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STUDENT REPORT

ASSURED COMBAT CAPABILITY:
THE POTENTIAL FOR DUAL-TRACK
RATED PERSONNEL MANAGEMENT

MAJOR STEVEN L. HANSEN 87-1105
"insights into tomorrow"

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REPORT NUMBER 87-1105

TITLE ASSURED COMBAT CAPABILITY: THE POTENTIAL
FOR DUAL-TRACK RATED PERSONNEL MANAGEMENT

AUTHOR(S) MAJOR STEVEN L. HANSEN, USAF

FACULTY ADVISOR WING COMMANDER JOHN P. DACRE, RAF

SPONSOR MAJOR JEFFREY C. PARKER, HQ SAC/DPROR

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requirements for graduation.

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The purpose of this project was to examine the feasibility of a Dual-Track system of career management for the rated personnel in the United States Air Force. It begins with a discussion of the rated officer retention problem and some of the reasons why the current system must be changed. Chapters Two and Three discuss the current career management systems of the United States Air Force and the British Royal Air Force respectively. Chapter Four discusses the basic guidelines and framework for the proposed Dual-Track system. Chapter Five is a cost analysis showing the cost savings gained through implementation of the new system. The final chapter consists of conclusions and recommendations derived from this study. <i>KEY WORDS:</i> COMBAT READINESS, TRAINING, CARLEAS, COSTS, AIR FORCE PERSONNEL.					
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PREFACE

Retention of pilots and navigators in the United States Air Force has been decreasing drastically since 1983. Part of the reason for this low retention rate is the inability of the current personnel system of career management to satisfy rated officers' demands for job security, assignment stabilization, assignment selection, and promotion opportunity. This study examines the feasibility, analyzes the costs involved, and proposes the basic guidelines for a Dual-Track system of career management for the rated force. The proposed system will combine many of the policies inherent in the present system with those philosophies found applicable in the British Royal Air Force (RAF) system of career management. The proposed system will operate in conjunction with the career management pattern now in force for the remainder of the USAF officer force.

This material is being submitted to the faculty of Troy State University in Montgomery in partial fulfillment of the requirements for the Master of Science in Personnel Management degree.

During the course of this project, I was extremely fortunate to have outstanding support from several people. I want to express my sincere appreciation to Major Gene Leach for getting me started and providing encouragement when it was needed. I also owe a large debt of gratitude to both my advisor, Wing Commander Phil Dacre of the Royal Air Force, and Mr. Dennis Gibson of Troy State University in Montgomery for providing invaluable comments and suggestions throughout the project.



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ABOUT THE AUTHOR

MAJOR STEVEN L. HANSEN

Major Hansen received his Bachelor of Science degree in International Affairs from the United States Air Force Academy in 1973. He earned his navigator wings at Mather AFB, California in 1974. This project will fulfill partial requirements for his Master's Degree in Personnel Management from Troy State University in Montgomery with graduation scheduled in June 1987.

Major Hansen has extensive operational, training, and staff experience as an instructor radar navigator in the B-52H. Following Initial Qualification training, he was assigned to the 410th Bombardment Wing, K. I. Sawyer AFB, Michigan, from 1975 until 1982. He held various jobs during this period including Squadron Executive Officer, Wing Standardization and Evaluation Instructor Radar Navigator, and Wing Missile Officer. He also represented the USAF at the 1981 international bombing competition held in Great Britain.

In December 1982, he was assigned to SAC Headquarters at Offutt AFB, Nebraska, and served as the Chief, Strategic Timing Branch, Joint Strategic Targeting Planning Staff. In this assignment he developed, produced, and maintained US Nuclear War Plan timing and resolution for aircraft forces. During this assignment, Major Hansen performed additional duties as a Headquarters USAF Advance Agent for Presidential Flight Support. He represented the Chief of Staff of the Air Force and the White House Military Office as the on-scene Air Force expert for Presidential arrivals and departures throughout the world.

Major Hansen is a senior navigator with over 2600 hours of flying time and has 12 years of SAC experience. He attended Squadron Officer School in 1979. Following graduation from ACSC, he will be remaining at Maxwell AFB, Alabama for an assignment on the ACSC faculty.

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EXECUTIVE SUMMARY

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"insights into tomorrow"

REPORT NUMBER 87-1105

AUTHOR(S) MAJOR STEVEN L. HANSEN, USAF

TITLE ASSURED COMBAT CAPABILITY: THE POTENTIAL FOR DUAL-TRACK
RATED PERSONNEL MANAGEMENT

I. Purpose: To propose an alternative method for career management of rated officers in the United States Air Force that combines the best aspects of the current management system and alternatives proposed by current Royal Air Force career management policies to assure the necessary combat capability into the future.

II. Problem: Retention of pilots and navigators in the United States Air Force has been decreasing drastically over the past few years. Part of the reason for this low retention rate is the inability of the current personnel system of career management to satisfy rated officers' demands for job security, assignment stabilization, assignment selection, and promotion opportunity. The loss of these pilots and navigators is costing the Air Force millions of dollars in retraining costs. The loss of experience and aviation leadership, if not curtailed, will affect the combat capability of the Air Force in the future. An alternate system of managing the careers of rated officers is necessary to halt the decline in retention, satisfy the needs of those career aviators, and provide the Air Force valuable savings

CONTINUED

in terms of dollars. This new system must operate within the boundaries of the current management system and insure the combat capability of our forces into the future.

III. Discussion: Pilot and navigator retention rates have been on a decline since 1983 and presently the Air Force loses 41 out of every 100 pilots trained before twelve years of active duty service. Training costs have risen dramatically over the past decade. Presently, it costs over \$1 million to provide the basic aviation training and, in some cases, an additional \$3 million to complete requirements to become an aircraft commander. The loss incurred as a rated officer separates from the service directly impact the money available for weapon systems acquisition, spare part purchases, and personnel compensation. Furthermore, a vast amount of corporate knowledge is lost. Although this cost cannot be measured, it certainly affects the combat capability of the Air Force.

The current system of officer career management, based on the "whole person" concept, offers the needed guidance and recommendations for officers aspiring higher promotion, staff experience, and eventual command positions. However, it strongly discourages any thought of building a career totally in aviation. For many pilots and navigators, flying is more than a career starter. There are several documented surveys indicating many aviators would be more satisfied flying and training for their entire career. The low retention rate of rated officers the Air Force suffers today is largely a result of the current management system. Many of these highly trained, valuable resources desiring a career in aviation are leaving military service to find careers in the private sector.

The British Royal Air Force (RAF) already has a career management system that offers the aviator an option to remain in flying duties for an entire career. Only the best rated officers are offered this option which maintains the highest standards in excellence. These officers form the core of a highly trained and specialized cadre that provide a leadership, corporate knowledge, and training base invaluable in maintaining an assured combat capability.

CONTINUED

A Dual-Track system of career management is presented in this study and the basic guidelines are outlined. This system, or one very similar to it, provides the opportunity for the Air Force to have a highly trained and experienced core within the rated force to provide the training and flying leadership for the entire force.

IV. Conclusions and Recommendations: This study has determined the Dual-Track system of career management is a superior tool for pilots and navigators and should be implemented. It will work in conjunction with the current system and augment the overall force structure by providing a cadre of highly trained and experienced career pilots and navigators. This cadre is needed to increase retention of a costly resource and ensure our combat capability into the future.

Chapter One

INTRODUCTION

BACKGROUND FOR THE STUDY

Our ability to get the mission done and to maintain an effective deterrent force depends on recruiting and retaining high quality men and women in sufficient numbers to provide an experienced and combat-ready force. Retaining our experienced people takes a combination of personal commitment from them and a strong commitment to them on our part (4:108).

