

MICROCOPY

CHART

INFORMATION SYSTEMS

(2)



DTIC
ELECTE
MAY 13 1986
D

AD-A167 771

DTIC FILE COPY

A CAREER DEVELOPMENT HANDBOOK

DISTRIBUTION STATEMENT A
Approved for public release;
Distribution Unlimited

DISCLAIMER

The views and conclusions expressed in this document are those of the author. They are not intended and should not be thought to represent official ideas, attitudes, or policies of any agency of the United States Government. The author has not had special access to official information or ideas and has employed only open-source material available to any writer on this subject.

This document is the property of the United States Government. It is available for distribution to the general public. A loan copy of the document may be obtained from the Air University Interlibrary Loan Service (AUL/LDEX, Maxwell AFB, Alabama, 36112) or the Defense Technical Information Center. Request must include the author's name and complete title of the study.

This document may be reproduced for use in other research reports or educational pursuits contingent upon the following stipulations:

-- Reproduction rights do not extend to any copyrighted material that may be contained in the research report.

-- All reproduced copies must contain the following credit line: "Reprinted by permission of the Air Command and Staff College."

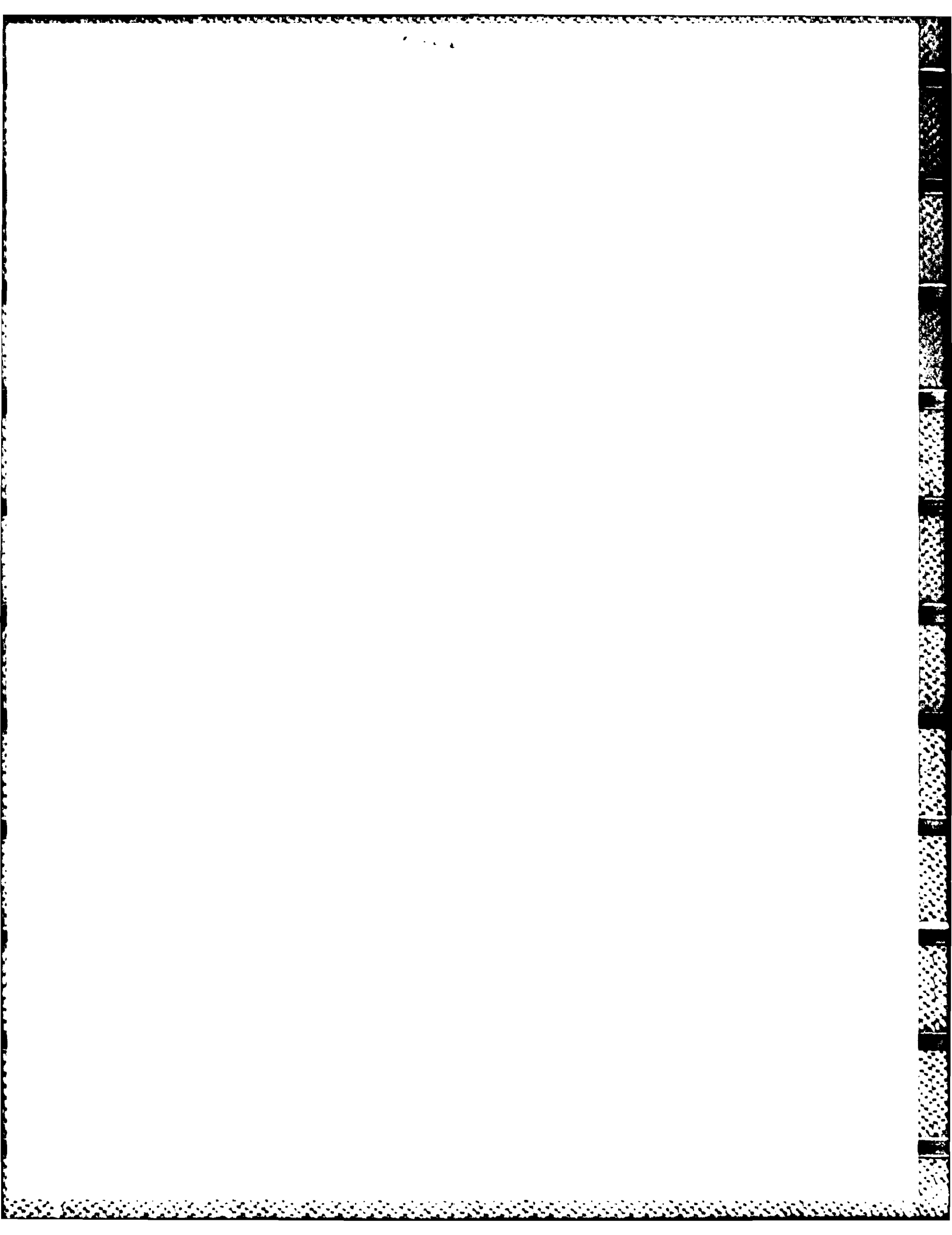
-- All reproduced copies must contain the name(s) of the report's author(s).

-- If format modification is necessary to better serve the user's needs, adjustments may be made to this report--this authorization does not extend to copyrighted information or material. The following statement must accompany the modified document: "Adapted from Air Command and Staff Research Report (number) entitled (title) by (author) ."

-- This notice must be included with any reproduced or adapted portions of this document.

DISCLAIMER NOTICE

THIS DOCUMENT IS BEST QUALITY PRACTICABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.





REPORT NUMBER 86-1550

TITLE A CAREER DEVELOPMENT HANDBOOK FOR
INFORMATION SYSTEMS OFFICERS (49XX)

AUTHOR(S) MAJOR WILLIAM F. LIENBY, USAF

FACULTY ADVISOR MAJOR CHARLES E. ZIMMER, ACSC/EDX

SPONSOR MAJOR MICHAEL E. SMILEY, HQ AFMPC/DPMRST2

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

AIR COMMAND AND STAFF COLLEGE
AIR UNIVERSITY
MAXWELL AFB, AL 36112

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

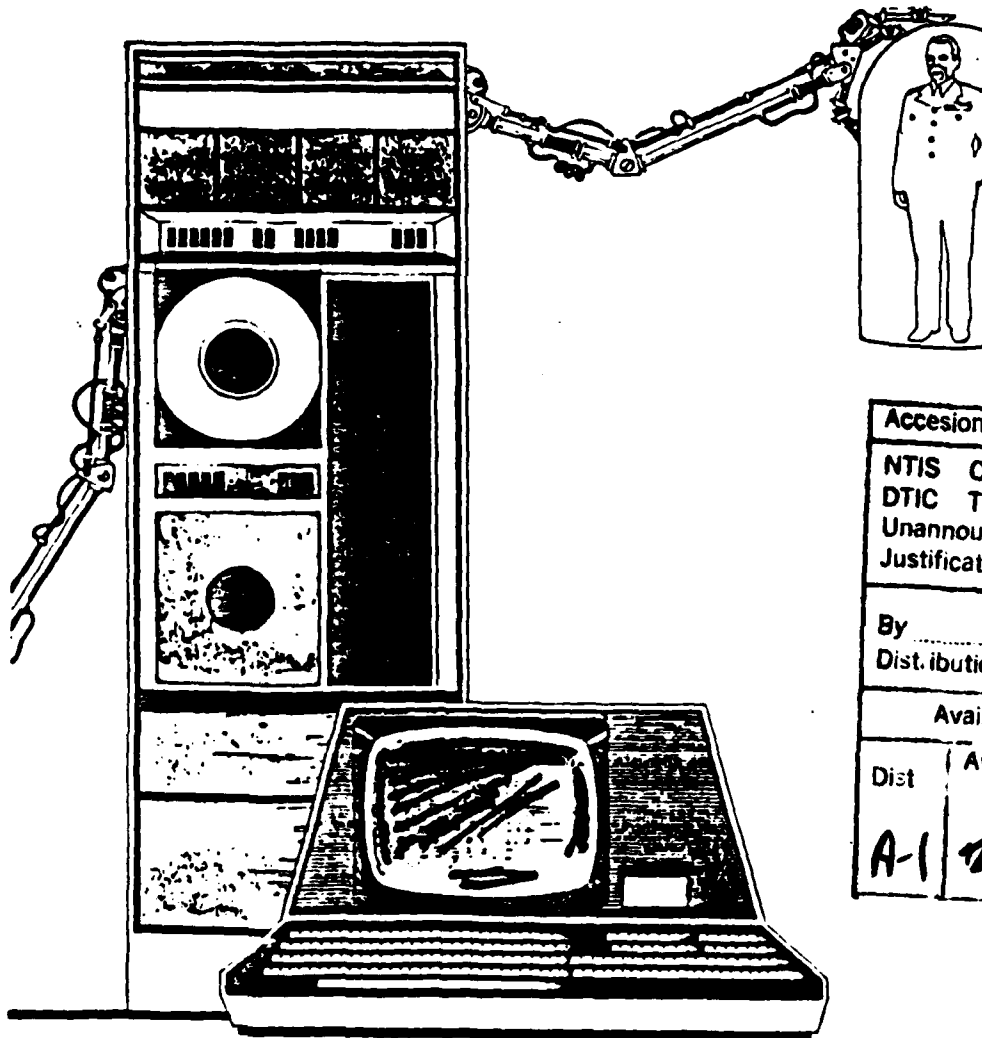
AD-1167771

REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED		1b. RESTRICTIVE MARKINGS	
2a. SECURITY CLASSIFICATION AUTHORITY		3. DISTRIBUTION/AVAILABILITY OF REPORT STATEMENT "A" Approved for public release Distribution is unlimited.	
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE		5. MONITORING ORGANIZATION REPORT NUMBER(S)	
4. PERFORMING ORGANIZATION REPORT NUMBER(S) 86-1550		7a. NAME OF MONITORING ORGANIZATION	
6a. NAME OF PERFORMING ORGANIZATION ACSC/EDCC	6b. OFFICE SYMBOL (If applicable)	7b. ADDRESS (City, State and ZIP Code)	
6c. ADDRESS (City, State and ZIP Code) Maxwell AFB, AL 36112-5542		9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8a. NAME OF FUNDING/SPONSORING ORGANIZATION	8b. OFFICE SYMBOL (If applicable)	10. SOURCE OF FUNDING NOS.	
8c. ADDRESS (City, State and ZIP Code)		PROGRAM ELEMENT NO.	PROJECT NO.
11. TITLE (Include Security Classification) A CAREER DEVELOPMENT GUIDE FOR INFORMATION		TASK NO.	WORK UNIT NO.
12. PERSONAL AUTHOR(S) Lisenby, William F. Major, USAF			
13a. TYPE OF REPORT	13b. TIME COVERED FROM _____ TO _____	14. DATE OF REPORT (Yr., Mo., Day) 1986 April	15. PAGE COUNT 38
16. SUPPLEMENTARY NOTATION Item 11: SYSTEMS OFFICERS (49XX)			
17. COSATI CODES		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)	
FIELD	GROUP	SUB. GR.	
19. ABSTRACT (Continue on reverse if necessary and identify by block number) This handbook provides Information Systems officers with career development information to help them develop a realistic and effective career plan. It has been developed with the aid of the Air Force Military Personnel Center (Hq AFMPC) Information Systems Assignments team. - - - - - 1			
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS <input checked="" type="checkbox"/>		21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED	
22a. NAME OF RESPONSIBLE INDIVIDUAL ACSC/EDCC Maxwell AFB, AL 36112-5542		22b. TELEPHONE NUMBER (Include Area Code) (202)293-2483	22c. OFFICE SYMBOL

PREFACE

This handbook provides Information Systems officers with career development information to help them develop a realistic and effective career plan. It has been developed with the aid of the Air Force Military Personnel Center (Hq AFMPC) Information Systems Assignments Team. Following review by AFMPC, the handbook may be published for distribution.



