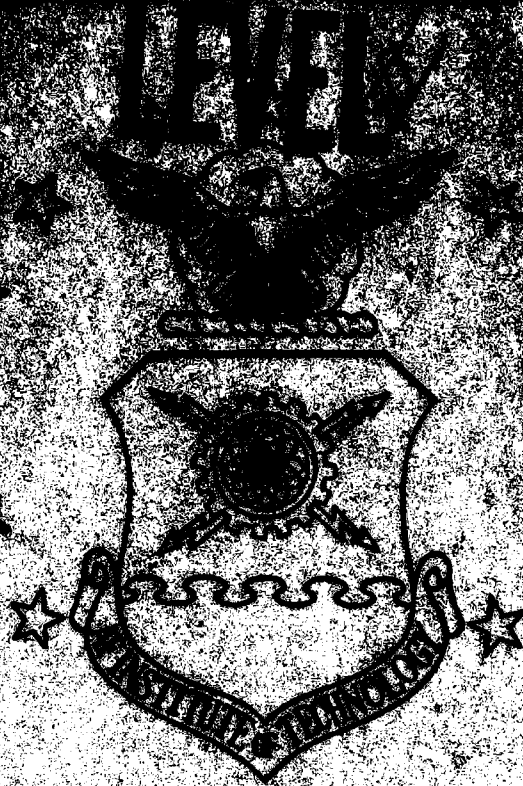


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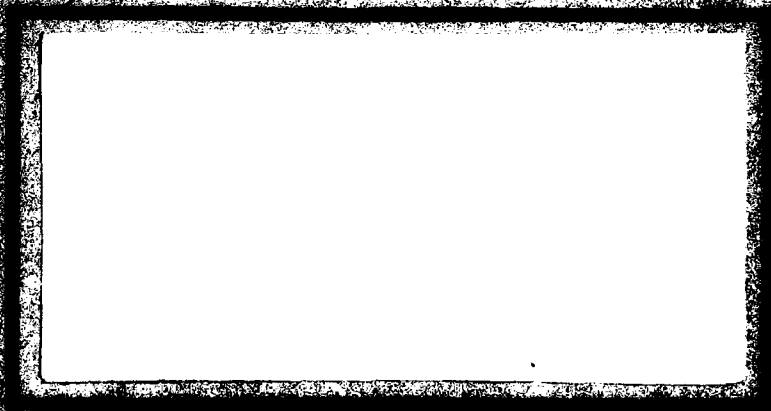
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A COMPARATIVE ANALYSIS OF
ENLISTED CAREER PROGRESSION SYSTEMS.

10 Edward A. Richter / Captain, USAF
David C. Tharp / Captain, USAF

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This thesis constitutes one part of a six-team, three-year study designed to determine if it would be practical or feasible for the USAF to eliminate or modify current upward progression policies. The primary objective of this thesis was to provide a baseline of information with respect to alternate enlisted career progression systems to the research teams conducting the subsequent efforts. The alternate career progression systems examined in this thesis are those of the U.S. Air Force, Navy, Army, Britain's Royal Air Force, and two major airlines. The informational base was constructed by systematically identifying, investigating, and synthesizing the current enlisted career progression systems for each of the systems listed above with respect to the grade structure, skill structure, and the promotion system.

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**A COMPARATIVE ANALYSIS OF ENLISTED
CAREER PROGRESSION SYSTEMS**

A 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 Logistics Management**

By

**Edward A. Richter, MBA, BSBA
Captain, USAF**

**David C. Tharp, BS
Captain, USAF**

June 1980

**Approved for public release;
distribution unlimited**

This thesis, written by

Captain Edward A. Richter

and

Captain David C. Tharp

has been accepted by the undersigned on behalf of the
faculty of the School of Systems and Logistics in partial
fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN LOGISTICS MANAGEMENT

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COMMITTEE CHAIRMAN

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CHAPTER I

INTRODUCTION

Overview

As the human factors of DOD management have grown in complexity, costs of DOD manpower have grown also-- 250 percent in 14 years for only 80 percent as many people. Since fiscal year 1964, annual costs for military and civilian personnel have increased from \$24 billion to over \$60 billion, even though personnel levels have declined from 4.9 million to 3.9 million. Effective management of personnel resources is of growing importance to DOD as it tries to do more with less because of higher costs [37:3].

Although no accounting systems exist in any of the military services which accurately reflect the full dimensions of maintenance, most observers agree that 30% to 40% of all military personnel are involved in one or another maintenance function, and that 20% to 30% of the Department of Defense budget is devoted to maintenance activities. Another way to state the case is to note that more military money is devoted toward maintaining currently owned equipment than is directed toward acquiring new equipment [17:p.2-2].

The above quotes illustrate the cost to the Air Force associated with the maintenance field and the importance that the Air Force must place on the efficient use of its maintenance manpower; yet the basic structure of the Air Force and its handling of its maintenance personnel leads to a constant, significant drain on the resources of the Air Force. This drain is caused, in part, by the constant loss of expertise from the technical maintenance career fields. To fully illustrate the problem, it is

necessary to understand the current career progression of an enlisted man who is in one of the technical maintenance career fields.

Enlisted Career Progression--Background

Each possible field an enlisted person can enter is assigned an Air Force Specialty Code (AFSC). This code identifies what the person has been trained for and to what degree the individual has been trained. For example, an AFSC of 443X0 identifies the Minuteman Missile Mechanic Career Specialty. The "X" in the number is the skill level to which the individual has been trained. A "3" indicates that the airman has only recently completed technical training and is considered to be an apprentice level worker. A "5-level" airman is considered to be a journeyman. These two skill levels (combined with a 1-level helper) make up the bottom tier of the three-tier structure used by the Air Force to manage its enlisted force. The second tier is composed of 7-level technician-supervisors. The third tier consists of 9-level supervisor-managers. These skill levels are related to rank and promotion possibilities and also to the type of work done by the person holding the AFSC. By following an individual through a typical career progression, it will be fairly simple to explain the interaction of these factors (see Figure 3-1).

When an individual (call him Sam) joins the Air Force he takes a test known as the Armed Services Vocational Aptitude Battery. This test has four main sections that measure the electronic, mechanical, administrative, and general aptitude of the recruit. The scores that Sam gets determine to a large degree what fields he will be allowed to enter (assuming that the Air Force has openings in that field). Assuming that Sam scores well in all fields and expresses a desire to enter an electronics field, he is tentatively assigned to a technical career field such as aircraft radar repair. During Basic Military Training Sam takes more tests to further evaluate his abilities and determine exactly what field he will go into and how much training he requires. For our illustration, after Basic Training, Sam is sent to a technical training school to begin learning how to maintain radar sets.

Sam would spend from several weeks to more than six months in technical training depending upon what field he is going into and how much knowledge he already has. After successful completion of technical training, Sam is awarded a 3-level AFSC and assigned to an operational squadron. Upon arriving at his new base Sam is entered into an On-the-Job Training (OJT) program. This program is designed to show a new member of the maintenance force how the concepts and theories he learned in technical

training are applied to the specific aircraft on which he now works. Sam continues in the OJT program until he has completed all portions of the program and has passed the test to receive a 5-level. This is an important test in two ways. First, while Sam was a 3-level, he was considered an apprentice and was not allowed to perform many of the tasks of his AFSC without supervision. When he attains a 5-level, he acquires new freedom and responsibility. He is now considered a journeyman and is permitted to accomplish many repair jobs with no one to directly and continuously monitor his performance. Second, promotions are tied (loosely) to skill levels (5:p.5-2). That is, Sam may not be promoted to E-4/Senior Airman without first passing the test for a 5-level AFSC. As a 5-level, Sam can be promoted to E-4/Sergeant and then to E-5 (Staff Sergeant), but he must have a 7-level AFSC to be promoted to E-6 (Technical Sergeant) or E-7 (Master Sergeant). (Other factors, beyond skill level, are more important for promotion and just having the proper skill level does not guarantee promotion.)

After Sam has passed the test for, and has received, his 5-level AFSC, and has been in the service for the appropriate time, he may take the tests for promotion to the next grade. For promotion to E-2, E-3, and E-4, promotion is on a "fully qualified noncompetitive basis [5:p. 5-16]." There are two tests required for promotion to E-5

through E-7: the Specialty Knowledge Test (SKT) and the Promotion Fitness Examination (PFE). The SKT asks questions dealing with a specific AFSC. It is designed to find out how much an individual knows about his/her job. The PFE asks questions about the Air Force in general. Its questions range from first aid to drill and ceremonies. For promotion to E-8 (SMSGT) or E-9 (CMSGT), there is no SKT. Instead, a board reviews the records of the individual eligible for promotion. This board is a major factor in determining who is promoted.

After Sam has been promoted to E-4/NCO, he will probably begin to monitor the activities of a new 3-level fresh from technical training. This means that, in part, the rating he receives on his Airman Proficiency Rating (APR) is based upon how effectively he can communicate information to a subordinate as well as how effectively he can fix the equipment. This continues as Sam is again promoted and advances to Staff Sergeant. Although he is still a technician, more and more of his time is spent on activities not directly involving his primary task of fixing equipment. A study of the Minuteman Missile Mechanic Career Specialty shows that a 5-level may spend up to 24 percent of his time on activities dealing with such subjects as scheduling, organizing and planning, training, etc. A Technical Sergeant, who is a 7-level, may spend up to 57 percent of his time in these activities (9:17).

Similar results were seen in a study of the Electronic Warfare Systems repair field (8:22-24).

About the time Sam gets promoted to E-5 (Staff Sergeant) he faces a major decision: should he re-enlist? If he decides not to re-enlist, all the skill and job knowledge he has developed through his training and experience will be lost to the Air Force. Airman retention is a major problem for the Air Force but beyond the scope of this research. But, even if Sam decides to re-enlist, his skills may still be lost. A small percentage of Staff Sergeants remain Staff Sergeants for their entire twenty-year career. When they retire, they take that experience with them just as does the E-5/Staff Sergeant who does not re-enlist after his initial commitment is up. However, the number of people who retire as Staff Sergeants from a technical career field is very small and does not have a significant impact (11:A-3). Another way in which skill is lost is through involuntary separation of the member for some offense such as drug use, criminal activity, or any other offense under the Uniform Code of Military Justice warranting dismissal from the service. An airman may also cross-train into another AFSC. The losses due to retirement, involuntary separation, and cross-training are small compared to the losses of not re-enlisting.

Even if Sam does re-enlist, his skills are going to be gradually lost to the Air Force as he moves up the

career ladder into higher rank. As earlier stated, as a 7-level Technical Sergeant, he may spend as much as 57 percent of his time not working on the equipment. A 9-level Master, Senior Master, or Chief Master Sergeant will spend as much as 91 percent of job time directing others, not working on equipment (9:17).

Problem Statement

Although "up or out" has been a much discussed topic throughout the Department of Defense, the main emphasis has been in relation to the Officer Personnel System. "Up or out," in a strict sense, has been defined as the way the Defense Officer Personnel Management System (DOPMS) eliminates an officer for reaching a particular age or for not being promoted. Lieutenant Colonel Robert O. Heavner defined "up or out" in the following way: "Up or out is a process of examining and then either promoting or eliminating in the search for a modest number of youthful senior commanders [21:57]." In some circles, however, "up or out" takes on a different meaning and has certain specific ramifications. Mr. Jerome G. Peppers, a Professor of Management with the Air Force Institute of Technology's School of Systems and Logistics, sees the "up or out" problem in this light: Essentially it is impossible for an enlisted technician in today's Air Force to remain a technician and survive for a career. Due to the Air Force's "up or out"

personnel policies, the technician's skills deteriorate or even disappear entirely (29). Weapon system complexity, the product of our technological age, is the underlying reason why technical skills must be maintained. Air Force Chief of Staff, General Lew Allen, Jr., emphasized the importance of technological capabilities in a recent public statement.

. . . to succeed, we need airmen with technological sophistication and high professional standards. . . . We are also beginning to lose more good, experienced people in critical skill areas, many of whom are impossible to replace in the short term [7:13].

Mr. Peppers senses an implied condemnation of the career technician--he obviously can be of little value if he doesn't want to become an Air Force supervisor. Mr. Peppers' diagnosis of the essence of the USAF "up or out" policy is a requirement for the individual technician to progress upward into management levels or to get out. The current career progression system does not allow the enlisted technician of today's Air Force to remain a performer of maintenance; he must progress "up" the management chain or "out" (29). It is therefore the career progression aspect of the enlisted force that this study will address.

Extensive review of Defense Technical Information Center (DTIC) and Defense Logistics Studies Information Exchange (DLSIE) studies failed to reveal any reports within, by, or of the Air Force to analyze the enlisted

career progression system. Prior to making an intelligent evaluation of the current system, a need exists to compare the Air Force enlisted career progression system with systems in alternate environments.

Scope

Air Force philosophy, concepts, and goals of enlisted personnel management are described in the USAF Personnel Plan, Volume III, Total Objective Plan for Career Airman Personnel (TOPCAP).

The TOPCAP management plan considers the entire personnel life cycle: procurement, education and training, utilization, sustainment, and final separation and retirement. TOPCAP has two major parts . . . the force structure part, and the career progression part [2:1].

This thesis examines elements of the force structure, as they relate to the career progression system. According to Air Force Pamphlet (AFP) 39-244, the enlisted career progression system consists of three major components: the classification component, the promotion component, and the training component (2:3). This thesis provides a comparative analysis of the first two components of the career progression system with systems in alternate environments.

The Air Force enlisted career progression system was compared with the enlisted career progression systems of the U.S. Army and Navy, the British Royal Air Force, and the private sector. The Army was chosen because of

past experiences with dual-track enlisted personnel systems. A dual-track system is a system that allows upward progression as a result of technical ability and managerial ability versus a single-track system that allows upward progression only as a result of managerial ability.

Although the overall mission of the Navy differs substantially from that of the Air Force, much of the flying missions of both services are accomplished utilizing identical aircraft systems. It is for this reason that the Navy's aircraft maintenance career progression system was of interest. The Marine Corps progression system was not considered since its system is almost identical to that of the Navy.

Throughout our history, this country has gained much from its association with our allies. Since many recent General Accounting Office (GAO) reports have called for improved enlisted management systems, it was felt that our foreign allies may have the potential for providing improvements to the Air Force current enlisted progression system. Due to time limitations, only one of the numerous foreign Air Forces was chosen for comparison. The British Royal Air Force (RAF) was chosen over other foreign Air Forces because its written policy is published in English and also because of its experience with a dual-track system.

Many individuals believe that optimal performance is attained in the private sector. A recent Air Command

and Staff College (ACSC) technical report employed the following hypothesis:

The working hypothesis is: if "up or out" is a viable management concept, then industry, working under the profit motive, would probably be employing such a practice [22:4].

While this thesis does not endorse the idea of the existence of a panacea in the private sector, it does acknowledge potential contributions from this arena of the environment.

Several major airlines were chosen as private sector comparators due to the mission similarity. The airlines that we dealt with requested they not be identified by name but rather as a "major airline." This request has been honored throughout this thesis.

The organizational focus of this thesis is in the aircraft maintenance area due to the fact that all five comparators have this type of organization with technology as a common bond.

In summation, this thesis compares and contrasts the enlisted career progression systems of the Air Force, Army, Navy, RAF, and the private sector. The emphasis is at the enlisted technical level. In order to maintain that technical emphasis, this thesis limits its scope wherever possible to the aircraft maintenance field.

Background/Literature Review

The background literature review is divided into three sections:

1. A related research section--this section discusses the efforts of two other thesis teams working on the same problem area.

