases of the acquisition life-cycle. Indeed, the regulation concerning ASPs stated that the ASP's importance was to bring expertise to bear early-on in a program. Many of the production phase program managers felt that their strategies were so fixed by that point that the benefit of the ASP was marginal at best.

ASP Preparation. The findings showed that preparation for the ASP was, perhaps, the biggest detriment to adding positive value for the program manager. The average estimated effort required to prepare for an ASP was just over nine man-months. The majority of respondents did not feel that preparation was straightforward. The opinions varied from product division to product division, suggesting that some product divisions may have provided better preparation assistance than others.

In fairness to AFSC and the product division staffs, much has been done to assist program managers in preparing for the ASP. However, some of the tools devised had greater impact than others. Indeed, some of the tools that were considered effective were not readily available to

the program managers. The research showed that the product division secretariats had the highest utilization rate and the second highest rating in terms of helpfulness to the program manager.

The video tape, on the other hand, was considered to be helpful by those who used it, but it was used in only 30% of the cases studied. One program manager who participated in the filming of the tape, commented that it was really just a "commercial" for the ASP process and that it did not really give the PM any solid information that would help in preparing for an ASP. In this vein, many of the program managers stated that the most effective way to prepare for an ASP was to either sit in on one or to talk to a program manager who had recently been through one. At some of the smaller product divisions, this could be very difficult to do because of the small number of programs going through the ASP process. The DSMC Acquisition Strategy Guide was found helpful by those who used it, but it was used in under 40% of the cases. AFSC publishes lessons learned every six months which highlight some of the better strategies used by program managers. However, the current guidance emanating from AFSC tends to concentrate more on the ASP briefing than the actual development of acquisition strategies.

Many of the comments received referred to a lack of preparation on the part of some of the panel members. The effect of this lack of preparation was to waste a lot of the ASP briefing discussing specific programmatic details rather then acquisition strategy issues. This author attended one joint ASP and observed this problem first-hand. A large part of the problem has been due to the headquarter's declining role in the management of major programs and, thus, a resultant lack of communication with the program offices. This translated into the panel

members having to be educated on the specific programs during the ASPs themselves.

Conduct of the ASP. The findings to questions 7 and 17 showed that the ASP was being conducted professionally and in a non-confrontational manner. Through the comments of the program managers, it appears that the non-confrontational aspect of the ASP is important to its continued success. Many commented that the ASP should be less formal and that it should take on more of a dialogue type approach rather then the current briefing approach. And in discussing confrontation as it applies to the ASP, it should be noted that the demeanor of the participants is what is important, not the avoidance of controversial program strategy issues.

Responses to questions 18 and 19 showed that both the product division panel members and the headquarters AFSC panel members added value to the process and that their respective values were in different areas. Therefore, major program ASPs should continue to include both groups.

The findings to question 10 of the interview guide showed that the ASP minutes were effective. They were conveying the correct information to the ASP participants, and they were being published in a timely manner.

Other Benefits and Problems with the ASP. The primary benefit of the ASP was in its use as a "sanity check" of the program managers' strategies. Another perceived benefit was that it forced discipline into the strategy formulation process. It also provided a vehicle for the cross-fertilization of lessons learned across the command. The problems associated with the ASP process included scheduling

difficulties, the amount of information required for the ASP briefings, and the rigidity of the presentation format.

Summary. The research has shown that while ASP recommendations did not change the fundamental aspects of program strategies, they did alter minor aspects of program strategies. The majority of the recommendations were being implemented and the value to the programs of these implemented recommendations was considered to be positive. Overall, the ASP process was given high marks by program managers and panel members alike.

The research did uncover some problems in the process. Among these were the amount of preparation a program manager had to engage in prior to an ASP, a lack of programmatic information being available to panel members prior to an ASP, and the large number of programs already in the production phase of the acquisition life-cycle which went through the ASP process and which received marginal benefit from the process. The next section of this chapter discusses recommendations for improving the process.

ASP Process Recommendations

It is clear from the research that the Air Force has a good ASP process. In fact, one of the respondents remarked that the "ASP was one of the things we were doing right" in the acquisition field. Nevertheless, the process can be improved. The improvements suggested from the research findings are described below.

1. **Continue the ASP Process.** First, and foremost, the ASP process should be continued. The early perception that the ASP was just another bureaucratic square-filling exercise has been refuted by the

findings of this research. The research clearly shows that the ASP is of value to the program manager and that its long term benefits outweigh its short term penalties. It should be noted, however, that the ASP's value varies depending on the acquisition phase of the particular program involved. This issue forms the basis for the next recommendation.

2. **Delegate Production ASPs.** Many of the program managers stated that the value of the ASP declined as the program matured. The expertise of the product divisions with the purchase and fielding of particular types of weapon systems is sufficient to provide the production program managers with the advice which they need. This would avoid the additional costs and effort required with Headquarters AFSC participation while achieving similar results. Additionally, ASPs for follow-on production contracts should be discontinued altogether.