Accession For	
NTIS CRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Dist. istribution /	
Availability Codes	
Dist	Avail a d/or special
A-1	23

ABOUT THE AUTHOR

Major William F. Lisenby earned his Bachelor of Science Degree in Business Administration from Troy State University in 1972, and was a distinguished graduate of Officers Training School. His first assignment was as the Chief of Operations for Headquarters Military Airlift Command (Hq MAC) World Wide Military Command and Control System (WWMCCS) Computer Operations Branch. While at Scott AFB, he earned a Master of Arts degree in Management from Webster University, St. Louis, Missouri. He attended Squadron Officer's School in residence and was reassigned as the Chief of the WWMCCS Operations Branch at Headquarters Pacific Air Forces (Hq PACAF) in 1975. He moved again in 1977 to become the Chief of the Hq PACAF Command and Control activity where he performed planning and acquisition functions. In 1979, he was selected for exchange duty with the Canadian Forces as a computer systems policy analyst. Returning to Headquarters Air Training Command (Hq ATC) in 1981, he served as an executive officer and Squadron Section Commander until moving to the Hq AF Manpower and Personnel Center (AFMPC) in 1982. From 1983-85 he was Chief of the Computer Systems Assignments team, until being selected to attend Air Command and Staff College at Maxwell AFB, Al.

TABLE OF CONTENTS

Preface.....	iii
About the Author.....	iv
List of Illustrations.....	vii
CHAPTER ONE - THE 49XX OFFICER'S HANDBOOK	
Introduction.....	1
Overview.....	2
Conclusion.....	2
CHAPTER TWO - THE 49XX SPECIALTIES	
Introduction.....	3
The Specialties.....	3
Conclusion.....	4
CHAPTER THREE- 49XX CHARACTERISTICS	
Introduction.....	5
Manning History.....	5
Accessions.....	6
Demographics.....	7
Professional Military Education.....	8
Advanced Academic Education.....	9
Separation/Retirement.....	10
Conclusion.....	10
CHAPTER FOUR - TRAINING AND EDUCATION	
Introduction.....	11
Training.....	11
Education.....	12
Conclusion.....	14
CHAPTER FIVE - ASSIGNMENTS	
Introduction.....	15
Assignment Generation.....	15
Assignment Requirements.....	15
Selection Process.....	15
Command Positions.....	16
Selective Crossflow.....	16
Assignment Stability.....	17
Conus Distribution.....	18
Overseas Distribution.....	19
Organizational Levels.....	20
Conclusion.....	20

CONTINUED

CHAPTER SIX - CAREER PLANNING

Introduction.....	21
The Plan.....	21
The Early Years.....	21
The Middle Years.....	22
The Pattern.....	22
Conclusion.....	23

CHAPTER SEVEN - FUTURE CHALLENGES

Introduction.....	27
Professionalism.....	27
Conclusion.....	27

BIBLIOGRAPHY.....	29
-------------------	----

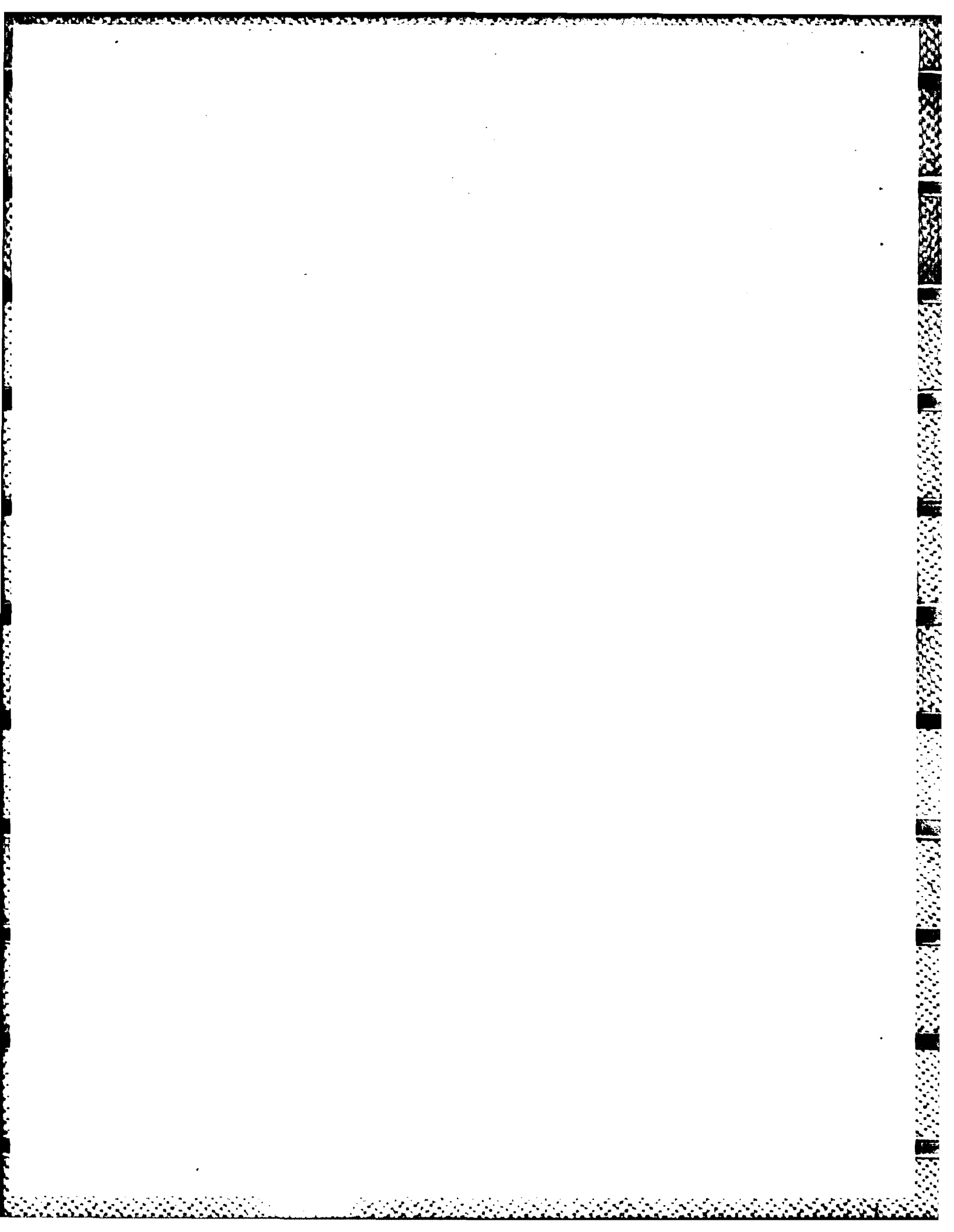
LIST OF ILLUSTRATIONS

TABLES

TABLE 1--Training Courses.....	11
TABLE 2--Advanced Academic Education.....	13
TABLE 3--Education with Industry.....	13
TABLE 4--Selective Crossflow.....	16

FIGURES

FIGURE 1--Manning Trends.....	5
FIGURE 2--Accessions.....	6
FIGURE 3--Demographics.....	7
FIGURE 4--Professional Military Education.....	8
FIGURE 5--Advanced Academic Education.....	9
FIGURE 6--Separation/Retirement.....	10
FIGURE 7--Assignment Stability.....	17
FIGURE 8--CONUS Distribution.....	18
FIGURE 9--Overseas Distribution.....	19
FIGURE 10--Organizational Levels.....	20



Chapter One

THE 49XX OFFICER'S GUIDE

INTRODUCTION

"People constitute the major pillar of today's war-fighting capability--qualified, motivated, and well trained warriors."
(Major General John T. Stihl)

This handbook is designed to help you prepare yourself for a challenging career as an Air Force Information Systems Officer. The information provided will help you develop a personal career plan as you progress through one of the Air Force's newest and most dynamic career fields, Information Systems.

> The Information Systems career field (49XX), was created by merging the functions of communications-electronics and computer systems. As a 49XX officer, you are a member of the third largest career specialty in the Air Force (after pilots and navigators), and the largest support officer specialty. Virtually every major weapons system now, in operation or in the planning/acquisition cycle, depends at least in part on an information system. <

"These systems now represent the critical central nervous system of our overall war-fighting effort - both strategic and tactical." (General Jerome F. O'Malley)

In addition, you are responsible for three of the four gateways to an Air Force base. The Security Police guard the gates for motor vehicle traffic, but you control the air traffic, voice, and digital access to the base. As an Information Systems Officer you will have the opportunity to:

Receive extensive training

Have a highly responsible job (even as a 2Lt)

Serve in both management and technical positions (in a very real sense, 49XX officers are managers of technology)

Serve at a wide variety of organizational levels and geographic locations

Pursue an advanced academic degree

Command relatively early in your career

If you are a junior officer, this handbook serves as a guide to get you started on a realistic career development plan. It should be used in concert with guidance from your commander/supervisor and your resource management team at Hq AFMPC. If you are a commander/supervisor, the information provided can help you counsel junior officers on developing their career plans.

OVERVIEW

Because you have unique skills, talents, and experience, there is no one "best" path to a successful career in Information Systems. The following chapters will address the major factors you should consider as you develop your personal career plan.

Chapter Two discusses the individual career specialties

Chapter Three presents demographic data on the 49XX population

Chapter Four identifies training and education programs

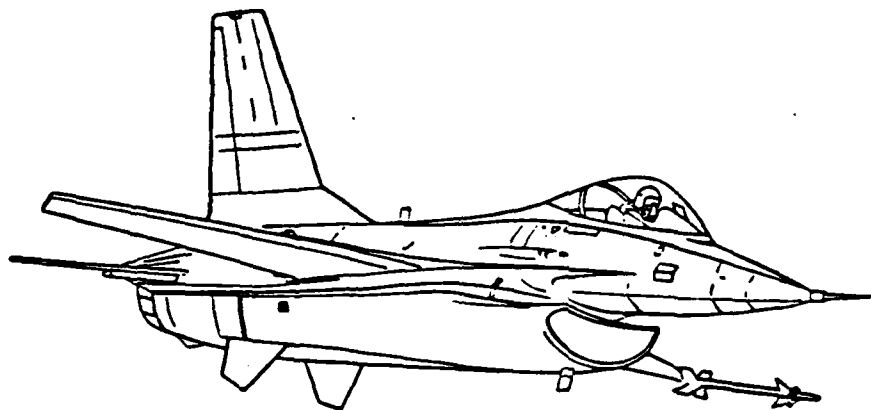
Chapter Five addresses 49XX assignment opportunities

Chapter Six focuses on career planning

Chapter Seven looks at professionalism in the Information Systems career field

CONCLUSION

As you review the information presented in this handbook, keep one thought in mind; you are first and foremost an Air Force Officer. In the 49XX career field, your job is to provide the information systems to help our Air Force deter war if we can, but if war is to come, to ensure we have the capability to win.