2. Related studies section--this section summarizes related studies discovered during DTIC and DLSIE review studies.

3. Air Force policy section--this section summarizes Volume Three of the Air Force Personnel Plan.

Related Research

Would it be practical or feasible for the USAF to eliminate or modify the current upward progression policy and allow an enlisted technician to remain a "doer" for a full career? The answer to this question employs the research efforts of six different thesis teams over a three-year period (see Figure 1-1). The research effort proceeded with a three-tier design. The first tier was accomplished during the first year (1979-80) to establish an informational base to aid researchers in the second year of the study. The first tier is composed of the following elements:

1. An exploration of enlisted attitudes concerning career progression policies.

2. An historical perspective of the events leading to the current upward progression policies.

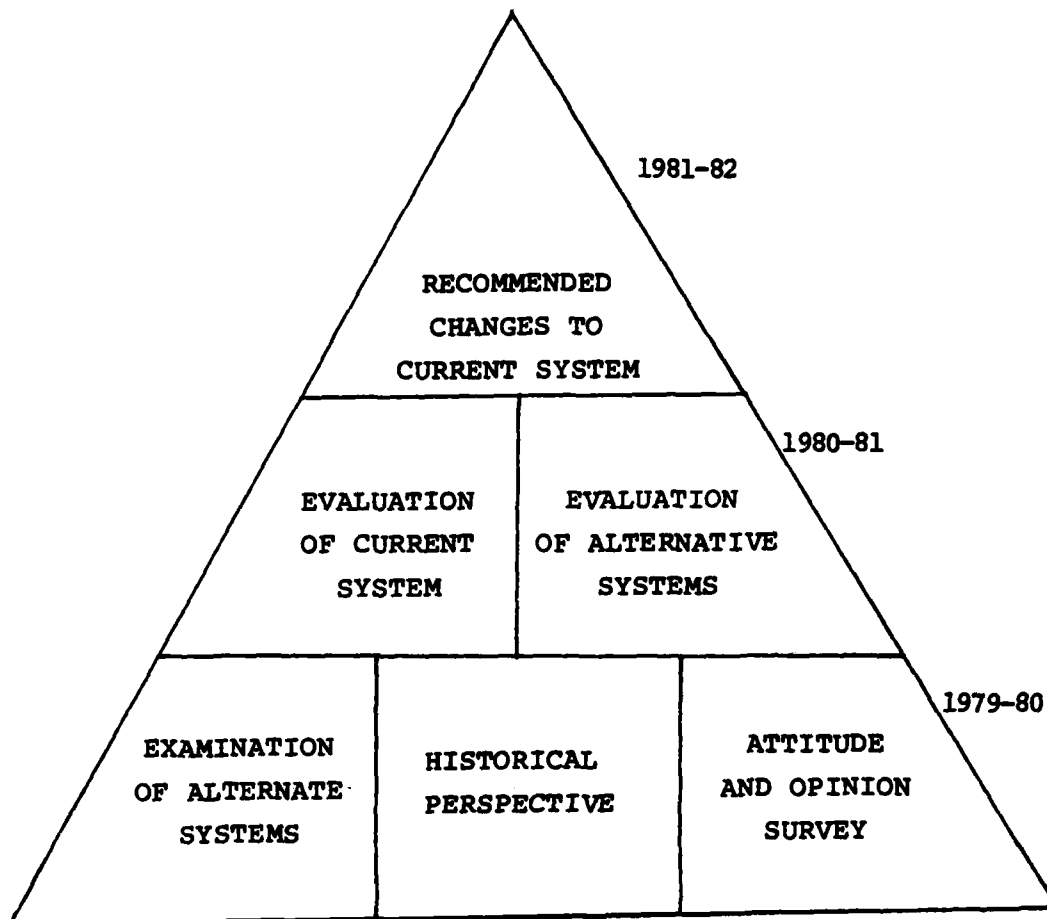


Fig. 1-1. Pyramid of Proposed Research--
USAF Enlisted Career Progression System

3. An examination of alternate career progression structures.

Effort number one was authored by Captains Gary Pierce and Erika Robeson; effort number two by Captain Clark K. Nelson and Mr. Francis J. Hall; and effort number three is this thesis.

The second tier will be completed during year number two and will utilize the base-line data generated during the first year. It will add to it and form a new base-line for the final year of the study. The following elements are planned to constitute the second tier efforts:

1. A more in-depth exploration and evaluation of alternate career progression systems.
2. An evaluation of the Air Force policy of upward progression.

The third tier of research will be completed during year three. Using the base-line data compiled by the five thesis teams over the previous two years, the final team will recommend an optimal enlisted maintenance career progression plan for the Air Force.

Summary of Tier One Efforts. The Pierce/Robeson team is involved with the exploration and determination of the attitudes of enlisted personnel in the aircraft maintenance career field relative to the Air Force's career progression policies. The study revolves around a survey

and examines perceptions of the roles and status of the technician and attitudes toward the transition from technician to supervisor.

The Nelson/Hall team traces the history of events leading to the current upward progression policies. The following types of issues are addressed:

1. What types of enlisted personnel systems have been used in the past?
2. What factors lead to the adoption of the various promotional systems?

Related Studies

The DTIC and DLSIE literature reviews identified two studies presenting views on various aspects of the Air Force enlisted retention problem. Robert P. McIntire, author of the first study, "Job Enrichment for the Crew Chief," examined motivation and job enrichment principles as applied to the aircraft maintenance specialist. The second study, "Military Manpower and the All-Volunteer Force," was written by Richard V. L. Cooper of the Rand Corporation. The Cooper report contained information on manpower management in the all-volunteer environment.

Summary of the Crew Chief Job Enrichment Study.

This report attempted to analyze the principles of motivation and job enrichment, and to apply these principles to a specific Air Force job. McIntire observes that in the

past various pay or incentive schemes and numerous types of bonuses have been employed to enhance recruitment and retention of skilled personnel. He goes on to illustrate through the opinions of several human motivational experts that money may not be as important for motivation as many seem to believe (28:2).

McIntire focuses on two of the experts in the field of job motivation and enrichment, Dr. Abraham Maslow and Frederick Herzberg.

Maslow proposed five classifications of needs, which represent the order of importance to the individual. These needs have been identified as: (1) physiological; (2) safety and security; (3) social and belonging; (4) ego, status, and esteem; and (5) self-actualization [8:104].

In order to progress up the need chain, each lower level need must be satisfied. It is possible that Maslow would view the Air Force upward progression policy as a threat against safety and security needs.

The second theorist considered is Herzberg. Rather than having five levels as does Maslow, Herzberg has two sets of job factors: a hygiene set and a motivator set. Hygiene factors are related to the context of a job and include such factors as job security, pay, working conditions, status, Air Force policies, and quality of supervision. Motivator factors are job content related and include such things as achievement, recognition, the work itself, responsibility, and advancement (23:108). The Air

Force upward progression policies could affect an individual's hygiene factor and motivator factors.

For example, an individual forced to become a supervisor against his will might very well feel as though he were assigned to an uninteresting job (motivator) resulting in feelings of inadequate job security (hygiene factor).

McIntire concludes his report by emphasizing that a system where people stay because they are satisfied with their job and want to stay may be more productive (28:58).

The emphasis of the McIntire report is on the study of motivational theory as a solution to the retention problem. Even though the primary focus of this thesis is not in the area of retention but rather utilization, there is a peripheral relationship of "up or out" to retention. The theories of motivation espoused by McIntire are applicable to the utilization aspects of this thesis but only in a general way. The two motivational theories he uses do not adequately illustrate the motivational aspects of "up or out." Two theorists not included in the McIntire study that provide added insight are Claude S. George, Jr. and Ray C. Hackman. Dr. George viewed personnel utilization in this manner:

Some employees don't want to be promoted. They are happy where they are and don't want to disturb their routine by learning a new job. Other employees place greater value on their leisure and freedom from pressure than they do on the status and added income of a bigger

job. Some employees refuse to be promoted to a supervisory status, because they find they cannot be responsible for what others do, . . . or because they know their limitations and recognize that they would probably fail on a more demanding job [19:169].

Hackman identified several motivational dimensions that describe an individual's view of work. Two applicable dimensions identified are closure seeking and responsibility seeking. A closure seeker has developed a competence in a skill and closely identifies with it. For the closure seeker there is no desire to progress upward; a task oriented career is what they seek. The responsibility seeker is just the opposite and sees all training as leading to supervision and management (30:153-154).

Individuals such as the responsibility seekers and those with high growth needs would fit right into the current Air Force structure. But what fate can the closure seeker anticipate? Is there a place for him in the enlisted force structure? These are questions that McIntire failed to answer in his crew chief study. These are questions that have not been answered by the Air Force in general.

Summary of the Rand Report. A significant portion of this report dealt with the ramifications of ending the draft and moving to an all-volunteer force. However, Part III of the report considered aspects of manpower management. In Chapter thirteen Cooper discusses the productivity aspects of enlisted manpower management. Cooper maintains

that first-term enlisted personnel are much less productive than career personnel due primarily to their lack of experience and training. Data are provided in comparing the productivity of first-termers with personnel who have four years of service.

Overall, the estimates show that individuals during the entirety of their first four years of military service are on the average about 55 percent as productive as the typical serviceman with four years of service [1:308].

It seems the current upward progression policies force people into management just when they are becoming effective. The problem is amplified in highly technical areas such as maintenance.

In low-skill jobs, for example, there may be little, if any, productivity differential between individuals with only a modest amount of military job experiences and those with substantial experience, whereas in the high-skill jobs there is likely to be a substantial productivity differential between such individuals [1:308].

Cooper goes on to discuss career management of the officer and enlisted forces. Career management policies such as promotion, rotation, assignment, and career length are discussed. He took particular note of the type of upward progression policies now in use by the Air Force.

For example, the historic emphasis on maintaining a first-term intensive force has resulted in policies requiring career enlisted personnel to assume supervisory responsibilities in order to remain in the force. The military might be better served if larger numbers could remain as career technicians [1:392].'

Mr. Cooper's remarks received unexpected support in a letter to the editor of the Air Force Times from an individual identified only as MAC NCO:

In these times of increasingly complex and sophisticated weapon systems, we must have only the most highly trained and competent personnel maintaining them. We must reduce the emphasis placed on teaching everyone to be leaders and managers. Our people must be allowed to practice the technical skills they were trained to perform. This way, they can gain valuable experience and use it to its fullest potential.

The stigma generally attached to those who actually perform maintenance tasks must be eliminated. Only then will the AF begin to use its people in the most effective manner [27:21].

If technology and weapon system complexity advance as fast in the next decade as the last, it might be appropriate to take the MAC NCO's and Mr. Cooper's remarks to heart.

Related Air Force Documents

The USAF Personnel Plan (USAFPP) establishes management policy for the officer, airman, and civilian force. Volume III of the USAFPP constitutes the Total Objective Plan for Career Airman Personnel (TOPCAP). TOPCAP supports the overall plan and provides an objective force structure for the active duty airman force. Chapter 1 establishes objectives and management principles for the enlisted force. The airman force structure characteristics are as follows (11:p.1-2):

Airman Force Skill Level
First-Term

1. Trainee
3. Apprentice
5. Journeyman (potential career airmen)

Career

5. Journeyman career
7. Supervisor/technician
9. Superintendent

The stated intent of this chapter is to provide the enlisted structure with a high degree of stability and consistency in the policies that affect them.

Chapter two includes an historical perspective of the development of our current force and grade structure; our promotional system; and the reenlistment bonus and proficiency pay systems.

Chapter three describes three major aspects of TOPCAP: the force structure, the career progression system and the TOPCAP force management concepts (27:p.3-1). The force structure is composed of two parts: the career force (over four years of service) and the first-term force. The career progression system is summarized by outlining the promotional flow and the grade/year requirements. TOPCAP assures the enlisted force the following promotional opportunity (11:p.3-2):

- 90 percent to staff sergeant
- 90 percent to technical sergeant
- 84 percent to master sergeant

75 percent to senior master sergeant

60 percent to chief master sergeant

The hallmark of TOPCAP management is management by year group. An individual's year group relates to his total active federal military service (TAFMS) and the fiscal year he entered the service (11:p.3-5).

The USAFPP also contains a series of annexes which cover the following elements:

1. Enlistment program in general
2. The reenlistment program
3. The promotion program
4. The utilization program
5. The separation program

In summation, USAFPP is the Air Force's overall plan to manage all aspects of the enlisted force.

Research Objectives

Our research objectives consisted of one general overall objective and two specific objectives. Since this project is an integrated six-part three-year study, the overall general objective is to determine whether or not it would be practical or feasible for the USAF to eliminate its upward progression policy for maintenance technicians and permit a force of career technicians (see Figure 1-1).

Since we were operating in the first year of the research program, the specific objectives of this thesis were:

1. To systematically identify, investigate, and analyze the current enlisted career progression systems of the Air Force, Army, Navy, and private sector, and the British Royal Air Force.

2. To provide a baseline of information to the three thesis teams that will conduct the future studies in this area.

Research Questions

The research objectives were met by answering a series of questions related to the career progression systems of each of the comparator organizations. The specific questions are:

1. What is the career progression grade structure?
2. What percentage of the enlisted men serve in each grade?
3. What is the career progression skill level structure?
4. What is the skill versus grade structure relationship?
5. What variables are considered in the promotion process?
6. What is the average time in service completed by promotion by grade?

CHAPTER II

RESEARCH DESIGN AND METHODOLOGY

Introduction

This chapter presents the research design and methodology used for this thesis. The data collection plan is presented first and illustrates the sources of the data. The data collection plan is divided into two major sections: the written policy and studies section, and the interview section. Next, the data analysis plan is illustrated.

Data Collection Plan

Written Policy

The major portion of the data for this thesis was obtained from an analysis and comparison of written policy. The formal regulations used were as follows:

Air Force Regulations.

1. AFR 39-6--The Enlisted Force Organization
2. AFR 39-29--The Weighted Airman Promotion System
3. The USAF Personnel Plan (USAFPP) Volume III--Airman Structure (TOPCAP)

Army Regulations.

1. Army Regulation (AR) 600-200--Enlisted Personnel Management System

2. AR 611-201--Enlisted Career Management Fields and Military Occupational Specialties
3. AR 600-20--Army Command Policy and Procedures

Navy Regulations. Unlike the Air Force and Army, the Navy consolidates all manpower policies into one manual. Bureau of Naval Personnel Instruction (BUPERSINST) 1430.16A contains information on the Naval enlisted management and promotional systems.

Royal Air Force Regulations.

1. Air Publication (AP) 3328, Section 4--Airmen's Trade Ability Tests
2. AP 3376 A, Vol. 1A--Trade Structure of the Royal Air Force
3. AP 3376 A, Vol. 1D--Trade Specification for the Trade of Aircraft Mechanical Propulsion
4. AP 3392, Vol. 2--Application for Further Service--Airman

Summary of Regulations. The regulations listed above provided essential background knowledge for understanding the career progression systems of the various services and in answering research questions one, three, four and five.

Written Studies

Air Force, Army, and Navy data for research questions two and six were obtained from General Accounting

Office report FPCD-77-42 dated 29 September 1977. RAF and private sector data for questions two and six were not available.

Interviews

Three types of interviews were conducted to obtain data for this thesis: personal, mail, and telephone.

Personal interviews were conducted at Wright-Patterson AFB with representatives of the Navy, Army, and the Royal Air Force. The purpose of these interviews was to acquire data not provided through respective written policy or reports. The personal interviews were also utilized in clarifying data that appeared in written policy. A third use of the personal interview was to obtain current unwritten policy.

Mail and telephone interviews were the primary data collection devices used for obtaining data from the personnel departments of the major airlines concerning the six research questions. Limited use was also made of the telephone interview to supplement data acquired through written policy and personal interview procedures for the Army, Navy, and the Royal Air Force.

Data Analysis Plan

Data must be analyzed to become usable information. The principle method of analysis used in this thesis was to compare and contrast each of the career progression

systems by synthesizing the concepts identified in the various regulations, written studies, and interviews. The synthesized concepts answer the research questions and are found in Chapters III through VII.

CHAPTER III

AIR FORCE CAREER PROGRESSION SYSTEM

Introduction

The guiding directive of Air Force personnel management is the USAF Personnel Plan. This plan is contained in eight volumes. Volume III contains the Total Objective Plan for Career Airmen Personnel (TOPCAP), which deals with the enlisted force. TOPCAP does not say what the enlisted force structure is; it presents what the Air force wants it to be. In addition, TOPCAP presents a program to attain this desired structure. Air Force Regulation 39-6 (AFR 39-6) also describes the enlisted force and

. . . defines the Enlisted Force Organization, the responsibilities of each enlisted grade within the organization, and sets forth the Grade, Titles, and Terms of Address for Air Force enlisted personnel [6:Title Page].

This regulation addresses such questions as, "What is an NCO and what should he do?" Promotion of enlisted personnel is covered in AFR 39-29. Those three publications contain the bulk of the information needed to understand the career progression of Air Force enlisted personnel.¹

¹The promotion process discussed below is accurate for normal career progression. It does not mention every aspect of the Air Force promotion policy; for example, no mention is made of the automatic promotion received by a Medal of Honor recipient, promotion of Physician Assistants,

Grade Structure

The rank structure of the Air Force is depicted in Appendix A. Grades E-1, E-2, and E-3 are below NCO rank and are addressed as "Airman." The grade of E-4 can be either an airman grade or an NCO grade. When initially promoted to E-4, an individual is still considered an Airman and the insignia of rank has in its center a blue star in a blue field. This rank is normally written as E-4/Senior Airman. After the individual has met the requirements to be promoted, the blue star is replaced by a white star, the individual is addressed as "Sergeant," and the rank is written as E-4/Sergeant; but the pay-grade remains the same.

TOPCAP divides the force into two major groups: first term and career.

Airmen with less than 4 years of active service or those on their first enlistment are considered first term, and those airmen having over 4 years who are serving on their second or subsequent enlistment are considered as career airmen [11:p.1-2].

Air Force needs dictate the total number of airmen who are enlisted or re-enlisted each year and fluctuations occur each year due to budget constraints (11:p.1-2). Most of these fluctuations will be taken up by changes in the size of the first term force (11:p.3-2). This allows the Air

special restrictions placed on the promotion of NCOs who were formerly commissioned officers, etc. For a complete discussion of these and other anomalies to the standard promotion cycle, the reader is referred to AFR 39-29.

Force to meet its manpower constraints while maintaining a stable force of career airmen which would be the central core around which the Air Force could rapidly expand in the event of a major force buildup.

