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AFIT/GSM/LSR/90S-28

PERCEPTIONS OF ACQUISITION PROGRAM
MANAGEMENT (27XX) OFFICERS ON
AERONAUTICAL RATINGS AND
CAREER DEVELOPMENT

THESIS

CHARLES A. STREETER JR., Captain, USAF

AFIT/GSM/LSR/90S-28

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PERCEPTIONS OF ACQUISITION PROGRAM
MANAGEMENT (27XX) OFFICERS ON
AERONAUTICAL RATINGS AND
CAREER DEVELOPMENT

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 for the Degree of
Master of Science in Systems Management

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September 1990

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Preface

The purpose of this study was to survey a small representative sample of the 27XX community to determine if certain perceptions about aeronautical rating and career development were present. This study would determine if there was any need for continued research in this area and further analysis.

An attitudinal survey was administered to all 27XX officers that comprised the 90S/D and 91S/D Classes of the Air Force Institute of Technology (AFIT), School of Systems and Logistics. Although the size of the sample was not large and the data collected did not allow for conclusive determinations, the results did show that further research in the topic was warranted.

In completing this report, I obtained untold amounts of assistance and support that must be recognized. First and foremost, I would like to give thanks to God through my Lord and Savior Jesus Christ, for giving me the strength and capability to endure. Without Him, none of the following work would be possible. Second, I would like to give my utmost thanks to my lovely wife Joanne for taking care of all the clerical work in completing this and countless other works throughout the term. It was your love and understanding that continually carried me through. Third, many words of thanks need to be bestowed upon Maj John Stibravy, my thesis advisor, for always believing in me, even when things looked

quite bleak. It was your allowing me to have the freedom to work at my own pace and style that is appreciated most. Thank you. Last, I would like to thank my fellow students for coming to my aide in my moment of need. Your unselfishness did not go unnoticed.

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Abstract

This study had the research objective of determining whether the Acquisition Management officer, Duty Air Force Specialty Code (DAFSC) 27XX, perceived that an Aeronautical Rating had a positive influence on career progression to program director (DAFSC 0029) positions. This study examined the perceptions of forty Air Force Institute of Technology (AFIT), School of Systems and Logistics, graduate students, who entered their respective programs with 27XX DAFSCs, to determine if certain perceptions were prevalent. Data analysis of the information obtained from the survey administered to the students indicates that those responding to the survey perceive that an aeronautical rating has an impact on career progression to program director positions. However, the data is inconclusive in determining whether these perceptions are held throughout Air Force Systems Command (AFSC). The study recommends that further research be conducted to ascertain the perceptions of the 27XXs within AFSC.

PERCEPTIONS OF ACQUISITION PROGRAM
MANAGEMENT (27XX) OFFICERS ON
AERONAUTICAL RATINGS AND
CAREER DEVELOPMENT

I. Introduction

The Department of Defense (DoD) spends approximately \$100 billion dollars yearly on the procurement of goods and weapon systems (13). These acquisitions are made to ensure the protection of the freedoms possessed in America and countries abroad. Within the Air Force, specific career fields have been established to organize the acquisition activities of the service. Air Force officers in the Program Director (0029), Scientific (26XX), Acquisition Program Management (27XX), Developmental Engineering (28XX), Test Pilot/Navigator (286X/287X), Communications-Computer Systems (49XX), Acquisition Contracting/Manufacturing (65XX), Budget (673X), or Cost Analysis (674X) specialties all play a part in the research and development, acquisition, and support of newly acquired weapons systems (1:3). The group of officers specifically assigned to the acquisition management of weapon systems lies within the 0029 and 27XX specialties.

General Issue

The officers in the 0029 and 27XX career fields are highly trained to perform the required duties associated with the process of acquiring Air Force weapon systems.

Acquisition management officers serve as the lower and middle level management specialists for weapons procurement programs. The program directors serve in the senior management positions. To progress through the 27XX career field and achieve 0029 positions, it is felt that an officer should have an operational assignment.

In preparing for their eventual roles as managers in the system acquisition process, it is desirable that the S&DE [Scientific & Development Engineering] officer have experience in operational as well as technical activities. Knowledge and experience from operational commands will prove valuable to officers subsequently assigned to duties that involve developing new systems and requiring direct interface with these commands. (4:70)

An operational assignment is considered as any tour which deals in the operating, supporting, or maintaining of an operational system acquired by an Air Force or joint command (1:5). This does not, however, include Air Force Systems Command (AFSC) or Air Force Logistics Command (AFLC). This desirability for operational experience, although specifically defined in AFSC Regulation 36-5, Acquisition Management Professional Development, 9 September 1988, may be misinterpreted by 27XXs to mean that an aeronautical rating is required or desired for career progression. This research project will determine 27XX officers' perceptions on aeronautical rating and career progression to become program directors (DAFSC 0002 and 0029).

Background

In 1985, General Lawrence Skantze, AFSC Commander, appointed the Acquisition Manager Career Development Task Force (CDTF) to evaluate the need for a defined career progression process for acquisition managers (12:21). One of the outcomes of the task force efforts was to establish a career development model for those officers associated with the acquisition management of weapon systems. One of the findings of the task force was that "operational experience, while not mandatory, was recommended strongly to give the acquisition manager a complete understanding of user command problems that he/she would be trying to solve" (12:21). This thought was adopted in the final career development model but with slightly less emphasis. The final model states, "Operational experience gained in an Air Force major air command (other than AFSC or AFLC) or in a joint command is highly desirable" (1:2).

The notion of the need for operational experience has differing views among Air Force general officers associated with acquisition management. General Bernard P. Randolph (Ret), former AFSC Commander, was of the opinion that operational experience was very important.

Since there is no substitute for operational experience, we look for flying or non-flying operations too - missiles, space, and munitions or aircraft maintenance. (15:6)

However, Lieutenant General Thomas L. Ferguson Jr., Aeronautical Systems Division (ASD) Commander, voiced a view

counter to General Randolph's when Ferguson was Program Director of the Advanced Medium-Range Air-to-Air Missile (AMRAAM) Program. He, although rated himself, felt that operational experience was not an essential element for an acquisition officer, but rather insight into the operational side of the house and an understanding of the user's needs are what is necessary (11:24). It is interesting to point out that the generals have opposing views on operational experience; however, they both are rated officers.

In 1986, The General Accounting Office (GAO) reported that rated officers (those who were pilots or navigators) composed about 25 percent or less of the total number of officers in the acquisition management career field and held about 50 percent of the program director positions (8:207). This situation pointed to a distribution that appeared skewed. A minority of the total population of acquisition management officers was appointed to nearly half the upper level positions in AFSC. The rated officers in the career field rarely had equal amounts of experience in acquisition to the non-rated officer.

In 1986, reasoning for the practice of assignment of rated officers with less experience into key positions was explained in this manner:

In times of peace, we still must be prepared for war. Today it takes many years to train and provide flight experience to a new officer in order to gain a fully mission-ready pilot. Thus, the "rated supplement" was formed. This system takes pilots and navigators out of airplanes (especially if there are far too many rated

officers for the available aircraft) and tries to utilize them in other jobs in the service. On the one hand, the system may save money and morale (as opposed to having these people do nothing, or simply firing them). On the other hand, given the need to manage effectively multi-million-dollar acquisition programs, it may be less expensive to hire or train experts in acquisition and let the rated officers remain in overmanned assignments. (8:211)

In 1986-1987, many initiatives were being examined in the acquisition arena to better the procurement of weapon systems. One such initiative was the creation of the Acquisition Management Professional Development Program (AMPDP). This program helped to quantify the requirements and criteria used to guide the progression of officers in the 27XX career field. The program also provided the outline of how an officer would be selected to program director positions. The AMPDP is discussed in depth in Chapter II of this report; however, it must be mentioned that the selection procedure is based on a "best qualified" process (1:10). This process is not, however, defined in the regulation. This selection process would seem to increase the quality of the officer selected for a program director position and help to eliminate the perception that rated officers had an advantage in program director selection because they possessed an aeronautical rating. This perception was observed by Brigadier General David Teal, ASD Deputy for Tactical Systems, in a 1986 interview when he stated,

I'm not even a pilot. I'm in this job because I've been 10 years or so in fighter development. Us non-rated guys used to have no future. Now people are

picked for AFSC jobs because they're the best people available. They don't simply slide into these support jobs because all these operations jobs are filled.
(10:30)

Problem Statement

Officers in the Acquisition Management (27XX) utilization field may perceive that possession of an aeronautical rating has a positive influence on career progression to program director positions.

Investigative Questions

To determine if the 27XX officer perceives that an aeronautical rating is influential in becoming a program director, the following questions will be researched:

1. What are the requirements to become a program director (PD)?
2. What is the respective percentage of rated and nonrated PDs?
3. Do 27XXs perceive that an aeronautical rating is a criterion used to select PDs?
4. Do 27XXs perceive that rating has an impact on career progression?
5. Do 27XXs perceive that an aeronautical rating is required to be selected as a PD?
6. What is the perceived percentage of rated and nonrated PDs in AFSC?

Scope and Limitations

This research project only examined the perceptions of 27XX officers assigned to the Air Force Institute Of Technology (AFIT) Wright-Patterson AFB OH. The research was further limited to the 27XX officers who make up the classes of 90S/D and 91S/D. This research examined the perceptions of this group in order to ascertain whether effort is warranted in examining a larger population of 27XX officers as a follow-up research project.

Summary

This chapter introduced the 27XX and 0029 career fields to the reader. The chapter established that 27XXs may have a perception toward aeronautical ratings and that there is a need to discover if a perception actually exists. This research is being initiated because of the ratio of non-rated to rated officers in key positions that was witnessed in 1986-1987 and the view expressed by Brigadier General Teal in 1986. The information contained in this chapter forms the foundation for the following chapters.

Chapter II presents the requirements for program director selection as outlined in currently published materials. The chapter gives a history of how the present requirements were adopted and discusses the distinctions between the terms "program director" and "program manager." Chapter II also establishes the distribution of rated to non-rated program directors as reported by Headquarters Air

Force Systems Command as of May 1990. Therefore, the information contained in Chapter II answers Investigative Questions 1 and 2.

Chapter III will develop the methodology used to ascertain the AFIT students' of classes 90S/D and 91S/D perceptions of aeronautical rating significance.

Chapter IV reports the findings of the research, and Chapter V contains the recommendations formulated from the findings.

II. Literature Review

This literature review provides the reader with the background behind the establishment of the present requirements for program director/program manager (PD/PM) positions, the program director selection process, and the distribution of rated and non-rated program directors in Air Force Systems Command. The review provides the background necessary to orient the reader with why and how the requirements were established and what the requirements entail.

Justification

The recent attention given to quantifying PD/PM position requirements stems from the increased focus placed on Department of Defense (DoD) acquisition programs. In the late 1970's and early 1980's, mismanagement of government funds in various programs reflected that the federal government's programs were not well-managed. Examples of program cost and schedule overruns, excessive spares pricing, and test deficiencies were prevalent in many government acquisition programs and such events shook public confidence in the effectiveness of the defense acquisition system (14:41). Since this time, many shortcomings of the acquisition system have been identified and initiatives enacted to rectify the problems. One shortcoming identified was in the required credentials of PDs/PMs. A determination

was made that specific requirements needed to be established for the qualification of personnel to attain PD/PM positions.

Scope and Limitations of Topic

The scope of this literature review is to only discuss the background events and the initiatives enacted that pertain specifically to the quantification of PD/PM position attainment requirements. Discussion of both program director and program manager is included in this section to provide the reader with a clear understanding of the difference in the two positions. The literature reviewed consists of congressional public law, DoD directives, and Air Force regulations. Since this literature review deals with subject matter that is current to the last five years, literature published before 1985 is not considered pertinent to this research.