Those few words by former Air Force Chief of Staff, General Charles A. Gabriel, in September 1985, highlight the concern at the highest levels of the Air Force over the problem of recruiting and retaining qualified men and women in today's Air Force. The rated officer force comprised of pilots and navigators is one of the most expensive resources the Air Force manages. The overall concern about training and retention of this resource rightfully deserves the attention it has received in recent years. Neglecting these assets could directly affect the readiness and combat capability of the Air Force in the future (14:71).

Retention in the rated force has been a critical problem for the Air Force throughout the 1980s as evidenced by a significant decline in rated officer retention rates since 1983 (1:7). Retention of the pilot force, for example, has dropped to the lowest levels since the period just before 1980, "where pilot retention rates dropped to all-time lows, costing the service billions of training dollars and immeasurable losses of combat pilot experience" (6:1). The following figures detail the increase in loss rates for pilots in their sixth to eleventh year of active duty. Although specific retention figures for navigators were not available for the same time period, their overall retention figures were slightly better than those listed for pilots (1:7; 7:8; 12:2; 16:1).

FISCAL YEAR	PILOT RETENTION RATES
1976	50.6 %
1977	47.9 %
1978	39.6 %
1979	26.0 %
1980	42.0 %
1981	54.0 %
1982	68.0 %
1983	78.0 %
1984	72.0 %
1985	59.0 %

Table 1. Pilot Retention Rates

These loss rates impact the Air Force in several areas. Expensive replacement costs, loss of flying expertise, critical shortages for personnel in flying-related staff jobs, and a loss of potential future senior leadership are just a few of the problems that must be contended with as the retention rates drop (27:4). With today's budgetary constraints, one of the most pressing problems faced by Air Force senior leadership is the tremendously high cost of replacing qualified pilots and navigators to maintain a minimum level of combat readiness for the future. Moreover, an increase of experience level is required to meet the needs of the Air Force as new and more technically advanced aircraft come into service.

Training and maintaining an effective rated officer force with the desired combat capability is an area where low retention rates in the rated force directly impact the expenditures of defense dollars. Every dollar spent on replacing a pilot or navigator reduces the money available for weapon systems acquisition, spare part purchases, and personnel compensation (25:4).

The cost in 1985 to train just one graduate of Undergraduate Pilot Training (UPT) was \$354,700 and a cost of \$63,600 for a Undergraduate Navigator Training (UNT) graduate (23:50). The specific costs to train each individual in selected weapon systems are presented in Chapter Five, but the overall average cost for each fully trained pilot trained is near \$1 million (23:50). The costs increase if further training and eventual upgrade to aircraft commander or instructor status is involved. The Military Airlift Command's Deputy Chief of Staff for Personnel estimated

the 1985 cost of a mission ready C-141 aircraft commander at nearly \$4 million (3:1; 17:1). Furthermore, a vast amount of corporate knowledge is lost, the cost of which is invaluable, but which affects our combat capability (3:1).

PREVIOUS RETENTION STUDIES

Many surveys have been conducted over the last 15 years by various commands in the Air Force to determine the major causes for the rated officer retention problem. A survey in the Military Airlift Command cited the major reason for pilots leaving the service as not allowing pilots to fly as much as they desired and forcing them to devote their 'free' time to pursuit of the Air Force's "whole man" concept (10:3; 28:3). The Tactical Air Command's survey blamed involvement in additional duties as the main cause for separation. The additional duties were taking away too much time from opportunities needed to develop experience (2:3; 28:3).

In 1979, an Air Force wide survey reported,

the dilemma perceived by pilots and navigators is one of being forced to choose between two unacceptable alternatives: they can enhance promotability and job security by giving up what they enjoy and getting a staff or rated supplement job, or they can continue in rated duties and unnecessarily jeopardize their promotion opportunities (11:23; 28:3).

Another study charged low job satisfaction as the major complaint because of limited flying time and a lack of emphasis on flying duties. The Air Force and commercial pilots answering this survey blamed the current leadership throughout the command structure for these inadequacies (8:24; 25:6).

Pay, benefits, and assignment policies, though significant problems to retention, are not the most important reasons why Air Force pilots leave the service. In fact, many of the airline pilots, as well as Air Force pilots who plan to . . . [separately], indicated they would have remained in the Air Force if they were given an opportunity to spend a career performing flying duties and be equitably recognized for doing so (8:1, 24; 25:6).

The biggest measure of success in today's Air Force is promotion. However, aviators seeking promotion must leave the cockpit and receive career broadening assignments (28:45-48). This management system works well for rated officers who only want

to earn wings and fly as a foundation to later staff and command positions. Unfortunately, this system inhibits the professional military officer who does not want to leave the cockpit. Therefore, the officers who only want to fly will eventually decide the Air Force is not for them and leave for the airlines or another career in civilian life where their needs can better be met (6:1).

"In order to halt the present retention trend, we need to develop a sense of commitment . . . our rated force toward the service and conversely, the service toward our rated force" (3:3). Based on forecast airline hirings and the present trend in retention, the Air Force must take positive action to resolve the conflict between those who want to be professional crewmembers and the Air Force philosophy of promoting the whole-person concept (3:1). The Air Force must realize there are a large number of pilots and navigators perfectly content to fly airplanes and not become Chief of Staff. Presently, the system does not provide a career track for these individuals. "If a man enjoys flying because of the challenge involved and is not motivated by other jobs in the Air Force, then the Air Force needs to look at ways to keep him in the cockpit" (31:16). There should be many opportunities for those desiring a career in the Air Force and among them should be a realistic opportunity for the professional aviator (28:3).

OBJECTIVES

The main objective of this study is to develop and recommend a Dual-Track career progression system for USAF rated officers. The proposed system will save the Air Force valuable dollars and continue to ensure and enhance the future combat capability of the United States Air Force. It will contain many of the aspects currently found in Air Force career management doctrine and aspects found in the career management system of the British Royal Air Force (RAF) (28:4).

ASSUMPTIONS AND LIMITATIONS

Several assumptions have been considered in the development of this research study. It must be assumed the Air Force will continue to manage an officer's career under the provisions of the current officer career management program. It must further be assumed the previous retention studies were valid and many rated officers today would like to have an alternative career progression avenue available to supplement the present career progression track (28:5).

This study has several limitations. First, research has been limited to developing a career management system for rated officers only. Also, only the RAF was examined for possible alternatives in the development of such a system. Assumptions were also made in developing the proposed Dual-Track career system about future promotion percentages. The guidelines and framework for the Dual-Track career management system are presented in Chapter Four (28:5).

OVERVIEW

This chapter introduced the rated officer retention problem and examined some of the reasons why current USAF rated officer career management policies must be modified. Chapter Two discusses the philosophy of the current career management program. Chapter Three explains career possibilities available to rated officers and discusses the basic rated officer career management philosophy of the British Royal Air Force (RAF). The framework and guidelines of a proposed Dual-Track career management system are presented in Chapter Four. A cost analysis of the proposed system compared with the present rated officer career management system is presented in Chapter Five. The analysis shows the cost benefits of developing an alternative way to manage the rated force. Chapter Six presents conclusions drawn from this study and makes recommendations as applicable.