Chapter Two
THE 49XX SPECIALTIES

INTRODUCTION

In Chapter One we learned how the Information Systems career field was formed. Chapter Two will address what 49XX officers do. Generally we support information systems functions, which include:

Command and Control
Air Traffic Control Services
Program Management
Systems Engineering
Acquisition
Installation
Planning
Inspection
Evaluation

Responsibilities include technical, advisory, supervision, and command, for both common user and special purpose systems.

THE SPECIALTIES

To execute these functions and responsibilities, the 49XX career field is organized into the following Air Force Specialty Codes (ASFCs). For detailed information concerning the qualifications, knowledge, education, experience, training, and specific duties/responsibilities, reference AFR 36-1 Atch 14.

Information Systems Programming and Analysis Officer (4924)
Information Systems Engineer (4934)

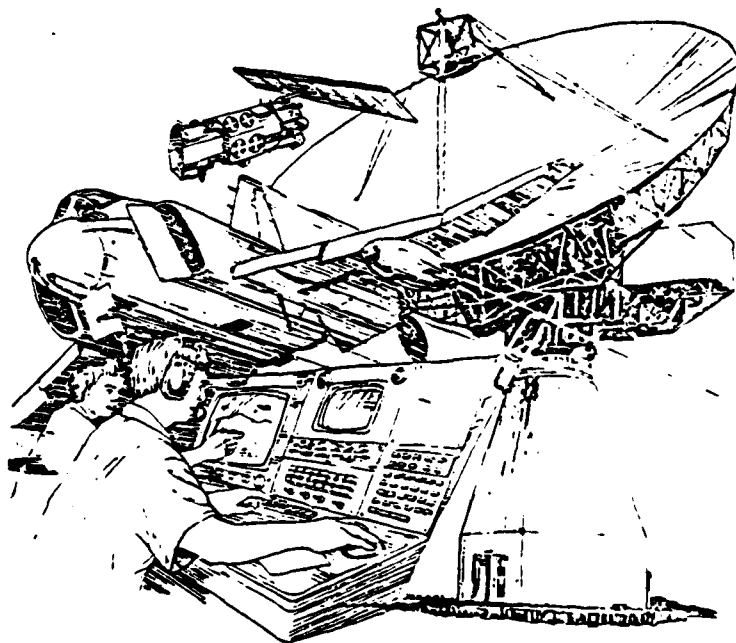
Information Systems Officer - Operations (4944A)
- Maintenance (4944B)
- Plans and Programs (4944C)

Information Systems Staff Officer (4916)

Information Systems Director (4916)

CONCLUSION

As you become more aware of the qualifications, duties, and responsibilities of the 49XX specialties, you'll be better able to begin developing plans for career progression. Remember there is no one best route, and the specialty structure provides enough flexibility to accommodate your individual career interests. As you develop your career plan, frequently review the knowledge, education, experience, and training requirements to ensure you are making yourself eligible for upgrade to a fully qualified specialty in minimum time. Also, plan to branch out into other specialties to gain additional experience. You should try to avoid a narrow duty history or job hopping merely to collect a variety of specialties without spending sufficient time in any to gain real experience. The idea is to seek a balanced approach that optimizes your past experience with new challenges. Chapter Three will cover some additional factors affecting your overall career plan.



Chapter Three

49XX CHARACTERISTICS

INTRODUCTION

In Chapter Two we looked at the career field specialties of the Information Systems career field. Now, we'll compare the 49XX career field with the other support officer career fields. Specifically, how 49XX officers measure up in terms of accessions, manning trends, professional military education, advanced academic education, retirements/separations, and other demographic factors.

MANNING HISTORY

The single most distinctive characteristic of the Information Systems career field has been its dramatic growth, as illustrated by Figure 1. Over 1200 additional manpower authorizations have been added in the last six years. These increases were due to conversions from other specialties and new authorizations. To keep pace with this tremendous growth, the Air Force has accessed officers from all three commissioning sources - Air Force Academy, Reserve Officer Training School, and Officer Training School.

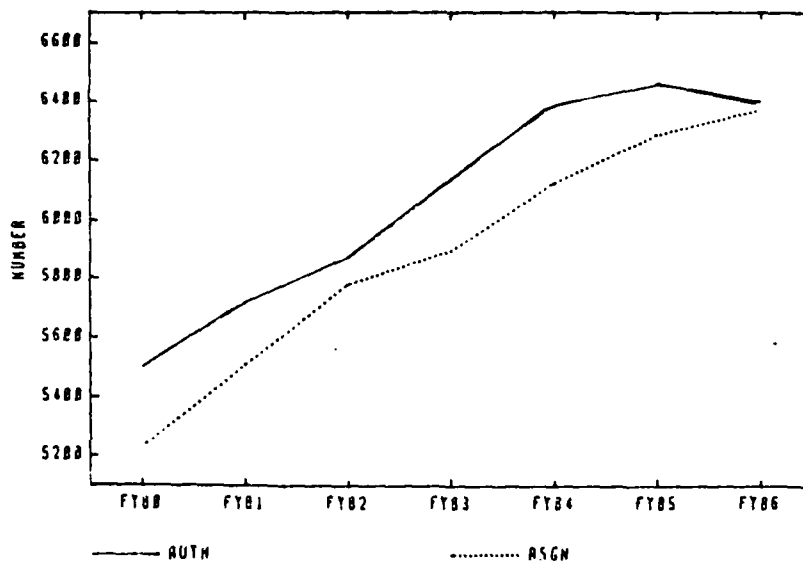


Figure 1. Manning Trends

ACCESSIONS

Fundamentally, accessions are a function of end strength. That is, the number of Air Force officers we can have on active duty at the end of any fiscal year is controlled by the congressional budget process. If we are under, officers can be commissioned to bring our end strength up to authorized levels. In Figure 2, you will notice considerable fluctuation in the overall number of new officers brought on board. You'll also notice considerable differences in the number of accessions from each commissioning source. Again, some of this is constrained by previous agreement. The number of Air Force Academy (AFA) graduates that enter into the Information Systems career field is affected by policy considerations and the curriculum of the individual cadets. And while the number of cadets entering the career field has averaged in the low 30s in years past, for three of the last four years we have received more than 50. As you can see from the graph, we brought on many more Officer Training School (OTS) graduates in the late 1970's and early 1980's to meet the growing demand. The trend then reversed, and most of the Information Systems accessions came from the Reserve Officer Training Corps (ROTC). In 1986 the number of OTS and ROTC accessions will be relatively equal.

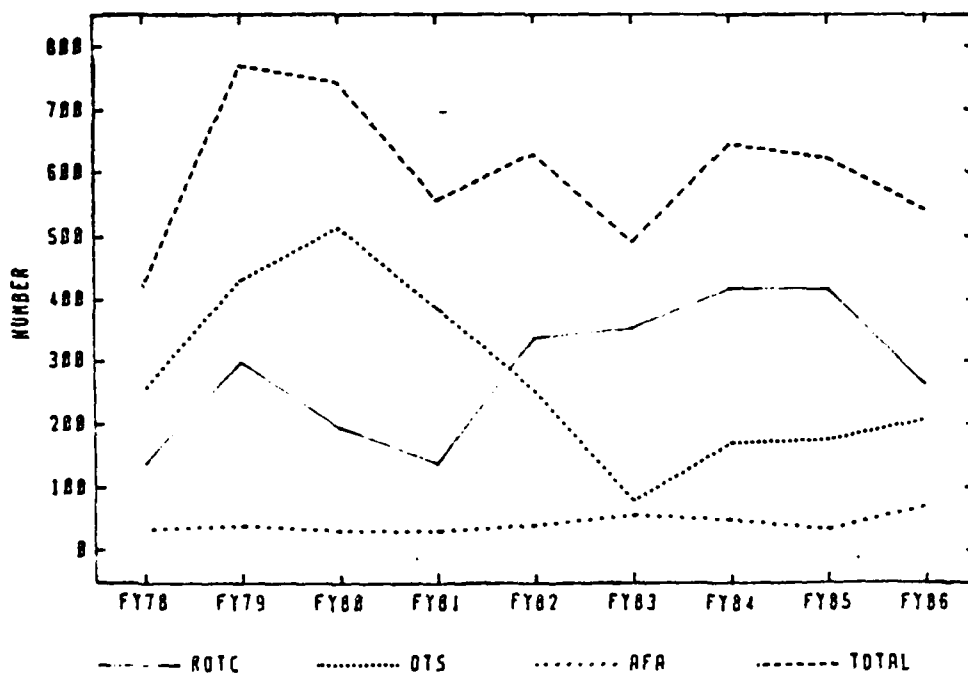


Figure 2. Accessions

DEMOGRAPHICS

The percentages of females, as shown in Figure 3, are slightly higher than the support officer average. The percentage of 49XX officers with a regular commission however, is lower. Primarily, because our career field has a higher percentage of lieutenants than the support force. Many of these officers have not yet reached their first consideration for regular.