3. **Integrate the ASP with the PEO Structure.** With Headquarters AFSC role in the management of Air Force acquisition programs on the decline, the involvement of the program executive officers (PEOs) in the ASP process becomes more critical. Allowing the PEOs to co-chair ASPs would bring them into the acquisition strategy formulation loop and would put ASP recommendations on the same level as the programs' decision making authority. The AFSC panel would then function more as an independent advisory board with the PEO making the decisions on whether the panel's recommendations should be implemented or not.

4. **Insist on High-Level User Participation.** Some of the program managers and panel members described ASPs in which the user representatives had no real authority to commit to anything on the part of the using command. In several cases, the representative did not have

an understanding of the program being discussed or the acquisition process. To adequately address requirements and risk, knowledgeable representation on the part of the user is essential. Anything less will result in problems for the user downstream.

5. **Continue to Emphasize Quality Panel Membership.** Several respondents pointed out that the ASP was a very personality driven process. Its continued success hinges on the quality of the personnel making up the panels at both the headquarters and product division levels. "Off-the-wall" comments, championing of causes, and comments reflecting a lack of understanding for a program all work together to reduce the credibility of the panel. The panel's credibility makes the difference in the usefulness of the ASP. Panel chairpersons must continue to monitor the performance of all panel members and insist on replacing panel members only with other quality personnel. The chairpersons should insist that primary panel members attend as many of the briefings as possible.

6. **Recognize the Directive Nature of the ASP.** Panel members need to understand that, while the ASP is advisory in nature, their positions and authority serve to make the ASP implicitly directive. Panel members must recognize this and avoid making comments which are not well thought out.

7. **Insist on Proper Preparation by Panel Members.** The ASP is not a cost effective vehicle for providing panel members with programmatic information. The tight schedules of panel members which dictate the length of the ASP briefings require that they be well versed in the programmatic issues before the panel is convened. Every minute spent in an ASP providing background information takes away a minute from the

discussion of the program's important acquisition strategy issues. The result is that some of the issues which require heavy debate may be glossed over while others may not be discussed at all. An information package describing program background should be forwarded to the AFSC ASP secretariat for distribution to the panel members several weeks prior to the convening of an ASP. Panel members would then have the responsibility to review the package before the ASP itself. While this would increase the workload for the program managers in the short term, it would be expected to result in a much more useful dialogue during the ASP. The pre-meetings of all panel members to discuss the issues expected to surface at upcoming ASPs should be formalized.

8. **Allow for Greater Flexibility and Interaction.** While it is clear that the panel members require certain information to be presented, the program manager should be given the flexibility to present the material in a manner which fits the program and his or her management style. It should be made clear that the ASP Presentation Guide is really just a guide and that strict adherence to its format is not required. Likewise, in a less formal atmosphere, the program manager must assume the responsibility for getting the required information across to the panel members. The ASP regulation and the presentation guide should be changed to tailor the type of information required to the particular phase of a program. The importance of the ASP lies in the cross-flow of information between the participants and, therefore, the ASP briefing format should be subordinate to its interactive nature.

9. **Continue Efforts to Standardize Risk Assessment.** Part of the success of the ASP hinges on its ability to predict what will happen in

the future. Key to this is adequate risk assessment of the programs. There is currently no standardized model within the Air Force to assess program risks. Each program manager who briefs an ASP goes about the risk assessment task in a slightly different way. This makes it difficult on the panel members to impart the best advice for a program. The command has embarked on an effort to develop standardized risk assessment models and should continue to do so.

10. **Encourage the Use of the ASP on an Ad Hoc Basis.** The ASP is currently required for programs nearing a milestone decision point. However, programs are often redirected between milestones. This redirection can come in the form of reduced funding, changing threat environments, and changing user requirements, to name a few. Each of these changes can have a significant impact on program strategy. Yet, the ASP regulation makes no provisions for convening ad hoc ASPs at the request of the program manager. Accordingly, the regulation should be changed to allow for program manager requested ASPs.

11. **Standardize ASP Briefing Schedules.** A complaint of program managers was in the difficulty in scheduling the ASP briefings to conform to the schedules of the high-level personnel involved. Headquarters AFSC and the product divisions should set aside a specific day or days during each month for the express purpose of conducting ASPs. This would result in fewer scheduling difficulties and higher structure for the preparation process.

12. **Encourage the Use of Video Tele-Conferencing.** Interestingly, the author did not hear of any instances in which this method of communication was used. The standardized locations and format of ASP briefings, however, make the ASP a prime candidate for the use of video

tele-conferencing. The benefits of video tele-conferencing include reduced travel budgets and more efficient use of resources.