Promotion Policy

Promotion to E-3 and Below

When an individual enlists in the Air Force, he² is assigned the rank of E-1, Airman Basic, and enters basic training. Upon completion of basic training, some airmen are promoted to E-2, or even E-3. Promotion to E-2, E-3, and E-4/Senior Airman is on a "fully qualified" basis except for below-the-zone (BTZ) promotion to E-4 which is explained below (6:18). This means there is no limit on the number of airmen who may be promoted to these ranks. If an airman is recommended for promotion by his commander and is not ineligible for the promotion, or the promotion is not in a withhold status, he may be promoted. He may be promoted to E-2 after six months time in grade (TIG) as an E-1 or on the day following graduation from basic training. If his initial enlistment is for six years, he may be promoted to E-3 on completion of basic training. After an E-2 has served six months in grade, he is eligible

²Throughout this thesis the term "airman" and the pronoun "he" will be used as inclusive of both men and women. No disrespect whatsoever is intended toward the many fine women serving in the Air Force.

to be promoted to E-3. Thus (assuming no courts martial, unfavorable information files, etc.), anyone who completes basic training can expect to be an E-3 approximately within the year after enlistment.

Promotion to E-4

Promotion to E-4/Senior Airman is on a fully qualified basis but is not as automatic as promotion to E-2 and E-3. Promotions to E-2 and E-3 are on a monthly cycle and an individual is promoted as soon as he or she meets all requirements. Promotions to E-4 are made only when there are available vacancies. Thus, although the minimum TIG is eight months, with at least twelve months total active federal military service (TAFMS), promotions to E-4 may be delayed until approximately twenty-two months TIG. The required date of rank (DOR) as an E-3 to be promoted to E-4/Senior Airman in a given cycle is announced by Headquarters Air Force Military Personnel Center (HQ AFMPC). Airmen with a specified DOR (announced by AFMPC) are eligible to be considered for BTZ promotion. Unit commanders may nominate up to 10 percent of their eligible E-3 personnel for BTZ promotion. These nominees meet a base-level board headed by a colonel (O-6), or higher, and composed of E-6, or higher, members. This board ranks the nominees and a quota of the nominees are promoted.

Promotion to E-5 through E-7

Promotions to grades E-5 through E-7 are made on a "best qualified" basis. The means for determining who is best qualified is the Weighted Airman Promotion System (WAPS). WAPS is an attempt to make the promotion process as competitive and as free of personalities as possible. It is comprised of six factors worth a total of 460 points. The Specialty Knowledge Test (SKT) examines an airman's knowledge of his career field. The test is constantly changed through the addition and deletion of questions and is applicable to only one career field. It is worth 100 points. The Promotion Fitness Exam (PFE) is a much broader test that looks at many facets of military life. The depth of required knowledge changes with each increase in rank. To be promoted to E-5, a sergeant is only required to identify basic facts and terms about the Air Force Reenlistment and Retention Program while an E-6 being promoted to E-7 is expected to be able to evaluate situations dealing with the reenlistment program and select the best solution to problems in the area (5:pp.1-2,1-3). This test is worth 100 points. Time in Service (TIS) is worth a maximum of 40 points, computed as one-sixth point for each month of TAFMS. Time in Grade (TIG) is worth a maximum of 25 points. Medals vary in value: the Medal of Honor is worth 15 points; an Air Force Commandation Medal is worth 3; a Purple Heart is worth 1. Twenty-six decorations and medals count for

points. The Airman Performance Report (APR) is worth a maximum of 135 points. The APR is a rating form, written by the airman's supervisor, that attempts to identify individuals performing in a superior manner. The APRs of the last five years are used to compute the points (6:25). The maximum total score is 460 points.

To select who is to be promoted, AFMPC rank orders all personnel being considered for promotion by grade, AFSC, and WAPS score. "Airmen with the highest scores in each AFSC are selected to fill vacancies forecasted during the cycle, and are placed on a selection list [6:6]." Seniority is based upon DOR, TAFMS, and age; it would be possible for someone to have the highest WAPS score in a cycle but be the last to be promoted because of a very recent DOR in his current grade.

There are TIG and TIS requirements for each grade as shown in Table 3-1. Also, the individual is required to hold the appropriate skill level in his AFSC.

TABLE 3-1
TIG/TIS REQUIREMENTS (6:22)

To be Promoted to Grade:	Minimum Time in Current Grade is:	Minimum TAFMS:
E-5	6 months	3 years
E-6	18 months	5 years
E-7	24 months	8 years
E-8	24 months	11 years
E-9	24 months	14 years

Promotion to E-8 and E-9

For promotion to E-8 and E-9, the WAPS score is not used, although parts of the WAPS are used. TIG, APR, and Decorations are computed and scored as under WPAS; TIS drops to 25 possible points, one-twelfth point for each month of TAFSM. The PFE and SKT are dropped, and scores for the USAF Supervisory Examination (USAFSE) and for Professional Military Education (PME) are added. The maximum possible score for the USAFE is 100. The PME maximum is 35 points computed by adding 20 points for completing the Senior NCO Academy and 15 points for the Command NCO Academy. In addition, a central evaluation board, located at HQ AFMPC, reviews the record of each individual being considered for promotion. This board, composed of two colonels and one E-9, looks at one AFSC at a time. The purpose of this board is to look at each individual and to promote those who best fit the "whole-person" concept (6:4). Each board member reviews each promotion folder and subjectively awards up to 450 points.

Because these evaluations are subjective and have no weights associated with specific factors, a precise determination of how a particular board's score is decided is not possible [6:5].

These subjectively derived scores are added to the objective scores discussed above and the results are rank ordered. A quota of each AFSC is promoted. The quota is derived from the number of vacancies available during the

promotion cycle. The number of authorized E-8s in the Air Force is 2 percent of the total authorized enlisted force while 1 percent of the total force is authorized in grade E-9. Because the quota is given as a percentage (10 percent of all eligible E-7s may be promoted), some career fields may promote more people. However, any eligible individual, in any career field, will have a 10 percent chance of being promoted.

TOPCAP attempts to keep promotion channels open by setting a maximum number of years TAFMS an airman can serve in any rank. This minimizes the effect of someone who is promoted to a rank (say E-5) and then never gets promoted to E-6. As long as he is in the Air Force, he is using an authorized position in the total force and prevents the Air Force from promoting a younger airman who might be of more future value to the force. The maximum number of years TAFMS an airman may have in a grade is shown in Table 3-2, and the promotion probabilities with respect to TOPCAP guarantees is shown in Table 3-3. By inspection, it would appear that TOPCAP guarantees that the Air Force will promote to E-6 90 percent of the people who are E-5s. This is incorrect. What the 90 percent figure means is the 90 percent of a given year group will, if they stay in the Air Force until the maximum years TAFMS, be promoted to E-6 or higher. For example, suppose 60,000 airmen enlisted in 1960, and 20,000 were promoted to E-5.

TABLE 3-2
 MAXIMUM ALLOWABLE TAFMS (11:p.3-4)

Grade	Maximum Years TAFMS
E-3	4
E-4	8
E-5	20
E-6	23
E-7	26
E-8	28
E-9	30

TABLE 3-3
 AIR FORCE PROMOTION PROBABILITIES (11:p.3-2)

To Grade	Number in Beginning Year Group of Zone	Number in Ending Year Group of Zone	Number in Higher Grades at End of Zones	% of Year Group at End of Zone in Higher Grades
E-5	55,377	10,288	9,277	90
E-6	12,458	5,510	4,977	90
E-7	9,825	1,981	1,665	84
E-8	7,178	874	656	75
E-9	6,134	475	285	60

(The 40,000 not promoted were those who left the Air Force prior to being promoted.) This 20,000 includes all those who were promoted as soon as they were eligible as well as those who were promoted at the last opportunity. Over time, this pool of E-5s who enlisted in 1960 is reduced. Many are promoted; some are killed in accidents or wars; some accept favorable employment opportunities in the civilian job market; some see that they are not in a good position to be promoted and leave the Air Force prior to having this assessment verified. At the end of twenty years TAFMS, a count is made of all the people in the Air Force who enlisted in 1960 and are in the rank of E-5 or higher. This number becomes the denominator. The numerator is the number of people who are E-6 or higher. If 6000 people are still in service, and 5400 of them are E-6 or higher, the promotion rate to E-6 or higher for year group 1960 was 90 percent, even though only 9 percent of the people who enlisted in 1960 were ever promoted to E-6 or higher.

Enlisted Grade Distribution

The percentage of the enlisted force serving in each grade is shown in Table 3-4. Inspection of this table shows that the distribution of grades has been fairly constant and stable since 1975 for all grades, especially E-7, E-8 and E-9. Because the average enlisted man attains the grade of E-4 during his first enlistment (see Table 3-5),

TABLE 3-4

AIR FORCE ENLISTED GRADE DISTRIBUTION (38:44)

Fiscal Year	E-9	E-8	E-7	E-6	E-5	E-4	E-1 E-3
1964	.82	1.5	4.5	9.4	20.5	22.8	40.5
1972	.99	2.0	7.3	13.5	23.0	26.4	40.5
1975	.99	2.0	7.0	12.4	20.7	24.3	32.5
1976	.99	2.0	7.0	12.1	19.9	24.7	33.3
1977	1.0	2.0	7.2	11.3	21.0	23.5	34.0

it can be seen that 57-58 percent of the force is serving an initial commitment.

TIS at Promotion

The average TIS (1977 data) to attain a given rank in the Air Force is shown in Table 3-5. Also shown is the planned TIS for promotion. The two numbers do not agree past the grade of E-4. Although it is very difficult to say that this is caused by any one factor, certainly one large contributing factor must be the reduction in the size of the Air Force since the early 1970s. A reduction such as that makes it more difficult to achieve higher rank because a reduction in force is more easily accomplished by decreasing acquisitions than by forcing out people in higher ranks.

Air Force Specialty Code

The Air Force is a huge organization with literally thousands of possible jobs. To provide some manageability,

TABLE 3-5

AIR FORCE AVERAGE TIS AT PROMOTION (38:31)

Grade	Actual	Planned
E-9	24.1	21.5
E-8	21.9	19.3
E-7	17.5	14.9
E-6	13.6	9.6
E-5	5.3	4.3
E-4	2.5	2.5

these jobs are grouped into fields of related jobs. These fields are known as Air Force Specialties. Each job is given a separate, distinct number to identify it. This number is an Air Force Specialty Code (AFSC).

The Air Force Specialty is the basic device used to identify occupations. The classification system provides a common language for identifying job requirements and individual qualifications, in terms of knowledge, education, experience, and training needed to perform these duties [10:p.4-5].

When an Air Force member is trained to do a particular job he is awarded the AFSC corresponding to that job. As he gains skill and experience in his job he may be able to expand his area of competence to include related jobs. By the time he is a manager in his field his skills have expanded to encompass several jobs in his area of expertise. This is the concept of AFSC and the career field subdivisions. An in-depth look at one career field will illustrate the concept.

According to TOPCAP, the jobs identified as Avionic Communications Specialist, Avionic Navigation Systems Specialist, Airborne Warning and Control (AWAC) Radar-Specialist, Electronic Warfare Systems Specialist, and Avionic Inertial/Radio Navigation System Specialist, are all closely enough related to be grouped into one field. Such a field is known as a Career Progression Group (CPG) (11:p.C-10). This particular CPG is assigned the three-digit number 328 and each job within it is assigned an identifying number. The Avionic Navigation Systems Specialist, for example, is identified as 328X1. The "X" refers to the skill level of the specialist and it changes as the specialist increases his knowledge. An Avionics Communication Specialist, for another example, has an AFSC of 328X0. The other jobs in the CPG have similar AFSCs with differentiation established with the final digit. Occasionally, however, there is a need to differentiate "sub-specialties" and this is done with an alphabetical suffix. An AWAC Radar Specialist who works on EC-121 aircraft has an AFSC of 328X2A while an AWAC Radar Specialist who works on E-3 aircraft has an AFSC of 328X2B.

The "X" in these AFSCs refers to skill level.

There are five possible skill levels a specialist can hold:

1. Helper
3. Semiskilled (Apprentice)
5. Skilled (Journeyman)
7. Advanced (Technician)
9. Superintendent [11:p.1-2]

Initially, a newly enlisted airman is considered at the 1-level. After he has completed technical training he is awarded a 3-level AFSC. At this time a new specialist begins to undergo a training program known as On-The-Job-Training (OJT). During this period he studies formal course materials, learns by watching his supervisors, and studies for his SKT. The SKT is important because there is a direct link between skill level and rank. AFR 39-29, Table 5, page 22, shows that one of the prerequisites to being promoted to E-4 is a 5-skill level. Once the specialist has been awarded a 5-level AFSC, he can be promoted as high as E-5 (assuming that all other factors permit promotion) but that is as high in grade as he can go with only a 5-level AFSC. To be promoted to E-5 or E-7 he must have a 7-level AFSC. To be promoted to E-8 or E-9 he will need a 9-level AFSC. During these years the specialist continues to expand his area of expertise to learn more about the related AFSCs. The specialist in the 328X2A field has gone from 32832A, Apprentice AWAC Radar Specialist (EC-121) to 32852A, AWAC Radar Specialist (EC-121) to 32872A, AWAC Radar Technician (EC-121). But, when he is awarded a 9-level AFSC, the AFSC he is awarded is 32894, Avionics Communications Navigation Systems Superintendent. He is expected to be able to supervise anyone working in the 328 CPG.

Tier Structure

The Air Force enlisted force is divided by rank into three tiers. While these tiers are not directly reflected in promotions or pay (in the sense that an enlisted man gets more prestige or privileges because he is in the second tier instead of the first), they are indicative of the changing skills of the individual and the changing emphasis in his duties. There are five basic levels of capabilities that comprise these three tiers. The lowest level is Trainee. This is someone who has little or no training in his field and is not capable of performing more than simple tasks in his assigned AFSC without close supervision. As an Apprentice, he can do more tasks by himself. Most of the technical work in the Air Force is done by those at the Technician level, the third level of capability. Above the Technician level is the Supervisor level, comprised of sergeants rather than airmen. Supervisors provide general military and technical supervision to personnel under their supervision (3:p.1-1). The highest level is Manager; a sergeant at this level would be expected to effectively manage the people and material assigned to their control. Figure 3-1 shows the relationship among grade, capability, and the tier structure.

The lowest tier is the Trainee-Apprentice Tier, composed of grades E-1 through E-4. The primary duty of personnel in these grades is to learn. These ranks are

<u>Supervisor-Manager Tier</u>			
E-7 Manager	E-8 Manager		E-9 Manager
Supervisor	Supervisor		Supervisor
<u>Technician-Supervisor Tier</u>			
E-4 Supervisor	E-5 Supervisor		E-6 Supervisor
Technician	Technician		Technician
<u>Trainee-Apprentice Tier</u>			
E-1	E-2 Apprentice	E-3 Apprentice	E-4 Technician
Trainee	Trainee	Trainee	Apprentice
			Trainee

Fig. 3-1. USAF Tier Structure (3:p.1-1)

the lowest in the Air Force and most of the personnel in these ranks are first-term enlistees. They have to learn not only about their job in their selected career field, but also about the Air Force and its customs. As an E-1, an airman is considered to be a trainee; when he advances to E-2, he is considered to be mostly a trainee and somewhat of an apprentice. An E-3 is still considered a trainee in some respects, but as more of an apprentice in his field. By the time he reaches the rank of E-4, he may be considered to be part trainee, part apprentice, and part technician, able to do work without immediate guidance and supervision.

The second tier is the Technician-Supervisor Tier. This tier contains the three lowest-ranking Sergeants, E-4/Sergeant, E-5, and E-6. As shown in Figure 3-1, an E-4 entering this tier is primarily a technician, while an E-6 is primarily a supervisor. While most of the technical work is done by people in this tier, much of the supervision and training is also done by people in this tier.

The Supervisor-Manager Tier is the highest level in the Air Force's three-tier structure. Personnel in this tier hold the rank of E-7, E-8, or E-9, and their duties are centered around supervision and management.

Summary

The Air Force promotion system attempts to provide an equitable chance for promotion for all of its enlisted personnel while it maintains a high-quality force. The use of the interaction between the rank structure and the skill level insures that individuals who are promoted have the necessary combination of skill and experience required to make an effective and efficient enlisted force.

CHAPTER IV

NAVY ENLISTED CAREER PROGRESSION SYSTEM

Introduction

Today's Navy has a bigger and more important job than ever before: the job of carrying out national policies expressed by Congress and directed by the President. Supporting our forces and our allies wherever they may be. Protecting the rights of ships to move about freely on the oceans. And providing a first line of defense in protecting our country against aggressors [16:4].

The enlisted force of the U.S. Navy plays an important part in supporting the objectives stated above. This chapter covers three aspects of the Naval enlisted career progression system: the rank structure, promotional policies, and the skill structure.

Grade Structure

Navy enlisted force rank structure and insignia are shown in Appendix A. Ranks below E-4 are addressed as seamen and are below NCO rank. Appendix A shows a pair of crossed anchors as part of the insignia for petty officers. This is correct only for a petty officer who is a Boatswain's Mate. The symbol beneath the eagle is an indicator of the career field in which the petty officer has specialized, and the crossed anchors are used for illustration purposes only.

Bureau of Personnel Instruction (BUPERSINST)

1430.16A contains the Navy's promotion regulations but it does not set forth a master plan that defines or describes the ideal Navy enlisted force.