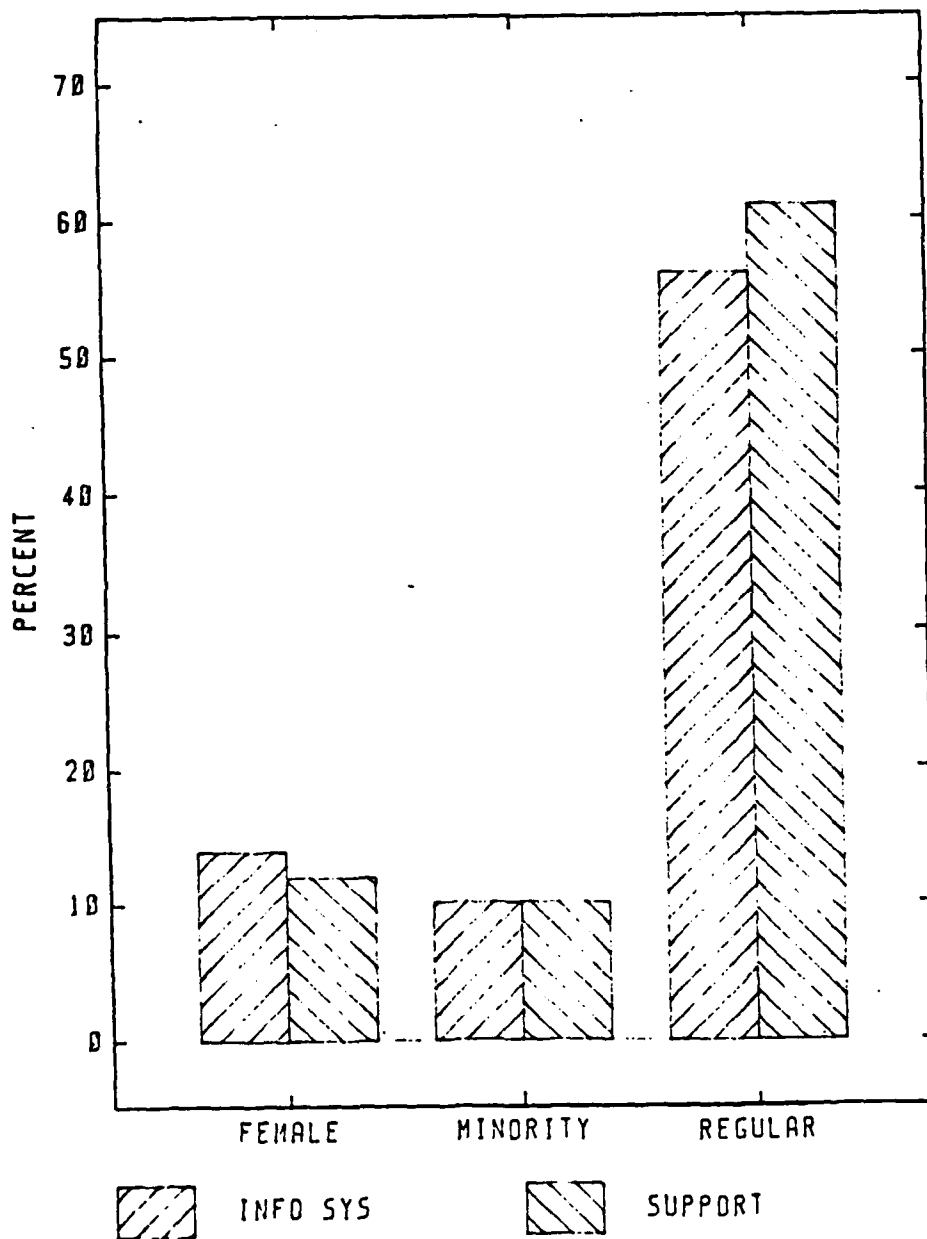


Figure 3. Demographics

PROFESSIONAL MILITARY EDUCATION

Figure 4 indicates that with the exception of Captains with SOS and Majors with SSS, 49XX officers have more PME than the support officer average. To improve duty performance and enhance promotion potential, Captains should not only complete SOS, but have completed Intermediate Service School (by correspondence) prior to primary consideration for promotion to major. The relatively higher percentage of lieutenants with SOS is a good sign. Many officers have chosen to work on PME first and defer advanced academic education.

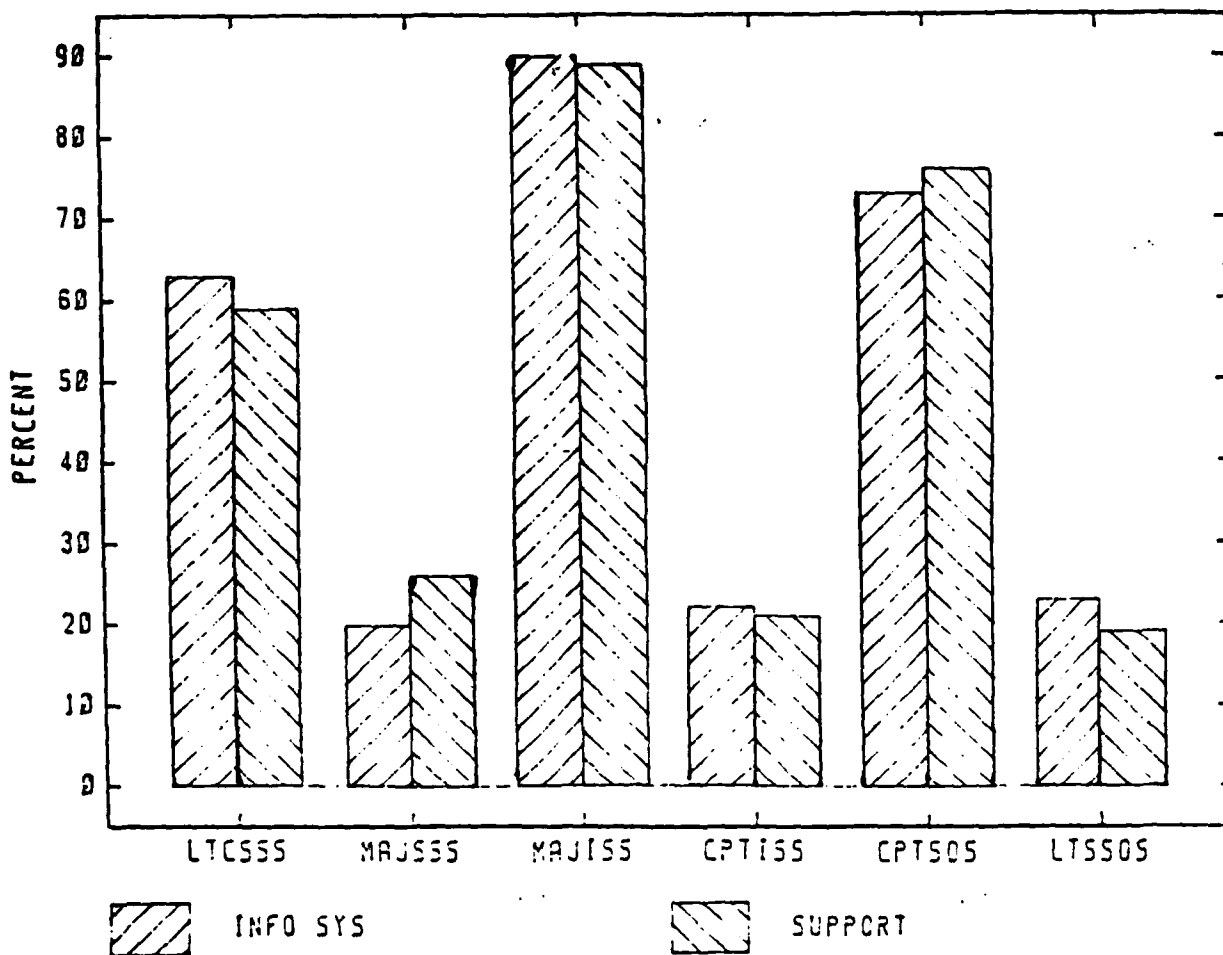


Figure 4. Professional Military Education

ADVANCED ACADEMIC EDUCATION

Figure 5 shows the highest degree held by degree type. Of course all Air Force officers must have a bachelors degree to receive a commission. The fact that more Information Systems officers have a bachelors degree as their highest degree held, and fewer 49XX officers have acquired a masters degree is reflective of the higher percentage of lieutenants in our career field and that many of them are pursuing PME first. While the percentages of Phd holders is slightly below the support average, the numbers are too small to be statistically significant.

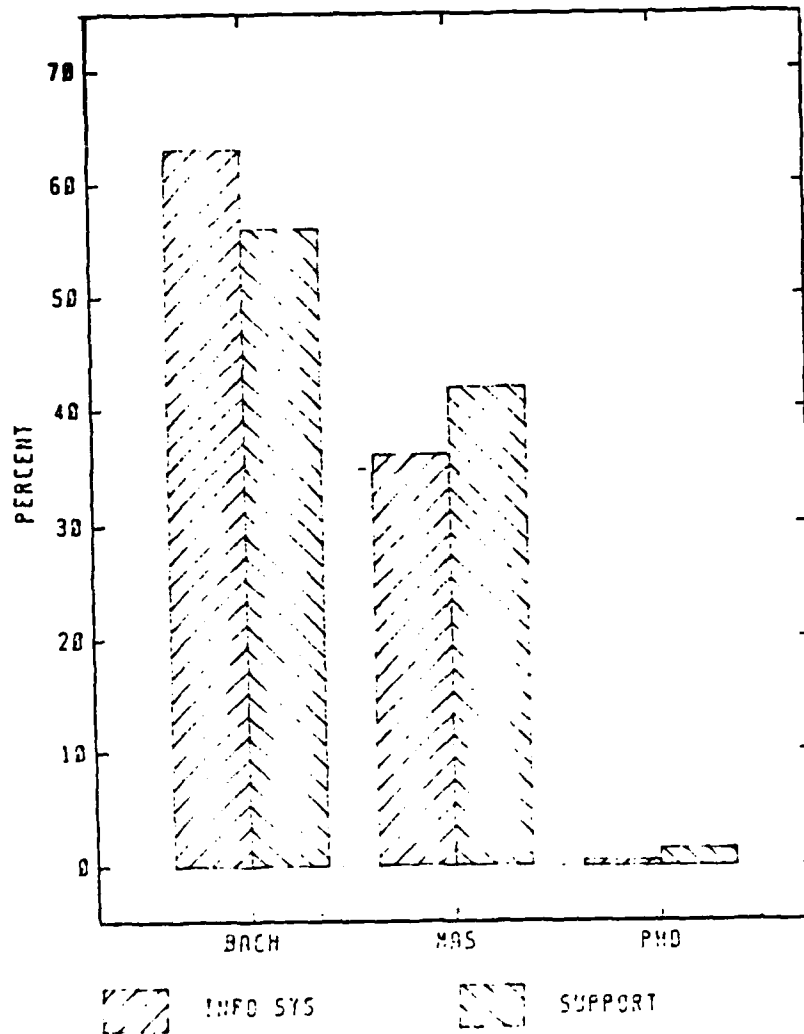


Figure 5. Advanced Academic Education

SEPARATION/RETIREMENT

As you can see from Figure 6, for the last five years, the Information Systems career field has followed the overall trend of the support officer force.

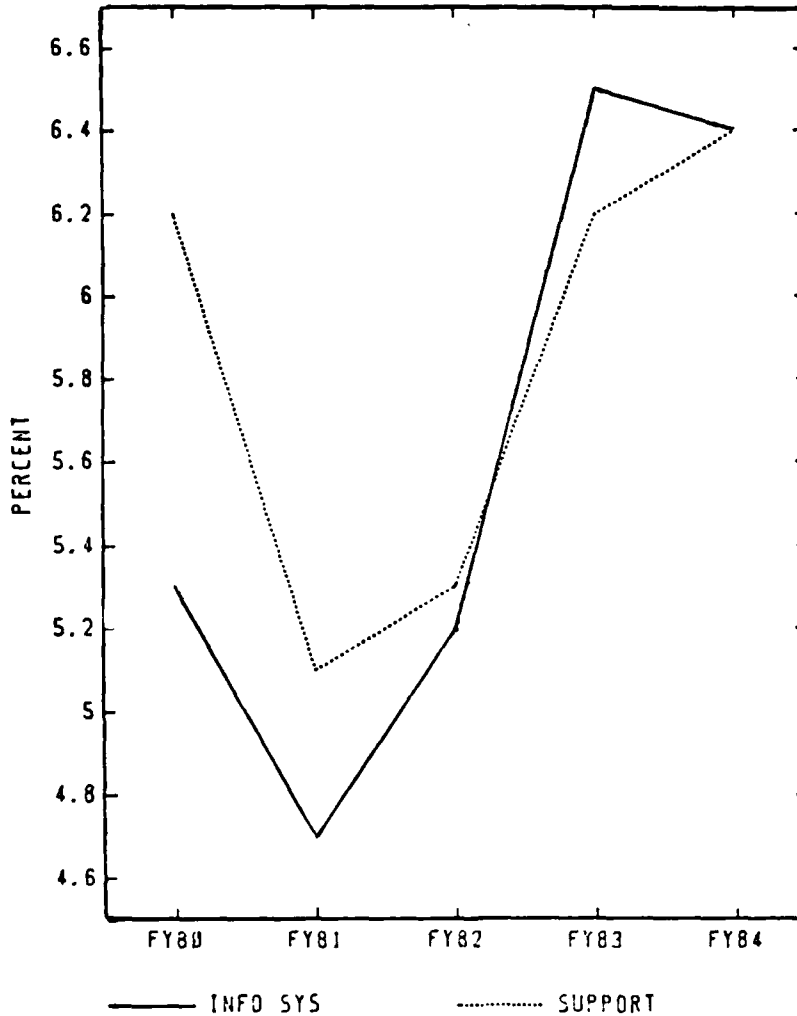


Figure 6. Separation/Retirement

CONCLUSION

In Chapter Three you can begin to get a profile of how the Information Systems career field compares with the support officer force in general. In Chapter IV we'll look at what training and educational opportunities you can expect in the 49XX career field.