Chapter Two

USAF CAREER MANAGEMENT

THE WHOLE-PERSON CONCEPT

The current policy of managing the pilots and navigators in the United States Air Force is based on the whole-person concept and the basic philosophy of the Defense Officer Personnel Management System (DOPMS) (21:9). These policies are designed to "prepare an officer to assume additional responsibilities within the defense establishment. A secondary purpose is to prepare each officer for advancement. To accomplish these objectives, the Air Force offers, and encourages each member to seek additional intellectual and professional credentials" (20:9). Simply stated, the goal of the present management system is to prepare rated officers to assume future leadership and command positions that require an educated, broadly-based background. The background is gained by career broadening assignments outside the realm of operational flying. It is also evident that the career broadening path is the key to future promotion. For pilots and navigators whose career ambitions include higher rank and executive-type positions, the whole-person concept and DOPMS are both valid principles for their career development (13:93).

This is not the case for all rated officers. For many pilots and navigators, flying is more than a career starter aimed at future desk jobs. Flying is a challenging experience and a career in itself. But according to the present Air Force officer management system, many rated officers cannot find careers unless they are willing to conform to the whole-person concept that requires extensive time away from the cockpit.

The present guidance for preparing officers for top managerial and command positions is found in Air Force Regulation (AFR) 36-23, Officer Career Management, dated 11 March 1985. This manual establishes the policies, objectives, and responsibilities for the career development of all officers, including pilots and navigators, below the grade of colonel. Chapter Seven of AFR 36-23 contains information about career progression in the rated utilization fields and contains guides that "give important milestones that can be used in measuring each officer's progress as related to desirable progression, and in planning assignments, training, and education actions when deficiencies are noted" (20:6-2).

The guides for pilots and navigators divide the flying officers' careers into several phases. "With the diversity of demands for rated expertise and the ever evolving USAF role in the national military structure, no single career path can be labelled as 'best' or 'optimal'" (20:42). The Career Progression Guides list the various types of duties that officers should be performing at various stages of their careers and provide timing for growth in the support and technical fields to broaden managerial and executive skills (20:41). According to Air Force Pamphlet (AFP) 36-22, Officer Career Information, the rate of progression "should provide for an officer to remain at a given level long enough to profit by his or her experience, but not long enough to lose interest and initiative" (21:50-51). The pamphlet acknowledges that some officers may reach their peak performance at a level below the senior leadership level and that these officers can continue to serve in a lower grade. However, the major theme of both AFR 36-23 and AFP 36-23 is that rated officers should leave rated duties and assume managerial and executive responsibilities whenever possible. A career in which the officer specializes as a pilot or navigator until retirement is not recommended (13:94).

A composite pilot and navigator progression guide is shown at Figure 2. All information is extracted from AFR 36-23 (20:45-48). By examining Figure 2 it is apparent the Air Force only stresses rated duties for pilots and navigators during the initial phase (zero to six years) and the advanced development phase (twelve to eighteen years) of their careers. It must be noted the aim of the advanced development phase is to requalify rated officers in a weapon system and then move them into command positions or associated staff positions.

The Career Progression Guides found in AFR 36-23 make it very plain that advanced educational degrees and completion of the applicable professional military education (PME) are the prerequisites to promotion and moving into command positions. The regulation shows that intermediate professional military education (PME) and a master's degree should be completed by the fourteenth year of military service (20:45). The 1985 promotion board for majors found that 58 percent of those line officers eligible for promotion had completed a master's degree, while 66 percent had completed some type of intermediate PME. For those officers who were actually selected for promotion to major, the percentages were much higher. Of the successful candidates, 86 percent had a master's degree, and 85 percent had completed an intermediate service school of some type (32:--).

In the advanced development phase (twelve to eighteen years), officers should not only expect to fill supervisory and staff positions but should plan on completing a senior service school.

Initial Phase**(0 - 6 yrs)**

- Primary emphasis should be placed on establishing flying skills, including pilot and navigator training and qualification in an operational aircraft
- Concentrate on further developing skills to upgrade to instructor
- Complete Squadron Officer School by end of phase
- Consider application for ASTRA Program
- Selected navigators perform duties in scheduling and training

Intermediate Phase**(6 - 12 yrs)**

- Emphasis is on career broadening assignments
- Move into associated utilization fields, such as flight safety, flight test maintenance, or experimental test
- Complete intermediate PME
- Possible assignment in support functions
- Possible assignment as instructor or to an advanced flight school
- Exposure to staff positions at the wing/air division/MAJCOM level

Advanced Development Phase**(12 - 18 yrs)**

- Some may be assigned as operations officers and squadron commanders
- Officers in this phase will fill most operational staff positions
- Those officers assigned to support duties should return to rated duties to renew currency and then move into staff positions
- Rotate assignments between MAJCOM/geographical areas
- Attend intermediate service school
- Complete senior service school
- Master's Degree is desired

Staff Phase**(18 - 23 yrs)**

- Assignments to command/staff positions at wing/MAJCOM/Air Staff levels
- Many officers will be removed from field operations for extensive periods
- Assignment to command positions in support areas

Executive Phase**(23 - 30 yrs)**

- Assignments as wing/air division commanders, vice commanders, or high level staff directors
- Attain doctorate degree if possible

FIGURE 2. Career Progression Guide for Pilots and Navigators

In the staff phase (eighteen to twenty-two years), successful officers will go to major command and air staff positions. Many officers will leave operations during this time and never return. During the executive phase (twenty-three to thirty years), successful officers will be in high-level staff and command positions (13:95).

This concept as presented would, in fact, develop a "whole person" rated officer. This system is both recommended and strongly encouraged through the promotion system. Those officers not following this track are eventually forced out of the Air Force by not being promoted. This process is referred to as the "up or out" system and is currently used to separate those officers not showing the potential for advancement into command and leadership positions (28:10).

CONCLUSIONS

The present system of managing the careers of the rated force is excellent and will efficiently and effectively prepare those officers whose goal is to attain the rank of colonel or general and have a career filled with supervisory or command positions. Unfortunately, there are two basic faults with this philosophy. First, not everyone can be a colonel or a general officer. Secondly, not every pilot or navigator wants to be the future Chief of Staff.

There are several obvious reasons why all rated officers will never reach top management positions. First and foremost is that not everyone has an equal chance. According to AFP 36-22, the overall promotion opportunities in the primary zone are 95 percent promoted to captain, 74 percent promoted to major, 62 percent promoted to lieutenant colonel, and 47 percent to colonel. Using simple mathematics it can easily be determined that only 20 of any 100 newly commissioned officers can be promoted to colonel (21:52).

The surveys cited in Chapter 1 also indicated that many pilots and navigators desired career opportunities while remaining in the cockpit for 20 years. The current rated officer management system does not allow for that alternative and through the "up or out" promotion system actually discourages that career progression to the point of making it virtually impossible. The management system is designed so selection, assignments, promotion opportunity, and job construction tend to favor the manager (30:53). The low retention rate of rated officers that the Air Force suffers today is largely a result of this career management system. Many of these highly trained, valuable resources desiring a career in aviation are leaving military service to find jobs in the civilian sector (6:1).

Chapter Three

ROYAL AIR FORCE CAREER PATTERNS

CAREER/SPECIALIST AIRCREW

The British Royal Air Force (RAF) already has a rated officer career management system that offers more variety in its career management philosophy than that of the United States Air Force (USAF). The biggest difference is the alternative career management system which has been in effect for many years within the RAF. This difference and other basic differences of policy are examined in this chapter for possible application in the proposed Dual-Track system of managing USAF rated officers.