Promotion Policy (15)

Promotion to E-1, E-2, and E-3

Most enlistees attend Navy basic training in the rank of E-1. In some cases an individual is assigned the rank of E-2 or even E-3 immediately upon enlistment. This occurs most commonly in the case of someone who has enlisted for a long term and is going into a technical field such as nuclear energy. Another program that allows enlistment at a higher rank is the Sea Cadet program. A Sea Cadet is (usually) a high school-age person who is able to attend a technical training course prior to enlisting. In all cases, while in basic training, enlistees are paid as if they were in grade E-1 and no special treatment is given the person who enlisted as an E-2. Upon graduation from basic training, seamen who enlisted at the higher ranks wear the appropriate insignia and receive the corresponding pay. Most graduates of basic training are assigned to their first duty station as E-1 although the individual who graduates at the head of his basic training class is promoted to E-2. The minimum time in grade (TIG) as E-1 for people not promoted immediately after completion of basic training

is six months. Minimum TIG to be promoted from E-2 to E-3 is also six months. In addition to the minimum TIG for promotion, individuals must be recommended for promotion by their commanding officer and must pass a professional competence examination. This test contains 150 questions and is centrally generated (by the Naval Examination Center) and scored by the unit. Promotion to E-2 and E-3 is on a "fully qualified" basis (25).

Promotion to E-4, E-5, and E-6

Promotions to E-4 through E-6 are made on a "best-qualified" basis with "best-qualified" being determined by a six-factor weighted scale. The total number of points available, and the weighting for the various factors, changes for promotion to E-6. The first of the six factors in the Final Multiple Score (FMS) is the Standard Score (SS).

The SS is worth a total of 80 points for all personnel being promoted to any rank above E-3, but the percentage of the FMS varies between grades. For promotion to E-4 and E-5, the SS is worth 35 percent of the 230 total possible points; to E-6, it is worth 30 percent of the maximum 264 points. The standard score is computed from a test each individual takes that is specialized for each career specialty. The test is worth 150 points and covers both broad, general questions concerning everything about

being in the military and highly specific questions that deal with only one field. Thus, a postal clerk would take one test and an electronic technician would take another. In order to compare the two scores, they are converted to a standard of 80 points in the following manner. Assume that 100 E-3s take the test, with the highest score achieved by anyone as 127. The lowest achieved score was 60. The highest score would be converted to a score of 80, the lowest to 20, and all other scores would be ranked appropriately between these two values. The minimum passing score is determined by a promotion board for the rank concerned.

The use of this standardized score allows comparisons between career fields that are inherently different in difficulty. If only raw scores are compared, then the disbursing clerk who scored 130 would appear to be much more promotable than the electronics technician who scored 107. A standardized score might show, however, that the disbursing clerk scored 65 while the electronic technician scored 73. Thus, the electronic technician would have more points for promotion than would the clerk.

The second factor in the FMS is the performance factor. It is worth 70 points (30 percent) for promotion to E-4/E-5 and 92 points (35 percent) for promotion to E-6. The performance factor is based upon a rating form the individual's commander completes. This rating is very similar to the Airman Performance Rating used by the Air Force.

Length of Service (LOS) is the third factor in the FMS. The Navy promotion system does not require a minimum number of years of service to be promoted. There is no "lock-out" of promotions because the individual has not been in the service long enough. However, because of the manner in which the points are computed, there is advantage to longer service. This effectively penalizes the individual who makes rank very quickly. The points and percentage of FMS, 30 and 13 percent respectively, are the same for promotion to E-4 and E-5, while 34 points and 13 percent are used for promotion to E-6. They are computed by subtracting the time spent in a pay grade (Service in Pay Grade, SIPG) from the Total Active Service (TAS) and then adding 15 points for promotion to E-4 and E-5 and 19 points for promotion to E-6. Assume that two individuals are computing their LOS points and one has been in service for a total of six years (LOS=6) with one year in rank as an E-5 (SIPG=1). The second individual has been in service for twelve years (LOS=12) with one year in rank as an E-5 (SIPG=1). The first person would have a total of 24 points ($6-1 + 19 = 24$), while the second would have a total of 30 points ($12-1 + 19 = 30$). Thus, the second individual would hold an advantage over the first by a total of 6 points (all other things equal). This advantage would continue until the maximum point total of 34; after the second individual reaches this point, the first individual

will continue to increase his points until he, too, has 34 points.³

The next factor in the FMS is the points awarded for Service in Pay Grade (SIPG). This is computed as $2 \times \text{SIPG} + 15$ for promotion to E-4 and E-5 and $2 \times \text{SIPG} + 19$ for promotion to E-6. For promotion to E-4 and E-5, the maximum number of points is 30, 13 percent of the FMS. The maximum number of points for promotion to E-6 is 34, 13 percent of the FMS.

The fifth component of the FMS is points for Awards. The value of the award determines the number of points; the maximum number of points is 10 for promotion to E-4/E-5 and 12 for promotion to E-6. Both of these are 4.5 percent of the FMS.

The final factor of the FMS is worth 4.5 percent of the total; 10 points for promotion to E-4 and E-5 and 12 for promotion to E-6. This factor is the PNA points. "PNA" refers to the standard score test and stands for "Passed but Not Advanced." It is possible for someone to score above the cutoff point and therefore pass the test but not have enough overall FMS points to be promoted.

³It might appear that this is an unfair penalty placed upon the individual who makes rank quickly; it is not. Any military service needs a strong core of experienced, mature NCOs to operate efficiently. This method of computing promotion points allows for the development of this experience and maturity while permitting the truly superior individual to score high in other areas and advance in rank.

The Navy awards .5 points for each test cycle in which this occurs. The maximum points and percentages are the same as for the Awards factor.

To be eligible for promotion to any rank, time in grade restriction must be met by the person seeking promotion. For promotion to E-4, the minimum time in grade as E-3 is nine months; for promotion to E-5, twelve months as an E-4; for promotion to E-6, twenty-four months as E-5.

Increasing rank implies increasing skill and knowledge. The Navy promotion system accomplishes this through a skill test. No one can be promoted until he has passed the test appropriate to the increased rank. This is the Standard Score (SS) and will be discussed more fully later.

After all the points in the FMS have been computed, the scores of all those eligible for promotion are rank ordered. The number to be promoted is determined by the number of openings in that career field. If an individual is in a career field such as electronic technician or a field in which he works with nuclear reactors, he is more likely to be promoted than if he were in a field such as postal clerk which is overmanned and very slow moving at the higher ranks (25). It is conceivable that the Navy could have 125 postal clerks eligible for promotion but only five slots available in that field while it had only 100 electronic technicians eligible for promotion and 105 openings. The five openings in the electronic technician

field could not be allocated to the postal clerks. The probability of not having enough promotable people is small but this example shows the possibility of a blocked career field. It is possible for someone in a blocked field to transfer into another specialty and this is discussed later.

Promotion to E-7, E-8, and E-9

For promotion to the E-7, E-8, and E-9 ranks, the FMS is not used as it was for promotion to the lower grades. Only two factors are considered, the SS and the performance factor. As always, the SS is worth 80 points and the performance factor increases in importance with each promotion. For promotion to E-7, the SS is worth 60 percent and the performance factor is worth 52 points (40 percent) for a total of 132 possible points. For promotion to E-8, the SS is 50 percent and the performance factor is worth 80 points and 50 percent for a total of 160 points. For promotion to E-9, the SS is worth 40 percent and the performance factor is worth 120 points (60 percent) for a total of 200 possible points. In addition, an individual must be recommended for promotion by his commander. While passing the SS test and accumulating a high FMS was both necessary and sufficient to be promoted to E-4, E-5, or E-6, it is necessary but not sufficient to be promoted to E-7 or higher. Personnel being considered

for promotion to the higher ranks have their records reviewed by a central selection board. The board attempts to promote based upon the "whole-person" concept. Thus, knowledge in his chosen field is not enough to get a man promoted; he must demonstrate leadership, both actual and potential. These boards must be extremely discriminating at times. The previous example of 125 eligible people being considered for five openings was not fictitious, although the field was recruiting, not postal clerks (39).

Enlisted Grade Distribution

Enlisted force grade distribution for the Navy is shown in Table 4-1. From 1964 to 1972 there was a fairly large shift in the distribution when the percentage of E-1 through E-3 dropped 9 percentage points and the higher ranks increased their percentage accordingly. Since 1972, however, the distribution has remained relatively constant.

TABLE 4-1

NAVY ENLISTED GRADE DISTRIBUTION (38:44)

Fiscal Year	E-9	E-8	E-7	E-6	E-5	E-4	E-1 E-3
1964	.5	1.3	6.5	11.7	15.1	19.1	45.8
1972	.62	1.7	7.2	14.3	17.4	21.8	37.0
1975	.80	1.8	6.8	14.2	17.6	20.6	38.2
1976	.72	1.7	6.8	14.3	17.5	20.1	38.9
1977	.79	1.8	6.8	14.3	17.9	20.0	38.3

TIS at Promotion

Planned and actual TIS (1977 data) at promotion for the Navy is shown in Table 4-2. Although there are some differences, the Navy appears to be promoting its people at the time it feels to be most appropriate. This is very interesting, considering that the Navy does not have any minimum time in service requirements.

TABLE 4-2
NAVY AVERAGE TIS AT PROMOTION (38:31)

Grade	Actual	Planned
E-9	18.5	19.4
E-8	17.2	17.0
E-7	13.7	13.9
E-6	8.9	7.7
E-5	4.3	3.4
E-4	2.0	1.9

Blocked Field

The Navy promotes people to higher rank in a given field only when there is an opening in that rank in that field. If a field (for example, postal clerk) is authorized a total of 200 E-6s, has 200 E-6s, and no E-6s are advanced or removed from the service, then no one in the field may be promoted from E-5 to E-6. Even if every other field in the Navy has the ability to promote people from E-5 to E-6 that field is frozen. This situation can

occur if the field is over-manned for some reason. If an enlisted man is in a blocked field he may try to transfer from that field to one with promotion potential. He does this by taking and passing the skill test in the new field for his current rank and by obtaining permission from the Bureau of Personnel. He may then take the test for and be promoted to E-6. He may not go from being an E-5 in one field to being an E-6 in another (25). Transferring between fields is normally migration to highly technical fields or to fields with a critical need for personnel.

Skill Progression

Career specialties in the Navy are divided into six major fields as shown in Appendix B. When a person enters the Navy, he is normally guaranteed a specific occupational specialty. He enlists as a recruit in the field that contains the specialty he is going to enter. Thus, if a man has been guaranteed schooling to become an electronics technician, he will enlist in the Navy as a Seaman Recruit. Someone who is going to become a steelworker would enlist as a Constructionman Recruit. The only difference in insignia among people below the grade of E-4 in the various major fields is the color of their stripe(s). For a Seaman, Hospitalman, or Dentalman, the stripes are white; for a Constructionman, they are blue. The stripes of an Aviationman are green, and those of a Fireman are

red. All insignia for grades at or above E-4 are white (39).

After recruit training most enlisted persons attend a technical training school known as a Class "A" Technical School. Here they learn the basics of the specialty they have chosen. When graduates of the Technical School are assigned to the Fleet they are assigned to the major group that contains their specialty. For example, if a person has completed training as an electronics technician, he would be assigned to the electronics and precision instrument group. While he is an E-2 or E-3 he could expect to spend most of his time working in his field. He could, however, also expect to receive OJT in the other specialties of the electronics and precision instrument group (See Appendix B). This allows him to receive a broad background in fields closely related to his own.

As an E-3 a man is not considered to have chosen his primary field, even if he has been to a technical school for a given subject. It is at this time, then, that an E-3 decides which career specialty or "rating" he is going to enter. Choosing a field as an E-3 is known as "striking for a rating" and a man who has already selected the rating he is going to try for is known as a "striker." This can be a critical step in an enlisted man's career because the rating he chooses to try for can have a great effect on his chances for promotion later. Because of the

critical nature of his choice, a man must meet a counseling board before he can make his choice of ratings. This board, known as the "Striker Screening Board," is a local board and consists of such people as the Master Chief of the Command, usually an E-8 or E-9; the career counselor of the ship; the Educational Services Officer of the ship; the Department Head of the field concerned (the man for whom the striker will work); a senior member of the rating being considered; and the ship's Executive Officer (25). This board advises the man of both the advantages and disadvantages of the field and if the man possesses the required qualifications approves his entry into the field.

As a striker, a man completes additional OJT and correspondence courses in his chosen rating. After he completes these courses he takes a comprehensive test covering his field. It is this test that is reduced to a standard score (SS) and is used for promotion purposes.

After being promoted to E-4 an enlisted man's insignia of rank shows what rating he holds by means of a symbol between the top chevron and the eagle (see Appendix A). For example, a Boatswain's Mate has a pair of crossed anchors, a Hospital Corpsman has a caduceus, an Equipment Operator has a profile of a bulldozer, etc. Thus it is possible to tell at a glance what a man's

specialty is (if one can remember what each of 71 different symbols mean).

Each rating may be broken down into various sub-specialties. To identify them, each specialty is assigned a specific number known as a Navy Enlisted Classification code (NEC). For example, a Yeoman (an administrative specialist) might have an NEC of 2525 which identifies him as a legal specialist, while an NEC of 2516 is given to a chaplain's assistant specialist (25). The NEC does not indicate skill level and/or proficiency. It only indicates the area of specialization.

Skill Levels

Skill level in a rating is indicated by rank. To be promoted to a given rank, a man must pass the test associated with the advanced rank. This test centers around technical information related to the field being examined. Thus a yeoman being tested for promotion to E-6 would take a different test than a mineman being tested for promotion to E-6 but the depth of skill and technical competence tested in each field would be the same. At lower ranks, the test centers around technical matters but by the time that a man is testing for E-8 or E-9 the coverage of the test has spread to include items necessary for managers and supervisors.

Summary

The promotion system of the Navy allows a qualified, enthusiastic enlistee to advance almost as rapidly as he can prove he can handle the advanced responsibility. It is possible to determine both a man's career specialty and his technical competence in the specialty by a glance at his insignia. The major problem associated with advancement appears to be the possibility of being in a career field that is blocked. This can, however, be sidestepped somewhat by a lateral transfer into a field that needs people.

CHAPTER V

ARMY ENLISTED CAREER PROGRESSION SYSTEM

Introduction

It is the intent of Congress to provide an Army that is capable, in conjunction with the other armed forces, of-

(1) Preserving the peace and security, and providing for the defense, of the United States, the Territories, Commonwealths, and possessions, and any areas occupied by the United States;

(2) Supporting the national policies [36:1].

A primary player in the attainment of the objectives stated above is the enlisted force of the United States Army. This chapter discusses three aspects of the career progression system for the Army's enlisted force. First, the rank structure is examined. Next, the various details of the skill structure are scrutinized to include the relationship of skill level to grade. Finally, the Army's enlisted promotion system is reviewed.

Grade Structure

The enlisted rank structure of the Army is divided into three basic categories: senior noncommissioned officers, junior noncommissioned officers and specialists, and privates. Table 5-1 illustrates the rank structure of the Army by grade of rank, pay grade, and title of address.

TABLE 5-1

ARMY ENLISTED RANK STRUCTURE (12:p.1-4)

Senior Noncommissioned Officers

<u>Grade of Rank</u>	<u>Pay Grade</u>	<u>Title of Address</u>
Sergeant Major of the Army	E-9	Sergeant Major
Command Sergeant Major	E-9	Sergeant Major
Sergeant Major	E-9	Sergeant Major
First Sergeant	E-8	First Sergeant
Master Sergeant	E-8	Sergeant
Platoon Sergeant and Sergeant First Class	E-7	Sergeant

Junior Noncommissioned Officers and Specialists

<u>Grade of Rank</u>	<u>Pay Grade</u>	<u>Title of Address</u>
Staff Sergeant	E-6	Sergeant
Specialist Six	E-6	Specialist
Sergeant	E-5	Sergeant
Specialist Five	E-5	Specialist
Corporal	E-4	Corporal
Specialist Four	E-4	Specialist

Privates

<u>Grade of Rank</u>	<u>Pay Grade</u>	<u>Title of Address</u>
Private First Class	E-3	Private
Private	E-2	Private
Private	E-1	Private

However, it should be noted that all enlisted persons are often referred to as "soldier" without regard to grade of rank.

Table 5-1 illustrates the dual-track rank structure of the Army. The two tracks are often referred to as the "hard stripes" track and the "soft stripes" track (18:26). The "soft stripes" track includes the ranks of specialist four, five, six. The "hard stripes" track includes all other ranks. For a pictorial view of the two tracks as well as the insignia for each grade, see Appendix A.

The basic enlisted grade in the Army is private. A private may serve in any one of three pay grades (E-1, E-2, E-3). The private is considered the basic manpower strength of the Army. Privates do not normally exercise command; however, under emergency conditions the chain of command can migrate to a private.

The dual-rank structure of the Army does not begin until a soldier reaches the grade of E-4. At this point, a soldier may find himself in the "hard rank" track or in the specialist track. According to Army policy (12:p.4-2, 4-3) a specialist is a selected enlisted person who has been appointed for the purpose of discharging duties that require a high degree of special skill. Specialists, by virtue of their technical skill, are often called upon to exercise leadership with respect to matters related to

their specialty. However, their duties do not normally require the exercise of enlisted command of troops. Leadership proficiency is not a primary prerequisite for promotion to or within the specialist grades. Although a specialist is granted the same type of privileges as an NCO of the same pay grade, it should be emphasized that a specialist is not, in fact, an NCO. Specialists rank immediately below NCOs of identical pay grades and above NCOs of the next lower pay grade. The main difference between the "hard stripe" track and the specialist track is that a soldier in the hard track is in command of men while the specialist is not. It was our impression, from the numerous interviews of Army enlisted personnel in our research, that it was not desirable to remain in the specialist grades any longer than possible because any specialist past specialist four was considered a "nonleader." Army policy, in fact, seems to support this view.