Organization

This review will first describe the program director/program manager career field. Second, it describes the initiatives enacted to quantify PD/PM requirements. Third, it lists these requirements. Last, it gives the distribution of rated to non-rated PDs.

Program Director/Program Manager (PD/PM) Career Field

Description

The titles of Program Director and Program Manager are often used synonymously within the Air Force; however, each

has a specific meaning and specific duties and responsibilities. Each position also retains a separate Duty Air Force Specialty Code Number (DAFSC). The DAFSC is a number which designates the specific utilization and career field that an individual is assigned. Both the Program Director and Program Manager positions center around the acquisition management of Air Force systems. The Acquisition Program Management Utilization Field (27XX) encompasses staff and management functions peculiar to the Air Force acquisition life cycle and executive supervision in acquisition program management as described by DAFSC 0029 (2:A10-29/30). A Program Director is denoted by DAFSC 0029 while a Program Manager is denoted by DAFSC 2716, and a Project Officer is denoted by DAFSC 2724.

Program Director (0029). The PD is an executive supervisor of an acquisition program. A PD directs major defense system acquisition programs typically identified by one or more of the following:

Air Force Executive Program; Defense Enterprise Program; DoD 5000.1 Major System Acquisition; Secretary of the Air Force Program Assessment Review Program; a highly sensitive or highly visible program of significance to the Air Force; or Congressional Selected Acquisition Reporting Program. (2:A5-7)

A PDs duties and responsibilities included:

- a. Directs high precedence acquisition program critical to fulfilling a priority DoD mission.
- b. Delivers operational systems to commands.

- c. Translates operational requirements into acquisition programs, evaluates contractor proposals, and recommends implementing actions. . . .
- d. Organizes and directs Systems Program Officer.
(2:A5-7)

PDs hold the grade of colonel or colonel selectee. A general officer may also hold a Program Director position. In this case, the DAFSC would be 0002. Colonels may also have DAFSCs of 0002. This situation occurs when a Colonel PD is holding a position in an unfunded general billet.

Program Manager (2716). The PM is a supervisor of a non-major acquisition program. A PM's position can be summarized as follows:

Plans and manages acquisition programs of other than major systems or subsystems which span the entire life cycle of the acquisition process. Performs managerial functions involving engineering, program control, test and deployment, configuration management, or acquisition program integrated logistics support. Performs staff functions essential to acquisition program, or performs acquisition support roles. (2:A10-31)

A PM's duties and responsibilities include:

- a. Provides overall program management.
- b. Performs program office management.
- c. Provides staff functions.
- d. Provides acquisition program support.
(2:A10-31)

PMs hold the grade of major through colonel. The PD and PM are responsible for the acquisition of highly technical and complex systems of major and non-major systems, respectively, that meet the approved mission need and achieve the established cost schedule, readiness, and affordability objectives (5:13). With such responsibilities, it is only

reasonable that assurances must be put in place to guarantee that PD and PM positions are held by highly competent and capable individuals.

Initiatives to Quantify PD/PM Requirements

Defense Acquisition is the largest business in the world with annual purchases by the Department of Defense (DoD) totaling almost \$130 billion. (8:7). Because of the tremendous spending power that is held by DoD, and the "horror stories" that were witnessed through cost and schedule overruns, spares overpricing, and other issues, specific actions were taken to improve the quality of the DoD acquisition system (14:41).

Public Law 99-145. P.L. 99-145, FY 1986 Defense Authorization Act, section 1622, contains certain minimum requirements that must be held by an individual entering a senior acquisition management position. The specific requirements contained in P.L. 99-145 are as follows:

1. Must have attended the program management course at the Defense Systems Management College or a comparable program management course at another institution.
2. Must have at least eight years experience in the acquisition, support, and maintenance of weapon systems, at least two of which were performed while assigned to a procurement command. (16:698)

President's Blue Ribbon Commission on Defense Management. The President's Blue Ribbon Commission on Defense Management was established in July 1985 to conduct a study of defense management adequacy (14:xvii). The panel found that

one of the problems of the acquisition system stemmed from "the simple exercise of poor judgment by acquisition personnel" (14:44). The commission stated the following in its final report:

DoD must be able to attract and retain the caliber of people necessary for a quality acquisition program. Significant improvements should be made in the senior-level appointment system. The Secretary of Defense should have increased authority to establish flexible personnel management policies necessary to improve defense acquisition. An alternate personnel management system should be established to include senior acquisition personnel . . . (14:66)

The commission's final report also stated that comparable improvements were required to enhance middle managers (14:66). The commission came to the realization that in order to solve some of the problems of the defense acquisition system, a revamped appointment and acquisition personnel management system was required.

DoD Directive 5000.23. To respond to the requirements of P.L. 99-145 and the President's Blue Ribbon Commission on Defense Management, the DoD issued directive 5000.23. The directive established the required eligibility, criteria, and policy for the selection, training, career development, and tenure of DoD personnel to be assigned as Program Managers of major or non-major defense systems acquisition programs, and to certain positions in support of acquisition program management (6:1). As defined by DoD Directive 5000.23, a program manager of a major program is synonymous with the Air Force PD, DAFSC 0029, and a program manager of a non-major program is synonymous with an Air Force PM, DAFSC 2716. The

stipulated requirements for a Program Manager of a major program are as follows:

(1) Education

(a) A baccalaureate or advanced degree in a technical, scientific, or managerial field is mandatory. A master's degree in an appropriate field is desired.

(2) Training

(a) Successful completion of the Defense Systems Management College (DSMC) Program Management Course or comparable course is mandatory.

(b) Successful completion of the prescribed curriculum of an intermediate service school is mandatory.

(c) Successful completion of the prescribed curriculum of a senior service school is desired.

(3) Experience

(a) At least 8 years experience in the acquisition, support, and maintenance of weapon systems--at least 2 acquired while assigned to a procurement command--is mandatory. (6:2-3)

The stipulated requirements for Program Manager of a non-major program are as follows:

(1) Education

(a) A baccalaureate or advanced degree in a technical, scientific, or managerial field is mandatory.

(b) A master's degree in an appropriate field is desired.

(2) Training

(a) Successful completion of the DSMC Program Management Course, or a comparable program management course approved by the Senior Procurement Executive of DoD at another institution, is mandatory.

(b) Successful completion of the prescribed curriculum of an intermediate service school is desired.

(3) Experience

(a) At least 3 years of experience in the acquisition, support, and maintenance of weapon systems--at least 1 acquired while assigned to a procurement command--is mandatory. (6:4-5)

The directive also tasked each DoD component to determine qualifications required to enter and advance in acquisition career fields and to develop career plans that lead to the satisfaction of the stipulated requirements. P.L.99-145, The President's Blue Ribbon Commission on Defense Management, and DoD Directive 5000.23 are all initiating factors leading to the formulation of the Air Force requirements for PD/PM selection.

Air Force Requirements for PD/PM Selection

The specific requirements stipulated to qualify for PD, DAFSC 0029, assignments and PM, DAFSC 2716, are contained in Air Force Regulation 36-1, Officer Classification. The requirements reflect the compilation of initiatives set forth in P.L.99-145, The President's Blue Ribbon Commission, and DoD Directive 5000.23. The requirements for Program Director, DAFSC 0029, as outlined by AFR 36-1 are as follows:

a. Knowledge. Knowledge is mandatory of: DoD and Air Force program management procedures pertinent to development, procurement, production, and logistics support; operational environment; and techniques of employment for the system being acquired.

b. Education:

(1) Undergraduate academic specialization in a technical, scientific, or management field appropriate to program management is mandatory for award of this AFSC.

(2) A master's degree in a technical, scientific, or management field appropriate to program management is desirable.

c. Experience

The following are mandatory for award of this AFSC:

(1) At least 8 years' experience in acquisition, support, or maintenance of weapons systems, 2 years of which were performed while assigned to Air Force Systems Command or Air Force Logistics Command.

(2) A minimum of 24 month's experience in a program office as a project manager, or in the direct supervisory chain of a program manager or director, responsible for the technical performance, schedule, cost, and supportability of a system, subsystem, or equipment item.

d. Training:

(1) Completion of intermediate level professional military education is mandatory for award of this AFSC.

(2) Completion of a senior level professional military education course is desirable.

(3) Completion of the DSMC Program Management Course or a comparable program management course at another institution is mandatory for award of this AFSC. (2:A5-7 to A5-8)

The requirements for Program Manager, DAFSC 2716, as outlined by AFR 36-1 are as follows:

a. Knowledge.

Knowledge is mandatory of Air Force program management procedures pertinent to development, procurement, production, and logistics support; and performance characteristics, capabilities, and limitations of Air Force systems and equipment.

b. Education:

(1) Undergraduate academic specialization in engineering science, engineering management, math, physical science, business or management is mandatory for entry into this specialty unless member possesses awarded AFSC 2724.

(2) Master's degree or doctorate in management appropriate to systems management is desirable.

(3) Completion of Air Force Institute of Technology Education with Industry program is desirable.

c. Experience

Full qualification is mandatory in the Acquisition Project Officer specialty plus 6 month's experience as a 2711 or a minimum of 18 month's experience in the Acquisition Management Officer specialty. It is mandatory that the experience include management or direct support of management of an acquisition program.

d. Training

Completion of one of the following sequence of training is mandatory:

(1) DoD DSMC Program Management Course, or

(2) DSMC Program Management for Functional Managers Course and Air Force Institute of Technology Intermediate Program Management Course (Systems 400), or

(3) Acquisition Management Course (Systems 100), or equivalent, an appropriate Air Force Institute of Technology Intermediate Program Management Course (Systems 400). (2:A10-31&32)

PD Selection

The selection process used to appoint officers to program director positions is outlined in Air Force Systems Command Regulation (AFSCR) 36-5, Acquisition Management Professional Development, 9 September 1988. This regulation was created in response to the acquisition management

improvement initiatives previously discussed in this chapter. The regulation echoes the requirements for PD/PM appointment as established in AFR 36-1, Officer Air Force Specialty: Acquisition Management Officer, and also introduces a career development professional certification program. This program allows officers to certify at various levels in their acquisition management career that they are meeting requirements toward their selection to PD. AFSCR 36-5 establishes that the first step in the PD selection process is the Senior Acquisition Managers List (SAML). "The purpose of the SAML is to provide a pool of officers qualified to assume senior program management positions" (1:1). It is from this list that PDs are selected to manage system program offices (SPOs).

Officers are selected for the SAML by an annual selection board composed of senior program directors AFSCN 0002 and 0029, that convene at Air Force Systems Command Headquarters (1:10). Eligibility for board consideration is determined by an officer's qualifications under the following criteria:

- (1) Have achieved Level IV certification.
- (2) Be a lieutenant colonel selectee or above.
- (3) Not be in a deferred status to the grade of colonel. (1:10)

An officer who meets the pre-board criteria will be considered for SAML selection.

The SAML selection board will identify officers on a "best qualified" basis for inclusion on the SAML. Duty performance, demonstrated leadership ability, and operational experience will be weighed heavily in the selection process. (1:10)

No definition for the term "best qualified" is contained in the regulation; therefore, it is assumed that "best qualified" has no guidelines or standards associated with it and is left to the determination of the board members. Also, note that operational experience takes on an increased importance in SAML selection procedures. The philosophy of the Acquisition Management Professional Development Program (AMPDP) contained in AFSCR 36-5 states that operational experience is highly desirable and the SAML board heavily weighs operational experience. This shows that Air Force Systems Command does place a high importance on operational experience and career development, but this operational experience is not specifically associated with aeronautical rating. None of the literature states that an aeronautical rating is required or is given any special emphasis for SAML and subsequent PD selection.