Chapter Four

TRAINING AND EDUCATION

INTRODUCTION

Chapter Three touched on the importance of PME and advanced academic education. The following, taken from the course philosophy of the Professional Information Systems Management Course, addresses the need for continued training and education.

Information is a critical resource for today's decision makers and will be even more critical for tomorrow's leadership. The fulfillment of operational requirements through the application of complex technology demands the utmost in professional technical skills as well as an understanding of the complex interrelationships among information elements processed by and transferred among functional users. The pace of change in information technology challenges managers in all functional areas of the Air Force to continually assess economies and efficiencies of technology against critical resources and to maintain, in addition a balance among many operational considerations external to the technology itself. A cadre of professionals to provide expert advice in information technology and to effectively and efficiently implement and manage approved applications of that technology is essential.

With that philosophy in mind, let's look at the unique training and education opportunities available to you.

TRAINING

"One of the major challenges in the information systems agenda is the training of the Information Systems manager."
(General Andrew P. Iosue)

All Information Systems officers will attend a basic course at Keesler AFB, Mississippi. The course lengths are:

Information Systems Programming & Analysis Officers	29 wks
Information Systems Engineers	21 wks
Information Systems Officers (Operations)	17 wks
(Maintenance)	19 wks
(Plans & Programs)	19 wks

Table 1. Training Courses/Lengths

The Information Systems Staff Officer Course (ISSOC) at Keesler AFB is designed for the middle grade officers, primarily captains.

For the senior officers, we have the Professional Information Systems Management Course (PISMC), a two week course at Maxwell AFB. This course is designed to prepare selected military and civilian senior management people to address information technology from an integrated and systematic perspective. PISMC presents current management policies, procedures, and organizational roles. It focuses on current and future technology and its utility in supporting the Air Force operational mission.

The idea is to provide Information Systems officers with a continuing training opportunity to stay current in a rapidly evolving technical field. To study advanced technology further, the 49XX career field also has an advanced academic educational program.

EDUCATION

"Our Command and Control Systems need a technological update to keep pace with the information our commanders and our weapons systems require." (General Bonnie L. Davis)

Information Systems officers have a unique opportunity for advanced academic education through the Air Force Institute of Technology (AFIT) and for experience in industry through our Education with Industry (EWI) program. The FY86 AFIT program offers the following degree programs for those who can qualify:

Masters Degree Programs	Quota
Computer Systems/Data Processing	29
Systems Management	6
Electrical Engineering	13
Computer Systems/Math	8
Teleprocessing	5
C3 Systems Technology	4
Computer Systems/Electronic Computation	1
Operations Research	2
Space Operations	2
Computer Systems Electronics	1
Information Systems	15
Information Resources Management	5
Electronic Circuits	1
Total Masters Degree Programs	92
Phd Computer Systems	4

Table 2. Advanced Academic Education

The EWI program also offers a wide variety of experience with interesting public and private organizations. The EWI programs for FY86 are:

Programs	Quota	Company	AFSC
Satellite Communications Mgt	1	American Satellite	4944
Information Sys Security	1	Nat'l Sec Agency	4924
Info Sys Project Mgt	4	Honeywell	4944
" "		Nat'l Cash Register	4944
" "		MacDonald Douglas	4924
Sys Proj Mgt (C3)	3	Hughes	4924
" "		Digital Equip Corp	4924
Telecommunications Mgt	2	Hughes	4944
" "		IT&T	4944
" "		Nat'l Bur of Stds	4924

Table 3. Education with Industry

CONCLUSION

The key to taking advantage of training and education opportunities is advanced planning. Begin early by establishing your goals and developing an action plan to meet them. The lead times for some educational programs are a year or longer if you have to satisfy prerequisites to be eligible to compete. AFIT programs, for example, are worked about a year in advance, so you need to apply for academic eligibility as soon as possible. AFIT selections are also among the first actions worked during the assignment selection cycle. Chapter Five will cover the assignment process in more detail.

Chapter Five

ASSIGNMENTS

INTRODUCTION

Now that we've looked at how Information Systems officers are accessed, trained, and educated, how does the assignment system work to get the right person in the right job? Let's first consider what situations generate the need for an assignment and how you are selected.

ASSIGNMENT GENERATION

Assignments are made to fill valid vacancies created by a variety of situations. With manning levels at less than 100%, not all positions can be filled with fully qualified personnel of the required grade. However, when an officer separates or retires from the Air Force, a replacement must be sought. Likewise, when officers return from most overseas tours or complete controlled tours, a valid vacancy exists. These are categorized as "must fills." Also, officers who graduate from commissioning, AFIT/EWI, and PME programs are considered mandatory availables. That is, they must be assigned immediately upon graduation. In addition to the relatively small pool of mandatory available officers, other officers with high time on station will also be considered for reassignment to fill requirements. Requirements are combinations of several factors.

ASSIGNMENT REQUIREMENTS

Positions to be filled have many facets. Each manpower authorization has a position number, grade, and AF Specialty Code (AFSC) associated with it. Additionally, the position may require a specific advanced academic degree, security clearance, experience, PME, language, and many other unique qualifiers. Each requirement is then prioritized depending on the level and type of organization, etc., and the selection process begins.

SELECTION PROCESS

Again, if an officer is qualified and in a mandatory available status, that officer should be selected over an officer who is also qualified but is not in a "must move" situation. Non-volunteers who are qualified and available to move should be

assigned over officers who are volunteers but are not qualified or available. The first consideration has to be the needs of the Air Force, followed by career development, and finally personal desires. Some of the most challenging assignments in the Air Force are:

COMMAND POSITIONS

The Information Systems career field offers significant opportunities to command. There are nearly 200 commander positions in AFCC alone. Over half of them are in overseas locations and offer a real challenge to develop leadership ability. Like most commands, AFCC has a selection process that is covered in AFCC reg 3b-4. Another challenging assignment is to career broaden under the selective crossflow program.

SELECTIVE CROSSFLOW

Most support officer career fields are tasked with providing highly qualified officers with solid records of performance to fill annual vacancies in career areas not supported by a generic career field. The FY86 program consists of the following:

Career Area (AFSC)	Quota
ROTC Instructor (0940)	26
Recruiting Service	9
Missiles (18XX)	5
OTS Instructor (0950)	6
Basic Military Training Squadron (0940)	2
Squadron Officer's School (SOS)	5
Total	53

Table 4. Selective Crossflow

These assignments will require you to grow and broaden your perspective, thereby increasing your potential for more responsibility in the future. Now that we've looked at some of the unique assignment opportunities, how long can you expect to

stay on station if you are assigned to a typical Information Systems position.

ASSIGNMENT STABILITY

As you can see from Figure 7, Information Systems officers tend to move more often than the support officer force in general. Of course there are a significant number of controlled tours for 3-4 years and training assignments that last less than a year. These figures represent the average months on station by the time you'd actually move. It is important to remember while no one will minimize the trauma of moving, those who accept it as a fact of life and press on are developing a broader range of experience recognized by a promotion board. Now that you know you'll be moving, where are you likely to go?

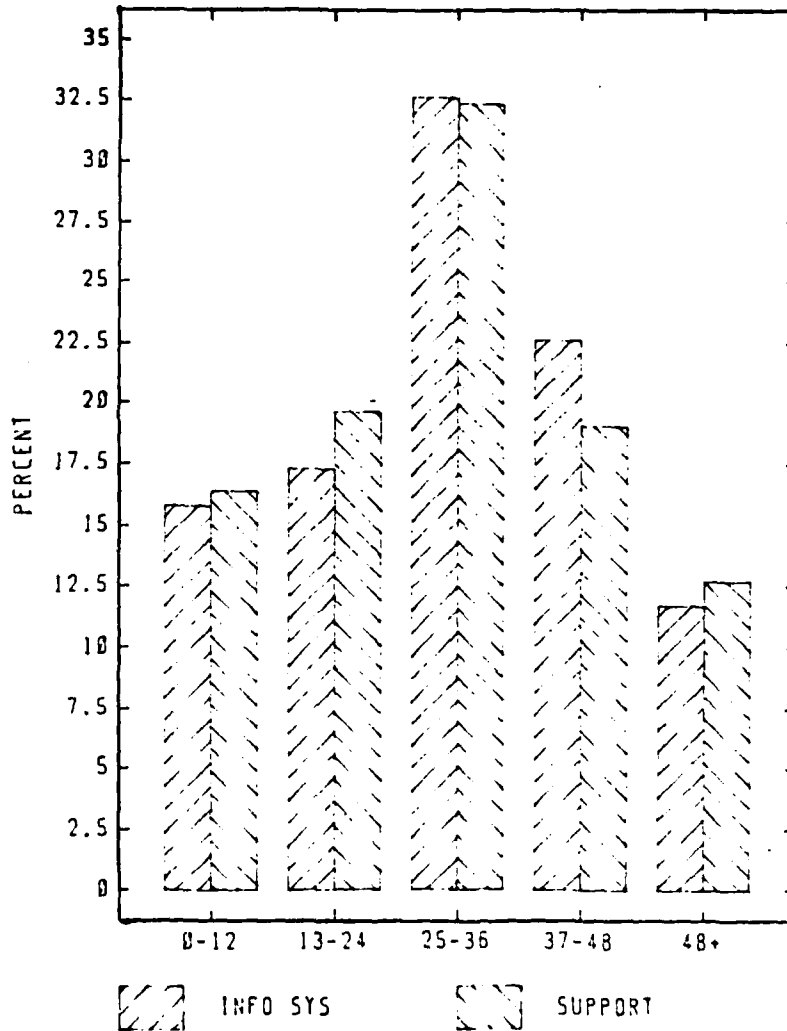


Figure 7. Assignment Stability

CONUS DISTRIBUTION

Figure 8 shows 49XX assignment locations by state. The Washington D.C. area (including Virginia) accounts for about one sixth of all 49XX assignments. If you add in Nebraska (primarily Offutt AFB), you could spend one fourth of your career in these two locations. There are many theories about when in your career you should go to Washington, and there are some officers who would just as soon not go there at all if they could avoid it. The fact is many of the best jobs in our career field are in the Washington D.C. area. And, in spite of the traffic, cost of living, etc., you'll gain experience that is simply not available anywhere else in the Air Force. Remember, most of the senior officers sitting on promotion boards have also put in their D.C. time. In fact, the lack of a tour in D.C. can be conspicuous by its absence and therefore the duty history is not as well rounded as it could have been with a D.C. tour. Another key element in a well rounded duty history is an overseas tour.