13. Produce a Video Tape of an Actual ASP Briefing. The video tape produced by AFSC was considered by many to be a "commercial" for the ASP process. Many of the program managers felt that sitting in on ASP or talking to a program manager who had been through one would have been the best way to prepare for an ASP. Using the video tape medium to capture the essence of an actual ASP briefing followed by candid comments from program managers who had been through the process, as well as panel members expressing their views on what was required in an ASP, could be a significant aid to a program manager preparing for one.

14. Publish an AFSC Acquisition Strategy Guide. The DSMC Acquisition Strategy Guide was found to be useful to those program managers who knew of its existence. Unfortunately, many did not know it existed. AFSC could combine its semi-annual lessons learned package into an acquisition strategy guide which could be distributed across the command. This would have the potential to reach many more program managers than the DSMC guide. Providing assistance to the program manager before he or she formulated the program strategy could be of more use than reviewing it after it was already formulated.

Summary. This section has made some wide-ranging recommendations regarding the ASP process. There are, however, areas which justify further research.

Recommendations for Further Research

This thesis has concentrated on the joint ASPs conducted by AFSC and its product divisions. Of concern is how the ASP is being implemented at the product division and lower levels. Several of the

It is hoped that the recommendations suggested by the findings of this research will be of benefit to the personnel who acquire the Air Force's weapon systems.

Appendix A: Suggested Topics for Discussion at an ASP

AFSCR 800-53 Attachment 1 19 July 1989

1. **Requirements and Program Description:**
   - *Overall acquisition strategy
   - *Integrated program schedule
   - *Program assumptions and alternatives
   - *Program margin and slack
   - *Could-cost application
   - User requirements known
   - Requirements updated
   - Disconnects identified and trade-offs accomplished
   - User involvement
   - People resources
   - Potential competitors
   - Lessons learned and experience
   - Political concerns
   - Security issues
   - TQM application

2. **Engineering:**
   - *Engineering strategy
   - *Engineering schedule
   - *Engineering assumptions and alternatives
   - *Engineering margin and slack
   - *Could-cost application
   - Threat response
   - Reliability, maintainability, and producibility
   - Technology transition
   - Requirements allocation
   - Control of development process
   - Risk assessment and reduction
   - Operational use considerations
   - Software control
   - Industrial base activity
   - Productivity enhancement
   - Production operations requirements
   - Environmental safety and occupational safety issues
   - Hardware and software systems integration concept definition
   - TQM application

3. **Test:**
   - *Test strategy
   - *Test schedule
   - *Test assumptions and alternatives
   - *Test margin and slack
   - *Could-cost application
   - Test and evaluation
   - Developmental test and evaluation
   - Operational test and evaluation
   - Test resource summary
   - Transition from development to production
   - TQM application

4. Support:
   - *Support strategy
   - *Support schedule
   - *Support assumptions and alternatives
   - *Support margin and slack
   - *Could-cost application
   - Maintenance and support concept definition
   - Lessons learned application
   - Life cycle cost management
   - Logistics support analysis application
   - Resource development
   - Fielding strategies
   - Mission planning
   - Post-production support
   - Software maintenance and support concept definition
   - TQM application

5. Budget:
   - *Funding requirements and budget
   - *Budget assumptions and alternatives
   - *Budget margin and slack
   - Legislation
   - Unfunded requirements
   - Disconnects
   - Planning, programming, and budgeting system
   - Independent cost analysis
   - TQM application

6. Business:
   - *Business strategy
   - *Business schedule
   - *Business assumptions and alternatives
   - *Business margin and slack
   - *Could-cost application
   - Contract type, parameters, and incentives
   - Competition
   - Long lead
   - Letter contract and unpriced order
   - Should-cost
   - Design-to-cost and life cycle cost
   - Multiyear
   - Small and disadvantaged business opportunities
   - Warranty
   - Government-furnished property, equipment, and data
   - Value engineering
   - Indemnification
   - Allied or foreign participation
   - Foreign military sales
   - Unique clauses and special provisions
   - TQM application

* Indicates a core topic which describes the essential strategy of each section.

Appendix B: Interview Guide

INTERVIEW #_____

INTRODUCTION

I am conducting this interview as part of a Masters Degree thesis sponsored by the Air Force Institute of Technology. The objective of the thesis is to determine if the Acquisition Strategy Panel (ASP) process is of value to the program manager in the development and implementation of program strategy. The end result of this thesis research is expected to be a recommendation for continuance, discontinuance, or modification of the ASP process. To do so, I am conducting interviews with program managers and other personnel at the SPO, product division and headquarters level who have had direct experience with the process. To provide a valid recommendation, your candor in responding to the interview questions is vital.