Rated to Non-rated PD Distribution

In 1986, the General Accounting Office (GAO) reported that rated officers (those that were pilots or navigators) composed about 25 percent of the total number of officers in the acquisition management career field and held about 50 percent of the program director positions (8:207). This statistic showed that a minority of the total officers in the

acquisition management career field held an approximate majority of the program director positions. It was pointed out in Chapter I that one could perceive from these figures that the rated officer was being selected for program director (all other things being equal) more often than the non-rated acquisition officer. The current distribution of rated to non-rated program directors was obtained to determine what changes, if any, this distribution had experienced in the past four years. No literature was available to determine this information; however, Headquarters Air Force Systems Command supplied the Officer Personnel Briefs of the sixty program directors of the various SPOs. Of the sixty PDs in charge of the product division AFSC SPOs, thirty-nine are non-rated and twenty-one are rated (3). The rated officer ratio of fifty percent has declined to thirty-five percent representing that non-rated officers are gaining senior acquisition management positions as program directors.

Conclusion

Numerous actions have taken place in the last five years to improve the defense acquisition management system. One area of improvement was required in the selection of personnel to manage major acquisition programs. The specification of the criteria required for an individual to become a Program Director or Program Manager is clearly defined in the applicable Congressional, DoD, Air Force, and Air Force

Systems Command documents. A clear path is defined for advancement and career development to obtain PD positions. It is clear that the goals of such groups as the President's Blue Ribbon Commission on Defense Management to establish distinct selection criteria, have been met. It is also clear that the actual percentage of rated to non-rated program directors has decreased in the past four years.

The next chapter will discuss the methodology used to complete this report. Chapter III will describe the test instrument used to collect the required research data, explain why that particular form of data collection instrument was used, and discuss how this data was analyzed.

III. Methodology

Introduction

This chapter outlines the design and methodology for this research study. In particular, this chapter will describe the survey approach, test instrument, selection of population and test sample sizes, and data analysis.

Survey Approach

There are presently just over 2,200 27XXs in the Air Force Systems Command. Each of these officers plays a vital role in the acquisition and support of systems acquired by the Air Force. The progression of these officers to the title of Program Director or 0029s is outlined in Air Force Systems Command Regulation 36-5; however, many 27XXs perceive that there is a need to possess an aeronautical rating to achieve the 0029 title. To determine if this perception is indeed prevalent among 27XXs, a survey was administered to a sample of 27XXs from the Air Force Institute of Technology (AFIT), School of Systems and Logistics, Classes 90S/D and 91S/D. The survey was used to ascertain the attitudes and perceptions in contrast to actual behavior of 27XXs towards the relevancy of an aeronautical rating. Since this research is designed to confirm whether a perception is held by the 27XXs, an attitudinal survey was the best vehicle available to gather the required research data in the timeframe available. The

survey was administered to the AFIT students as a pretest to determine if continued research was required.

The survey was designed to collect the opinion of all 27XXs questioned; however, a filtering question was used to distinguish between rated and non-rated respondents. The question was also used to determine the proportion of rated to nonrated respondents.

Test Instrument

An attitudinal survey was used to collect the data required to determine the perceptions of the 27XXs regarding the influence of an aeronautical rating. A survey was selected as the test instrument to gather this data because it provided the most economical, efficient, and timely manner to question the 27XX AFIT students (7:158). The survey was administered to both rated and nonrated 27XX's.

The survey consisted of 16 questions and is contained in Appendix A. The data generated from the survey consisted of self-reported information gathered from the 27XX AFIT students. The survey was divided into three sections. The first section was designed to gather the background data of the respondee. The second section was designed to determine the perceptions of 27XXs on aeronautical ratings. The questions in this section provided answers to Investigative Questions 3, 4, and 5. The third section of the survey was designed to determine the perception of 27XX's as to the

number of rated/non-rated officers who were program directors. This section provides an answer to Investigative Question 6.

The survey methodology, therefore, achieved three primary objectives: 1) a determination of perception of impact of an aeronautical rating on career progression, 2) a determination of perception of aeronautical rating for program director selection, and 3) a determination of the perception of rated and non-rated percentages of program directors in AFSC.

The survey was designed for use in any follow-on research efforts if required. The first section of the survey was designed to collect vital demographic information. The information provided in this section gives background information on the respondent and can be used to cross-tabulate responses. The demographics provided the following information:

1. Respondee's rank
2. Respondee's duty AFSC
3. Respondee's acquisition experience
4. Respondee's operational experience
5. Respondee's aeronautical rating
6. Respondee's last assigned Product Division

The second section of the survey was designed to determine the perceptions of 27XX officers regarding the significance of aeronautical rating. This section of the

survey used a six point Likert scale to rate each question. The summated scale is used to determine the respondent's favorable or unfavorable attitude toward a question (7:255). Each question in section two of the survey was designed to provide data to answer Investigative Questions 3, 4, and 5. Survey Questions 10 and 13 were used to collect data on Investigative Question 3. Survey Questions 7, 11, 12 and 15 were used to collect data on Investigative Question 4. Survey Questions 9 and 13 were used to collect data on Investigative Question 5.

The third section of the survey was designed to determine 27XX's perceptions of the distribution of rated and non-rated PDs. This section of the survey contained a single question requesting the respondent to identify what was the perceived percentage. Each possible response represented a twenty percent interval of the total population. Question 8 in section two of the survey was also used to provide information on Investigative Question 6. Survey Question 8 requests the respondent to specify the degree of agreement or disagreement that rated officers hold a majority of the PD positions.

Data Analysis

For this research study, the data analysis consisted of a frequency count of responses per question, and the frequency count analysis was then used primarily to establish attitudinal trends.

To accomplish this analysis, the STATISTIX computer program was used to generate the required information from the survey responses. The following steps were taken:

1. Each returned survey was given a case number.
2. Each question was given a variable name.
3. Each of the survey responses was entered in accordance with its respective case number and variable name.
4. The frequency command under the summary statistics menu was used to transform the data into the required output.

Population of Interest

The population of interest consisted of all the 27XX's at the AFIT, School of Systems and Logistics Wright-Patterson AFB OH in classes 90S/D and 91S/D.

Summary

This chapter outlined the procedures and methodology that was used to collect and analyze the data for this research project. The chapter explained why a survey was generated over other data collection devices, how the survey questions were created, and how the data analysis was performed.

The next chapter contains the results of the data collected during the AFIT survey. Chapter IV describes how each question was responded to by the survey participants and what each of these responses generally indicate.

IV. Results

Introduction

This chapter presents the results of the study described in Chapter III. The analysis addresses each of the six investigative questions. The analysis gives insight to the perceptions of the respondees towards the question of rating significance and career development.

As discussed in the previous chapter, the students of Classes 90S/D and 91S/D at the Air Force Institute of Technology (AFIT), School of Systems and Logistics, were surveyed to obtain the required data. The two classes contained a total of forty-six individuals who possessed a DAFSC of 27XX upon entering the school (9). To insure that all eligible participants were solicited, surveys were distributed to both classes in total. Only those with DAFSCs of 27XX were requested to respond. This procedure insured that 100 percent of all eligible respondees were given the survey. A total of 54 surveys were returned, and of the 54 returned, 14 were not used for this study. The 14 were not used for one of the following reasons: 1) the respondent did not possess a DAFSC of 27XX, or 2) the respondent provided more than one answer per question. With respect to the first category, the majority of the discarded surveys were from respondents who, although they did not enter AFIT as 27XXs, were going to depart AFIT as 27XXs.

With the 14 discarded surveys, the total number of surveys used in the analysis came to 40. This reflected an 87 percent response rate.

Demographics

The first six questions of the survey were designed to collect basic demographic information on the participants. Survey Question 1 asked the participants to identify their respective rank. Of the 40 respondents, 92 percent were captains and 8 percent were first lieutenants. While this breakout is not reflective of the total population of 27XXs in Air Force Systems Command (AFSC), it is within 5 percent of the true distribution of the AFIT classes.

Survey Question 2 asked the participants to identify their current DAFSC. All respondents held the DAFSC of 2724.

Survey Question 3 asked the participants to supply information on the years of acquisition experience that they possessed. The breakout is shown below in Table 1.

TABLE 1
Numerical Breakout of Survey Question 3

<u>Years Experience</u>	<u>Number of Responses</u>
None	1
3 or less	3
3 to 6	32
7 to 9	4

Survey Question 4 requested information on the operational experience of the individual. The responses of the individuals are shown in Table 2.

TABLE 2
Numerical Breakout of Survey Question 4

<u>Years Experience</u>	<u>Number of Responses</u>
None	35
3 or less	2
3 to 6	1
7 to 9	1
10 to 12	1

Survey Question 5 was used to determine how many of the respondents were rated. Of the 40 surveys that qualified for use in the survey, all the respondents were nonrated.

Survey Question 6 determined which Product Division the respondent was last assigned. The breakout of the Product Division assignments is contained in Table 3.

TABLE 3
Numerical Breakout of Survey Question 6

<u>Product Division</u>	<u>Number of Responses</u>
Space Systems Division	3
Electronic Systems Division	4
Aeronautical Systems Division	27
Munitions Systems Division	3
Never Assigned	3

The demographic questions were placed in the survey to gain general information on the respondents. The information could be used to cross-tabulate investigative question responses to respondent demographics and also to determine the makeup of the survey respondents. The results of the survey for the six demographic questions show that 80 percent or more of the respondents were captains with a 2724 DAFSC, 3 to 6 years acquisition experience, no operational experience, and non-rated. Also, over 57 percent of those surveyed were last assigned to the Aeronautical Systems Division (ASD). The breakout above constitutes the "typical" makeup of a respondent.

The remaining survey question, Survey Questions 7-16, were placed in the survey to gain the information from the respondents needed to answer Investigative Question 3-6. Graphical representations of the responses received are found in Appendix B of this report.

Investigative Question 1

Investigative Question 1 was used to stipulate what the requirements were to become a program director (PD). This question was answered in Chapter II by accomplishing a literature review of current published information. The specific requirements are explicit in the criteria used for progression and subsequent selection of officers to PD positions.

Investigative Question 2

Investigative Question 2 was used to determine the actual percentage of rated and non-rated officers that held PD positions in AFSC. This question was required to verify how valid the perception of 27XXs was as to the number of rated officers that actually held PD positions. This question was also answered in Chapter II of this report. It was explained in Chapter II that of the 60 PD positions available in AFSC, 39 were non-rated and 21 were rated. Therefore, 35 percent of the PDs were rated and 65 percent were non-rated. It was noted in Chapter 2 that this was a decrease in rated officer PD positions held in the past four years.

Investigative Question 3

Investigative Question 3 was used to determine whether "27XXs perceive that an aeronautical rating is a criterion used to select PDs." Survey Questions 9 and 14 were designed to collect the information required to answer this question. Attitudes examined were towards aeronautical rating being used as PD selection criterion and being a needed element for PDs appointment.

Survey Question 10 stated, "I believe that possession, of an aeronautical rating is a criterion used to appoint program directors." The results of the Survey Question 10 are shown in Table 4.

TABLE 4
Numerical Breakout of Survey Question 10

<u>Survey Question 10 Response</u>	<u>Number of Responses</u>
Not Applicable	0
Strongly Agree	17
Moderately Agree	12
Neither Agree or Disagree	3
Moderately Disagree	8
Strongly Disagree	0

Generally, those responding to the survey were of the opinion that aeronautical rating is used as a criterion for PD selection. It was the feeling of 73 percent of the respondents that rating is used as a criterion in comparison to 20 percent that felt that it was not a criterion. The remaining 7 percent were neutral on the issue.