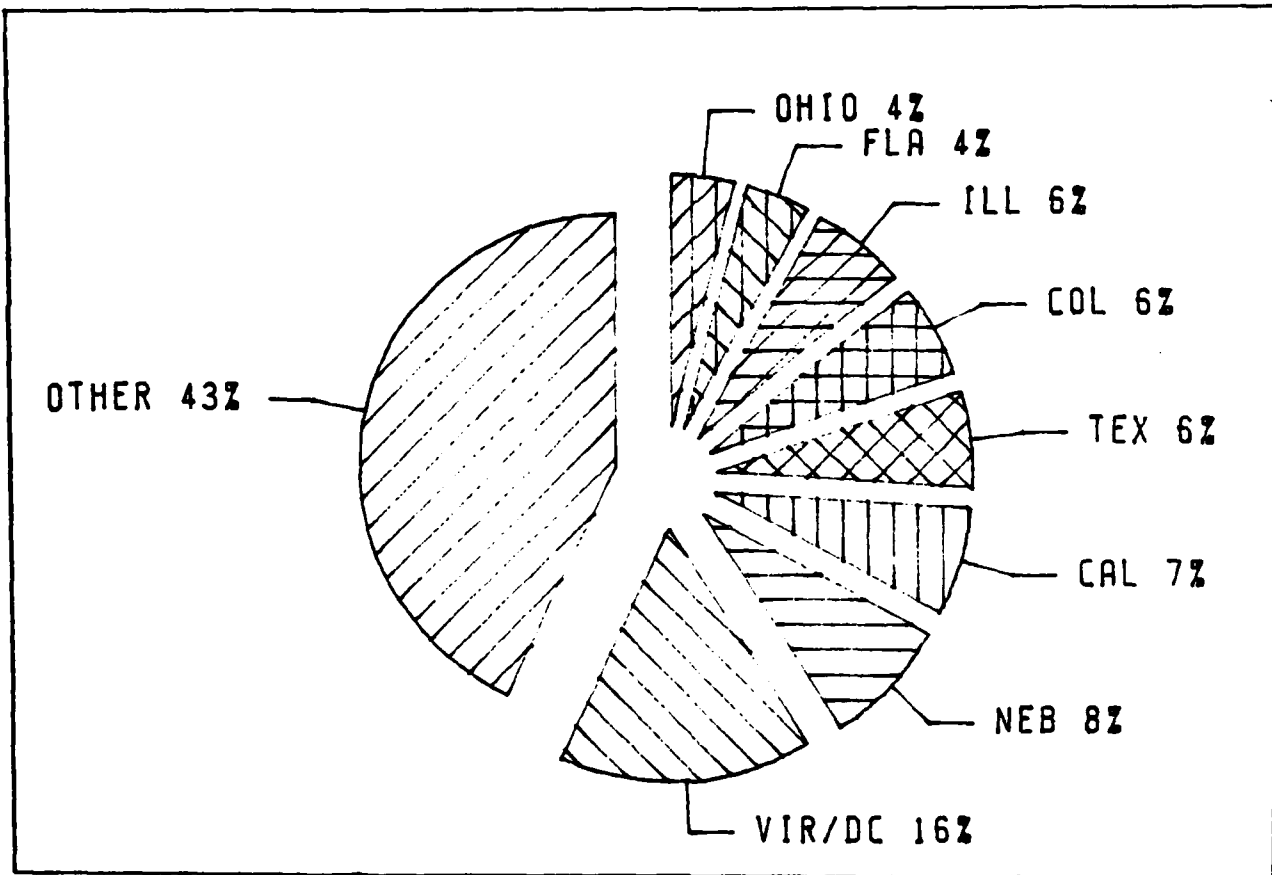


Figure 8. CONUS Distribution

OVERSEAS DISTRIBUTION

According to Figure 9, there are over five jobs in the CONUS for every job overseas. Most of the overseas jobs for Information Systems officers are in Europe. As you can see from the graph, there are a significant number of short tours and many of them are also commander positions. In a normal career you should expect to spend at least one long and possibly one short tour overseas. In some career fields, two long and two short tours is considered normal. Now that you know the overseas probabilities, where could you go organizationally?

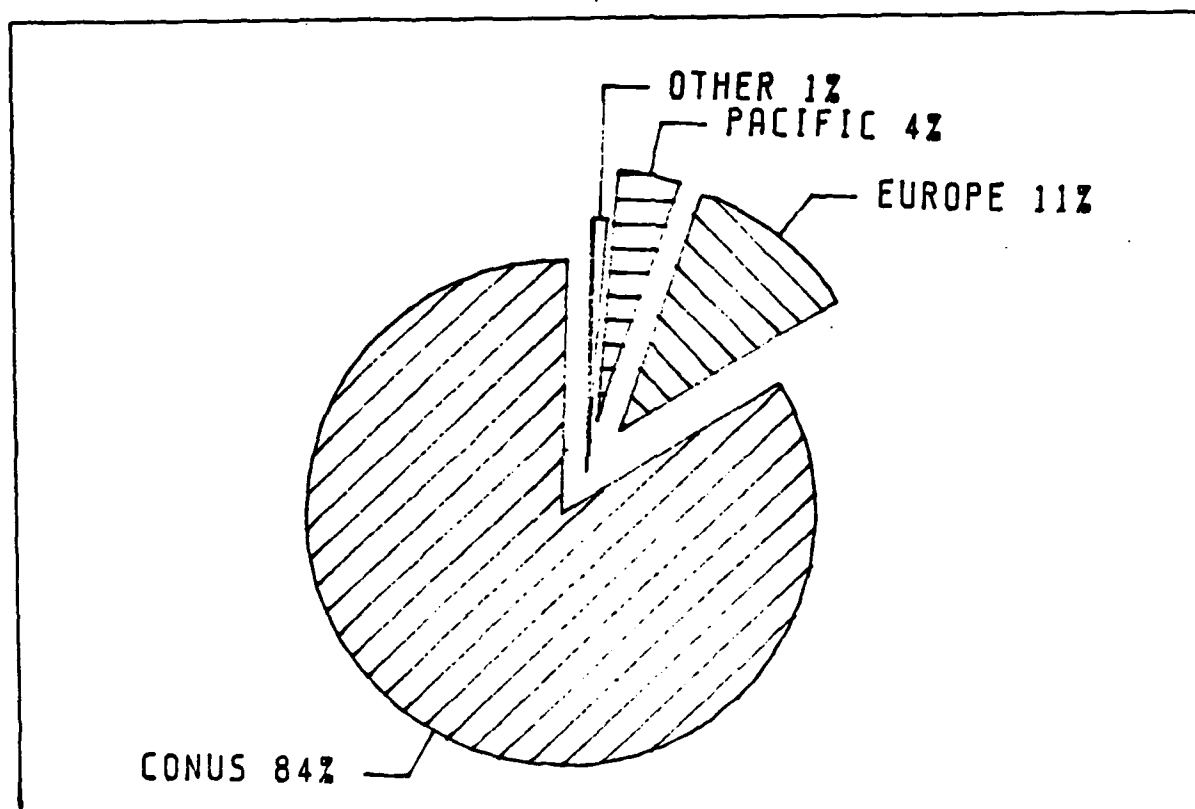


Figure 9. Overseas Distribution

ORGANIZATIONAL LEVELS

A large number of Information Systems officers serve at MAJCOM level. And, as indicated in Figure 10, there is a relatively high percentage of positions in Joint/Departmental agencies. A well rounded duty history will show an ability to perform in a variety of organizational levels. And whether or not a move is considered upward, downward, or lateral must also take into consideration the job responsibility. For example, a move from a deputy division chief at MAJCOM level to a command position at unit level is probably an upward move in terms of career development. Assuming you are assigned to a MAJCOM level job, you have a very good chance of being assigned to the Air Force Communications Command.

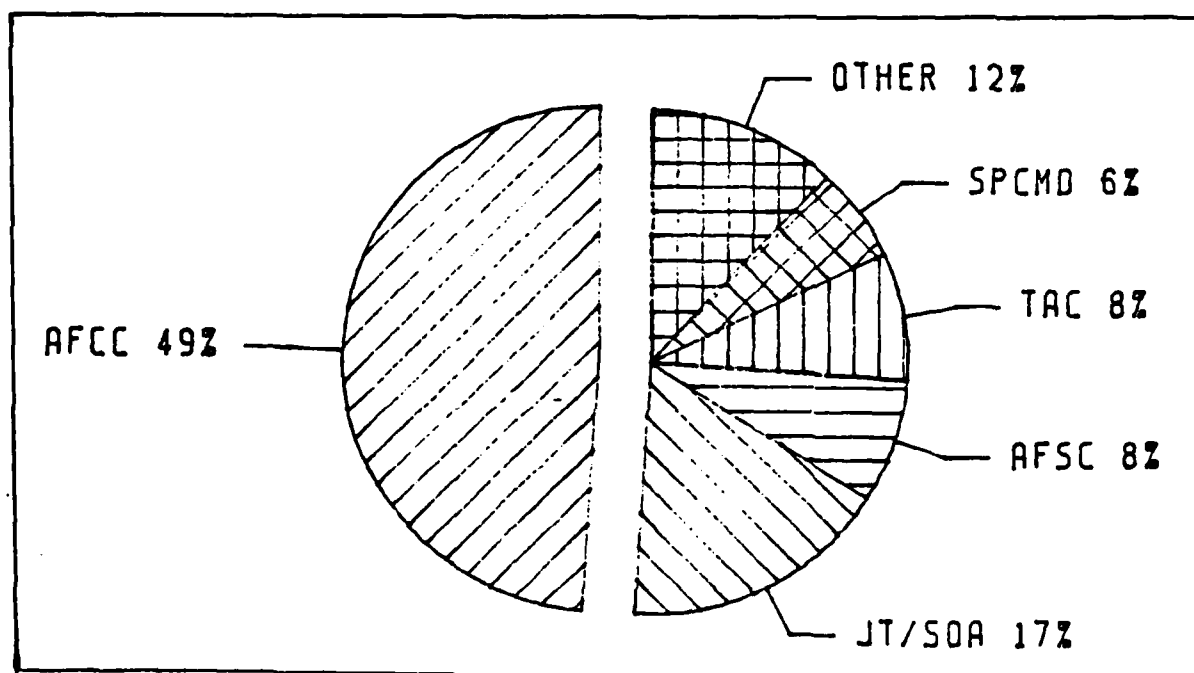


Figure 10. Organizational Levels

CONCLUSION

As you can see, you will have a variety of challenging assignments as an officer in the Information Systems career field. Chapter six will give you an idea of how to incorporate assignments into an overall career plan.

Chapter Six
CAREER PLANNING

INTRODUCTION

In Chapter Five you learned where you might be assigned. The assignment process is a key element in overall career development, and so is planning. Chapter Six will discuss the importance of career planning and provide some advice on how to begin developing your personal career plan. What aspects should you concentrate on and when? Are there any "fast-tracks"?