Specialists who show leadership potential should be encouraged to advance toward noncommissioned officer skills in appropriate military occupational specialty by undergoing on-the-job training [12:p.4-3].

Anyone competing for promotion would hardly wish to be viewed as lacking in leadership potential! Although it still exists, the specialist track appears to be on the way out. In 1972, the Army eliminated the grade of specialist seven. Our interviews with Army officers and enlisted personnel indicate they believe the Army may be considering the elimination of the dual-track system.

At the present time, most soldiers reaching E-4 assume the rank of specialist four. A few soldiers follow the "hard" track and become corporals. A corporal has a leadership position and is usually an assistant squad leader or, in some cases, a squad leader.

The next grade in the Army structure is that of E-5. An E-5 can serve as either a sergeant or a specialist five. However, Army standard grades of authorization reveal that most soldiers leave the specialist track at E-5. Exceptions are the finance, personnel, and medical career fields. A sergeant, unlike a corporal, can be in either a command or administrative position. If a sergeant has a command position he would probably be a squad leader (18). Most E-5s promoted to E-6 become staff sergeants versus specialist six. Once again, a staff sergeant can hold a command or noncommand job. The only Army career field still using the specialist six grade is the Medical Corps (13:p.4-12). All Army personnel promoted to E-7 assume the rank of sergeant first class. An E-7 serving in a command position holds the position title of platoon sergeant while an E-7 in an administrative or technical position is simply a sergeant first class.

A few soldiers promoted to E-8 assume the rank of first sergeant. A first sergeant is in direct and daily contact with large numbers of enlisted personnel and serves as the senior command NCO at the company, battery,

or troop level. An E-8 in a noncommand position holds the rank of master sergeant. Although the rank of master sergeant in Appendix A lies in the same row as the specialist grades, it is not considered a "soft stripe" rank.

The grade of E-9 contains three different ranks: sergeant major, command sergeant major, and sergeant major of the Army. Any E-9 in a noncommand position is a sergeant major. The rank of command sergeant major is basically a position rank, designating the senior NCO of the command at a battalion or higher level.

He/She executes established policies and standards pertaining to the performance, training, appearance, and conduct of enlisted personnel. The command sergeant major provides advice and initiates recommendations to the commander and staff in matters pertaining to enlisted personnel [12:p.4-1].

The sergeant major of the Army is the senior sergeant major (E-9) grade of rank and designates the senior enlisted position in the Army. The E-9 occupying this position serves as the Senior Enlisted Advisor and consultant to the Army Chief of Staff on problems and issues affecting Army enlisted personnel (12:p.4-2).

The enlisted grade distribution as a percentage of total enlisted strength is illustrated in Table 5-2.

Although the percentage has been declining since 1964, the private still constitutes the bulk of the Army enlisted force. However, one can see the E-4 grade running a close second. The top six grades have been experiencing a constant grade creep from the private ranks since 1964.

TABLE 5-2

ARMY ENLISTED GRADE DISTRIBUTION (38:44)

Fiscal Year	E-9	E-8	E-7	E-6	E-5	E-4	E-1 E-3
1964	.42	1.4	4.3	9.7	16.5	17.4	50.3
1972	.60	2.0	7.6	12.5	17.5	28.2	31.3
1975	.55	1.9	6.7	10.7	16.0	24.6	39.6
1976	.54	1.8	6.7	10.5	16.2	24.5	39.7
1977	.54	1.9	6.7	10.4	16.7	25.3	38.6

Table 5-3 identifies the needs of today's Army by grade versus the actual and approved levels. According to the Army personnel plan, fewer privates are needed than are approved. Table 5-3 indicates that the Army would like to trade some private authorizations for E-4, E-5, and E-6 authorization with a possible motive being personnel retention.

TABLE 5-3

COMPARISON BETWEEN ARMY REQUIREMENTS--OSD APPROVED LEVELS AND ACTUAL LEVELS (1977) (38:25)

Pay Grade	Army Required	OSD Approved	Actual
E-9	.51	.55	.54
E-8	2.08	1.90	1.90
E-7	6.79	6.70	6.70
E-6	11.42	10.43	10.40
E-5	19.20	16.91	16.70
E-4	30.13	25.66	25.3
E-3/E-1	29.87	37.85	38.6

Career Progression Skill Structure

To understand the skill level structure of the Army one must understand a little about the Army Job Classification system in general. The main elements of the classification system are the career management field (CMF) structure and the military occupational specialty (MOS) structure.

Career Management Field Structure

CMFs are groupings of occupational specialties that can be managed in terms of common activities. A complete listing of Army CMFs is at Appendix C. There are a total of 30 career management fields, 60 subfields, and 348 occupational specialties in the CMF structure. For example, the aviation maintenance CMF carries an identifying code of 67. The field is broken into two subfields: aircraft maintenance and component repair with subfield codes of 671 and 672 respectively. The subfields are further broken into occupational specialties (similar to the USAF specialty code). The aviation maintenance CMF has seventeen different MOSs to which an individual could be assigned.

The CMF structure provides a progression pattern from the time a soldier leaves basic until retirement at grade E-9. An example of the career progression pattern for aviation maintenance is at Appendix D. Each occupational specialty in a given CMF is so related that a soldier

serving in any one specialty should have the potential ability and aptitude to function in any other specialty in that group.

Military Occupational
Specialty Structure

The MOS is a term used to identify the skills required by a group of duty positions which are so closely related that an individual qualified to perform in one of these positions can, with adequate on-the-job training, perform satisfactorily in any of the others that are of the same level of complexity or difficulty [13:p.1-2].

The MOS is considered a broad occupational categorization and identifies the type of skill without regard to the level of skill. For example, MOS 67G identifies an airplane repairer but does not identify the proficiency of the repairer.

The MOS code, commonly termed an MOSC, is similar to the Air Force specialty code (AFSC). The MOSC identifies an occupation by both type and level of skill, level of proficiency, and/or scope of responsibility. As a key occupational identifier, the MOSC is used to:

- (1) Classify enlisted positions in authorization documents
- (2) Identify levels of skill
- (3) Serve as an objective for MOS training
- (4) Provide guidance for enlisted career progression
- (5) Serve as an objective for enlisted evaluation test design and administration
- (6) Support other occupational identification requirements [13:p.1-2]

MOS Code

Each enlisted MOSC has five basic characters with an option for the use of four additional characters when further occupational breakout is required. The basic elements common to every MOSC are depicted in Figure 5-1.

First Character	Second Character	Third Character	Fourth Character	Fifth Character
MILITARY SPECIALTY			Skill Level	Special Qualification

Fig. 5-1. MOSC Elements (13:p.1-4)

An explanation of the MOSC is as follows (13:p.1-4):

1. First three characters. These characters are comprised of two numbers and one letter and identify the occupational specialty of the soldier. For example, a 67G annotation identifies a soldier working as an "airplane repairer," while a code of 67N identifies a "utility helicopter repairer."

2. Fourth character. This is a number which identifies a soldier's level of skill. There are five levels of skill identified by the numbers 1 through 5. An individual with a "3" in this position would be categorized as a "three level," a soldier with a "4" as a four level, and so on. A more detailed explanation of skill levels is given in the next several paragraphs.

3. Fifth character. This character identifies special Army qualifications such as special forces (code S), parachutist (code P), drill sergeant (code X), etc. If a soldier does not possess a special qualification, a letter "O" is used in the fifth position.

4. Sixth and seventh characters. These are letters used to identify languages in which the soldier is proficient. For example, MOSC 11B4PFR would identify a soldier who is in the infantry, paratrooper qualified, and a French linguist.

5. Eighth and ninth characters. The last two characters of the MOSC are an additional skill identifier (ASI). These characters identify skills acquired in functional training in maintenance and/or operation of weapons systems. For example, an attack helicopter repairer would carry a code of A2 in these columns. There are over 100 ASIs specified in AR 611-201.

Determination/Award of Skill Level

The particular skill level to be awarded a soldier depends upon whether the award is to be made to the soldier's primary MOS (PMOS), the secondary MOS (SMOS), or the career progression MOS (CPMOS). The PMOS is the specialty in which the soldier is currently serving while the SMOS is simply a career field in which the soldier is qualified but is not performing at the present time. The SMOS is

simply a way of identifying additional specialties in which a soldier is qualified.

The career progression MOS provides a "road map" to the soldier indicating the channel in which he/she should expand his/her professional development efforts, and, when coupled with the skill level, indicates the fact the soldier either has or has not met the training and evaluation prerequisites for a skill of one grade above current grade [14:p.2-8].

Determining PMOS Skill Level. The Army skill level identifies the level of qualification within the MOS. The various levels are identified by the numbers 0 through 5 in the fourth position of the MOSC. There is a direct relationship between a soldier's grade and the skill level he is allowed to hold in his PMOS. Table 5-4 illustrates that relationship.

TABLE 5-4
PMOS SKILL LEVEL/GRADE RELATIONSHIP (14:p.2-9)

Grade	Skill Level
E-1 to E-4	1
E-5	2
E-6	3
E-7	4
E-8/E-9	5

A skill level of zero is used to identify a soldier who is currently undergoing training that will lead to award of his first MOS. "Under no circumstances will

soldiers possess a skill level in PMOS other than that specified [2:p.2-9]." Upon promotion or reduction, the skill level consistent with the promotion or reduction is awarded.

Determining SMOS Skill Level. In a secondary MOS, the soldier carries a zero skill level until such time as he verifies the MOS. All soldiers must possess a verified SMOS after obtaining a three level in their PMOS or they become ineligible for promotion. The MOS is verified by attaining a passing score on the skill qualification test (SQT) for the particular MOS. When the soldier verifies the SMOS a skill level consistent with Table 5-4 is awarded.

Determining CPMOS Skill Level. The fourth character (skill level) of the CPMOSC is an indication that the soldier is either striving to meet the qualifications for the skill level of the next highest grade or that those qualifications have already been met. If a soldier is still striving to meet the higher level, a zero would be entered in the fourth position of the MOSC. If, on the other hand, a soldier has successfully demonstrated his potential for service at the next higher skill level, a skill level one number higher than that currently possessed in the PMOS is awarded. Potential in a CPMOS is demonstrated by a combination of training and attainment of a qualifying score on the appropriate SQT (13:p.2-9).

Skill Level Example. The following example serves to illustrate the coding of a soldier's PMOS, SMOS, and CPMOS. A clearer vision of this example may be attained by referring to Appendix D.

An E-5 working in CMF 67 as an airplane repairer would hold the PMOSC of 67G20 providing, of course, the E-5 maintained validation. Note that the skill level of two in the fourth character position is in agreement with Table 5-4. This same E-5 might also hold the SMOSC of 67N20 (utility helicopter repairer) if he had passed the SQT for that MOS. If not, he would hold the SMOSC of 67N00 until such time as the SMOS was verified. The CPMOSC for this particular E-5 would be 67G30 if he had verified the CPMOS and 67G00 if not. In short, the determination of a soldier's skill level depends upon the particular MOSC to which one is referring.

MOS Validation. The skill qualification test (SQT) is the method by which the MOS is validated. Most SQTs have the following components (14:p.5-1).

1. Written components--this part is used to test decision making and other mental tasks.

2. Hands-on-component--the purpose of this part of the SQT is to test the soldier's ability to perform critical tasks and the soldier is tested on actual or simulated equipment.

3. Performance certification component--the third part of the SQT allows the soldier's supervisor to observe and rate the soldier on the proficiency of manipulative and other motor skills.

The SQT level administered to a soldier depends upon the grade of a soldier as indicated by Table 5-5.

TABLE 5-5
ARMY SQT LEVELS (14:p.5-2)

Grade	Level
E-1/E-4	SQT 2
E-5	SQT 3
E-6	SQT 4
E-7 through E-9	SQT 5

SQT testing in a soldier's PMOS is required biennially. SMOS testing, however, is only required once in a soldier's career and is usually administered during the second regularly administered SQT for the SMOS after the soldier attains his three level in the PMOS. In order for a soldier to validate the CPMOS he would have to pass the SQT for the PMOS in the next higher level. For example, an E-5 would have to pass SQT level four in order to validate the CPMOS.

Army Enlisted Promotion System

According to Army policy the objectives of the Army promotion system are as follows:

Fill authorized enlisted spaces with qualified men and women who have demonstrated potential for increased responsibility; provide for career progression and rank which is commensurate with ability and potential; attract and retain the high caliber individual for a career in the Army; provide an equitable system for all soldiers; and, preclude from promotion the individual who is nonproductive/nonprogressive [14:p.7-1].

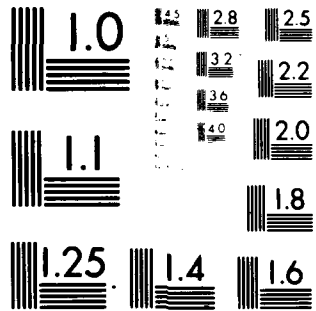
Since the methods used and factors considered in the promotion of Army enlisted personnel depend upon the grade to which the soldier is being promoted, this section will be divided into three parts: first, promotion to grade E-4 and below; second, promotion to E-5 and E-6; and third, promotion to E-7, E-8, and E-9.

Promotion to E-4 and Below (14:Ch. 7)

The Army does not use the term "promotion" to describe progression from E-1 to E-2 but, rather, uses the term "advancement." Normal advancement to E-2 has only two requirements: first, the soldier must have been recommended by his commander and, second, the individual must have completed six months of active military service. Provisions do exist for accelerated advancement to E-2 for outstanding privates who have four months time in service (TIS) with the constraint that not more than 20 percent of the command's assigned E-2s have less than the required six months TIS (14:p.7-6).

Normal promotion to private first class (E-3) is predicated upon 12 months TIS and 4 months time in grade (TIG) as an E-2. Although commanders may promote all eligible (required TIG and TIS) E-2s, promotion to E-3 is not mandatory and may be withheld at the commander's prerogative. Provisions also exist for accelerated advancement to E-3. The outstanding soldier must have at least six months TIS and at least two months TIG as an E-2 for below the zone promotion. The below the zone limitation to E-3 is that not more than 20 percent of the assigned E-3s can have less than 12 months TIS.

The requirements for normal progression to E-4 is 24 months TIS and 6 months TIG as an E-3 and all who meet these criteria may be promoted. However, the commander may withhold promotion. As in the case for the E-2 and E-3, there are provisions for below the zone promotions to E-4 for outstanding soldiers with at least 15 months TIS and 3 months TIG as an E-3. The number of below the zone promotions to E-4 is limited to 60 percent of the E-3s and E-4s who have between 15 and 24 months TIS. For example, if a particular unit had 40 E-3s and 30 E-4s with 15 to 24 months TIS, the sum (70) would be multiplied by 60 percent arriving at a figure of 42. One would then subtract the 30 E-4s from 42 and this would be the additional number (12) of permissible promotions below the zone to E-4.



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

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The promotional authority to pay grades E-4 and below is the company, troop, battery, or detachment commander (14:p.7-2).

Promotion to E-5 and E-6

Field grade commanders of organizations authorized a commander in the grade of lieutenant colonel or higher may promote soldiers to grades E-5 and E-6. A major holding a position authorized a lieutenant colonel would have authority to promote to E-5 and E-6 (14:p.7-2).

Army enlisted personnel must meet a series of minimum criteria prior to being considered for promotion to grades E-5 and E-6. Once the basic criteria are met, the soldier competes with his contemporaries for promotion points. Seven promotional factors are considered in the award of promotion points. Each month the Department of the Army announces promotion point cutoff scores by MOS for promotion to E-5 and E-6.

Minimum Criteria. Table 5-6 defines the minimum TIG/TIS requirements for promotion to E-5/6.

TABLE 5-6
ARMY MINIMUM TIG/TIS REQUIREMENTS TO
E-5/E-6 (14:p.7-9)

Promotion to Pay Grade	Time in Grade	Time in Service
E-5	8 months as E-4	36 months
E-6	10 months as E-5	84 months

A soldier can be considered for below the zone promotion to E-5 and E-6 with 33 and 60 months TIS respectively. A waiver for one-half of the TIG is allowed. Personnel competing in below the zone require a minimum of 550 promotion points to E-5 and 600 to E-6 (14:pp.7-1 to 7-8). (Promotion points are later explained.)

Any soldier considered for promotion must be in a "promotable status" (not AWOL, under court-martial charges, etc.), must receive written recommendation from the unit commander, and must be able to qualify for any security clearance required for the MOS to which promotion is to be made.

Promotion to grade E-5 has a basic requirement of an eighth grade education or the GED equivalent, while a soldier competing for E-6 requires a high school diploma or its equivalent.

Soldiers who meet the criteria listed above may compete for promotion in their PMOS or CPMOS but only if the skill levels of those specialties are validated. The MOS is validated by receiving a passing score on the appropriate SQT. The minimum passing SQT score is 60. A soldier who fails to validate his skill level is not eligible to compete for promotion even if he meets all other criteria (14:p.7-10).

Once the soldier has met all of the above criteria, he is ready to compete for promotion points.