The RAF is considerably smaller than the USAF with approximately 15,000 officers and 80,000 enlisted personnel (24:2; 28:13). There are basically two types of commissioning avenues for those interested in pursuing flying careers. An individual can be granted a permanent commission (PC) or a short service commission (SSC) in the General Duties Branch of the Royal Air Force and pursue duties as a pilot, navigator, air electronics officer, air engineer officer, or air loadmaster. Officers with a short service commission performing in the General Duties Branch will have a commitment for 12 years service, with an option to leave after 8 years and serve for 4 years in the RAF Reserve of Officers (18:1-3). These officers are not eligible for retirement pay but will receive a monetary award upon completion of active service (18:1-4). Officers with SSCs are eligible to compete for appointment to a permanent commission and if selected have the opportunity to serve to age 38 with the option of continuing service until age 55. Officers with permanent commissions will serve initially until their 38/16 point (18:1-1). The 38/16 point is further defined as

the date upon which an officer reaches the age of 38, the day after the date on which he completes 16 years' reckonable service from the age of 21 to qualify for immediate retired pay, or the day after the date on which he completes 8 years' service on a permanent commission whichever is the latest (18:1-1).

At the discretion of the RAF, these officers have the option of being offered service to age 55 (18:1-2).

There are many similarities between the rated officers in the United States Air Force and the Royal Air Force, especially in the first seven years. Most of this time is spent in the cockpit, although certain officers in the RAF are picked for "career" duties early in their careers and may be assigned to a staff tour. "Career" is a term used to describe officers who move through the ranks to positions on the Air Staff (15:52; 28:14).

Promotion to the rank of flight lieutenant (USAF captain) is based on time in grade. After spending five years as a flight lieutenant, all officers are qualified for promotion and must pass an examination prior to promotion to squadron leader (USAF major). The normal promotion to squadron leader can be expected after approximately 8 to 10 years of commissioned service with a promotion expectancy of about 80 percent (19:2; 28:14).

In the RAF, a rated officer's career diverges into two tracks at the point of eligibility for promotion to squadron leader. Those selected for squadron leader can continue their careers to age 55, with the opportunity of promotion to the highest ranks of service. Thereafter they can expect only one flying tour in each rank up to and including Group Captain (USAF Colonel). These officers can expect to be used to a greater extent in ground and staff positions in training and operational areas. As in the USAF this makes use of their flying experience and gives them the breadth of experience necessary for higher command. These officers will normally not be utilized in full time flying duties after their mid-forties (19:1; 28:14). Officers promoted to squadron leader also retain the option of retiring at 38/16 point (19:1-2).

Those officers not selected for promotion to squadron leader by their 36th birthday (or after 14 years of service if they entered after their 22nd birthday) have several alternatives:

1. At the option of the RAF they can be offered Specialist Aircrew duty to age 55. This does not imply that every officer is afforded this opportunity. In fact, the RAF only offers this chance to their best aircrew members. As a Specialist Aircrew member they will remain in flying duties until age 55 or until they can no longer pass their flight physicals. Although promotion to Squadron Leader is possible in exceptional cases these officers are not normally promoted once they become Specialist Aircrew and receive enhanced pay which is comparable to the salary of a squadron leader (18:1-2).
2. At the option of the RAF, they can remain in Specialist Aircrew duty until the 16-year service point, or age 38,

and then transfer to the General Duties Ground Branch. Those officers accepting this option are no longer eligible to receive flight pay (18:1-2).

3. Decide to retire at the 38/16 year point with retirement pay (18:1-2).

4. Forced to retire at the 38/16 year point at the discretion of the RAF with retirement pay (18:1-2).

THE PROMOTION PROCESS

The promotion process of the RAF is another area which has some possible applications in the USAF. To begin with, officers compete only against other officers in their branch for promotion, with promotion quotas determined by requirements of their particular branch (24:2).

The biggest difference in the RAF promotion system in relation to the USAF's rated officer's career pattern is the fact there is no "up or out" system in the RAF. Without the pressures of "up or out", the efficiency reports apply only to an officer's fitness for promotion and command. This gives the RAF raters the latitude to rate their officers with more objectivity (24:6; 28:15).

CONCLUSIONS

There are some outstanding management philosophies in the RAF Dual-Track career system that could apply to the management of the USAF rated officer resource. Although not every aspect of the RAF system is suited for USAF pilot and navigator career progression, certain concepts do have definite benefits, both in dollar savings for the Department of Defense as well as individual consideration of the Air Force rated officer. The Dual-Track proposal in Chapter Four outlines some of these alternatives in the guidelines of a proposed rated officer career management system (28:16).

Chapter Four

THE DUAL-TRACK SYSTEM OF PERSONNEL MANAGEMENT

DUAL-TRACK PROPOSAL

A Dual-Track rated officer management system proposal must combine the current best methods and ideas of the Air Force management system with the best innovative and cost saving concepts appearing most beneficial to the entire Air Force. As the first priority, the new management system must also combine the rated officer's individual needs and the needs of the Air Force and Department of Defense. After studying the current officer management system and the philosophy of normal career patterns, this chapter proposes a new rated officer career management system that stays within the intent of current policies and adds some facets of the career patterns in the Royal Air Force (RAF) noted in Chapter Three (28:17).

The first six years of career development would be the same for rated officers as in the present system. From the end of the initial obligation through selection to major (O-4), a rated officer will have the option to apply for entry into the Dual-Track rated specialist career pattern. The pilot or navigator electing to remain in the executive officer path would expect a career designed along the lines of the current officer career management system. These officers would compete with the rest of the officer force desiring future supervisory and command positions. Their careers would be limited in flying duties and be oriented toward leadership across the spectrum of Air Force. Promotion to lieutenant colonel (O-5) and above would be the goal of these officers. Rated officers wanting a career in the Dual-Track rated officer specialist category would do so with the realization of spending their entire careers in the cockpit or in directly related flying duties (28:18). The alternate Dual-Track rated officer track would have the following characteristics:

1. The Dual-Track rated officer specialist position will be offered only to those rated pilots and navigators possessing outstanding flying records and possessing the ability and qualifications to become outstanding aviators and instructors. Officers can enter the Dual-Track rated specialist career path anytime after their initial obligation through six months after the release of their year group's promotion list to major (O-4) (28:18).

2. Based on the current promotion opportunities listed in AFP 36-23, the assumption will be made that 80 percent of those rated officers in the Dual-Track rated specialist track will attain the rank of major (O-4).
3. The highest rank attainable in the specialist track will be major (O-4).
4. Based on the attempt to maintain a balanced rated force, no more than 30 percent of maximum pilot and navigator authorizations within each specialty will be filled by officers in the Dual-Track rated officer career track (25:12).
5. The current OER system will not apply to pilots and navigators in the specialist track. A yearly evaluation of these individuals will be based on their performance as aviators and their bearing as officers in the Air Force (28:18).
6. After entering the Dual-Track rated specialist track pilots and navigators will not be eligible for PME in residence or other career broadening opportunities such as the Air Force Institute of Technology (28:18).
7. Primary duties will be flying. Additional duties will be only those directly related to flying (28:18).
8. Pilots and navigators in the specialist track will be assigned normally at the squadron level (28:18).
9. The O-3 pay scale will be adjusted to provide a five percent increase in base pay every 2 years after 15 years.
10. Those officers in the Dual-Track rated officer track will receive the maximum allowable flight incentive pay until mandatory retirement at twenty years of military service as long as they continue to pass their annual physical examinations.
11. Pilot and navigator Dual-Track specialists who become medically unqualified for flying duty will be transferred to non-flying duties until mandatory retirement (28:18).
12. Pilots and navigators in the Dual-Track rated specialist track will normally remain in the same weapon system their entire career. Permanent change of station (PCS) moves will be kept to a minimum to enhance both the corporate knowledge aspects and force management system.