THE PLAN

The first step is to talk with your commander/supervisor. You need to sit down and honestly review where you have been, where you are, and where you would like to go in the future. To prepare for this discussion, you should consider your personal strengths and weaknesses. This will save time and help you develop realistic options. You should develop long range goals (what you want to be doing in 5-10 years). Then, develop shorter range goals (2-5 years out) that support your long range goals. Ask yourself what knowledge, training, education, skills, etc., you'll need to have to qualify yourself for the kinds of assignments you'll need to meet your goals. Next, review the Air Force Officer Authorization List at your local Consolidated Base Personnel Office (CBPO). This list is organized by career field and geographic location. It will give you a basic idea of how many jobs there are at a given location, what the duty titles are, if there are any special educational or security requirements, and if the positions are being added or deleted by fiscal quarter. Compile a list of the jobs that you are eligible for and that meet your goals. The kinds of jobs you look for should be consistent with where you are in your career.

THE EARLY YEARS

Your first few assignments should provide you with an opportunity to gain experience. As you learn your craft, you should also seek opportunities to develop your communications skills. Speaking and writing are basic skills you will use throughout your career. Also work SOS and advanced academic education into your plan in the early years. But don't forget the primary focus of your effort should be duty performance.

THE MIDDLE YEARS

After you have established a solid reputation in the career field, you should look for positions of increased leadership and responsibility. You should also consider assignments that fill-in any gaps in experience to improve your overall qualifications. Some assignments to consider are:

Squadron/Detachment Commander

MAJCOM Staff

Air Staff

AFIT Masters Program

Education With Industry

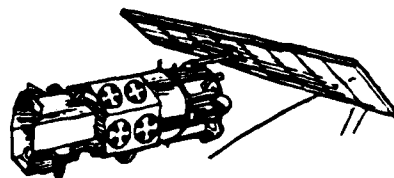
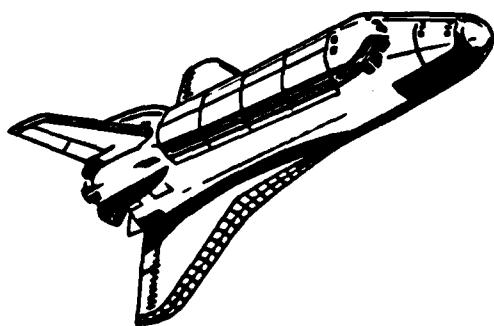
Career Broadening

Joint Agency

Again, don't neglect PME. Too often an officer has waited-until-the-last-minute and was not able to complete an appropriate level of PME prior to a promotion board. The old alibi that your particular job was too demanding; because of frequent TDY, working on a master's degree, etc., frankly doesn't count for much. Lots of other people have demanding jobs, and still found time to complete their PME. Remember, prior-planning-prevents-poor-performance.

THE PATTERN

There is no "fast-track" but there are many roads to success. However, if you don't know where you're going, it makes no difference what direction you take. Review your short and long range goals regularly. Remember, they need to be modified as new opportunities arise, or your perspective changes on what you want to do. While there is no magic formula, there are some DOs and DON'Ts that can help you along the way.



The first is a list of 10 "fatal flaws" that were judged by the top executives in many of the Fortune 500 corporations, as being career-killers:

- Insensitive to others; abrasive, intimidating, bullying
- Cold, aloof, arrogant
- Betrayal of trust
- Overly ambitious; thinking of next job, playing politics
- Specific performance problems with the business
- Overmanaging; unable to delegate or build a team
- Unable to staff effectively
- Unable to think strategically
- Unable to adapt to boss with different style
- Overdependent on advocate or mentor

Though no executive had all the flaws cited; indeed only two were found in the average derailed executive, the most frequent cause for derailment was insensitivity to other people.

So much for the DON'Ts, what about the DOs? For a unique insight into the "right stuff" we'll conclude with an article written by Major General Gerald L. Prather, AFCC/CC.

CONCLUSION

The article outlines what then, Colonel Gerald L. Prather's thoughts were on what it took to get a "1" under the controlled OER system. It was reprinted in the January 1984 issue of the Information Systems Newsletter because it captured the essence of what it takes to succeed in this or any other career field. The guidance he gave then rings as true today as it did a decade ago.

One of the prime attributes for a "1" is superior performance. What is required in performance, as a matter of course, is completed, error-free, fully staffed staff work - not only in routine matters, but also in inordinately complex issues that arise. The "1" officer is flexible, requiring little, perhaps no, supervision or detailed instructions on how to complete a project and, in fact, is able to fully suggest to the supervisor how the project should be completed.

The officer who is a "1" is perceived as being able

to function at least one and perhaps two levels above in the organization. There are other things that enhance this perception - for instance, leadership and management abilities - getting things done through the optimum use of people and resources - not just being an outstanding worker, but also seeking out work and volunteering to accept the most difficult tasks. The "1" is thus perceived by the rater as a potential section chief, a potential commander, and a potential senior leader for the Air Force - not just a good performer.

Another important attribute for a "1" is education. A master's degree, or at least progress toward one for the younger officer, is a discriminant factor. PME, commensurate with one's time in service and rank is very important. Having the PME is necessary to compete; not having it is certainly a negative factor. Plus marks can also be gained by taking advantage of career broadening or enhancing opportunities such as professional organizations. ECI courses, seminars, etc. Active participation on one or more of these is necessary - rater knowledge of these activities is also necessary - you must sell yourself. Not only must one possess the educational tickets, the "1" uses that education on the job - in mastering the most complex problems while being able to relate those problems and their solutions in a way that a layman can understand and in a way that the rater and additional raters can appreciate.

As a "1" officer you must be a recognized authority in your specialty - others seek your help and advice - but you must also know or be finding out what is going on elsewhere in your branch, division, directorate, MAJCOM, and even in your Air Force. Where possible, insert this knowledge and your expertise in the process of resolving problems outside your realm of direct responsibility.

The "1" always seems to be eager to seek out and take on additional responsibilities, projects, and tasks. The "1" goes out of the way to help others, not only at work but in church groups, scouting, PTA, speaker's bureau, etc. To fit here, you must be eager to make decisions where you can and to make recommendations when the decisions are to be made at the higher levels. Not only must you do these things but you must also be right - the quality of your decisions, recommendations, and advice must be good, consistently.

Other attributes of a "1":

- capability for large volumes of work under all conditions and suspenses, even if it means long hours at the office and working at home.

- outstanding and timely written and oral correspondence are musts.

- creativity is that attribute which describes the officer who can not only do the job well but is consistently looking for and finding ways to do it better.

- making better use of resources, personnel, equipment, and dollars, to make the organization more efficient and effective.

Presentation is difficult to describe specifically, but it makes the whole person - from attitude to education to military bearing to adaptability to capability. The "1" accepts responsibility, new ideas, changes, and stresses with a "sharp salute" and yet keeps a broad perspective as opposed to parochial thinking, tunnel vision, or selfishness. The professional complies with all directives, customs, and courtesies, and insists on compliance by others. This officer sets the example and leads the way down the right road even when it is a bitter pill to swallow. It takes tenacious effort to fill all the squares, keep on working after you've spent a 7-day week of 12-hour days and see no let-up, and still "do it according to the book", particularly when no one would notice that a few corners had been cut. Choosing the harder "right" over the "wrong" is one description of that most important attribute called integrity.

And of course, one can never give up - never cease the effort to reach that "ideal" and never quit striving to be that one most outstanding person in the whole organization.

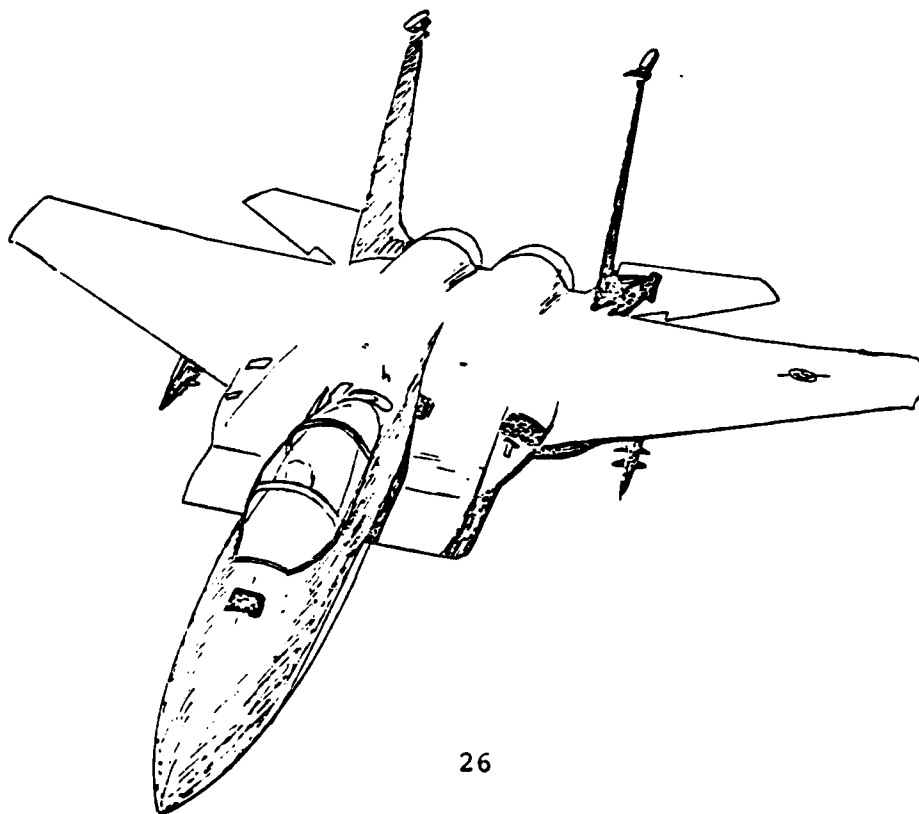
The most common attribute that I find as descriptive of a "1" is that called "self-starting". A self-starter is a searcher of new ways to carry out assigned and self-initiated responsibilities. You don't have to be told what to do. Rather, it is half-done or possibly completed by the time the tasking reaches your desk.

All these attributes and many others, such as loyalty, devotion to duty, etc., are the factors used to rate a given officer in a given job. Perception of the job being done by an individual and, indeed, the individual's personal perception, are key factors. If you perceive yourself as a "1" and get a "3", you

either perceive yourself as better than you are, or your rater, additional rater, or reviewer have underrated you. It could also mean that you are really not competing or that you may have not "sold yourself" to your raters. To be a "1", you must take steps to raise your supervisors' perceptions of yourself. If you are a true "1", you can do just that by your actions. You must ask some very tough questions in order to evaluate your competitive status and decide whether you are willing to make the sacrifices to raise the perception of the raters. There is one other alternative, of course, and that is to quit, but that alternative is not one to be considered by an officer who is striving for excellence.

Finally, it must be recognized that there are unquantifiable, unqualified, and highly subjective things that enter into the picture. Being at the right place at the right time may be one of those, although I don't consider that as too important for a consistent "performer". But it certainly could play a part if one consistently was in the middle of the tough jobs and consistently came to the surface with the right answers.