Award of Promotion Points. There are seven factors considered in the award of promotion points: TIG, TIS, enlisted evaluation report, SQT, awards and decorations, education, and a local board score. Points awarded for the first six factors are administrative points and those for the board are board points. A maximum of 1000 total promotional points are available; 750 administrative points and 250 board points.

A maximum of 100 points can be awarded for time in service with 70 being awarded to the soldier who possesses the minimum required TIS for normal promotion. One point is added for each month the soldier's TIS exceeds the minimum required; one point is subtracted for each month the TIS is less than the normal minimum. In other words, a soldier in below the zone would have points subtracted.

A maximum of 100 points is awarded for TIG. Once again, 70 points are awarded to the soldier with the minimum required TIG for normal promotion with one point being added for each month over and one subtracted for each month under. For example, an E-5 with 12 months TIG would be awarded 72 administrative points for promotion to E-6.

The third promotional factor for the award of points is the enlisted evaluation report. A copy of the Army's enlisted evaluation report is at Appendix E. Promotion points as indicated in Table 5-7 are awarded in accordance

TABLE 5-7

EVALUATION REPORT PROMOTION POINTS (14:p.7-26)

Evaluation Report Points	Administrative Promotion Points
98 or below	same as evaluation report
99-100	112
101-102	115
103-104	118
105-106	121
107-108	124
109-110	127
111-112	130
113-114	133
115-116	136
117-118	139
119-120	142
121-122	145
123-124	148
125	150

with the total number of evaluation points received in blocks E, F, and G of the evaluation report.

A maximum of 150 points can be earned by a soldier for the SQT score. Table 5-8 illustrates the number of administrative promotion points that can be earned on the basis of a given SQT score.

Awards and decorations can earn a maximum of 50 promotion points. The point values of the individual medals range from a high of 35 for a Soldiers Medal, or higher, to a low of 5 points for such awards as the

TABLE 5-8

SQT PROMOTION POINT SCHEDULE (14:p.7-27)

SQT Score	Administrative Promotion Points
60-61	62
62-63	65
64-65	68
66-67	71
68-69	74
70-71	77
72-73	80
74-75	83
76-77	86
78-79	89
80-81	95
82-83	101
84-85	107
86-87	113
88-89	119
90-91	125
92-93	131
94-95	137
96-97	143
98-99	149
100	150

Parachutist Badge, Marksmanship Badge, etc. A Meritorious Service Medal scores 25, a Commendation Medal 20, a Purple Heart 15, and a Good Conduct Medal 10 points. There are many other medals which earn promotion points (14:p.7-27).

The last area in which a soldier can earn administrative promotion points is education. Points are awarded for military and civilian education. The maximum points to be earned is 200. Attendance at NCO Leadership School earns the soldier 30 points. All other in-residence military courses earn two points for each week attended. Correspondence courses earn one point per five credit hours. Soldiers earn 15 points for completing the ninth grade, 30 for completing the tenth grade, 45 for completing the eleventh, sixty points for completing the twelfth grade, and 75 points if the soldier has a high school diploma. One point is granted for each semester hour of earned credit from a business or trade school or college.

Field promotion selection boards are held monthly unless no one is recommended for board action. The convening commander has the option of appointing a mixed board of officers, warrant officers, NCO/Specialists, or an all enlisted board. The members of the board must all be senior to those being considered for selection. A total of 250 board points may be earned as indicated by Table 5-9.

Once all of the factors have been graded, the points are accumulated and forwarded to the Department of the Army

TABLE 5-9
BOARD POINT DETERMINATION (14:p.7-33)

Area of Evaluation	Point Spread
Personal appearance, bearing, self-confidence	0-30
Oral expression	0-30
Knowledge of world affairs	0-20
Awareness of military programs (drug abuse, etc.)	0-30
Knowledge of basic soldiering	0-30
Self improvement through enrollment in civilian courses	0-20
Self improvement through enrollment in military courses	0-20
Other achievements such as class standing honors; selection as soldier/NCO of the month	0-30
Evaluator's subjective appraisal	0-40

which then issues the promotion cut-off scores for the various occupational specialties in accordance with Army needs.

Promotion to E-7, E-8, and E-9

A centralized promotion system is in effect for the top three Army enlisted grades with recommendation for promotion being made by boards convened at Headquarters, Department of the Army (HQDA). The selection boards are composed of at least five members and include both officers and senior NCOs. The president of each board is a General Officer. The names of individuals who are eligible for

promotion consideration are published by HQDA prior to the Board.

General Criteria. The basic criteria for promotion to the top three grades are prescribed in a letter of instruction and general guidance provided to each selection board. To meet minimum qualifications an individual must:

1. Meet announced date of rank requirements or other eligibility criteria as may be prescribed by HQDA.
2. Have at least six, eight, and ten years TIS for promotion in the secondary zone to the grades E-7, E-8, and E-9, respectively.
3. Have at least a high school diploma.
4. Be serving on active duty in enlisted status prior to the convening date of the Board (14:p.7-74).

Although the date of rank requirements change from year to year, requirements in 1979 were: to E-9, a date of rank (DOR) to E-8 of 31 July 1975 or earlier; to E-8 a DOR to E-7 30 Sept 1974 or earlier; and to E-7 a DOR to E-6 30 Aug 1976 or earlier (26).

Promotional Factors. The promotional factors to the top three grades are not disseminated as is the case for E-5 and E-6 promotion.

DA selection boards apply the whole person concept whereby individuals' qualifications for promotion are judged by the entire record of accomplishments

and failures. No one item of information by itself is considered overriding in determining either the best qualified or those not qualified for promotion [14: p.7-73].

According to Army policy (14:p.A5-2) the central promotion board should evaluate and analyze the soldier's background to include the following:

1. The scope and variety of assignments and how well the jobs were performed
2. The degree and level of responsibility
3. Efficiency trends
4. Length of service and maturity
5. Moral standards
6. Integrity and character
7. Awards, decorations, and commendations
8. Military and civilian education
9. General physical condition

The Army does not award points to the above items nor does it claim the importance of one factor over another. The Army simply states that these are factors the top three promotion boards are instructed to consider.

Average TIS Completed
at Promotion

Much has been said about TIS requirements as a basic criteria for promotion to the various grades. How closely does the Army plan mesh with actual experience? The answer to this question is resolved in Table 5-10.

TABLE 5-10
ARMY AVERAGE TIS AT PROMOTION (YEARS) (38:31)

Pay Grade	Actual	Plan
E-9	21.4	21.5
E-8	17.8	18.0
E-7	13.7	14.0
E-6	7.1	8.5
E-5	3.0	4.0
E-4	1.9	2.2

Although quite close, the Army has not met its long-range plan with respect to average TIS.

Summary

This chapter has summarized the grade, classification, and promotional aspects of the enlisted career progression system of the U.S. Army. We are confident that this chapter will provide those who plan to do future comparative analyses of career progression systems a solid body of technical knowledge in the Army career progression system as of the time of our research.

CHAPTER VI

BRITISH ROYAL AIR FORCE CAREER PROGRESSION SYSTEM

Introduction

The United States and its partners cooperate through alliances based upon mutual interest. Allied forces are an essential part of the total force. Our allies make a vital contribution to common defense through their commitments to mutual defense arrangements, financial participation, and force modernization [4:p.3-10].

The United States has gained much from its ties with its allies in the past and the potential exists to gain much in the future. It is felt that the enlisted career progression system of the British Royal Air Force (RAF) may provide valuable ideas for improving our current system. This chapter opens with a discussion of the rank structure of the RAF. Next, the methods of identifying, maintaining and verifying occupational skills are scrutinized. Third, the RAF's enlisted promotion system is surveyed and, finally, a few words are said about reenlistment policies in the RAF.

Grade Structure

The RAF employs a dual rank structure. The structure in which an airman functions is dependent upon the occupation in which he is employed. Occupations in the RAF are divided into trade groups (see Appendix F) and the

trade groups are further classified as list I or list II trades. List I trades apply to all occupations of a technical nature such as aircraft maintenance. List II trades are made up of administrative and operating tasks such as personnel, supply, transportation, etc. Appendix F illustrates the RAF trade groups and the list categories to which they belong. The rank structure of the RAF is given in Table 6-1.

RAF regulations specify the responsibilities of each grade of rank by trade group. For example, AP 3376A specifies rank responsibilities for trade group one; AP 3376B for trade group two, and so on.

Individuals functioning in the basic aircraft technician grades serve in an apprentice or helper relationship to the higher grades (32).

A corporal is assigned to a unit for a two-year period of improver (on-the-job training) service to enable him to gain practical experience and to apply the knowledge gained during technician apprentice training. During this period he is employed in flights and sections dealing with airframe, propulsion, electrical, armament equipment, and assisted escape systems. The job tasks are primarily of a servicing nature. Upon successful completion of improver service, the corporal is qualified to perform the duties of a sergeant; however, he must be supervised until he is actually promoted (33:p.1A-1).

TABLE 6-1

ROYAL AIR FORCE RANK STRUCTURE (32)

List I Grades of Rank	U.S. Pay Grade	List II Grades of Rank
Warrant Officer	E-9	Warrant Officer
<u>Senior Noncommissioned Officers</u>		
Flight Sergeant	E-8	Flight Sergeant
Chief Technician	E-7	None
Sergeant	E-6	Sergeant
<u>Junior Noncommissioned Officers</u>		
Corporal	E-5	Corporal
<u>Basic Grades</u>		
Junior Technician	E-4	None
Senior Aircraftman	E-3	Senior Aircraftman
Leading Aircraftman	E-2	Leading Aircraftman
Aircraftman	E-1	Aircraftman

The tasks of a sergeant include debriefing aircrews and planning the recovery of the aircraft. Sergeants also carry out performance testing and diagnosis and direct single trade craft personnel in the rectification of more extensive faults, especially those involving multiple skills. Upon completion of extensive repairs it is the sergeant who checks the overall system performance (33:p.1A-1).

The chief technician performs many of the same diagnostic functions as the sergeant. However, the defects worked on are of a more obscure and complex nature. The chief technician may also be employed in trade testing and the overall supervision of corporal aircraft technicians during their on-the-job training (33:p.1A-1). The rank of chief technician does not exist in list II trades but a chief technician has command authority over sergeants whether they are in a list I or list II occupation. Since an airman in a list II trade is unaccustomed to taking orders from a chief technician, one might expect some friction to exist. There are, however, very few problems with respect to the command relationships of the junior and chief technician since personnel in list I and list II trades are usually quite separated on a day-to-day basis (24).

The flight sergeant's job is one of a junior manager. He is responsible for the direction of maintenance

tasks, control of maintenance records, notification of job orders, man-hour costing, defect records, and other statistical data as may be required for analysis or research purposes. Additionally, the flight sergeant is responsible for the ground and flight safety program (33:p.1A-1).

The grade of warrant officer is in the normal RAF enlisted grade structure. A warrant officer is considered a manager and is employed in jobs more demanding than those of flight sergeants. A collateral task of a warrant officer is the training of junior commissioned officers (33:p.1A-1).

The dual trade structure of the RAF works very well and in an aircraft maintenance unit one often sees the top enlisted grades doing actual work on the aircraft (24). In the normal course of events, however, technical maintenance work is performed by the ranks of aircraftman to chief technician (33:pp.1B-1 to 1B-10).

Rank in the RAF is identified by a combination of chevrons, stripes, and devices. The warrant officer is identified by the lion's rampant, the flight sergeant with three chevrons and a crown; the sergeant with three stripes; the chief technician with three strips and a four-pronged propeller; the sergeant and corporal with three and two stripes respectively; the junior technician wears only the propeller device with the senior aircraftman and

leading aircraftman having three and two prongs of the device; the aircraftman is without chevrons, stripes, or devices (24).

Trade Structure

To understand the trade (skill) structure of the RAF, one must know something about the trade specification system. A trade specification consists of a trade title, a series of trade qualification annotations (TOA), and a job specification. Each trade group has a series of manuals which identify the trade specification in detail. For this thesis, the trade specification for trade group one is illustrated.

Trade Title

The trade title is the name of a trade in its full and abbreviated form which is approved by the RAF Ministry of Defense (30:1). A list of the current titles in the aircraft engineering trade group is given in Table 6-2. The short title is used as a type of specialty code. For example, a senior aircraftman specializing in propulsion systems would be referred to as a "A mech P."

Trade Qualification Annotations (TQA)

A TQA is a code that defines the broad nature of the trade and provides a general picture of the work and its boundaries. TQAs are composed of alphabetic characters

TABLE 6-2

ROYAL AIR FORCE TRADE TITLES (32:p.1-1)

Full Title	Short Title	Authorized Rank
Aircraft engineering technician	A eng tech	Sergeant to warrant officer
Aircraft engineering propulsion	A tech P	Junior technician to warrant officer
Aircraft technician airframe	A tech A	Junior technician to warrant officer
Aircraft technician electrical	A tech E	Junior technician to warrant officer
Aircraft technician weapons	A tech W	Junior technician to warrant officer
Aircraft mechanic airframe	A mech A	Leading aircraftman and senior aircraftman
Aircraft mechanic propulsion	A mech P	Leading aircraftman and senior aircraftman
Aircraft mechanic electrical	A mech E	Leading aircraftman and senior aircraftman
Aircraft mechanic weapons	A mech W	Leading aircraftman and senior aircraftman
Flight line mechanic	F ln M	Leading aircraftman and senior aircraftman

and are divided into three parts. The first part, which consists of one character, identifies the level of qualification; the second part denotes the type of weapon system and make; the third part identifies the nature of work an airman is qualified to accomplish (i.e., propulsion, electrical, etc.).

The first digit of the TQA can be either a "T", "Q" or an "X". A "Q" indicates that an airman is qualified in the job identified by the TQA. A "T" is awarded to technicians who have completed post graduate training in a particular aircraft or electrical system and have attained the rank of sergeant (32:p.3-3). Post graduate training refers to that training in excess of the basic training required for the "Q". "X" annotations are used to identify specialized skills acquired by experience with an aircraft type or with certain equipment or functions. They are used solely as a manning aid to the RAF personnel management center (33:p.3-4).

The second and third parts of the TQA can contain a myriad of possible characters and are identified by line item in the trade regulations. For example, the TQA of "Q-AHR-P" identifies an airman "Q" qualified on an aircraft (A) system of the Harrier (HR) class who works on propulsion systems. A TQA of "Q-HSK-VA" identifies an airman qualified on a helicopter system of the Sea King class with a specialty of vibration analysis.

Job Specifications (34:Ch. 3)

The specification against which RAF airmen are trained comprises both a statement of the work to be undertaken and the Operational Performance Standard (OPS) to be achieved in its execution. Airmen who complete basic trade training are considered to have achieved a Training Performance Standard (TPS). Financial and other constraints placed upon training schools inhibit both the time devoted to practical training and the range of activities over which such training is given. In consequence, the TPS is often below the required OPS [34:p.3-1].

An airman is not awarded a qualified TQA until he has demonstrated that he can function at the OPS. The airman proves his ability by passing a trade ability test which will be discussed later in this chapter. The job specification lists the skill and knowledge specifications (SAKS) which an airman must know to perform a trade at the OPS. The SAKS is a code and specifies in detail the skills and knowledge necessary to perform a task at the OPS. Airmen performing in a given trade title are required to satisfactorily perform in numerous SAKS prior to reaching an OPS and the resultant award of a TQA. An example of a SAKS (one of hundreds) is at Appendix G.

Trade Ability Tests (30:Ch. 3)

A trade ability test (TAT) is similar to the SQT in the U.S. Army. As previously stated, an airman who successfully completes basic training is said to have reached a TPS. Formal and mandatory TATs are required of

the airman to demonstrate he has reached an OPS on a selected range of SAKS.

TATs are established at two levels of skill and are known as TAT 1 and TAT 2. The purpose of TAT 1 is to check the trade competence of leading aircraftmen at their first unit. The successful completion of this TAT is a prerequisite for promotion to senior aircraftman and award of the TQA. TAT 2 provides a similar check for junior technicians and is a prerequisite for promotion to corporal. There are no requirements for TATs past the rank of junior technician and skill proficiency is evaluated by the airman's immediate supervisor. Airmen past the rank of junior technician who fail to retain their proficiency may be required by their immediate supervisor to re-sit TAT 1 and 2 as appropriate (24).

TAT Structure. TATs 1 and 2 are each divided into parts A and B. Part A is a test of the airman's first aid and safety knowledge. This part of the test is conducted via a written and oral test. Part B of the TAT is a test of the airman's trade skill and requires the airman to demonstrate he is capable of working at the OPS. Part B of a TAT is conducted in the normal working environment by a warrant officer or senior NCO who is a training specialist in the relevant task. Performance of each SAKS

is subjectively graded "satisfactory" or "below standard." Airmen who fail must be retrained and retested.

Royal Air Force Enlisted Promotion Policy

The enlisted promotional system of the RAF differs somewhat depending upon the rank to which one is being promoted. There are two basic forms of promotion; by time and by selection to fill established vacancies. Promotion to the grade of junior technician and below are by time and promotion to corporal and above is by vacancy.

The promotion factors considered for promotion are the performance report, the promotion exam, and the trade ability test. First we shall describe the promotional factors and then we will summarize the promotional requirements by rank.