This is the basic framework for officers in the proposed Dual-Track career management system. The Dual-Track provides a flexible and responsive force apparent in the RAF system with the benefits inherent in the current USAF philosophy. In the years ahead, the continuance of the all-volunteer environment will demand that Air Force planners become more innovative in their approaches to the management of the rated officer's career. The Dual Track career alternative is viewed as one way to address this challenge.

PROPOSAL ADVANTAGES

The most obvious advantage of the Dual-Track system is the increased retention of experienced pilots and navigators. The Dual-Track system provides an alternative for those rated officers who would normally leave and go fly for the airlines to pursue a flying career. It also offers those who do not desire or do not possess the qualifications for success within the whole-person concept a chance for a career. The proposed Dual-Track system for rated officer career management provides a means of enhancing the experience levels of a core element of the rated officer force that will train and instruct young rated officers to ensure combat capability in the future. This experience is even more valuable as weapon systems become more sophisticated and as flying hours decline due to higher fuel costs and increased use of simulators (28:21).

Another major advantage would be lower training and maintenance costs. The analysis of this cost savings is presented in the next chapter. The extensive dollars savings could be used in many other ways to further Air Force goals in the future. In summary, the advantages the USAF should definitely gain from a Dual-Track system of rated officer career management are individual career control, increased experience level of the rated officer force, improved retention of rated officers, and lower costs (28:21).

PROPOSAL DISADVANTAGES

Because no management system can be totally effective in every way, it is important to present some possible drawbacks to the proposed Dual-Track system of career management.

The concept of a mixed rated officer force is one probable area of concern for Air Force planners attempting to implement a system differing in many ways from established methods. Prior to implementing this concept, the basic philosophy would have to be

made perfectly clear to all personnel. The key feature stressed to all personnel should be that the two career patterns would not be in competition, but would be mutually complementary in the overall flying mission of the Air Force (28:22).

Another criticism of this proposal could be the worry that there are, and would be in the future, insufficient numbers of pilots and navigators who want a career totally and completely involved with flying. This has certainly not been the case in the RAF. Also the commercial airlines employ pilot specialists who apparently reap sufficient job satisfaction from full-time flying careers. Additionally, the airlines profess no requirement, or desire, for their pilots to aspire to become president of the airline or to seek other management positions. Their system appears to have no trouble in recruitment and retention (28:22).

In conclusion, the proposed Dual-Track rated officer career management system provides an alternative to the present officer career management system and combines many of the best ideas of the current system and advantages found in the RAF rated officer career philosophy. The conclusions and recommendations derived from this study are presented in Chapter Six.

Chapter Five

COST ANALYSIS

INTRODUCTION

This chapter compares the training and personnel costs of the proposed Dual-Track rated officer management system and the present rated officer management system. The cost comparison focuses on comparing pilots and navigators in the two systems. The overall evaluation will determine if it is more economically efficient to pay three pilots or navigators under the present rated officer management system or the one pilot or navigator it will take to replace them and perform the same duties in the cockpit as a specialist in the Dual-Track system. Initial training costs for pilots and navigators of both systems are used to establish a common base. Added to this base are the career costs for rated officers of both systems. This provides a cost comparison for one pilot and one navigator of each system. Multiplying the cost per rated officer by the total number of aviators involved in a particular weapon system allows a total force comparison of the Dual-Track rated specialist and the present management system officers. The comparison is presented near the end of this chapter.

TRAINING COSTS

Training costs are equal in either rated officer career management system for pilots and navigators becoming mission-ready in each of the four aircraft examined. Table 2 through Table 5 show the cost calculations for pilots and navigators through their first two years of active duty. The cost components added together to arrive at a training cost are as follows:

- Undergraduate Pilot Training (UPT) or Undergraduate Navigator Training (UNT)
- Survival Training
- Permanent Change of Station (PCS)
- Specific Operational Training (Includes fighter lead-in training for F-111)
- In-Unit Qualification Training

In-unit qualification training costs result from the minimum flight hours required to complete training in a weapon system

multiplied by the hourly cost to operate each aircraft specified in AFR 173-13 (23:10-12). All other components are average or estimated costs for FY 86. The total represents the cost to train one pilot or navigator in the selected aircraft.

	pilot	nav
UPT / UNT	\$ 354,700.00	N/A
Survival Training	4,760.00	N/A
PCS	4,970.00	N/A
Specific Operational Training	168,900.00	N/A
In-Unit Qualification Training	6,760.00	N/A
Total	\$ 540,090.00	N/A

Table 2. T-38 Training Costs

	pilot	nav
UPT / UNT	\$ 354,700.00	\$ 63,600.00
Survival Training	4,760.00	4,760.00
PCS	4,970.00	4,970.00
Specific Operational Training	111,000.00	31,500.00
In-Unit Qualification Training	52,520.00	52,520.00
Total	\$ 527,950.00	\$ 157,350.00

Table 3. C-141 Training Costs

	pilot	nav
UPT / UNT	\$ 354,700.00	\$ 63,600.00
Survival Training	4,760.00	4,760.00
PCS	4,970.00	4,970.00
Specific Operational Training	225,900.00	192,000.00
In-Unit Qualification Training	103,880.00	103,880.00
Total	\$ 694,210.00	\$ 369,210.00

Table 4. B-52H Training Costs

	pilot	nav
UPT / UNT	\$ 354,700.00	\$ 63,600.00
Survival Training	4,760.00	4,760.00
PCS	4,970.00	4,970.00
Specific Operational Training	1,533,900.00	1,023,500.00
In-Unit Qualification Training	53,230.00	53,230.00
Total	\$ 1,951,560.00	\$ 1,150,060.00

Table 5. F-111 Training Costs

Table 2 through Table 5 show that although the cost for each rated specialty is identical through the first year, the cost for qualification and operational training differs significantly. The total training cost to produce a mission-ready pilot or navigator will have a major impact in determining the cost efficiency of the two management systems later in this chapter. For a Dual-Track pilot or navigator specialist, the training cost is a one-time cost. Training costs are also a one-time cost for the first rated officer trained in the present management system, but are really replacement costs for the next two rated officers.

DUAL-TRACK SYSTEM COSTS

Dual-Track system costs add training costs to 20 years of pay and allowances (P & A) and 30 years of retirement pay (RP) to attain a total cost for each pilot or navigator rated specialist in each aircraft. Pay and allowances and retirement pay are computed in dollar figures for FY 86 (23:23).

An earlier assumption of the Dual-Track rated officer management system was an 80 percent promotion rate to major (O-4). Because of that, two tables are listed for each aircraft. Tables 6, 8, 10, and 12 show specialist pilots and navigators in each aircraft who were promoted to O-4 at the fourteen-year point. Tables 7, 9, 11, and 13 illustrate the costs for pilots and navigators who remain captains (O-3) from the four-year point until retirement at twenty years service. In each aircraft the difference between ranks is \$106,041.60 spread over 50 years of active duty and retirement.

	pilot	nav
Training Costs	\$ 540,090.00	N/A
P & A, O-2 (yrs 2 - 4)	59,554.80	N/A
P & A, O-3 (yrs 4 - 14)	403,280.40	N/A
P & A, O-4 (yrs 14 - 20)	293,979.60	N/A
RP, @ O-4 (30 years)	564,084.00	N/A
Total	\$ 1,860,988.80	N/A

Table 6. T-38 Specialist Track Costs, O-4

	pilot	nav
Training Costs	\$ 540,090.00	N/A
P & A, O-2 (yrs 2 - 4)	59,554.80	N/A
P & A, O-3 (yrs 4 - 20)	667,466.40	N/A
RP, @ O-3 (30 years)	487,836.00	N/A
Total	\$ 1,754,947.20	N/A