Survey question 13 stated, "I believe that possession of aeronautical rating has no bearing on program director appointments." The results for Survey Question 13 appear in Table 5.

TABLE 5
Numerical Breakout of Survey Question 13

<u>Survey Question 13 Response</u>	<u>Number of Responses</u>
Not Applicable	0
Strongly Agree	0
Moderately Agree	2
Neither Agree or Disagree	1
Moderately Disagree	14
Strongly Disagree	23

This question was answered in a highly negative manner. Nearly 73 percent of the respondents moderately disagreed or strongly disagreed with the question and 17 percent were neutral. Only 10 percent were of the opinion, and moderately so, that a PD should have an aeronautical rating.

The responses to the two questions showed that overall the officers surveyed felt that a selection criterion for PD was whether or not one possessed an aeronautical rating. Although more than 70 percent perceived that rating was a criterion, the same percentage expressed that a PD did not have to have a rating to be a PD.

Investigative Question 4

Investigative Question 4 was designed to determine if "27XXs perceive that rating has impact on career progression." Four survey questions were used to gather data to answer this investigative question. The survey questions used were Questions 7, 11, 12, and 15. Each of these questions asked, in some manner, how the respondent perceived how career progression and rating were related.

Survey Question 7 stated, "I believe that possession of an aeronautical rating is beneficial to a 27XX's career development." Survey responses to this question are presented below in Table 6.

TABLE 6
Numerical Breakout of Survey Question 7

<u>Survey Question 7 Response</u>	<u>Number of Responses</u>
Not Applicable	0
Strongly Agree	12
Moderately Agree	17
Neither Agree or Disagree	4
Moderately Disagree	5
Strongly Disagree	2

The responses showed that of those with an opinion, 73 percent were in agreement with the survey questions. This group perceived that possessing a rating is beneficial towards career progression. In contrast, 17 percent were of the opinion that rating was not beneficial and 10 percent were neutral.

Survey Question 11 stated, "I believe that an officer with an aeronautical rating is more likely to be appointed as a program director than a non-rated officer." Table 7 shows the responses to Survey Question 11.

TABLE 7
Numerical Breakout of Survey Question 11

<u>Survey Question 11 Response</u>	<u>Number of Responses</u>
Not Applicable	0
Strongly Agree	22
Moderately Agree	14
Neither Agree or Disagree	0
Moderately Disagree	3
Strongly Disagree	0

The general opinion of those responding shows that 90 percent perceive that a rated officer will more likely be selected as a program director than a non-rated officer. It is of note that of the 90 percent in agreement with Survey Question 11, 55 percent held a strong opinion on the subject. Only 10 percent disagreed with the statement and only held a moderate disagreement towards the subject.

Survey Question 12 stated, "I believe that not being rated will lessen one's chances of becoming program director." Survey Question 12 responses are shown below in Table 8.

TABLE 8
Numerical Breakout of Survey Question 12

<u>Survey Question 12 Response</u>	<u>Number of Responses</u>
Not Applicable	0
Strongly Agree	18
Moderately Agree	17
Neither Agree or Disagree	0
Moderately Disagree	5
Strongly Disagree	0

Respondents who agreed with the wording of the survey question were 87 percent of the total respondents. Disagreement with Survey Question 12 came from 13 percent of those returning surveys. The data indicates that an overwhelming number of the respondents perceive that a non-rated officer's chances of selection to program director are less than a rated officer's chances.

Survey Question 15 stated, "I believe that it is more difficult to be appointed a program director if you possess an aeronautical rating." The responses to Survey Question 15 are depicted in Table 9 below.

TABLE 9
Numerical Breakout of Survey Question 15

<u>Survey Question 15 Responses</u>	<u>Number of Responses</u>
Not Applicable	0
Strongly Agree	2
Moderately Agree	0
Neither Agree or Disagree	0
Moderately Disagree	10
Strongly Disagree	28

The respondents held the general opinion of disagreement towards Survey Question 15. Disagreement to the question was expressed by 95 percent of the respondents. Of that 95 percent, 70 percent held a strong disagreement. A very small number, 5 percent, held a positive position on this question, though this 5 percent also had a strong opinion of agreement.

The responses to Survey Questions 7, 11, and 12 show that those responding to the survey are highly in agreement; over 70 percent agree with the respective survey statement. The responses to Survey Question 15 also show a response above 70 percent but, towards disagreeing rather than agreeing with the statement. All of the responses tend to reflect a perception within the responding participants that

they perceive a relationship between rating and career progression. The relationship that the data reflects is that rating does have an impact on career progression and furthermore the impact is beneficial.

Investigative Question 5

Investigative Question 5 was used to determine whether "27XXs perceive that an aeronautical rating is required to be selected as a PD." To obtain insight into this question, two survey questions were designed and used in the survey instrument. Survey Questions 9 and 14 were the questions used to obtain the needed information to answer the investigative question.

Survey Question 9 stated, "To become a program director, I believe that an aeronautical rating is required." The responses to this question are shown in Table 10.

TABLE 10
Numerical Breakout of Survey Question 9

<u>Survey Question 9 Responses</u>	<u>Number of Responses</u>
Not Applicable	0
Strongly Agree	5
Moderately Agree	6
Neither Agree or Disagree	1
Moderately Disagree	13
Strongly Disagree	15

The majority of respondents, 70 percent, were in disagreement with the statement. These respondents

perceived that rating was not a requirement. Those agreeing with the statement made up 28 percent, and the remaining 2 percent were neutral.

Survey Question 14 stated, "I believe that a program director should have an aeronautical rating." The responses to this question are represented in Table 11.

TABLE 11
Numerical Breakout of Survey Question 14

<u>Survey Question 14 Responses</u>	<u>Number of Responses</u>
Not Applicable	0
Strongly Agree	0
Moderately Agree	4
Neither Agree or Disagree	7
Moderately Disagree	15
Strongly Disagree	14

Generally, those responding held the opinion that a rating should not be required to become a program director. The results showed that 72 percent were in disagreement with the statement. The responses were approximately equally divided between moderately and strongly disagree. Those holding a neutral opinion equaled 13 percent. Respondents who had the opinion that rank should be required equaled 10 percent.

The general opinion of those surveyed is that an aeronautical rating is not required to become a program director. In addition, over 70 percent were of the opinion

that rating should not be a requirement for program directors.

Investigative Question 6

Investigative Question 6 was used to determine, "the perceived percentage of rated and non-rated PDs in AFSC." Investigative Question 2 identified that the percentage as of May 90 was 35 percent rated and 65 percent non-rated. Therefore, of the sixty PD positions in AFSC, just over one third were held by rated officers.

Survey Questions 8 and 16 were used to collect the required data to answer the investigative question. Survey Question 8 stated, "I believe that a majority (above 50%) of the Air Force Systems Command program directors have aeronautical ratings." The responses are in Table 12.

TABLE 12
Numerical Breakout of Survey Question 8

<u>Survey Question 8 Responses</u>	<u>Number of Responses</u>
Not Applicable	0
Strongly Agree	27
Moderately Agree	9
Neither Agree or Disagree	3
Moderately Disagree	0
Strongly Disagree	1

A total of 36 participants or 90 percent of those responding agreed that at least 50 percent of the Air Force Systems Command program directors were rated. Neutral

responses were produced by 8 percent of the respondents and 2 percent disagreed. The one response in disagreement with the statement strongly disagreed.

Survey Question 16 states, "I believe that the percentage of Air Force Systems Command program directors who have aeronautical ratings is . . .". This question was included in the survey to determine what percentage range each respondent perceived accurate. The results are shown in Table 13.

TABLE 13
Numerical Breakout of Survey Question 16

<u>Survey Question 16 Responses</u>	<u>Number of Responses</u>
less than 20%	1
20% to 39%	1
40% to 59%	5
60% to 79%	17
80% and above	16

The majority of respondents were of the opinion that over 60 percent of the PD positions were held by rated officers. The exact breakout realized from the responses were 83 percent perceived a minimum of 60 percent were rated, 12 percent felt that 40 to 59 percent were rated, and the remaining 5 percent felt that the number was below 40 percent. Only one of the participants responded in the correct range of 20 to 39 percent.

The responses to Survey Question 8 and 16 generally indicated that those surveyed perceive that rated officers hold a much greater percentage of PD positions than in actuality.

Conclusion

In general, the six investigative questions findings established that the 27XXs surveyed perceived that possession of an aeronautical rating has a positive influence on career progression to program director positions. This study also identified certain perceptions that 27XXs have of the actual makeup of program directors. In particular, this research study established that:

1. There are documents that are readily available to the 27XX community that describe specific requirements and qualifications to become program directors. Air Force Systems Command Regulation (AFSCR 36-5), Acquisition Management Professional Development, outlines a program manager certification program. The regulation also explains how this certification process is used to select officers to the Senior Acquisition Managers List (SAML) which is used to appoint officers to program director positions. Although AFSCR 36-5 did apply some importance to an officer obtaining operational experience, neither it nor any other portion of the literature reviewed stated that aeronautical rating was used as an appointment criterion.

2. There are 60 program director positions in Air Force Systems Command as of May 1990. From information obtained from the personnel briefs of each program director, the possession of aeronautical rating was determined. Of the 60 officers, 35 percent or 21 of the officers possess aeronautical ratings. This data documented the distribution of rated to non-rated program directors, and the fact was that a minority of rated officers hold program director positions.

3. There is a perception among 27XXs that an aeronautical rating is a criterion used to select program directors. Those surveyed held a strong opinion that aeronautical rating had bearing on PD appointments. This perception is of extreme interest to this study. The study previously pointed out that none of the literature specifically stated rating was used as a criterion, yet over 70 percent of the respondents perceived this to be the case.

4. There is a perception that rating has an impact on 27XX career progression. The survey participants tended to believe that rating was beneficial to career development and that a rated officer was not only more likely to be selected as a program director, but lack of a rating actually lessens one's chances of PD appointment.

5. There is a perception an aeronautical rating is required to be selected as a PD. This perception is contrary to the published literature; however, a strong

perception was evidenced in those surveyed. This perception is also intriguing due to the fact that by there being nonrated program directors, a requirement cannot exist.

6. There is a perception among 27XXs surveyed that the rated program directors are in the majority and this majority is a minimum of 60 percent. The perceived percentage is nearly twice that of the actual percentage of 35 percent.

Overall, the study indicates that the individuals surveyed hold many perceptions about career progression and the significance of rating in the acquisition career field that are not consistent with the factual data. Because of the small number of participants and the lack of variety in Duty Air Force Specialty Code, rank, and possession of rating, no conclusive determination of the 27XX population can be expressed. However, the surveyed results do show that, among those surveyed, certain perceptions are prevalent and tend to support further research.

Summary

This chapter presented the findings associated with the data collected from the survey. The chapter related to the reader how those participating in the survey responded to each question and how these questions aided in the answering of each of the four investigative questions associated with 27XX perceptions. Although the results of the survey were not able to draw any sound conclusions about

the entire population of 27XX officers in Air Force Systems Command, the data collected did give strong positive indication to the researcher that further research should be initiated.

Chapter V gives the recommendations that the author has determined are of benefit in attempts to further the research efforts of this study.

V. Recommendations

The results of this study indicate that the survey respondents hold certain opinions about the relationship between aeronautical rating and 27XX career progression. Some of these perceptions, such as the perception that aeronautical rating is used as a criterion for program director appointments, were in very strong agreement with those surveyed. This particular question (Survey Question 10) had a positive response by over 70 percent of those surveyed. Yet, aeronautical rating is not actually used to appoint program directors. The data collected from the AFIT students who participated in this study does not allow the author to draw any conclusive judgements from the results. The number of individuals actually surveyed (40) does not allow any inferences to be drawn about the entire population of approximately 2,200 27XXs; however, the results do indicate that of those surveyed, some very strong perceptions exist. It is because of the presence of these strong opinions found in the test instrument responses that further research in this area should be examined.