Some of the interview questions seek quantifiable data, while other seek subjective data. The subjective questions will be asked in two parts. First, you will be given a statement, and asked if you strongly disagree, have no opinion, or strongly agree or are somewhere between these. Then you will be asked for specific comments regarding the statement. At the end of the interview, please feel free to provide information which you think is important to the ASP process, but was not questioned earlier.

I will ask you several personal identification questions which I will use to contact you should I need clarification of your responses. This information will be kept separate from the response sheets and will be destroyed upon publication of the thesis. While portions of your responses may be used in the thesis, they will not be directly attributed to you.

At the end of the interview, I will leave a supplemental response sheet with you. Should you think of anything that might be important in characterizing the ASP process which we did not cover in the interview, please fill in the supplemental sheet and mail it to me.

THANK YOU FOR YOUR TIME!

SCOTT C. HARDIMAN, Capt, USAF
Student, School of Systems and Logistics
Air Force Institute of Technology

INTERVIEW GUIDE INTERVIEW #_____

DEMOGRAPHIC DATA

1. Which of the following best describes your role in the ASP process?

A. Program Manager
B. Contracting Officer
C. Product Division ASP Focal Point
D. Product Division ASP panel member
E. Command ASP panel member
F. Other. Specify:

_____

2. Are you currently involved in the ASP process? ___Yes ___No. If not, how long ago were you involved? _____
If your association is with a specific program, when was the ASP conducted? _____. At what point in the program's lifecycle did the ASP occur? _____
_____.

3. If you were involved at the SPO level, what was the value of the program?

$_____ R & D $_____ Production

4. The specific ASP(s) that you have been involved with was (were) a
_____ Joint ASP (AFSC & Prod Div) _____ Product Division ASP

YOU WILL NOW BE ASKED SEVERAL OPINION QUESTIONS. PLEASE USE THE FOLLOWING SCALE IN RESPONDING TO THESE QUESTIONS.

1	2	3	4	5
STRONGLY DISAGREE	MODERATELY DISAGREE	NO OPINION	MODERATELY AGREE	STRONGLY AGREE

The overall ASP process is or was of value to the program manager.

1 2 3 4 5

ASP PREPARATION AND GUIDANCE

1. Preparation for the ASP was straightforward.

1 2 3 4 5

INTERVIEW #_____

2. The following items were helpfull in preparing for the ASP (0 for not used, N for unaware of its existence).

AFSC Regulations	1	2	3	4	5	0	N
Product Division Regs	1	2	3	4	5	0	N
Product Division Handbook	1	2	3	4	5	0	N
AFSC Video Tape	1	2	3	4	5	0	N
AFSC ASP Focal Point	1	2	3	4	5	0	N
Prod Div ASP Focal Point	1	2	3	4	5	0	N
DSMC Acq Strategy Guide	1	2	3	4	5	0	N
ACSC Acq Strategy Guide	1	2	3	4	5	0	N

3. Were there other items that were not listed above which served as an aid in preparing for the ASP? _____ Yes _____ No. If yes, what werethey?_____
_____

4. Please estimate the amount of effort expended in preparing for the ASP.

# of personnel _____. Manhours _____. Overall length of time _____. Are these estimated or actual figures? _____ Est _____ Act

5. **Preparation** for the ASP resulted in an altered program strategy.

STRONGLY DISAGREE				STRONGLY AGREE
1	2	3	4	5

If so, how?
_____
_____
_____

6. Do you have any other comments on ASP preparation or suggestions for changing the preparation process?
_____
_____
_____

THE ACQUISITION STRATEGY PANEL

7. The ASP was conducted in a non-confrontational way.

1	2	3	4	5

Specific comments:
_____
_____
_____

INTERVIEW #_____

8. Comments received from panel members were constructive.

STRONGLY DISAGREE				STRONGLY AGREE
1	2	3	4	5

Specific Comments:_____

_____

_____

9. The ASP redirected overall program strategy.

1 2 3 4 5

If so, how?

_____

_____

10. Written minutes of the ASP briefing paralleled oral comments made during the briefing.

1 2 3 4 5

If not, how did they differ and what was the source of the difference?

_____

_____

11. Direction received from the ASP has been implemented.

1 2 3 4 5

If not, why not?

_____

_____

_____

12. If ASP direction was implemented, some or all had a positive impact on the program.

1 2 3 4 5

If so, what was or were the positive impacts?

_____

_____

13. If ASP direction was implemented, some or all had a negative impact on the program.

1 2 3 4 5

INTERVIEW #_____

If so, what was or were the negative impacts?

_____

_____

QUANTITATIVE BENEFITS OR COSTS RESULTING FROM THE ASP

14a. Program Budget: $_____

14b. Program Schedule: _____ Hrs

14c. Technical Performance: _____

14d. Program Quality: _____

14e. Other: _____

15. The ASP process served to build a consensus of support for the program.

STRONGLY DISAGREE				STRONGLY AGREE
1	2	3	4	5

15a. If a consensus of support was built, this served to reduce oversight or program redirection later in the acquisition lifecycle.