Promotion Factors

Efficiency Reports. Perhaps the most important factor for an airman is his assessment report (24). The assessment report serves the same function as the USAF's APR and Army's EER. The assessment report is divided into three basic sections. The first section is an evaluation of promotion potential and has three categories: specially recommended, fit, and not fit; the second section is an assessment of conduct and has four categories: exemplary, very good, good, and unsatisfactory; the last section evaluates an airman's general qualities. The format of

the last section of the assessment report is illustrated in Table 6-3.

TABLE 6-3
RAF GENERAL ASSESSMENT REPORT (32:p.68-1)

-
-
- A. TRADE PROFICIENCY
 - (a) Trade Knowledge
 - (b) Resourcefulness
 - (c) Proficiency in Current Duties

 - B. SUPERVISORY ABILITY
 - (a) Acceptance of Responsibility
 - (b) Ability to Organize
 - (c) Effectiveness in Control

 - C. PERSONAL QUALITIES
 - (a) General Common Sense
 - (b) General Reliability
 - (c) Self Confidence
 - (d) Cooperation
 - (e) Sense of Duty
 - (f) Appearance and Bearing
 - (g) Determination
-

Each of the factors in the general assessment section is graded on the following nine-point scale:

- 9 - Outstanding in all respects
- 8 - Outstanding in most respects
- 7 - More than satisfactory in all respects
- 6 - More than satisfactory in most respects
- 5 - Satisfactory
- 4 - Less than satisfactory in some respects
- 3 - Less than satisfactory in all respects
- 2 - Wholly deficient in some respects
- 1 - Wholly deficient

The average rating in the RAF is, in fact, a "5". A truly outstanding individual would have 7s and 8s. The award of a 9 is unheard of in the RAF and supervisors who tend to inflate the ratings are criticized (24).

The general assessment section is indexed by calculating an average index for the "A" (trade proficiency), "B" (supervisory ability), and "C" (personal qualities) sections. These indexes are then indexed to arrive at a grand index. In ranks where promotion is based on established vacancy (Corporal and above), the personnel management centre (PMC) considers airmen for promotion based upon the sum of grand indexes for the last four years. If, for example, the PMC had ten openings for the rank of flight sergeant in trade group one, it might decide to review all records with a grand index sum of 75 to 108 (maximum possible) points. Anyone not in that range of points would not even be considered for promotion. If one were in the stated range promotion still would not be assured since he might be one of 50 or 60 airmen competing for the 10 available slots (2).

In ranks based upon time criteria an airman must have a conduct rating of at least "very good;" promotion potential of at least "fit;" and a general assessment rating of at least "5" in all headings.

Promotion Exams (30:Ch. 4). The primary aim of promotion exams (PEs) is to test an airman's awareness of the additional responsibilities attached to increased rank, and his knowledge of procedures applicable to NCOs of the next higher rank. PEs are established for three levels of airmen rank and, in each case, are related to the knowledge required for the next higher rank.

Successful completion of PE 1 is a basic requirement for promotion from junior technician to corporal in list I trades, and from senior aircraftman to corporal in list II trades. Promotion from corporal to sergeant requires a tradesman to successfully complete PE 2. Promotion exam 3 tests the airman's knowledge of the standards of general service proficiency required of a flight sergeant. PE 3 is required of all sergeants (List II trades) and chief technicians (List I trades) aspiring to flight sergeant. The tests are objective in nature and require an 80 percent pass rate.

Summary of Promotion Requirements
(32:Ch. 1-4)

Promotion to Junior Technician and Below. Airmen in the RAF begin their careers in basic training at the rank of aircraftmen. Upon successful graduation from basic the aircraftman is promoted to leading aircraftman. Promotion to senior aircraftman depends upon the airmen passing TAT 1 and the completion of 12 months time in service. Promotion

to junior technician applies only to list I trades and is granted when a senior aircraftman successfully completes advanced technical training.

Additionally, promotion to all ranks above require a current conduct assessment of at least "very good," a current general assessment of at least "5" under all headings, and a current promotion recommendation of at least "fit."

Promotion to Corporal. Junior technicians in aircraft maintenance who specialize in airframe, propulsion, electronic engineering, air communications, and radar are eligible for promotion to corporal with one year time in grade subject to meeting the following criteria:

1. Successful completion of PE 1
2. Pass TAT 2
3. General assessments of at least "5" under

all headings

Junior technicians in all other list I trades require three years TIG before they are eligible for corporal. Additional criteria are as stated above, except junior technicians in this category must have general assessments of at least "6" under all headings. If the junior technician does not have a "6" he must spend four years TIG. It is interesting to note that in addition to the promotional advantage just described, personnel in list I trades

often enjoy pay advantages by virtue of a complex pay system that gives preference to list I trades. In list II trades, promotion is by vacancy. However, aircraftmen usually require four years TIG, a passing score on PE 1 and TAT 2, and general assessments of at least "5" for promotion (24).

Additionally, all airmen being promoted to corporal require conduct assessments and promotion recommendations of "very good" and "fit," respectively.

Promotion to Sergeant and Above. Promotion to the ranks of sergeant and above are on the basis of established vacancies. All ranks have basic requirements of "very good" in conduct, "fit" in promotion potential, and general assessments of at least "5" under each heading. Additionally, those corporals aspiring to sergeant must pass PE 2 and those sergeants seeking chief technician (list I trades) and flight sergeant (list II trades) must pass PE 3. A chief technician need not retake PE 3 for promotion to flight sergeant.

While there is no minimum TIG requirement for promotion to the ranks of sergeant and above, a corporal usually spends five years TIG; a sergeant five years; and a flight sergeant three years prior to being promoted to the next grade (24).

As previously stated, the most important factor for promotion above the rank of corporal is the efficiency report. All of the other criteria are simply basic qualifying criteria.

Reenlistment Policies (31:582)

The RAF does not require airmen to leave the service due to a failure to reach a given rank by a certain year. It does, however, require airmen to apply for reengagement at the end of their fourth and sixth years, and the end of each year during the ninth through fifteenth years. The RAF may deny reengagement at any of these points.

The whole of an airman's service is to be taken into account in evaluating his suitability and worth for re-engagement for pensionable service, but particular attention is focused on his performance as recorded in annual confidential reports (Form 6442) for the previous 3 years [31:Annex A].

Point calculations for the purpose of determining who will be allowed to reenlist in the event of reengagement quotas are as follows:

1. Evaluation reports--the totals of the "A," "B," and "C" assessments over the previous three years.
2. Promotion recommendations--five points for each year during the past three years that an airman received "specially recommended;" four points for "fit."

3. Conduct assessment--points are deducted for assessments below "exemplary" during the previous three years as follows:

- a. Each year of "Very good" 1 point
- b. Each year of "Good" 2 points

4. Rank element--credit for service is recognized by the award of the following scores for each year an airman has spent in the rank over the past three years:

Warrant Officer	10 points
Flight Sergeant	8 points
Chief Technician	6 points
Sergeant	4 points
Corporal	2 points

The points awarded in elements 1 and 4, above, are used to place individuals in merit order with other applicants of the same trade and year of exit.

After the individual's fifteenth year he may apply for re-engagement to complete twenty-two years. Upon completion of twenty-two years, an individual in the RAF is entitled to a two-thirds pension and a lump sum gratuity of 250 percent of his annual retirement pay. Airmen may also re-engage to ages 47, 55, and 58 upon approval of the Ministry of Defense.

Summary

This chapter provides the reader an illustration of the enlisted career progression system of the Royal Air Force. The grade, skill, and promotional policies of the RAF were discussed. Additionally, the reenlistment policies of the RAF were the subject of a brief discussion. This chapter was developed to provide the reader a basic knowledge of an allied service to assist him in making comparisons with the United States Air Force enlisted career progression system.

CHAPTER VII

CIVILIAN CAREER PROGRESSION SYSTEM

Introduction

Civilian industry is often perceived as a leader in effective management. It is not the intent of this chapter to prove that perception true or false but rather to provide the reader with an overview of career management practices in the private sector. The sector of industry chosen for our study was the airline industry. Several major airlines were canvassed for information concerning their career progression systems. Two major airlines responded but requested the information remain confidential. Therefore, throughout this chapter these companies will not be identified by name but will be referred to as "major airlines." The data used in writing this chapter was obtained from union agreements, company organizational charts, and policy letters furnished by the major airlines. These items are paraphrased and not included in the bibliography for the purposes of protecting the requested confidentiality. It should be noted that when we use the term "airlines" it refers to those companies responding to our survey and not necessarily to the airline industry in general.

Three aspects of the airline's career progression system were examined: the grade or rank structure; the skill structure; and the promotion process.

Grade Structure

In the U.S. Armed Forces, "grade structure" refers to what is commonly known as rank. Rank identifies the normal advancement by an enlisted man from E-1, the lowest ranking enlisted person, to E-9, the highest ranking enlisted person.

The personnel structure of a maintenance organization in the airlines is divided into nonmanagement and management positions. The nonmanagement personnel are paid on an hourly basis and are represented by the International Association of Machinists and Aerospace Workers. Management personnel are termed "salaried" employees and are not represented by the union.

Nonmanagement Personnel

Nonmanagement maintenance employees serve in one of four grades: inspector, lead mechanic, mechanic, or apprentice.

The work of an inspector consists of the overall inspection of company aircraft, including x-ray and radioisotope processors, and powerplant installations in connection with major repairs. The work of an inspector may also include the inspection of materials, parts, and

subassemblies. An inspector receives the work assignments for his section from the section foreman (management position) but the standards by which the inspector's work is to be performed are received from and evaluated by the quality assurance department. In other words, the foreman is responsible for insuring the work is performed; the quality assurance department is responsible for how well it is done. Inspectors are selected from those mechanics who have held a Federal Aviation Administration (FAA) airframe (A) or propulsion (P) license continuously in force for at least two years. Additionally, the aspiring inspector must have held both the A and P licenses continuously for at least one year. One airline reported 2.1 percent of their mechanic force serving in the grade of inspector.

The duties of a lead mechanic consist of working with, leading, and directing a group of mechanics who work as a unit on the same shift. Union agreement specifies that not more than twelve mechanics can be assigned to a lead mechanic's group. A lead mechanic must hold an FAA A and P license which has been in force for at least one year. Additionally, a lead mechanic must be capable of leading and directing those mechanics in his group to the satisfaction of the company. Approximately 8 percent of the mechanics in the respondent companies were lead mechanics.

The union agreement defines the work of a mechanic as any and all work generally recognized as mechanical work performed on or about aircraft. These tasks include but are not limited to such tasks as dismantling, overhauling, repairing, fabricating, assembling, welding, and erecting all parts of airplanes, engines, instruments, electrical systems, and so on. A mechanic must be capable of performing his work satisfactorily and hold valid FAA A or P licenses. The bulk of the maintenance work force falls in the mechanic grade (approximately 85 percent).

An apprentice is basically a new employee with the company. An apprentice can be assigned actual maintenance work; however, the apprentice must be under the guidance of a licensed mechanic at all times. At no time will the apprentice be allowed to sign for work accomplished. According to airline correspondence, the average person completes the apprenticeship program in six to eight months. Union regulations allow an apprentice up to one year mechanical seniority for all service as an apprentice. There are usually less than 5 percent of the maintenance work force in apprentice status.

It is interesting to note that technicians/mechanics do, in fact, have the opportunity to advance to supervisory and management levels. In one company, approximately 15 percent of the nonmanagement force migrated into management levels after undergoing a selection testing

process. This same airline reported a technician could remain a technician for an entire career without any penalty in terms of pay, promotion, benefits, or prestige. As a matter of fact, the union agreement dictates that a nonmanagement person accepting a management position has six months in which to change his mind. At the end of that period the technician/mechanic can revert to the nonmanagement ranks without any loss in pay or seniority. Pay rates and seniority are controlled by union contract. Pay rates are discussed in the next section and seniority later in this chapter.

Nonmanagement Pay Rates

The hourly pay rates were derived from the union agreement between the airlines and the International Association of Mechanists and Aerospace Workers (IAM) and are provided in Table 7-1. It should be noted that Table 7-1 does not include all of the occupations covered by the IAM. The occupation of stock clerk was included to demonstrate the fact that the airlines attach different values to each of the occupations and pay accordingly. It is interesting to note all apprentices (no matter what their occupation) are paid the same rate of pay.

Management Personnel

Management personnel in the maintenance business generally serve in one of several levels as indicated by Table 7-2.

TABLE 7-1

UNION PAY RATES FOR NONMANAGEMENT EMPLOYEES

Grade	Hourly Rate (Effective 1/1/80)
Inspector	\$ 11.66
Lead Mechanic	11.61
Mechanic:	
1st six months	9.54
2nd six months	9.91
3rd six months	10.28
4th six months	10.47
5th six months	10.67
Thereafter	11.03
Lead Stock Clerk	10.60
Stock Clerk:	
1st six months	7.93
2nd six months	8.03
3rd six months	8.19
4th six months	8.51
5th six months	8.90
Thereafter	9.06
Apprentice	
1st six months	7.16
Thereafter	7.43

TABLE 7-2

AIRLINE MAINTENANCE MANAGEMENT LEVELS

Management Level	Management Title
7	Chief Operations Officer
6	Senior Vice President
5	Maintenance Vice President
4	Maintenance Director
3	Maintenance Manager
2	Maintenance Supervisor
1	Maintenance Foreman

The chief operations officer is organizationally positioned directly below the president and has overall responsibility for flight operations, flight services, maintenance operations, and so on. At level six one would normally find a senior vice president of maintenance operations with a series of vice presidents (level five) reporting to him. The vice presidents are in charge of such activities as maintenance supply, maintenance engineering, aircraft maintenance, etc. At level four one finds directors in charge of activities like airframe maintenance, engine maintenance, and aircraft inspection. Managers are responsible to directors for such activities as structural maintenance, aircraft appearance, and so on. Supervisors and foreman are found at the work center and section level. A supervisor would have a number of foremen reporting to him. As previously stated, the foreman is

management's link to the nonmanagement grades. In one of our respondent companies, the percentage of personnel serving as vice president (including senior vice president), director, manager, supervisor, and foreman, was 1, 3, 15, 21, and 60 percent, respectively.

Grade Identification

There is no visual method by which one can distinguish one nonmanagement grade from another. However, one major airline indicated that management employees up to the director level wear plain I.D. badges; directors wear silver background badges; company officers (vice president and above) wear gold background badges. Floor supervisors and foremen in this company wore blue or black trousers, a white shirt, and blue or black tie.

Skill Structure (35)

An airline mechanic's skill is identified by the possession of an FAA A and/or P license. An airline mechanic qualifies for these licenses in much the same manner as members of the armed forces--that is by taking exams. Prior to taking an FAA exam one of two conditions must be met: graduation from an approved FAA school; or eighteen months experience working for an individual with a current A and P license. An FAA approved school is one in which the FAA specifies the courses and sets up the curriculum. An FAA course (of the type that would prepare

an individual to pass an A and/or P exam) lasts approximately two years and is made up of about 1900 hours of lab work, classwork, and on-the-job training. The type of subjects covered are electronics, mechanical and electrical drawing, hydraulics, weight and balance, non-destructive testing, and so on.

When an individual meets one of the two conditions stated above, he is allowed to take the exam. Actually, there are three different exams. All applicants for license must take the first exam. This exam consists of 50 multiple choice questions covering basic mechanical concepts. The second exam is an airframe exam. The third is a powerplant (propulsion) exam. Each of these exams consists of 100 multiple choice questions. The passing score for all exams is 70 percent.

After an individual passes the first exam and the second and/or third exams he becomes eligible for the oral and practical portions of the licensing process. This portion of the process is administered/observed by a certified FAA instructor. Each of the major airlines have one or more certified instructors at their maintenance locations. The airframe and propulsion areas are divided into numerous subject areas and the applicant must complete a project (and be certified proficient by the FAA instructor) in each of the subject areas. The oral/practical portion of the process is on a pass/fail basis.

When an individual passes the written and practical portions of the exam he receives an A and P license as appropriate. For example, an individual passing exams one and three, and the propulsion practical examination, would receive a "P" license while an individual passing all exams and practical examinations would receive an A and P license. An individual in the grade of mechanic, or higher, is paid a premium of 15 cents per hour for each valid license. An A and P is considered two licenses and is worth 30 cents per hour in extra pay. Effective 1 November 1980, this rate will increase to 20 cents per license.

An A and P license is considered valid for life. However, an individual who has not worked in a particular area for six months or longer becomes noncurrent. For example, an individual with an A and P license who works exclusively in an airframe section would (in six months) have a current A and noncurrent P license. Both licenses, however, are considered valid. An individual gains currency by having a mechanic with a current license certify his proficiency or by attending an approved FAA refresher school.

Promotion Policy

The promotion process in the airline maintenance field depends upon whether one is competing for a management or nonmanagement position. If one is competing for

a nonmanagement position, the union agreement specifies the process; if for a management position, the company establishes the process.

Nonmanagement Promotion

Promotion in nonmanagement positions depends on two factors: seniority and qualifications. An individual is considered qualified if he possesses the necessary licenses and time requirements as previously stated in this chapter. On occasion there are special factory or on-the-job training requirements specified. However, the senior employee cannot be disqualified due to the lack of such training in cases where the company has not given that employee an opportunity to acquire the training.