Table 7. T-38 Specialist Track Costs, O-3

	pilot	nav
Training Costs	\$ 527,950.00	\$ 157,350.00
P & A, O-2 (yrs 2 - 4)	59,554.80	59,554.80
P & A, O-3 (yrs 4 - 14)	403,280.40	403,280.40
P & A, O-4 (yrs 14 - 20)	293,979.60	293,979.60
RP, @ O-4 (30 years)	564,084.00	564,084.00
Total	\$ 1,848,848.80	\$ 1,478,248.80

Table 8. C-141 Specialist Track Costs, O-4

	pilot	nav
Training Costs	\$ 527,950.00	\$ 157,350.00
P & A, O-2 (yrs 2 - 4)	59,554.80	59,554.80
P & A, O-3 (yrs 4 - 20)	667,466.40	667,466.40
RP, @ O-3 (30 years)	487,836.00	487,836.00
Total	\$ 1,742,807.20	\$ 1,372,207.20

Table 9. C-141 Specialist Track Costs, O-3

	pilot	nav
Training Costs	\$ 694,210.00	\$ 369,210.00
P & A, O-2 (yrs 2 - 4)	59,554.80	59,554.80
P & A, O-3 (yrs 4 - 14)	403,280.40	403,280.40
P & A, O-4 (yrs 14 - 20)	293,979.69	293,979.60
RP, @ O-4 (30 years)	564,084.00	564,084.00
Total	\$ 2,015,108.80	\$ 1,690,108.80

Table 10. B-52H Specialist Track Costs, O-4

	pilot	nav
Training Costs	\$ 694,210.00	\$ 369,210.00
P & A, O-2 (yrs 2 - 4)	59,554.80	59,554.80
P & A, O-3 (yrs 4 - 20)	667,466.40	667,466.40
RP, @ O-3 (30 years)	487,836.00	487,836.00
Total	\$ 1,909,067.20	\$ 1,584,067.20

Table 11. B-52H Specialist Track Costs, O-3

	pilot	nav
Training Costs	\$ 1,951,560.00	\$ 1,150,060.00
P & A, O-2 (yrs 2 - 4)	59,554.80	59,554.80
P & A, O-3 (yrs 4 - 14)	403,280.40	403,280.40
P & A, O-4 (yrs 14 - 20)	293,979.60	293,979.60
RP, @ O-4 (30 years)	564,084.00	564,084.00
Total	\$ 3,272,458.80	\$ 2,470,958.80

Table 12. F-111 Specialist Track Costs, O-4

	pilot	nav
Training Costs	\$ 1,951,560.00	\$ 1,150,060.00
P & A, O-2 (yrs 2 - 4)	59,554.80	59,554.80
P & A, O-3 (yrs 4 - 20)	667,466.40	667,466.40
RP, @ O-3 (30 years)	487,836.00	487,836.00
Total	\$ 3,166,417.20	\$ 2,364,917.20

Table 13. F-111 Specialist Track Costs, O-3

PRESENT MANAGEMENT SYSTEM COSTS

This section takes the training costs and adds to them pay and allowances for three rated officers for 20 years. Retirement pay is shown in the tables for the Dual-Track rated officer specialist only in an assumption that the three officers shown in Table 14 through Table 17 will separate prior to retirement or fill other officer billets needed throughout the Air Force. The following tables show the cost of the first rated officer for six years and the two replacement rated officers for seven years each. Each table represents the total cost for the present management system to fill one flying position for 20 years.

<u>1st Pilot/Nav (yrs 0 - 6)</u>	pilot	nav
Training Costs	\$ 540,090.00	N/A
P & A, O-2 (yrs 2 - 4)	59,554.80	
P & A, O-3 (yrs 4 - 6)	74,446.80	
Sub Total	\$ <u>674,091.60</u>	
<u>2nd Pilot/Nav (yrs 6 - 13)</u>		
Training Costs	\$ 504,090.00	
P & A, O-2 (yrs 2 - 4)	59,554.80	
P & A, O-3 (yrs 4 - 7)	113,653.80	
Sub Total	\$ <u>713,298.60</u>	
<u>3rd Pilot/Nav (yrs 13 - 20)</u>		
Training Costs	\$ 540,090.00	
P & A, O-2 (yrs 2 - 4)	59,554.80	
P & A, O-3 (yrs 4 - 7)	113,653.80	
Sub Total (3rd)	\$ 713,298.60	
Sub Total (2nd)	\$ 713,298.60	
Sub Total (1st)	\$ <u>674,091.60</u>	
		V
Total	\$ 2,100,688.80	N/A

Table 14. T-38 Present Management System Cost

<u>1st Pilot/Nav (yrs 0 - 6)</u>	<u>pilot</u>	<u>nav</u>
Training Costs	\$ 527,950.00	\$ 157,350.00
P & A, 0-2 (yrs 2 - 4)	59,554.80	59,554.80
P & A, 0-3 (yrs 4 - 6)	74,446.80	74,446.80
Sub Total	<u>\$ 661,951.60</u>	<u>\$ 291,351.60</u>
<u>2nd Pilot/Nav (yrs 6 - 13)</u>		
Training Costs	\$ 527,950.00	\$ 157,350.00
P & A, 0-2 (yrs 2 - 4)	59,554.80	59,554.80
P & A, 0-3 (yrs 4 - 7)	113,653.80	113,653.80
Sub Total	<u>\$ 701,158.60</u>	<u>\$ 330,558.60</u>
<u>3rd Pilot/Nav (yrs 13 - 20)</u>		
Training Costs	\$ 527,950.00	\$ 157,350.00
P & A, 0-2 (yrs 2 - 4)	59,554.80	59,554.80
P & A, 0-3 (yrs 4 - 7)	113,653.80	113,653.80
Sub Total (3rd)	\$ 701,158.60	\$ 330,558.60
Sub Total (2nd)	\$ 701,158.60	\$ 330,558.60
Sub Total (1st)	<u>\$ 661,951.60</u>	<u>\$ 291,351.60</u>
Total	\$ 2,064,268.80	\$ 952,468.80

Table 15. C-141 Present Management System Cost

<u>1st Pilot/Nav (yrs 0 - 6)</u>	<u>pilot</u>	<u>nav</u>
Training Costs	\$ 694,210.00	\$ 369,210.00
P & A, 0-2 (yrs 2 - 4)	59,554.80	59,554.80
P & A, 0-3 (yrs 4 - 6)	74,446.80	74,446.80
Sub Total	<u>\$ 828,211.60</u>	<u>\$ 503,211.60</u>
<u>2nd Pilot/Nav (yrs 6 - 13)</u>		
Training Costs	\$ 694,210.00	\$ 369,210.00
P & A, 0-2 (yrs 2 - 4)	59,554.80	59,554.80
P & A, 0-3 (yrs 4 - 7)	113,653.80	113,653.80
Sub Total	<u>\$ 867,418.60</u>	<u>\$ 542,418.60</u>
<u>3rd Pilot/Nav (yrs 13 - 20)</u>		
Training Costs	\$ 694,210.00	\$ 369,210.00
P & A, 0-2 (yrs 2 - 4)	59,554.80	59,554.80
P & A, 0-3 (yrs 4 - 7)	113,653.80	113,653.80
Sub Total (3rd)	\$ 867,418.60	\$ 542,418.60
Sub Total (2nd)	\$ 867,418.60	\$ 542,418.60
Sub Total (1st)	<u>\$ 828,211.60</u>	<u>\$ 503,211.60</u>
Total	\$ 2,563,048.80	\$ 1,588,048.80