1 2 3 4 5

Do you have any comments on the consensus building aspect of the ASP?

_____

_____

16. The basic program strategy was developed prior to the assignment of the program manager.

1 2 3 4 5

Specific comments:

_____

_____

IMPRESSIONS

17. The ASP was conducted in a professional manner by all participants.

1 2 3 4 5

INTERVIEW #_____

Specific comments:

_____

_____

18. The recommendations of the product division panel members were/are of value to the program manager.

STRONGLY DISAGREE				STRONGLY AGREE
1	2	3	4	5

Specific comments:

_____

_____

_____

19. The recommendations of AFSC panel members were/are of value to the program manager.

1	2	3	4	5

Specific comments:

_____

_____

20. Rate your overall impression of the total ASP process, with 1 being lowest and 5 being highest.

1	2	3	4	5

21. The greatest benefit of the ASP is:

_____

_____

22. The greatest problem with the ASP is:

_____

_____

23. The ASP could be improved by:

_____

_____

OTHER COMMENTS

SUPPLEMENTAL ASP INFORMATION INTERVIEW #_____

If you would like to embellish on your responses to this interview, or add information which you do not feel was covered in the interview, please note your comments below and mail them to

AFIT/LSG
Wright-Patterson AFB, OH 45433
Attn: Capt Scott Hardiman

Mail your comments so that they will arrive by 30 June 1990. If you have any questions, please call me in care of the institute at Autovon 785-8989 or commercial (513) 255-8989.

Thanks again for your help!

Appendix C: Interview List

The following is a list of Air Force acquisition programs which have been through a Joint or Headquarters AFSC ASP and their responsible program offices. In ALL cases, an attempt was made to contact the appropriate person for an interview. Unfortunately, the high turnover inherent in the Air Force resulted in many of the programs not being included in this research. An asterisk in the "Interviewed" column indicates that a person from that office was interviewed for this thesis. Programs having been through more then one ASP are only listed once.

Many of the personnel interviewed stated that the greatest aid to preparing for an ASP was to talk to someone who had been through the process. It is hoped that this list will assist personnel expecting to participate in an ASP with finding experienced personnel to talk to.

Program	Program Office	Interviewed
ALS R/T	SSD/CLH	
MMW	MSD/XR-2	
DSCS-III	SSD/CWH	
IR Maverick	ASD/SDM	*
IPE	ASD/YZ	*
F-16 Multiyear	ASD/YP	*
Have Nap	MSD/YGP	
Titan IV	WSMC/ST	
Seek Spinner	ASD/VB	
AWACS RSIP	ESD/TC-1	*
JTIDS	ESD/TCD	*
C-17	ASD/YC	*
ELVUS	SSD/CLU	
Sensor Fused Weapon	MSD/YB	
Delta III	SSD/CLVM	
Combat Edge	HSD/YA	*
Alaska ACMI	MSD/YIC	
NASP	ASD/NA	*
TTTS	ASD/YT	*
BSTS	SSD/CNB	*
NAVSTAR Replenishment	SSD/CWNZ	*
ASTT	ESD/AT	
Space Launch Complex-7	WSMC/ST	
AMRAAM	MSD/YM	*
C-135 Avionics Upgrade	ASD/SD	*
O&M Contract	AEDC/PK	
OA-10	ASD/SDF	*
Brilliant Pebbles	SSD/CNIW	*
AGM-130	MSD/YGM	
DSP Satellite	SSD/CND	
MX Rail Garrison	BSD/CV	*
Space Based Radar	SSD/XRS	*
GPS	MSD/YIB	*
Joint-STARS	ESD/JS	*

The following list identifies the Headquarters AFSC offices whose personnel are members of the command's Acqusition Strategy Panel. An asterisk in the "Interviewed" column indicates that a person from that office was interviewed for this thesis.

Function	Office Symbol	Interviewed
Contracting	AFSC/PK	*
Legal	AFSC/JA	*
Comptroller	AFSC/AC	*
Technology	AFSC/XT	*
Test	AFSC/DR	*
Systems	AFSC/IG	
Manufacturing	AFSC/PM	
Engineering	AFSC/EN	*
Requirements	AFSC/EN	*
Projects	AFSC/PKP	*

Appendix D: Survey Results

The following is the data from the Quattro spreadsheet which was used in the analysis of this research. Each column represents a question asked in the interview guide. Each row represents the responses during a particular interview. Some demographic information has been left off to guarantee the anonymity of the personnel interviewed.