Recommended Further Research

It is recommended that further research be conducted on this project's topic to gain more insight into the perceptions of a more representative sample of the 27XX population. This additional research needs to be

accomplished to determine if the results of this research project do indeed correlate to the perceptions of 27XXs. This research project's objective was to determine if further study was required and that objective has been accomplished.

The follow-on to this project should look at surveying a larger portion of the 27XX population. The sampling technique used should allow for a minimum of 90 percent confidence in the data. This would give the researcher the capability of stating that for every sample of the same size and format drawn, 90 percent of the time the sample would reflect the true response of the population as a whole. Such a technique would allow for conclusive judgements to be made about the resulting data.

A follow-on study should consider possibly stratifying the sample or breaking the sample into sub-populations. The data associated with this project did not include any responses from rated officers or senior acquisition officers (DAFSC 2716). By stratifying the sample, not only would it allow the data received to reflect the true representation of the percentage of members in the sub-group, but could also be used to cross-tabulate responses within and without of the groups. This will allow the researcher to categorize information such as how majors with an aeronautical rating and who are assigned to Aeronautical Systems Division (ASD) answered questions as compared to majors with the same qualifications from Space Systems Division (SSD). The

survey administered to a randomly selected and stratified sample of Air Force Systems Command (AFSC) 27XX officers will allow for more valid conclusion to be drawn about the entire population.

In addition to carrying out further research on a larger population to verify and validate the results found in this research, a follow-on project could attempt to discover why the perceptions are held and what impact these perceptions are having on 27XXs. An example of this is the question that was brought to mind when over 70 percent of those responding indicated that a perception existed that aeronautical rating is a criterion used for program director appointment. The responses to this question (Survey Question 10) were quite puzzling since the regulations dealing with the program director selection process do not state that rating is a criterion. One reason for this perception could be that the 27XXs surveyed are ignorant of the content of the regulations discussed in Chapter II. Another reason could be that 27XXs are in fact knowledgeable of regulations but perceive that some type of unwritten standard is applied when dealing with aeronautical rating. Additional analysis is required to ascertain the origin of the perceptions revealed in the survey. Such indepth analysis could not be accomplished in this project and was not an objective of this project, but could prove invaluable to the Air Force. Analysis of this type can lead to

developing and enacting programs to bring officers'
perceptions in line with what is actually in existence.

Appendix A

Survey on Program Director Selection



DEPARTMENT OF THE AIR FORCE
AIR UNIVERSITY
AIR FORCE INSTITUTE OF TECHNOLOGY
WRIGHT-PATTERSON AIR FORCE BASE OH 45433-4523

REPLY TO
ATTN OF LSG (Capt Streeter, X54437)

10 Jul 90

SUBJECT: Program Director Selection Survey

TO: AFIT LS 90S/D and 91S/D 27XX Series Personnel

1. Please take the time to complete the attached questionnaire and return it by 1600 hrs, Friday 13 Jul 90. Please place your completed survey in the box marked STREETER SURVEY located beneath the student mailboxes. The survey should take no more than 20 minutes to complete.

2. Currently, the Department of Defense is undergoing many changes as a result of the Defense Management Review. Some of these changes will directly affect the 27XX career field. This survey will measure your perceptions and attitudes toward your career progression. The data gathered will become part of an AFIT research project and will be of invaluable assistance to the Air Force in developing the highest quality officers for the acquisition force!

3. Your participation is voluntary, and your responses will be anonymous. Please do not sign your name anywhere on the survey. To complete the survey, either circle the appropriate response or write your numerical response in the space provided below the question. PLEASE MARK YOUR RESPONSES DIRECTLY ON THE SURVEY. Results will be presented in terms of group averages of the AFIT 27XX officer's perception. When the results of the survey are published, readers will in no way be able to identify specific individuals.

4. Your participation is completely voluntary, but certainly appreciated. This survey allows you to voice your opinion/perceptions. Thank you for your cooperation and participation.

Charles A. Streeter

CHARLES STREETER, Capt, USAF
AFIT 90S Student

1 Atchs
Survey

STRENGTH THROUGH KNOWLEDGE

Survey on Program Director Selection

Instructions

Answer all items by either circling the appropriate response to each question or by writing your numerical response in the space provided below each question. Select only one response for each item and clearly erase any responses you change. If for any item you do not find a response that fits your situation exactly, use the one that is closest to the way you feel. Please answer each item as honestly and frankly as possible.

To ensure your response to this survey remains anonymous, please do not sign your name on this survey.

Background Information

1. What is your rank?

- (1) Second Lieutenant
- (2) First Lieutenant
- (3) Captain
- (4) Major
- (5) Lieutenant Colonel
- (6) Colonel

2. What is your current AFSC?

- (1) 2724
- (2) 2736
- (3) 2716
- (4) Other (Specify) _____

3. How many years of acquisition experience do you have?
(Acquisition experience is defined as experience in the acquisition, support, and maintenance of weapon systems. This may include SPO, SPO project management, general acquisition, and headquarters acquisition assignments and operational tours involving the maintenance of a weapon system.)

- (1) None
- (2) 3 years or less
- (3) 3 to 6
- (4) 7 to 9
- (5) 10 to 12
- (6) 13 to 15
- (7) more than 15

4. How many years of operational experience do you have?
(Operational experience is defined as experience in operating, supporting, or maintaining an operational system gained in an Air Force or joint command other than AFSC and AFLC.)
- (1) None
 - (2) 3 years or less
 - (3) 3 to 6
 - (4) 7 to 9
 - (5) 10 to 12
 - (6) 13 to 15
 - (7) more than 15
5. What aeronautical rating do you have? (Aeronautical rating is defined as a rating of pilot or navigator. All other ratings, i.e. flight engineer, are considered as none for this survey.)
- (1) None
 - (2) Pilot
 - (3) Navigator
6. What Product Division were you assigned to last?
- (1) Space Systems Division
 - (2) Electronic Systems Division
 - (3) Aeronautical Systems Division
 - (4) Munitions Systems Division
 - (5) Human Systems Division
 - (6) Foreign Technology Division
 - (7) Never assigned to a Product Division

Significance of Aeronautical Rating

I would like to establish your perception of the possession of an aeronautical rating on the career development of an acquisition program management (27XX) officer. Please use the following response scale to answer questions 7 through 15.

The term "program director" as used in this survey refers to an O-6 or above that holds the 0029 or 0002 AFSC. This position is normally held by all individuals in charge of system program offices.

(0) (1) (2) (3) (4) (5)

Not	Strongly	Moderately	Neither	Moderately	Strongly
Applicable	Agree	Agree	Agree or	Disagree	Disagree
			Disagree		

7. I believe that possession of an aeronautical rating is beneficial to a 27XX's career development.

(0)	(1)	(2)	(3)	(4)	(5)
Not Applicable	Strongly Agree	Moderately Agree	Neither Agree or Disagree	Moderately Disagree	Strongly Disagree

8. I believe that a majority (above 50%) of the Air Force Systems Command program directors have aeronautical ratings.
-
9. To become a program director, I believe that an aeronautical rating is required.
-
10. I believe that possession of an aeronautical rating is a criterion used to appoint program directors.
-
11. I believe that an officer with an aeronautical rating is more likely to be appointed as a program director than a nonrated officer.
-
12. I believe that not being rated will lessen ones chances of becoming a program director.
-
13. I believe that possession of an aeronautical rating has no bearing on program director appointments.
-
14. I believe that a program director should have an aeronautical rating.
-
15. I believe that it is more difficult to be appointed a program director if you possess an aeronautical rating.
-

Program Director Distribution

16. I believe that the percentage of Air Force Systems Command program directors who have aeronautical ratings is.

- (1) less than 20%
- (2) 20% to 39%
- (3) 40% to 59%
- (4) 60% to 79%
- (5) 80% and above

PLEASE RETURN THIS QUESTIONNAIRE BY PLACING IT IN THE BOX MARKED STREETER SURVEY BENEATH THE STUDENT MAILBOXES.

THANKS FOR YOUR HELP, AND HAVE A NICE DAY!