Seniority is determined by work classification and starts from the date an individual enters one of the work classifications listed in Table 7-3. When jobs are created or vacancies occur in the classification of inspector, lead mechanic, lead stock clerk, and so on, the company must publish bulletins and post them on the company bulletin board at all locations. Union rules are quite specific as to who gets promoted. The following quote is provided from the Union Agreement.

In filling all bulletined jobs, the senior employee bidding will be chosen, unless a thorough investigation by the company establishes reasonable doubt as to the employee's qualifications in the general class of work covered by the bulletin. In cases where the senior employee is passed over, the next senior qualified employee bidding on the job will be chosen.

TABLE 7-3

AIRLINE WORK CLASSIFICATIONS

1. Mechanic	7. Airline Services
2. Ground Communications	8. Facility Servicer
3. Flight Simulator Technician	9. Office Servicer
4. Apprentice Mechanic	10. Pressman
5. Stock Clerk	11. Bindary Clerk
6. Ramp Serviceman	

It is interesting to note that only probationary and management employees receive performance reports. All new hourly employees are in a probationary status during the first sixty-four work days while management employees remain on a probationary status for six months.

Managerial Promotion

According to the information received from the major airlines, promotion to management positions is based upon education, experience, and ability. There is no formal weighted promotion system that assigns points to these factors as is the case in the U.S. Armed Forces. However, one of the major airlines indicated the main emphasis is on education and ability. An example of the kind of factors considered by one major airline in the promotion of an individual to the position of an airframe maintenance foreman is given in Table 7-4.

TABLE 7-4
PROMOTIONAL REQUIREMENTS TO AIRFRAME FOREMAN

Education

High school diploma required with 2 years of
business college desirable

Graduate of an aircraft maintenance technical
school

A and P license required

Training in budget/cost methods desirable

Experience

4 years experience in all phases of aircraft
maintenance required with 7 years desirable

Some experience in supervision, leading, and
directing people.

Abilities

Demonstrates potential for first level super-
vision

Self starter, highly motivated

Willing to accept responsibility

Employee Appraisals. Both of the major airlines from whom we received information conduct performance evaluations of their management employees. One had a centralized divisional evaluation system using a professional appraisal department. There were two types of appraisals: the supervisory and staff assessment (SSA), and the management appraisal (MA).

Both the MA and SSA reports used information obtained from the following sources:

1. The employee's work history and educational background
2. An evaluation by the two levels of supervision above the employee with respect to current performance and future potential
3. Current test results measuring abilities, interests, values, management skills, and leadership styles

The SSA was used to evaluate an employee in fifteen areas of management and is the device utilized to screen candidates for management positions. It is the vehicle used to assess the abilities stated in Table 7-4. The SAA is completed each time an individual is considered for promotion. According to the airline, an SSA takes the appraisal office approximately twenty-one hours to complete.

The MA is accomplished annually and attempts to measure an employee's performance, abilities, interests,

management style, and relations with others. According to the airline, development needs are emphasized and the employee's long-range potential for advancement is estimated. The MA is a major input to the SSA and, as such, is an important promotional factor.

Once complete, these appraisals are discussed with the employee and the two levels of supervision above him. A rebuttal may be made if the employee disagrees with the assessment.

Summary

This chapter summarizes the system used by two major airlines in managing the personnel in their maintenance operations. Three aspects of the progression system were discussed: first, the positional grade structure, along with the requirements for those grades; next, skill requirements and the method of obtaining those skills; finally the promotional process. It is intended this chapter provide those doing future research in career progression systems the basic knowledge necessary to embark on more detailed studies.

CHAPTER VIII

SUMMARY AND RECOMMENDATIONS FOR FURTHER STUDY

Summary

This thesis constitutes one part of a six-team study which will attempt to determine if it would be practical or feasible for the USAF to eliminate or modify the current upward progression policy and allow an enlisted technician to remain a "doer" of maintenance for a full career. Figure 1-1 illustrates the three-tier research design used in answering the question stated above. This thesis was a part of the first tier and had a primary objective of providing a baseline of information with respect to alternate enlisted career progression systems to those thesis teams conducting the second and third tier studies.

The alternate enlisted career progression systems examined in this thesis are those of the Air Force, Navy, Army, Britain's Royal Air Force, and two major airlines. The information base was established by systematically identifying, investigating, and synthesizing the current enlisted career progression systems for each of the systems listed above. The research tools used in building the information base were the research questions established

in Chapter I. Chapters III through VII answer the research questions for the Air Force, Navy, Army, Royal Air Force, and the airlines, respectively and, therefore, constitute the second and third tier research baseline.

Recommendations for Further Study

The purpose of this thesis was to identify, examine, and consolidate the main features of the alternate enlisted career progression systems. It is recommended that future studies identify the objectives of each of the alternate systems with respect to retention and manpower utilization and then evaluate those systems in terms of objective accomplishment. Additionally, an evaluation of the current Air Force system with respect to its objectives is recommended. Once these two evaluations are complete, an effectiveness and efficiency comparison is recommended to identify the best features of each of the systems. Once those best features are identified, it is recommended that a study be conducted to determine the feasibility of using those features to build a modified Air Force enlisted career progression system, especially in technical fields such as maintenance. The main objective of these recommended studies should be the creation of an enlisted career progression system capable of enhancing the retention of those technicians who have become so critical in the maintenance of the complex weapon systems of our

technological age. The need to retain our technicians is great and has been recognized by top Air Force leadership. General Lew Allen, Jr. stressed the importance of technological skill in a recent public address when he stated that Air Force success depends upon airmen with technological sophistication (7:13). Recent reports have indicated a loss of experience in the type of personnel referred to by General Allen (7; 38).

If future Air Force researchers engage in studies of the type recommended here the potential exists for a significant improvement to the enlisted career progression system and to the retention of the technical airmen needed to succeed in today's Air Force.

APPENDICES

APPENDIX A
INSIGNIA OF THE UNITED STATES ARMED FORCES

Magazine

Insignia of the United States Armed Forces












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







NAVY

 SEAMAN RECRUIT	 SEAMAN APPRENTICE	 SEAMAN	 PETTY OFFICER THIRD CLASS	 PETTY OFFICER SECOND CLASS	 PETTY OFFICER FIRST CLASS	 CHIEF PETTY OFFICER	 SENIOR CHIEF PETTY OFFICER	 MASTER CHIEF PETTY OFFICER	 MASTER CHIEF PETTY OFFICER OF THE NAVY
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





MARINES

(No insignia) PRIVATE	 PRIVATE FIRST CLASS	 LANCIE CORPORAL	 CORPORAL	 SERGEANT	 STAFF SERGEANT	 GUNNERY SERGEANT	 FIRST SERGEANT	 SERGEANT MAJOR	 SERGEANT MAJOR OF THE MARINE CORPS
						 MASTER SERGEANT	 MASTER GUNNERY SERGEANT		

ARMY

(No insignia) PRIVATE	 PRIVATE	 PRIVATE FIRST CLASS	 CORPORAL	 SERGEANT	 STAFF SERGEANT	 SERGEANT FIRST CLASS	 FIRST SERGEANT	 COMMAND SERGEANT MAJOR	 SERGEANT MAJOR OF THE ARMY
			 SPECIALIST 4	 SPECIALIST 5	 SPECIALIST 6		 MASTER SERGEANT	 SERGEANT MAJOR	

AIR FORCE

(No insignia) AIRMAN BASIC	 AIRMAN	 AIRMAN FIRST CLASS	 SERGEANT	 STAFF SERGEANT	 TECHNICAL SERGEANT	 MASTER SERGEANT	 SENIOR MASTER SERGEANT	 CHIEF MASTER SERGEANT	 CHIEF MASTER SERGEANT OF THE AIR FORCE
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APPENDIX B
NAVAL CAREER SPECIALTY INSIGNIA



Master-at-Arms (MA)*



Electronic Warfare Technician (EW)



Ocean Systems Technician (OT)



Signalman (SM)



Sonar Technician (ST)



Operations Specialist (OS)



Quartermaster (QM)



Boatswain's Mate (BM)

Deck Group



Missile Technician (MT)



Torpedoman's Mate (TM)



Mineman (MN)




Gunner's Mate (GM)




Fire Control Technician (FT)


Ordnance Group




Electronics Technician (ET)



Data Systems Technician (DS)



Instrumentman (IM)



Opticalman (OM)

Electronics & Precision Instrument Group



Religious Program Specialist (RP)



Radioman (RM)



Journalist (JO)



Cryptologic Technician (CT)



Navy Counselor (NC)*



Yeoman (YN)



Storekeeper (SK)



Postal Clerk (PC)



Ship's Serviceman (SH)



Personnelman (PN)



Disbursing Clerk (DK)



Intelligence Specialist (IS)



Mess Management Specialist (MS)



Data Processing Technician (DP)



Legalman (LN)*

Administrative & Clerical Group



Lithographer (LI)



Illustrator-Draftsman (DM)













Musician (MU)








Miscellaneous Group


















Seaman

Seaman Apprentice

Seaman Recruit

 Molder (ML)	 Gas Turbine Systems Technician (GS)
 Machinist's Mate (MM)	 Electrician's Mate (EM)
 Engineman (EN)	 Hull Maintenance Technician (HT)
 Machinery Repairman (MR)	 Interior Communications Electrician (IC)
 Boiler Technician (BT)	 Patternmaker (PM)
Engineering & Hull Group	

 Construction Mechanic (CM)
 Equipment Operator (EO)
 Utilitiesman (UT)
 Construction Electrician (CE)
 Steelworker (SW)
 Builder (BU)
 Engineering Aid (EA)
Construction Group

 Aviation Electronics Technician (AT)	 Aviation Ordnanceman (AO)	 Aerographer's Mate (AG)
 Trademan (TD)	 Aviation Fire Control Technician (AQ)	 Photographer's Mate (PH)
 Aviation Antisubmarine Warfare Technician (AX)	 Air Traffic Controller (AC)	 Aviation Storekeeper (AK)
 Aviation Structural Mechanic (AM)	 Aviation Boatswain's Mate (AB)	 Aviation Electrician's Mate (AE)
 Aviation Machinist's Mate (AD)	 Aircrew Survival Equipmentman (PRI)	 Aviation Maintenance Administrationman (AZ)
 Aviation Antisubmarine Warfare Operator (AW)	 Aviation Support Equipment Technician (AS)	
Aviation Group		

Fireman

Fireman Apprentice

Fireman Recruit

Constructionman

Constructionman Apprentice

Constructionman Recruit

Airman

Airman Apprentice

Airman Recruit



Hospitalman

Dentalman

Hospitalman
Apprentice

Dentalman
Apprentice

Hospitalman
Recruit

Dentalman
Recruit

APPENDIX C
ARMY CAREER MANAGEMENT FIELDS

Career Management Field	<u>Title</u>
11	Infantry
12	Combat Engineering
13	Field Artillery
16	Air Defense Artillery
19	Armor
23	Air Defense Missile Maintenance
27	Light Air Defense Maintenance
28	Aviation Communications--Electronics
29	Communications--Electronics Maintenance
31	Communications--Electronics Operations
33	EW/Intercept Systems Maintenance
51	General Engineering
54	Chemical
55	Ammunition
63	Mechanical Maintenance
64	Transportation
67	Aviation Maintenance
71	Administration
74	Automatic Data Processing
76	Supply
79	Recruitment and Reenlistment
81	Topographic Engineering
84	Public Affairs
91	Medical
92	Petroleum
94	Food Service
95	Law Enforcement
96	Intelligence
97	Band
98	EW/Cryptologic Operations

APPENDIX D
ARMY CAREER PROGRESSION PATTERN FOR THE
67 MILITARY OCCUPATIONAL SPECIALTY

APPENDIX E
ARMY ENLISTED EVALUATION REPORT

ENLISTED EVALUATION REPORT (AR 600-300)										SSN													
For preparation, see DA Pamphlet 635-1.										C													
PART I PERSONAL DATA										D													
A. GRADE (ABBR) NAME (LAST) (FIRST) (MI) SSN					B. TYPE OF REPORT					0 1 2 3 4 5 6 7 8 9					0 1 2 3 4 5 6 7 8 9								
D. ORGANIZATION AND STATION					OTHER SPECIFY					INIT ANL CR SP					0 1 2 3 4 5 6 7 8 9								
										0 1 2 3 4 5 6 7 8 9					0 1 2 3 4 5 6 7 8 9								
E. PMOSC		F. DMOSC		G. SMOSC		H. PERIOD OF REPORT				I. NONRATED PERIOD													
						MO. 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55				NO. OF MONTHS _____													
						BEGIN				REASON CODES _____													
						TR 75 76 77 78 79 80 81 82 83 84 85																	
J. DUTY POSITION TITLE					NO. 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55																		
AUTH PAY GR					END																		
TR 75 76 77 78 79 80 81 82 83 84 85																							
PART II RATINGS																							
A. BRIEF DESCRIPTION OF DUTIES																							
B. INDORSER HAS NOT OBSERVED AND CAN NOT RATE SOLDIER			C. REPORT BASED ON:			DAILY CONTACT			FREQ OBSN			INFREQ OBSN			REPT & REC			D. SOLDIER SUPPORTS THE ARMY'S EQUAL OPPORTUNITY PROGRAM			YES NO		
						R 0 1 2 3 4 5			0 1 2 3 4 5			0 1 2 3 4 5			0 1 2 3 4 5			R 0 1 2 3 4 5			R 0 1 2 3 4 5		
E. DUTY PERFORMANCE TRAITS				RANKS WITH VERY BEST		SUPERIOR TO MOST		EXCEEDS OR MEETS DUTY REQUIREMENTS		NEEDS IMPROVEMENT		SCORE		F. DEMONSTRATED OVERALL PERFORMANCE OF ASSIGNED DUTIES									
				5 4		3 2		1 0		R I		Ranks With Superior to Most Exceeds or Meets Duty Requirements Demonstrates Share of Responsibility											
1. Is well informed on all phases of assigned duties. (Scope of knowledge about duties)				R 0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		R 0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5											
2. Carries out orders without constant supervision. (Dependability in performing without supervision)				R 0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		44 43 42 38 34 33 27 21 15 14 10 6 5 3 1											
3. Shows interest and enthusiasm for duties. (Attitude toward duties)				R 0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5											
4. Demonstrates qualities of leadership. (Exerts positive influence on others)				R 0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5											
5. Seeks out opportunities for self-improvement. (Effort directed toward realization of potential)				R 0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5											
6. Displays ability to initiate action without direction from others. (Aggressive pursuit of methods to improve duty performance)				R 0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		31 30 28 26 24 22 18 14 10 7 5 3 0											
7. Is successful in working with others. (Ability to work in harmony with others)				R 0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5											
8. Personal behavior sets a good example for others. (High standards of personal conduct)				R 0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5											
9. Takes pride in dress and appearance. (Neat and military in bearing)				R 0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5											
10. Is physically fit, as required, for MOS grade during combat. (Physical condition)				R 0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5		0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5 0 1 2 3 4 5											
TOTALS:																							
										H. SCORE													
										BLOCKS RATER INDORSER													
										E [] []													
										F [] []													
										G [] []													
										SUM [] + [] = [] + 1 = [] REPT SCORE													

DA Form 2166-3 1 Jul 75 This form, together with DA Form 2166-3A, 1 Jul 75, replaces DA Form 2166-4, 1 Jul 75, which is obsolete.

APPENDIX F
CURRENT ROYAL AIR FORCE TRADES (5:pp.1A-1 to 1A-5)

<u>Trade Group</u>	<u>Trade Description</u>	<u>List</u>
1	Aircraft Engineering (Maintenance)	I
2	Aircraft Electronic Maintenance	I
3	Ground Electronics	I
5	General Engineering	
	Carpenter	II
	Aerial Erector	II
	All other areas	I
6	Mechanical Transport	
	Driver	II
	Mechanic	I
7	Marine Craft	
	Boatwright	I
	Boat Repairer	I
	Boat Mechanic	I
	Coxswain	II
	Boat Crew	II
8	Security Police	II
9	Air Traffic Control	I
10	General Administration	II
11	Telecommunications	
	Radio Operators	I
	All others	II
12	Aerospace Systems Operating	II
13	Safety	II
14	Photography	II
15	Medical	
	Medical Secretary	II
	All others	I

<u>Trade Group</u>	<u>Trade Description</u>	<u>List</u>
16	Dental	
	Dental Secretary	II
	Dental Assistant	II
	All others	I
17	Accounting	II
18	Supply and Movements	II
19	Catering	II
20	Music	I

APPENDIX G
EXAMPLE OF A ROYAL AIR FORCE SKILL
AND KNOWLEDGE SPECIFICATION

Examining Propellers Installed
on Aircraft [7:p.APL-1]

SAKS AP-1

GENERAL DESCRIPTION

1. Pre-requisite SAKS: EP 13, 62, 74, 65.
SODEA 1, 5, 8, 10, 13, 25
2. A trained man can examine propellers installed on aircraft.

IMPORTANT SKILLS

3. He can recognize by their physical appearance:
 - a. Propellers
 - b. De-icer shoes/channels
 - c. Spinners
4. With the aid of a servicing schedule he can:
 - a. Check the propeller for track
 - b. Examine propeller and spinner for damage
 - c. Recognize corrosion
 - d. Recognize damage to de-icer shoes
 - e. Remove and refit spinner shell
 - f. Check all locking devices

User Trades:

TG 1: A tech A/P Jnr Tech
 A mech P LAC

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