ASP INTERVIEWS

	DEMOGRAPHICS					PREPARATION				
QUESTION #	JOB	TIME	R&D$	PRD$	PHASE	1	2A	2B	2C	2D
		3								
		3								
		3								
		3								
		1								
		3								
		1								
		1								
		0.5		0.55	4	4	4	4	4	7
		1		5	4	1	6	6	6	6
		1.2		11.5	4	3	6	4	7	6
		0.5		1	4	5	6	4	6	6
		0.5	0.5		1	2	3	4	4	4
		1.8		1.5	3	1	6	6	6	6
		1.2			3	4	4	6	6	6
		1	0		2	4	4	3	3	7
		1.2	0.1		4	1	7	7	7	7
		1				3	5	4	4	4
		1				2	4	4	4	5
		3				2	4	2	2	5
		0.2	0.5		3	2	4	2	4	3
		2			3	4				
		2	0.7		2	5	4	7	7	7
		2	0.1	0.9	4	2	4	3	7	7
		0.5	0.7		3	2	2	2	7	7
		0.8	0.4	3.1	3	2	4	3	4	4
		0.6		0.2	4	1	3	7	2	6
		0.8		0.7	4	4	4	3	6	6
		0.2	0.01	0.01	3	3	3	2	7	7
AGGREGATE										
RESPONSE	0	29	9	10	18	21	20	20	20	20
AVERAGE		1.41	0.34	2.45		2.71				
MINIMUM		0.2	0.00	0.01		1				
MAXIMUM		3	0.7	11.5		5				
STD DEV		0.93	0.27	3.35		1.28				
VARIANCE		0.87	0.07	11.2		1.63				

ASP INTERVIEW

QUESTION #	2E	2F	2G	2H	4	5	ASP 7	8	9
							5	5	1
							4	4	2
							4	5	1
							5	3	1
							5	5	1
							2	4	1
							5	5	
							4	4	2
	4	4	7	7	1.25	1	5	4	1
	6	6	7	7	16	1	5	4	4
	4	3	6	7	1.25	4	4	3	1
	2	4	6	6		1	5	4	1
	3	5	3	7	4	1	5	4	4
	6	6	6	6	25	4	2	4	1
	4	3	7	7	5	1	2	4	1
	4	3	7	7	0.25	1	1	4	1
	2	3			8	4	4	3	2
	6	5				4	4	5	2
	2	5				3	4	4	2
	5	5				5	2	4	4
	3	4	2	7	24	3	5	5	2
					20		3	4	1
	5	5	7	7	30	2	5	4	4
	4	5	5	7	5	3.5	5	4.5	1
	5	7	4	7	2.5	2	4	4	1
	4	4	3	7	3	3	5	4	1
	4	2	4	7	3	4	4	4	5
	6	3	6	7	1	1	4	4	1
	6	4	7	7	6	4	5	4	1
AGGREGATE RESPONSE	20	20	16	16	17	20	29	29	28
AVERAGE					9.13	2.63	4.03	4.12	1.79
MINIMUM					0.25	1	1	3	1
MAXIMUM					30	5	5	5	5
STD DEV					9.5	1.37	1.16	0.55	1.21
VARIANCE					90.2	1.87	1.34	0.3	1.45

ASP INTERVIEW IMPRESSIONS

QUESTION #	10	11	12	13	14	15	15A	16	17	18
	5	4				5	1		5	
	4	4	4	1		5	5	3	5	4.5
	5		5			5	4	1	5	3
	5	4	4	1		4	1	2	3	
	4.5	5	4	4		1		1	5	
	5	3	3	3		2		4	5	
	5	4	5	1		5	4	1	5	
	4		4	1		4	4	4	5	5
	5	3	3			5	2	4	5	
	5	5	4	1		2	4		5	
	5	5	3	1		4	2		4	4
	5					4	1		5	5
	4	5	5	1		5	4	5	5	4
	1	5	5	1		5	4	4	4	4
	5	5	4	1		1		1	4	4
	4	5	4	1		4	4	4	2	3
		5	5	5						
	5	3							5	5
	3	5	4	3					4	4
	4	5	4	4					5	4
	4	5	4	1		4	4	1	5	4
		4	3	2			4		5	
	5	3	4	1		4	2	4	5	4
	4	4	5	1		4.5	4	4	5	4.5
	5	5	3	2		5	1	1	5	3
	4	4	4	3		3		2	5	5
	3	5	4	4	0.01	5	4	1	5	3
	5	5	4	1		4	1	4	5	5
	5	5	4	2		5	4	1	4	
AGGREGATE RESPONSE	27	26	26	24	1	24	21	20	28	19
AVERAGE	4.39	4.42	4.04	1.92	0.01	3.98	3.05	2.6	4.64	4.11
MINIMUM	1	3	3	1	0.01	1	1	1	2	3
MAXIMUM	5	5	5	5	0.01	5	5	5	5	5
STD DEV	0.91	0.74	0.65	1.26	*****	1.25	1.36	1.46	0.72	0.7
VARIANCE	0.82	0.55	0.42	1.58	*****	1.55	1.85	2.14	0.52	0.5