Appendix B

Graphical Representation of Survey Questions 7-16

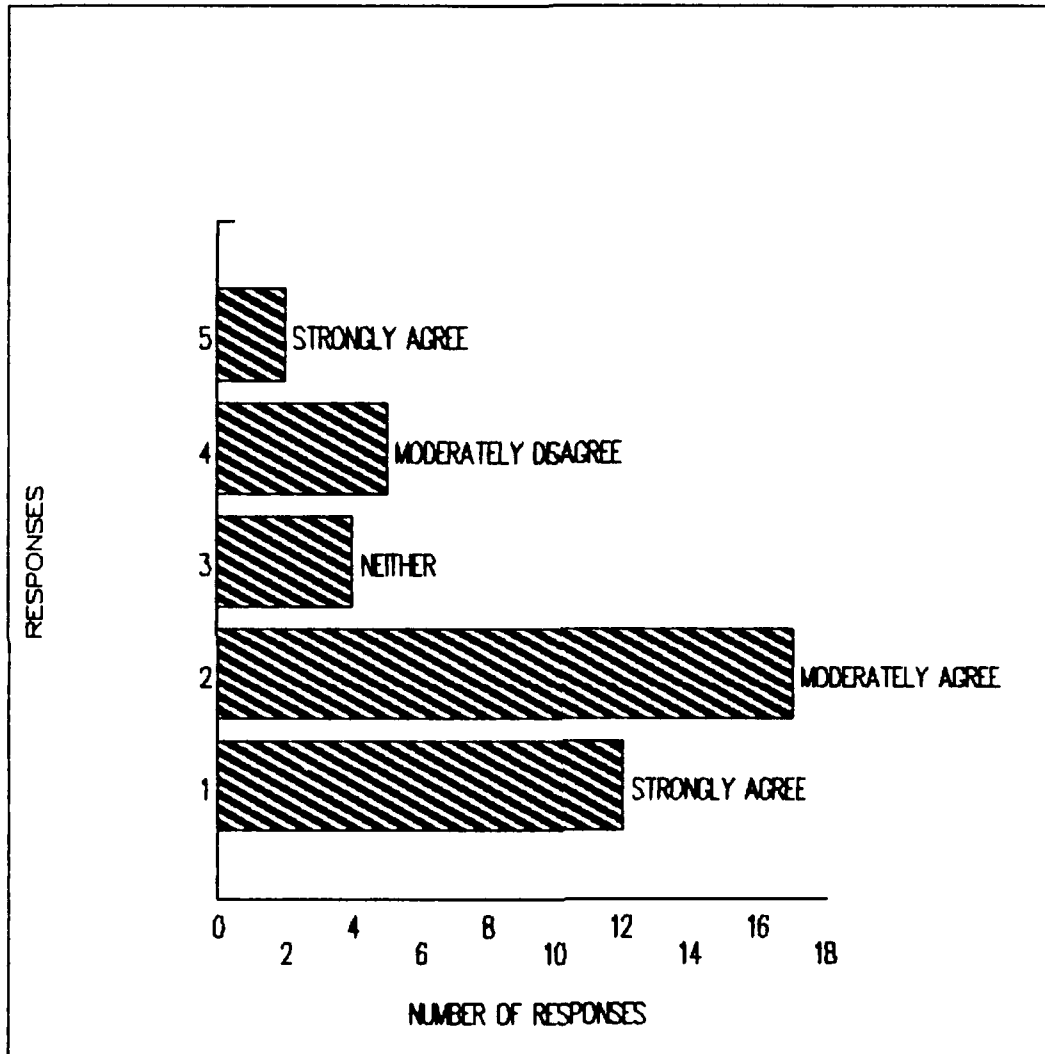


Figure 1. Responses to Survey Question 7

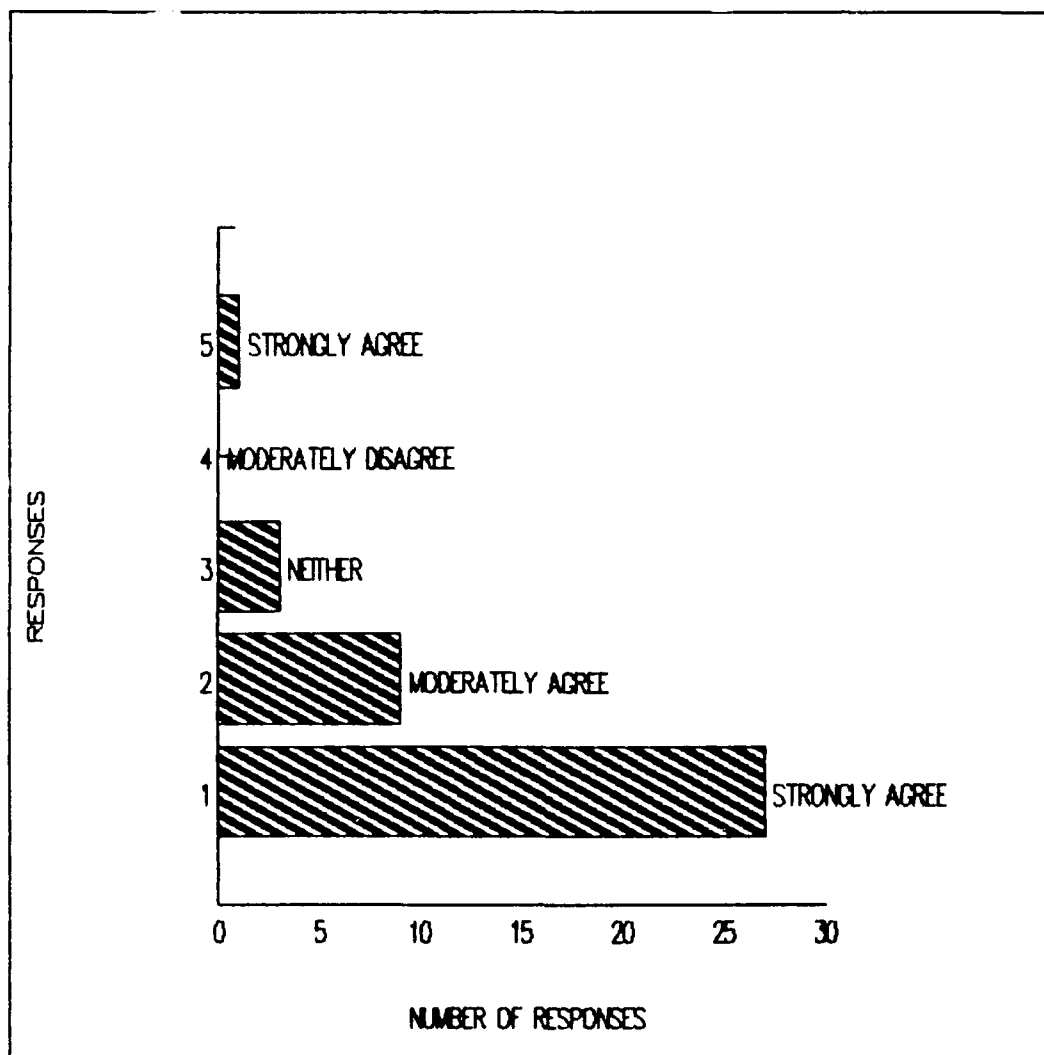


Figure 2. Responses to Survey Question 8

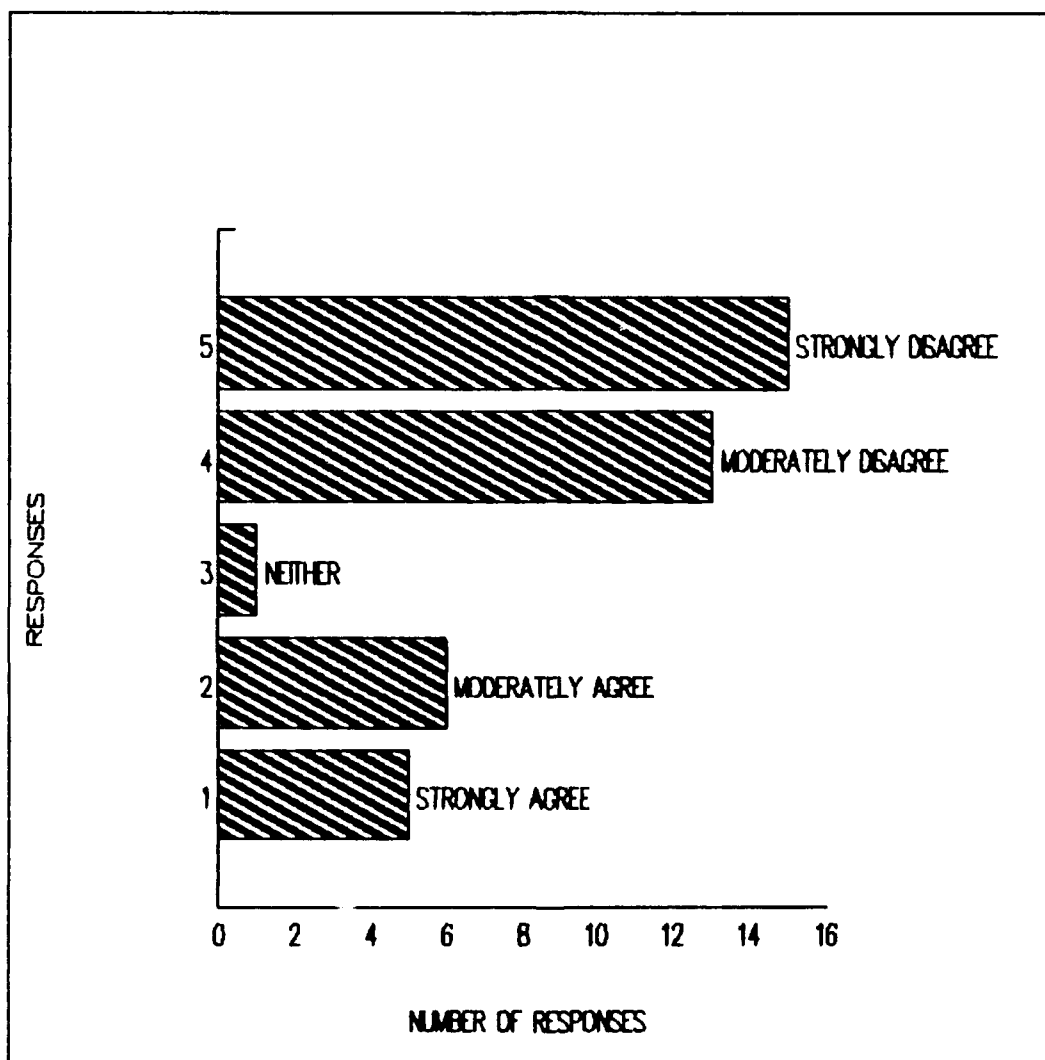


Figure 3. Responses to Survey Question 9

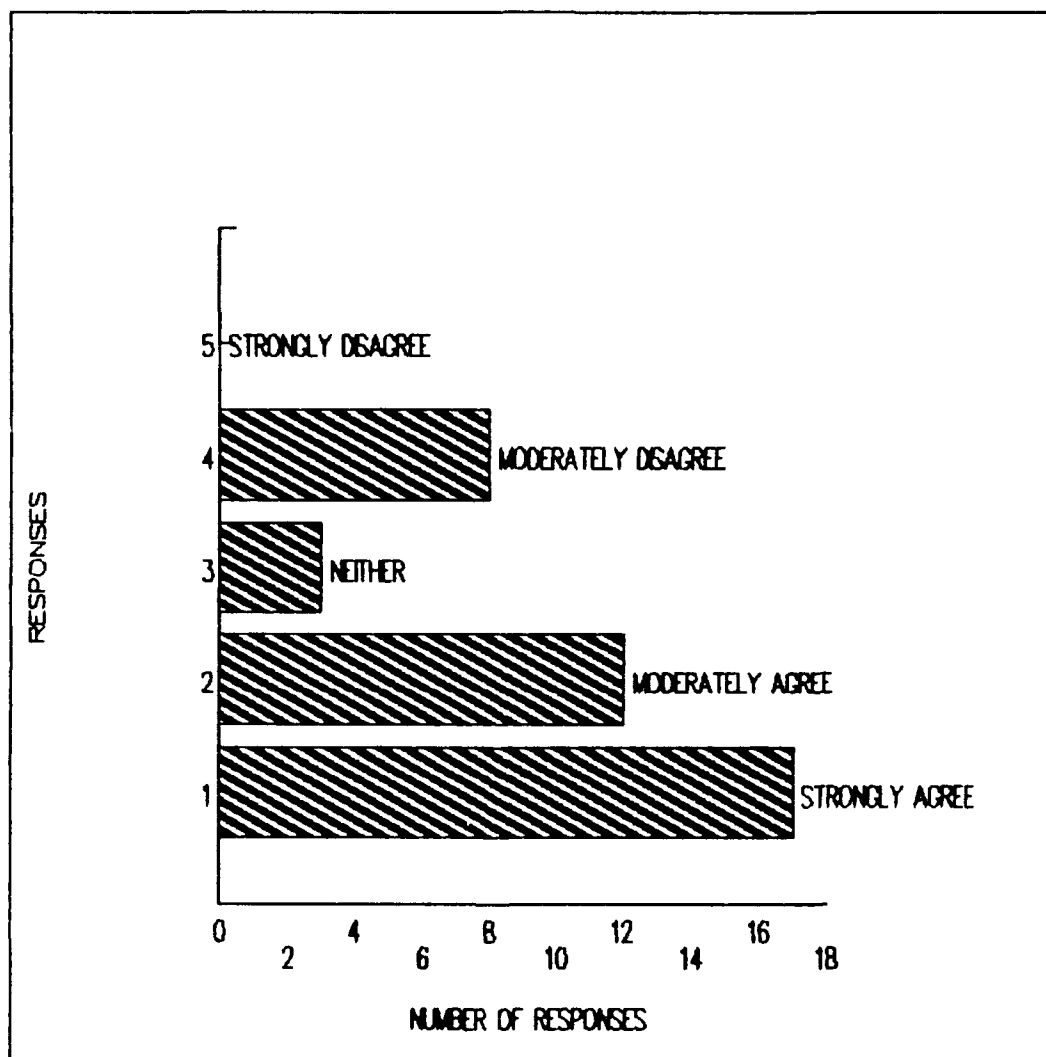


Figure 4. Responses to Survey Question 10

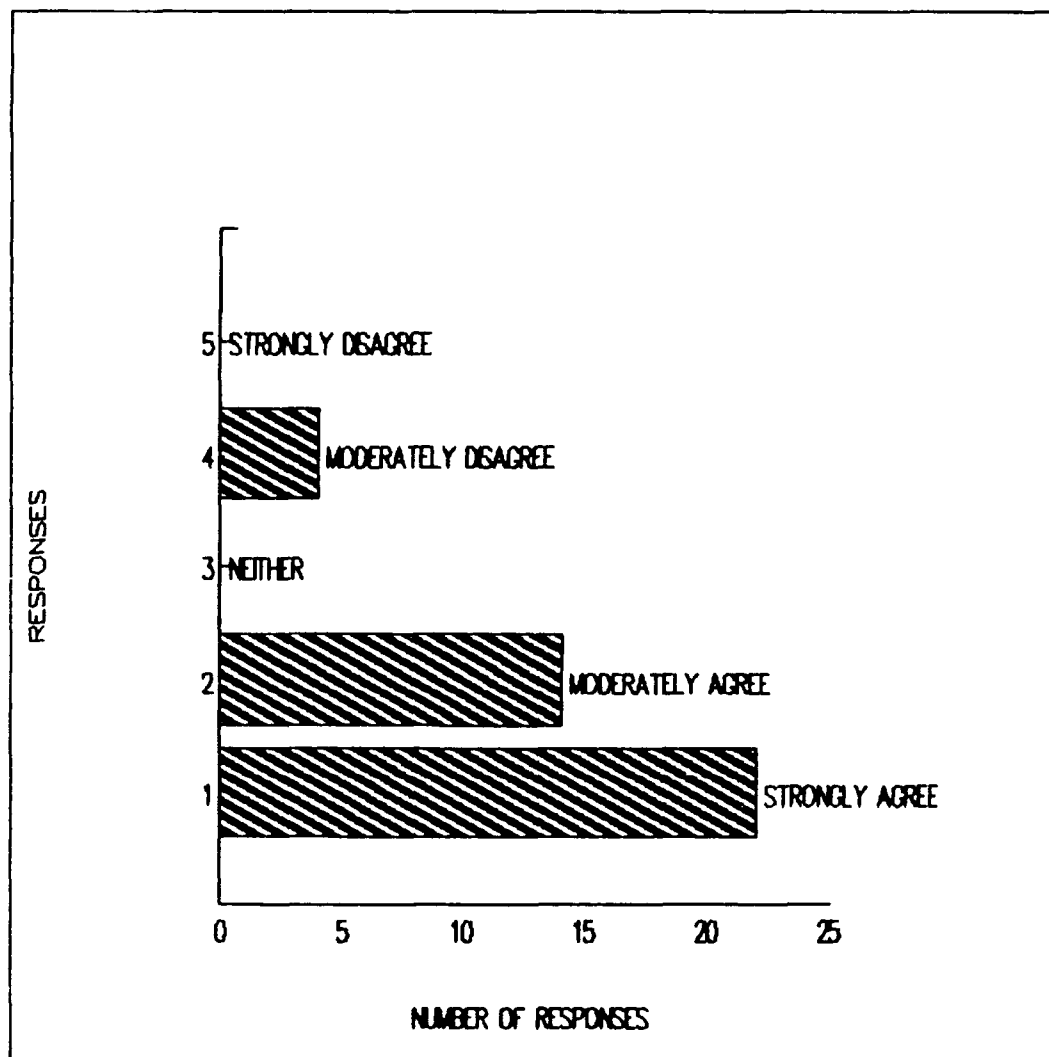


Figure 5. Responses to Survey Question 11

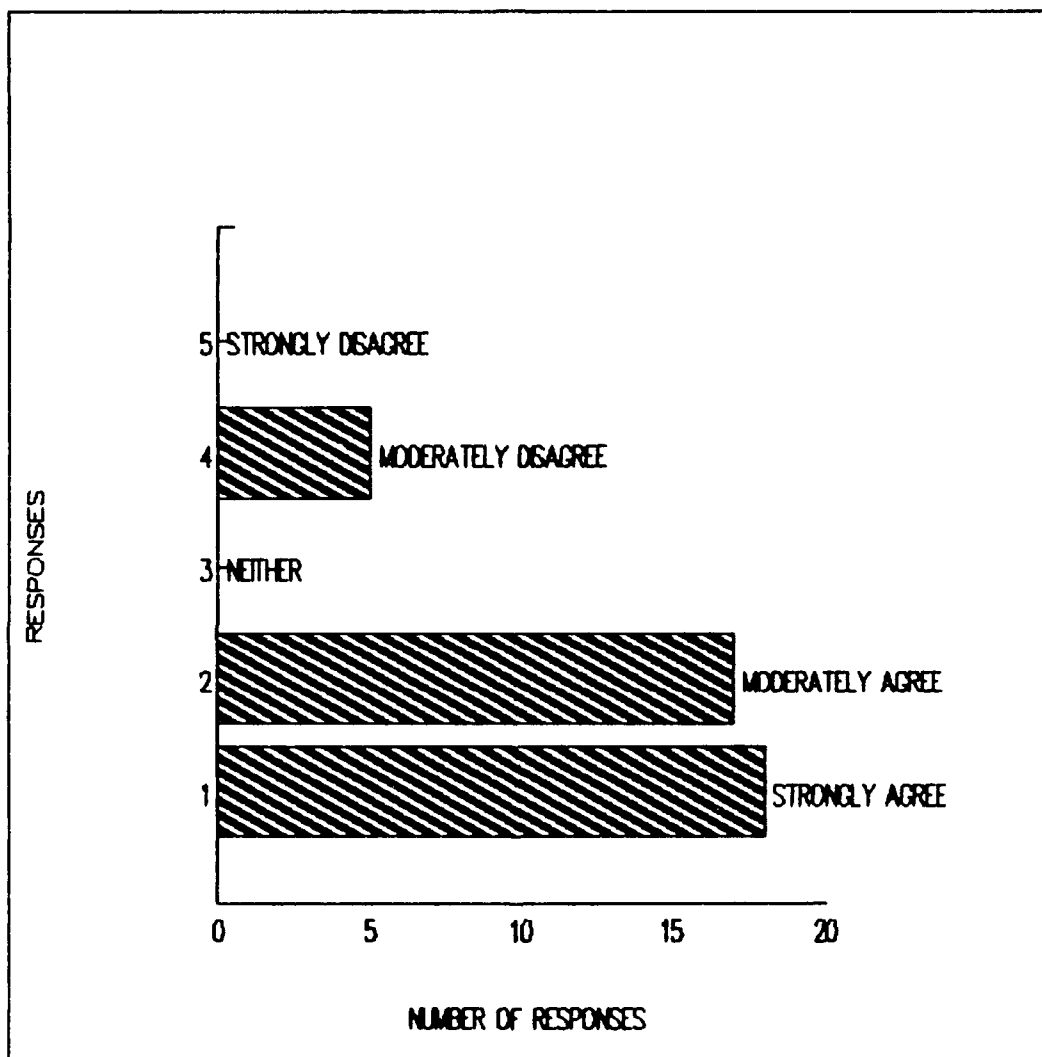


Figure 6. Responses to Survey Question 12

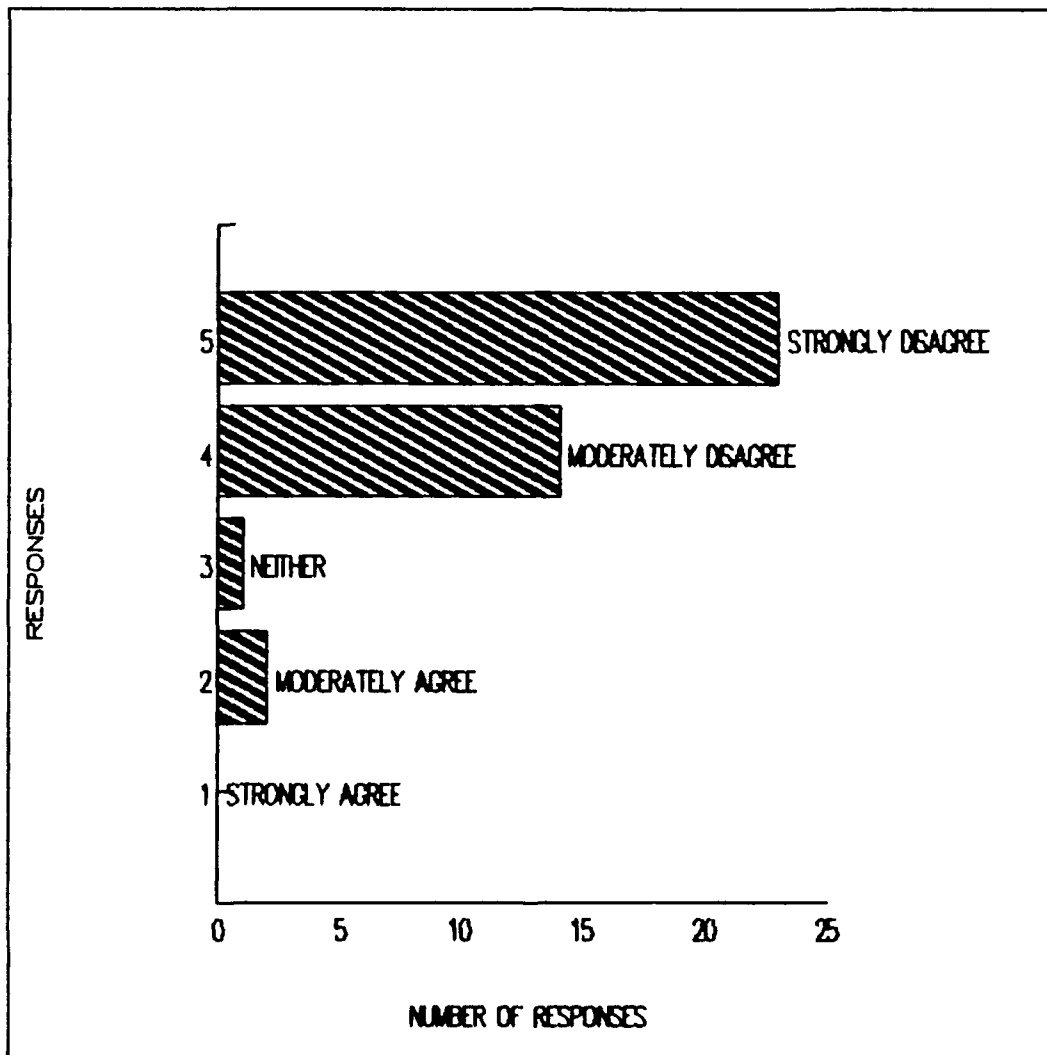


Figure 7. Responses to Survey Question 13

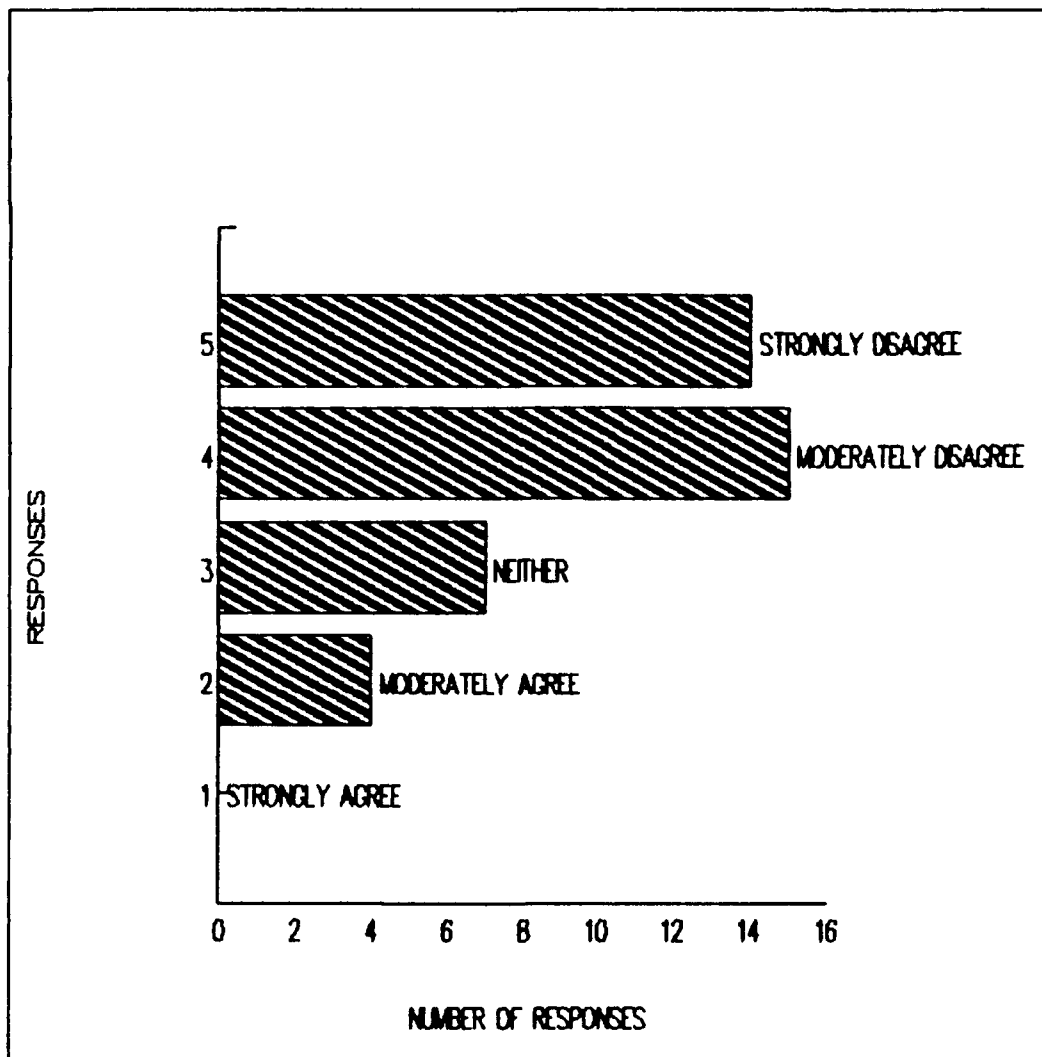


Figure 8. Responses to Survey Question 14

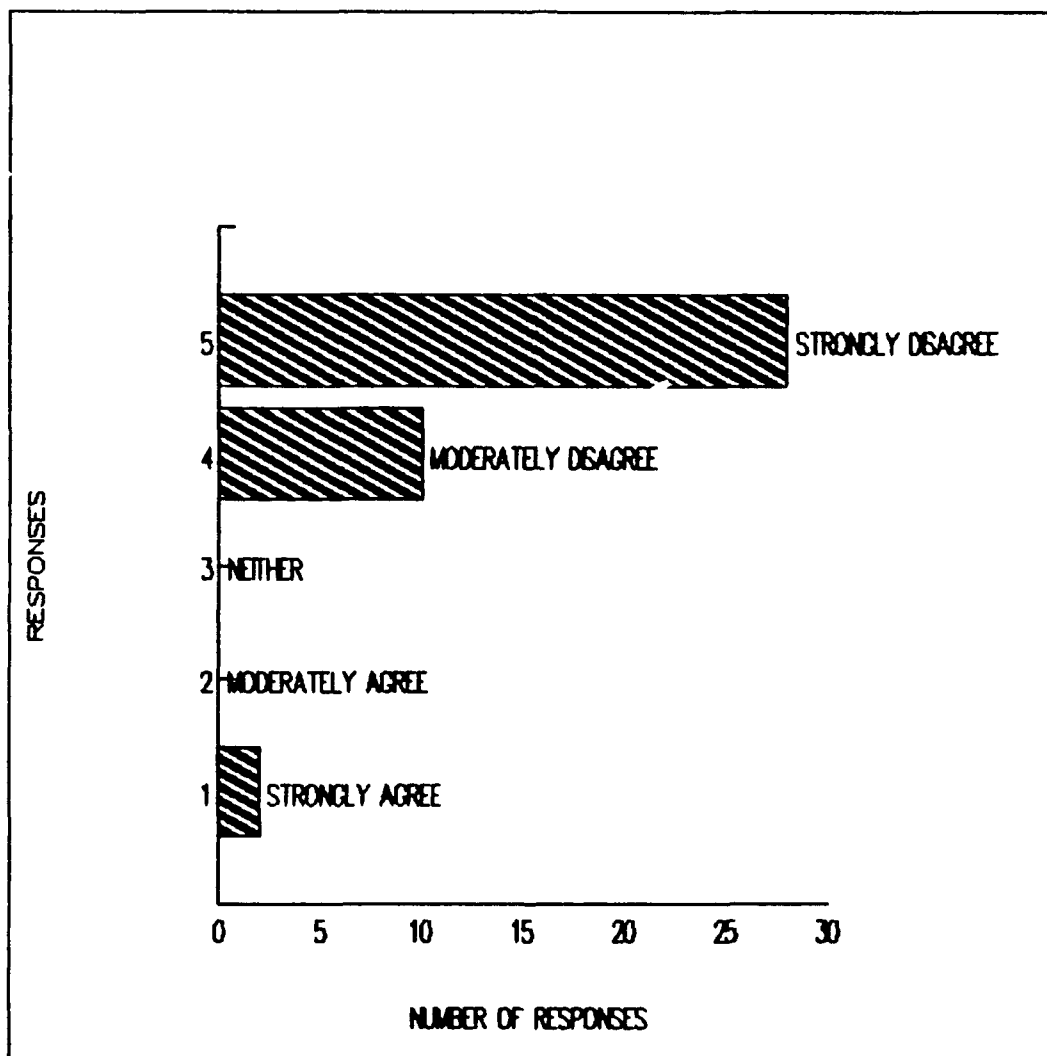


Figure 9. Responses to Survey Question 15

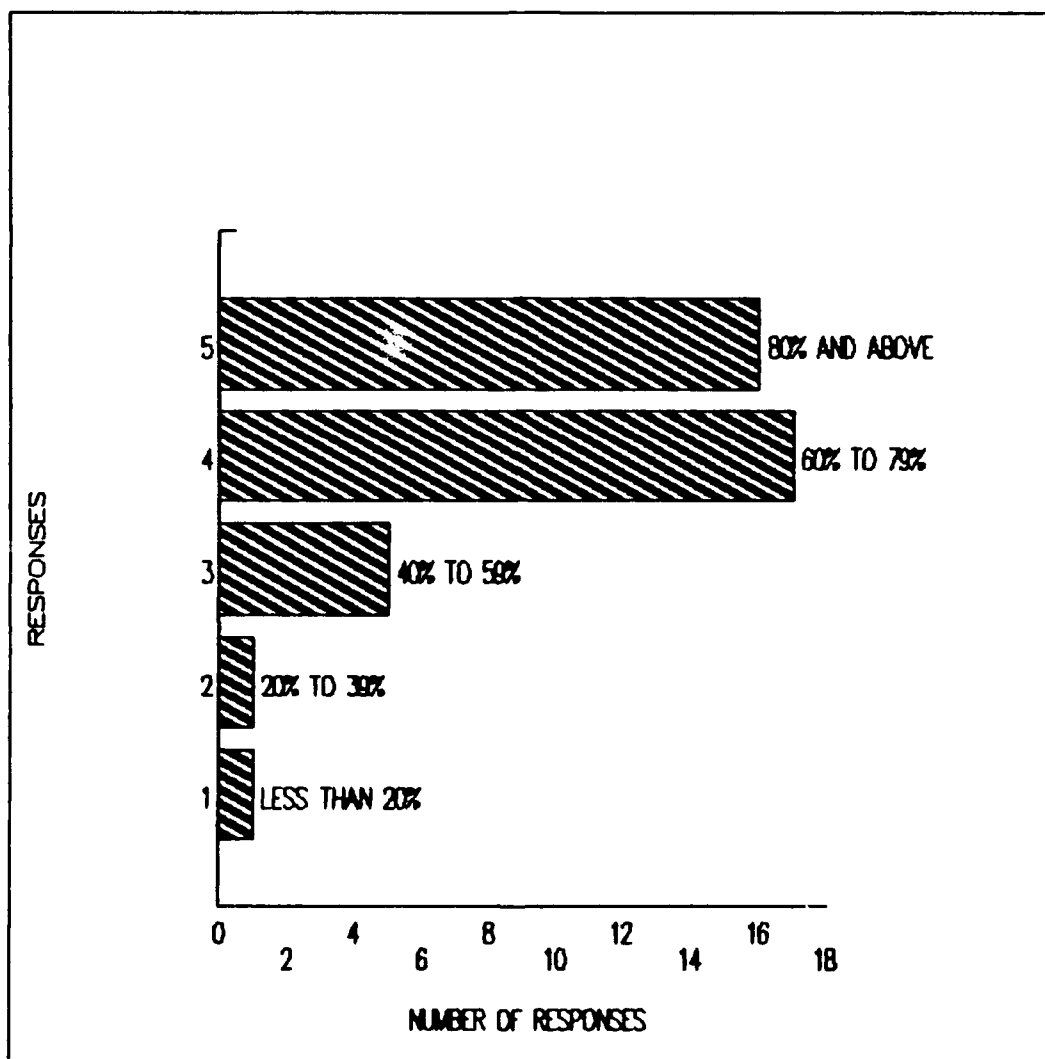


Figure 10. Responses to Survey Question 16

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VITA

Captain Charles A. Streeter Jr. [REDACTED]

[REDACTED]