Table 16. B-52H Present Management System Cost

<u>1st Pilot/Nav (yrs 0 - 6)</u>	<u>pilot</u>	<u>nav</u>
Training Costs	\$ 1,951,560.00	\$ 1,150,060.00
P & A, O-2 (yrs 2 - 4)	59,554.80	59,554.80
P & A, O-3 (yrs 4 - 6)	74,446.80	74,446.80
Sub Total	<u>\$ 2,085,561.60</u>	<u>\$ 1,284,061.60</u>
<u>2nd Pilot/Nav (yrs 6 - 13)</u>		
Training Costs	\$ 1,951,560.00	\$ 1,150,060.00
P & A, O-2 (yrs 2 - 4)	59,554.80	59,554.80
P & A, O-3 (yrs 4 - 7)	113,653.80	113,653.80
Sub Total	<u>\$ 2,124,768.60</u>	<u>\$ 1,323,268.60</u>
<u>3rd Pilot/Nav (yrs 13 - 20)</u>		
Training Costs	\$ 1,951,560.00	\$ 1,150,060.00
P & A, O-2 (yrs 2 - 4)	59,554.80	59,554.80
P & A, O-3 (yrs 4 - 7)	113,653.80	113,653.80
Sub Total (3rd)	\$ 2,124,768.60	\$ 1,323,268.60
Sub Total (2nd)	\$ 2,124,768.60	\$ 1,323,268.60
Sub Total (1st)	<u>\$ 2,085,561.60</u>	<u>\$ 1,284,061.60</u>
Total	\$ 6,335,098.80	\$ 3,930,598.80

Table 17. F-111 Present Management System Cost

FORCE COST COMPARISONS

At the present retention rate of 59 percent, 41 out of every 100 pilots or navigators that initially graduated from flying training would have to be replaced at the high costs shown in the previous tables. It was earlier assumed that 30 percent of the rated officer force would be comprised of Dual-Track rated officer specialists. Thus, the total cost implications of having a 30 percent Dual-Track (D-T) rated force is analyzed in this section and compared with the present management system. For this analysis, rated officers with a Rated Position Indicator of 1 (RPI 1) were considered. These officers' primary duties are in flying (23:33). Table 18 and Table 19 show the breakdown of these numbers by crew specialty.

Type Aircraft	Total RPI 1 Pilots	Total D-T Pilots (30%)	Total D-T O-4 (80%)	Total D-T O-3 (20%)
T-38	638	191	153	38
C-141	936	281	225	56
B-52H	756	227	182	45
F-111	340	102	82	20

Table 18. 30% Dual-Track Rated Pilot Force

Type Aircraft	Total RPI 1 Navs	Total D-T Navs (30%)	Total D-T O-4 (80%)	Total D-T O-3 (20%)
T-38	* No Navigators assigned in T-38 Aircraft *			
C-141	423	127	102	25
B-52H	823	247	198	49
F-111	315	95	76	19

Table 19. 30% Dual-Track Rated Navigator Force

Table 20 and Table 21 show the total force cost comparison broken out by aircraft and totalled. The present management system costs indicate the expense to fill a pilot or navigator position for 20 years utilizing the concept of training three pilots or navigators for each position. These cost figures reflect the total dollar amounts from Table 14 through Table 17 multiplied by the number of pilots in each Dual-Track manning level senario, as specified in Table 18 and Table 19. The costs for the Dual-Track system are calculated similarly, except these costs are broken into different ranks attainable in this system and totalled. The costs for an individual Dual-Track rated officer specialist are taken from Table 6 through Table 13 and multiplied by the number of O-4 and O-3 Dual-Track pilots and navigators using the 30 percent scenario.

Type Aircraft	T-38	C-141
Present Mgt Costs	\$ 402,070,000	\$ 579,650,000
DUAL-TRACK COSTS		
O-4	\$ 284,730,000	\$ 415,990,000
O-3	66,687,994	97,597,203
Total	\$ 351,417,994	\$ 513,587,203
Dollars Saved	\$ 50,652,006	\$ 66,062,797

Type Aircraft	B-52H	F-111
Present Mgt Costs	\$ 581,300,000	\$ 646,180,000
DUAL-TRACK COSTS		
O-4	\$ 366,750,000	\$ 268,340,000
O-3	85,908,024	63,328,344
Total	\$ 452,658,024	\$ 331,668,344
Dollars Saved	\$ 128,641,976	\$ 314,511,656
Total Cost Savings =	\$ 559,868,435	

Table 20. 30% Dual-Track Pilot Force Cost Savings

Type Aircraft	T-38	C-141
Present Mgt Costs	N/A	\$ 120,870,000
DUAL-TRACK COSTS		
O-4		\$ 150,780,000
O-3		34,305,180
Total		\$ 185,085,180
Dollars Saved	V	\$ -64,215,180

Type Aircraft	B-52H	F-111
Present Mgt Costs	\$ 392,090,000	\$ 371,440,000
DUAL-TRACK COSTS		
O-4	\$ 334,640,000	\$ 187,790,000
O-3	77,619,293	44,933,427
Total	\$ 412,259,293	\$ 232,723,427
Dollars Saved	\$ -20,169,293	\$ 138,716,573
Total Cost Savings = \$ <u>54,332,100</u>		

Table 21. 30% Dual-Track Navigator Force Cost Savings

CONCLUSIONS

For each aircraft selected, the Dual-Track pilot specialists showed cost savings when compared to the present management system. Only in the case of the F-111 did the Dual-Track navigator specialist show a savings. It should be noted that the reason for this can be determined to be the initial training costs. As a general rule, the cost to train a navigator is less than a pilot due to the increased use of simulators. The overall savings for the Dual-Track navigator specialist still resulted in a positive number and as training costs increase in the future so will the savings by adopting the proposed Dual-Track rated career management system. Overall a 30 percent Dual-Track rated officer force resulted in a cost savings of \$614,200,535 over twenty years.

It must be remembered these cost savings are for only four aircraft. These aircraft are neither the least nor the most expensive to train pilots and navigators, but represent one major aircraft system from each command and with the exception of the T-38, aircraft that utilize navigators. In fact, an aircraft less complex and expensive to train in than some of the aircraft used here may reveal the Dual-Track system to be more expensive. However, aircraft planned for the future are increasing in complexity, which translates into increasing costs. These costs coupled with high fuel and personnel costs will almost certainly drive initial training and replacement costs upward.

Chapter Six

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

This study has proposed the basic framework and guidelines for an alternative method to manage Air Force pilots and navigators, while, at the same time, operating in conjunction with the present officer career management system. The Dual-Track management system was designed to combine elements of the present system, the philosophies of the Royal Air Force (RAF), and the concept of having a career rated force that would be acceptable to the rated officer's individual needs, ensure and enhance combat capability in the future, and save money. This chapter identifies the significant implications and conclusions drawn from the study conducted in the previous chapters.

The results from surveys conducted in the previous years combined with the declining retention rates for USAF pilots and navigators indicate an alternative approach to officer career management is needed to allow career-minded aviators an avenue to pursue within the Air Force. The current system is not sufficiently responsive to the needs, desires, and goals of these officers. Any effort to retain the valuable training and experience these officers take with them when they separate would be at least as effective as the current management system (4:109). Experience translates into the effectiveness and combat capability needed at the start of any future conflict. The Dual-Track system of rated officer management is an attempt to correct the current problem and provide for those needs.