ASP INTERVIEW

QUESTION #	19	20	0
		4	5
	4.5	5	5
	5	4	5
	4	3.5	3.5
		5	5
		3.5	5
		4	5
	4	4	4
		4	4
	4	5	5
	2	2	1
	5	4	2
	4	5	5
	4	4	5
	4	3	4
	4		3
		3	
	5	5	5
	4	3	4
	4	4	4
	4	4	4
		3	3
	4	4	4
	4	4.5	4.5
	5	4	3
	5	4	5
	5	4	5
	5	4	4
		3	5

AGGREGATE			
RESPONSE	21	28	28
AVERAGE	4.26	3.91	4.18
MINIMUM	2	2	1
MAXIMUM	5	5	5
STD DEV	0.68	0.72	1.01
VARIANCE	0.47	0.52	1.02

Appendix E: Test for Reliability of the Instrument

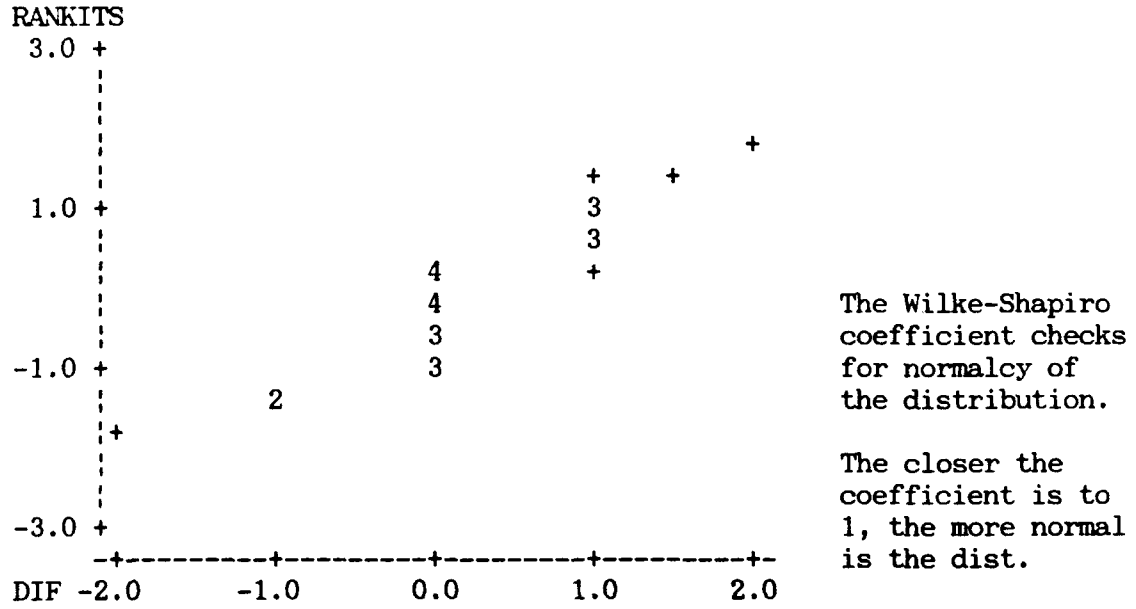
The results of questions 20 and 0 were compared using a paired t-test to check for the reliability of the instrument. The null hypothesis, Ho, was that the mean of the differences in the pairs of answers was 0, or $_{D} = 0$. The alternate hypothesis, Ha, was that the mean of the differences was not equal to 0, and thus the responses had different distributions.

FREQUENCY DISTRIBUTION OF DIFFERENCES IN RESPONSE TO QUESTIONS 20 & 0

VALUE	N	
-2	1	*
-1	2	**
0	14	**************
1	9	*********
2	1	*

27 Cases Plotted.

CHECK FOR NORMALCY OF THE DIFFERENCES



The Wilke-Shapiro coefficient checks for normalcy of the distribution.

The closer the coefficient is to 1, the more normal is the dist.

APPROX. WILK-SHAPIRO 0.8550 27 CASES PLOTTED

PAIRED T TEST FOR QUESTION 0 RESPONSE - QUESTION 20 RESPONSE

MEAN	2.778E-01	STD ERROR	1.609E-01
T	1.73		
DF	26		

For a two-sided paired t-test with a 95% confidence level and 26 degrees of freedom, the critical t value is 2.056. Ho is rejected if T 2.056 or T -2.056. The observed t value, 1.73, does not fall into the rejection region and the null hypothesis is accepted. Thus, with a 95% confidence, the distributions of questions 20 and 0 are considered the same and the instrument is considered reliable.