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[REDACTED] In May 1989, he entered the Air Force Institute of Technology (AFIT), School of Systems and Logistics.

[REDACTED]
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REPORT DOCUMENTATION PAGE

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Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE September 1990	3. REPORT TYPE AND DATES COVERED Master's Thesis
4. TITLE AND SUBTITLE PERCEPTIONS OF ACQUISITION PROGRAM MANAGEMENT (27XX) OFFICERS ON AERONAUTICAL RATINGS AND CAREER DEVELOPMENT			5. FUNDING NUMBERS
6. AUTHOR(S) Charles A. Streeter Jr., Captain, USAF			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Air Force Institute of Technology, WPAFB OH 45433-6583			8. PERFORMING ORGANIZATION REPORT NUMBER AFIT/GSM/LSR/90S-28
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSORING / MONITORING AGENCY REPORT NUMBER
11. SUPPLEMENTARY NOTES			
12a. DISTRIBUTION / AVAILABILITY STATEMENT			12b. DISTRIBUTION CODE
13. ABSTRACT (Maximum 200 words) This study had the research objective of determining whether the Acquisition Management officer, Duty Air Force Specialty Code (DAFSC) 27XX, perceived that an Aeronautical Rating had a positive influence on career progression to program director (DAFSC 0029) positions. This study examined the perceptions of forty Air Force Institute of Technology (AFIT), School of Systems and Logistics, graduate students, who entered their respective programs with 27XX DAFSCs, to determine if certain perceptions were prevalent. Data analysis of the information obtained from the survey administered to the students indicates that those responding to the survey perceive that an aeronautical rating has an impact on career progression to program director positions. However, the data is inconclusive in determining whether these perceptions are held throughout Air Force Systems Command (AFSC). The study recommends that further research be conducted to ascertain the perceptions of the 27XXs within AFSC.			
14. SUBJECT TERMS Program Management, Program Manager, Program Director, Career Development, 27XX Career Field, 0029 Career Field, Acquisition Management			15. NUMBER OF PAGES 78
			16. PRICE CODE
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UL