In the military vernacular, an extremely well-put descriptive phrase might describe all the above attributes of a "superior" officer - The "1" is the individual I choose to take with me when I go to war.



Chapter Seven
FUTURE CHALLENGES

INTRODUCTION

"I see an increasing role for Information Systems in maintaining the combat readiness of our forces today and in the future." (General Thomas M. Ryan)

PROFESSIONALISM

Our challenge as Information Systems officers is to play that role, professionally. In addition to the formal training and education programs discussed earlier, you need to stay current on a wide variety of professional issues. One of the best ways to do this is to expand your professional program. Your professional reading could include such publications as:

AF 700 series regulations

Intercom newspaper

AF Information Systems Newsletter

Signal magazine

Datamation magazine

Government Computernews newspaper

To supplement your professional reading, you could support such professional organizations as the Armed Forces Communications and Electronics Associations (AFCEA).

CONCLUSION

The real test of professionalism is in how we support our customers. Mr. Lloyd K. Mosemann II, Deputy Assistant Secretary of the Air Force (Logistics and Communications) said it best in his article entitled "Change, But Don't Loose Sight of the Mission", published in the Spring 1984 issue of the Information Systems Newsletter.

The important thing for all of us to remember is that change should be looked upon as an opportunity

rather than a threat. It is an opportunity to learn, to become more productive, and to grow. Those people with parochial and defensive attitudes, and those who resist this change, will simply be left behind. Don't be one of them. A good way to avoid being left behind is to get aboard the technology train. It's moving rapidly, but that's no excuse for staying at the station. Read the literature, attend the symposia, join professional organizations. But as you read, attend, and join, occasionally look up from your desk at the mission sign on your wall. One of the dangers in our business is that we become so enamoured with our technological achievements that we forget why all that fancy hardware and software is there. Remember that we have critical customers to support who probably don't know a megabyte from a gigahertz, and furthermore, they probably don't care. All they want is to get the job done, and they need our help to do it. Let's help them. Let's not intimidate them with our technical jargon. So stay current in your profession, but also stay in touch with your customer.



BIBLIOGRAPHY

A. REFERENCES CITED

Articles and Periodicals

1. McCall, Morgan W. Jr., and Michael M. Lombard. "What Makes a Top Executive?" Psychology Today. February 1983. pp. 26.

Official Documents

2. U.S. Department of the Air Force. AF/SI Corner - Air Force Board, Personnel, and Joint Matters. Information Systems Newsletter. AF Recurring Periodical 700-1, Keesler AFB, Mississippi: AFISDO, June 1985, pp. 5.
3. U.S. Department of the Air Force. The Electronic Battlefield. Information Systems Newsletter. AF Recurring Periodical 700-1, Keesler AFB, Mississippi: AFISDO, June 1985, pp. 1.
4. U.S. Department of the Air Force. Improving Force Readiness and Sustainability Through Training. Information Systems Newsletter. AF Recurring Periodical 700-1, Keesler AFB, Mississippi: AFISDO, Fall 1984, pp. 2.
5. U.S. Department of the Air Force. Credible Deterrence Depends on Information Systems. Information Systems Newsletter. AF Recurring Periodical 700-1, Keesler AFB, Mississippi: AFISDO, Summer 1984, pp. 1.
6. U.S. Department of the Air Force. Combat Readiness Depends on Information Systems. Information Systems Newsletter. AF Recurring Periodical 700-1, Keesler AFB, Mississippi: AFISDO, September 1985, pp. 1.

Unpublished Material

7. U.S. Air Force Manpower and Personnel Center. Information Systems Career Management Team Briefing Slides. Randolph AFB, Texas: HQ AFMPC/DPMRST2, undated.

CONTINUED

B. RELATED SOURCES

Official Documents

- U.S. Department of the Air Force. Information Systems Career Program - Career Management Guide. AF Pamphlet XX-XX, Randolph AFB, Texas: OCPO/MPKCI.
- U.S. Department of the Air Force. Military Personnel Classification Policy. AF Regulation 35-1. Washington DC: Government Printing Office, 1 March 1983.
- U.S. Department of the Air Force. Officer Assignments. AF Regulation 36-20. Washington DC: Government Printing Office, 5 August 81.
- U.S. Department of the Air Force. Officer Career Development. AF Regulation 36-23. Washington DC: Government Printing Office, 11 March 85.
- U.S. Department of the Air Force. Officer Career Information. AF Regulation 36-22. Washington DC: Government Printing Office, 10 May 82.
- U.S. Department of the Air Force. Officer Classification. AF Regulation 36-1. Washington DC: Government Printing Office, 1 January 84.

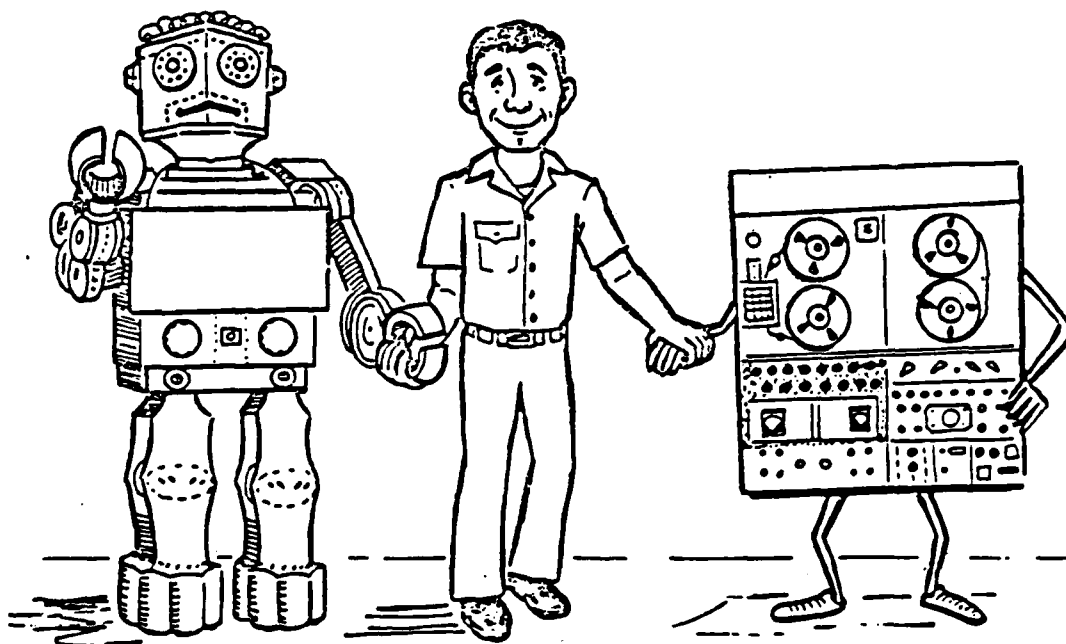
Unpublished Material

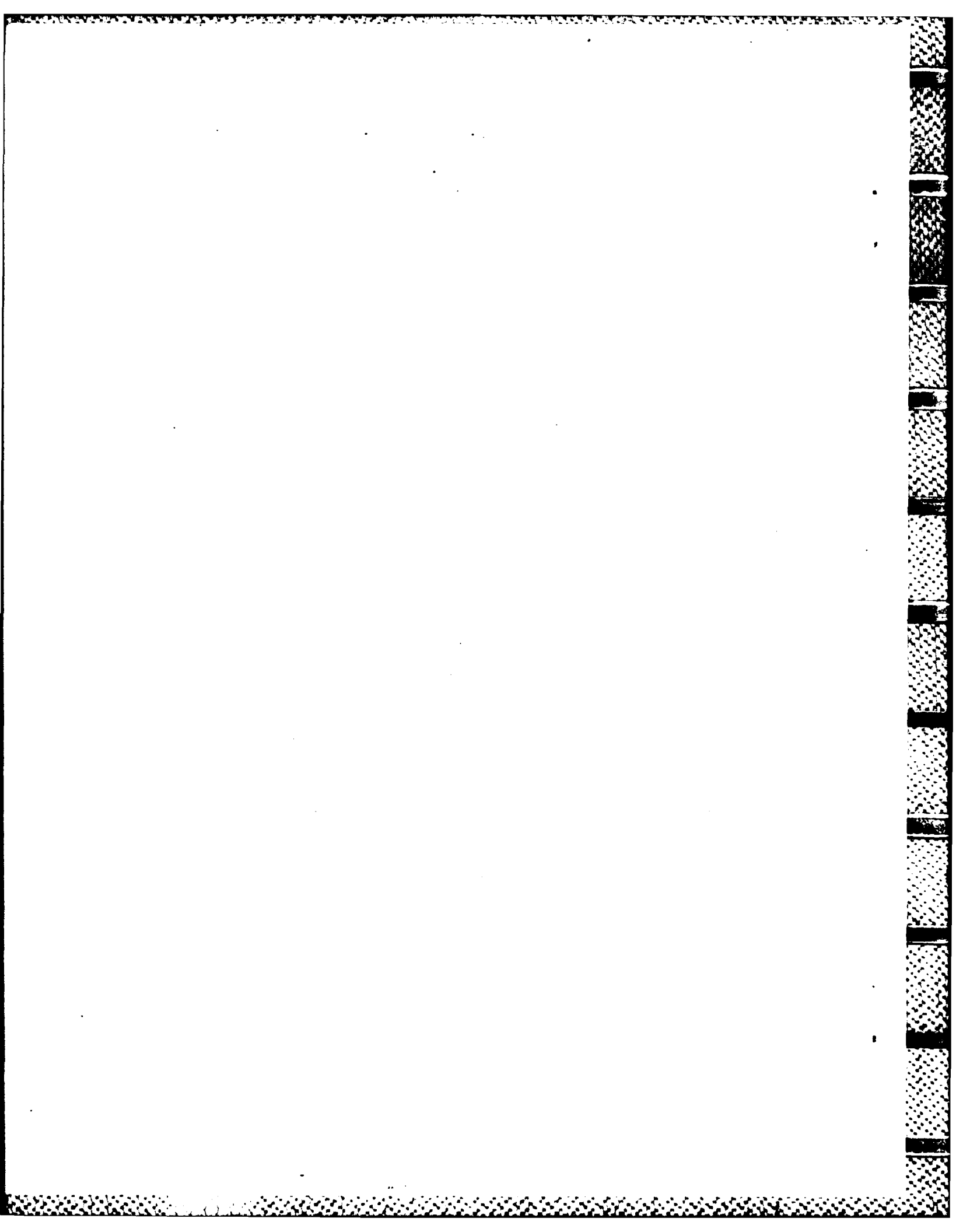
- Nyberg, Major Roland D., and Major Douglas J. Wursten. A Career Development Handbook for Computer Systems Officers. Unpublished Staff Problem Solving Report 84-1900, Air Command and Staff College, Air University, Maxwell AFB, Alabama. 1984.
- Tackett, Major Buford D., PISMC, AF Leadership and Development Center, Maxwell AFB, Alabama: AF LMDC/ESI Information Systems Career Field (49XX). Personnel Insight Program Video.

CONTINUED

The Handbook cover design was furnished by AF/SIBH.

Illustrations are from the Air University Graphics Branch.





END

DTIC

6-86