Appendix F: Test for Construct Validity of the Instrument

The following tables represent the cross-tabulations of the responses to questions 8, 12, and 13 with the responses to question 20. The section entitled Validity, Reliability and Practicality of the Instrument in Chapter III discussed the criteria for determining the construct validity of the instrument. Chapter IV discussed the results of the cross-tabulations depicted below.

Table 2. Cross-Tabulation of Question 8 With Question 20

	ASP Process Rating					
Q8	1	2	3	4	5	Row Total
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	0	1	2	0	0	3
4	0	0	5	11	3	19
5	0	0	0	4	2	6
Column Total	0	1	7	15	5	28

Table 3. Cross-Tabulation of Question 12 With Question 20

	ASP Process Rating					
Q12	1	2	3	4	5	Row Total
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	0	1	2	2	0	5
4	0	0	4	7	3	14
5	0	0	1	4	1	6
Column Total	0	1	7	13	4	25

Table 4. Cross-Tabulation of Question 13 With Question 20

	ASP Process Rating					
Q13	1	2	3	4	5	Row Total
1	0	1	2	7	3	13
2	0	0	2	1	0	3
3	0	0	2	1	0	3
4	0	0	0	2	1	3
5	0	0	1	0	0	1
Column Total	0	1	7	11	4	23

Appendix G: Glossary of Acronyms

ACSC	Air Command and Staff College
AF	Air Force
AFIT	Air Force Institute of Technology
AFLC	Air Force Logistics Command
AFR	Air Force Regulation
AFSC	Air Force Systems Command
AP	Acquisition Plan
ART	Acquisition Review Team
ASD	Aeronautical Systems Division
ASP	Acquisition Strategy Panel
BSD	Ballistic Systems Division
BSP	Business Strategy Panel
DAE	Defense Acquisition Executive
DoD	Department of Defense
DoDD	Department of Defense Directive
DoDI	Department of Defense Instruction
DPRB	Defense Planning and Resources Board
DSMC	Defense Systems Management College
ESD	Electronic Systems Division
FAR	Federal Acquisition Regulation
FSD	Full Scale Development
GFP	Government Furnished Property
HSD	Human Systems Division
MNS	Mission Need Statement
MSD	Munitions Systems Division
OFPP	Office of Federal Procurement Policy
OMB	Office of Management and Budget
PEO	Program Executive Officer
PM	Program Manager
PMD	Program Management Directive
PMP	Program Management Plan
R&D	Research and Development
RFP	Request for Proposal
SAE	Service Acquisition Executive
SES	Senior Executive Service
SSD	Space Systems Division
SSMG	Source Selection Management Group
USA	United States Army
USD/A	Under Secretary of Defense (Acquisition)
USMC	United States Marine Corps

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Vita

Captain Scott C. Hardiman [redacted], [redacted]a. He graduated from Westlake High School in Thousand Oaks, California, in 1980 and attended the University of Southern California under an ROTC scholarship, graduating with a Bachelor of Science Degree in Aerospace Engineering in May 1984. Upon graduation, he received a regular commission in the USAF and reported for duty at Wright-Patterson AFB, Ohio. Captain Hardiman worked for two years as a Propulsion Systems Test Manager at Aeronautical Systems Division's Propulsion Systems Program Office, overseeing the testing of the F100 Engine Model Derivative Program, the F100 and F110 Increased Performance Engines, the F100-PW-220 engine and the F100 Component Improvement Program. He then spent six months on a special assignment to the Propulsion SPO Director which culminated in a competitive engine procurement decision by the Secretary of the Air Force. He graduated from Squadron Officer School at Maxwell AFB, Alabama in 1987. Upon his return from SOS, he became a Production Project Officer for the F110-GE-100 engine program where he was responsible for depot activation, the engine's lead-the-fleet program, and integration of the engine into the YA-7F airframe. In June 1988, he became the Propulsion SPO Executive Officer where he oversaw the activities of nearly 400 SPO personnel until entering the Air Force Institute of Technology's School of Systems and Logistics in May 1989.

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13. ABSTRACT *(Maximum 200 words)*

The Acquisition Strategy Panel (ASP) was implemented by Air Force Systems Command (AFSC) to assist program managers developing strategies to acquire new weapon systems. When it was first implemented, the perception of many program managers was that it was just another bureaucratic exercise. Based on this perception, and amidst calls for streamlining the acquisition process, a thorough examination of the ASP's value was in order. To this end, 29 program managers and panel members with first-hand knowledge of the process were interviewed. Five-point Likert opinion scales were used throughout the structured interviews. The data refuted the early impressions of the ASP by revealing that its recommendations were being implemented, that these recommendations were having positive impacts on the programs involved, and that the ASP was considered a valuable tool by the majority of the respondents. However, this value was primarily of a qualitative nature. The research also revealed several areas in the process which could be improved. These included integrating the ASP into the Program Executive Officer structure and delegating responsibility for production ASPs to lower levels.

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