Air Force pilots and navigators are an extremely high cost resource (9:20). The present trend in training costs indicate their value will only increase over time. The cost analysis presented in Chapter Five clearly establishes the Dual-Track system to be more cost effective. The present concept of training three rated officers to fill one rated position for a 20-year period is certainly less efficient. The cost figures in Chapter Five show financial savings for pilots on all four aircraft and on the most technically complex aircraft for the navigators. The primary reason for savings in the hundreds of millions of dollars is the huge replacement cost involved in training multiple pilots and navigators for one flying position. Also, it should be kept in mind that although present navigator training costs are

relatively low, continued acquisition of increasingly more complex aircraft systems such as the B-1B, will greatly increase all training costs and move the navigators into the same position as the pilots for cost savings. A savings of over \$600 million dollars in a 20-year period was shown for just four aircraft weapon systems. Certainly these savings can be put to better use during a time of severe budget constraints.

Training and replacement costs would not be the only savings expected. With highly experienced pilots and navigators in the Dual-Track rated specialty, a reduction in sorties flown could be expected. Less flying hours converts to savings in fuel and other maintenance expenses. Lower overhead expenses would also result from reduced PCS movement and the smaller unit staffs needed to supervise the rated officer specialists (5:8). These specialists would also form the core of an instructor force used to train new rated officers with an experience level unparalleled in Air Force history. Most of these benefits would be difficult to quantify without additional studies, but their potential for cost saving is enormous.

This study has concluded that the Dual-Track system is a superior management tool for pilots and navigators in terms of effectiveness and efficiency. The proposed system is not intended to replace the present system of officer career management, but only to add an alternative. There is a specific need for rated officers to fill senior leadership positions, and the Dual-Track system recognizes that need. At least 70% of all Air Force rated officers would still compete for those positions under the present system of the whole-person concept and DOPMS. However, a core of highly trained and experienced career pilots and navigators is required to increase retention of a costly resource and ensure combat capability in the future.

RECOMMENDATIONS

The author recommends the Air Force continue to study, consider other proposals, or implement this proposal of a Dual-Track system for career management as an alternative to the current career management philosophy. The United States Air Force should not ignore the recent decline in retention rates. If the rates continue, the future combat capability of its forces could be seriously impaired.

Flying is a business where everyone has to do his or her job right. There is no room for sham or pretense -- you cannot 'fake it' in the air, at least not for very long. Everybody associated with it realizes that there are too many lives involved for anything less than the best effort (22:30).

BIBLIOGRAPHY

A. REFERENCES CITED

Articles and Periodicals

1. "AF Pilot Retention Declines." Air Force Times, 3 February 1986, p. 7.
2. Craver, Martha L. "Commands Talk About Retaining Pilots." Air Force Times, 4 December 1978, p. 3.
3. Dees, Danny J., Capt, USAF and Roseann P. Jokerst. "Is Pilot Retention a Problem?" Airlift, Vol. VII, No. 2 (Summer 1985), pp. 1-4.
4. "Defense Manpower Issues: Quality People -- Quality Force." Air Force Magazine, Vol. 68, No. 11 (November 1985), pp. 108-121.
5. Ginovsky, John. "AF Attacks Irritants that Displace Pilots." Air Force Times, 21 April 1986, pp. 1,8.
6. Ginovsky, John. "Civilian Pilot Hiring Threatens Retention." Air Force Times, 4 February 1985, p. 1.
7. Ginovsky, John. "Pilot Retention Rate Clarified." Air Force Times, 21 April 1986, p. 8.
8. Ginovsky, John. "Why AF Pilots Resign: They Don't Fly Enough". Air Force Times, 10 November 1980.
9. Korb, Lawrence J. "Keeping the Quality in a Quality Force." Defense '85, June 1985, pp. 19-27.
10. "Many MAC Pilots Quitting for Airline Jobs." Air Force Times, 4 December 1978.
11. "No Surprises in Why Pilots Leave Service." Air Force Times, 4 June 1979.

CONTINUED

12. "Pilot Exodus Still Growing." Air Force Times, 18 December 1978, p. 2.
13. Ross, Charles E. "A Dual-Track Career System for Pilots." Air University Review, Vol. XXXVI, No. 5 (July-August 1985), pp. 93-99.
14. Rourke, Russell A., Honorable. "Five Challenges." Air Force Magazine, Vol. 69, No. 5 (May 1986), pp. 70-71.
15. Smith, Paul. "RAF Changing to Keep Pace With Needs." Navy Times, 5 February 1979, p. 13.
16. "Top Priority -- Retention." Air Force Times, 10 March 1980, pp. 1,16.
17. "Training Costs Increase". Air Force Times, 24 June 1985, p. 3.

Official Documents

18. Royal Air Force. Commissioning and Conditions of Service of Officers. RAF Air Publication 3393. Great Britain: Ministry of Defense, August 1984.
19. Royal Air Force. Commissions as Aircrew Officers in the Royal Air Force. RAF Air Pamphlet 96. Great Britain: Ministry of Defense, September 1979.
20. US Department of the Air Force. Officer Career Development. AF Regulation 36-23. Washington, DC: Government Printing Office, 11 March 1985.
21. US Department of the Air Force. Officer Career Information. AF Pamphlet 36-22. Washington, DC: Government Printing Office, 10 May 1982.

CONTINUED

22. US Department of the Air Force. Supplement to the Air Force Policy Letter for Commanders. Air Force Reserve Pamphlet 190-2. Washington, DC: Government Printing Office, 1 April 1973.
23. US Department of the Air Force. The USAF Cost and Planning Factors. AF Regulation 173-13. Washington, DC: Government Printing Office, 1 February 1985.

Unpublished Materials

24. Allen, E. G., Col, USAF. "Royal Air Force OER System." AFMPC Memorandum, June 1979.
25. Bendick, Gordon L., Capt, USAF and David J. Jones, Capt, USAF. "An Examination of Dual Track Career Management: Current Pilot Attitudes and Cost Analysis." Research study prepared at the Air Force Institute of Technology, Wright-Patterson Air Force Base, Ohio, 1981.
26. Bouelik, David K., Maj, USAF. "Dual Trace-Future Career Alternatives for the USAF Pilot." Research study prepared at the Air Command and Staff College, Air University, Maxwell Air Force Base, Alabama, 1975.
27. Fleming, Thomas O., Jr, Maj, USAF. "Pilot Specialists -- The Potential for Dual-Track Personnel Management of U. S. Air Force Pilots." Research study prepared at the Army Command and General Staff College, Fort Leavenworth, Kansas, 1980.
28. Garrett, Roger G., Maj, USAF. "'Pilot Specialists in the USAF' --- What Can We Learn From The Royal Air Force?" Research study prepared at the Air Command and Staff College, Air University, Maxwell Air Force Base, Alabama, 1980.

CONTINUED

29. Graham, James D., Maj, USAF. "Random Thoughts on Retention." Air Staff Point Paper No. 4, AF/MPXXX, Department of the Air Force, Washington, DC, 23 January 1979.
30. Tompkins, Gary R., Maj, USAF. "The Pilot Officer in the USAF." Research study prepared at the Air Command and Staff College, Air University, Maxwell Air Force Base, Alabama, 1971.
31. Wheeler, R. C., Maj, USAF. "Every Man a General." Research study prepared at the Air Command and Staff College, Air University, Maxwell Air Force Base, Alabama, 1974.

Other Sources

32. Scott, Ronald L., Maj, USAF. AFMPC, Department of the Air Force, Randolph Air Force Base, Texas. Telephone Interview. 3 Dec 1986.

B. RELATED SOURCES

Books

Janowitz, Morris. The Professional Soldier. New York: The Free Press, 1971.

Articles and Periodicals

Craver, Martha L. "Two Tiered Pilot System Possible Starting in FY 80." Air Force Times, 8 October 1979, p. 5.

CONTINUED

Gates, E. "Why They're Leaving the Air Force." Air Force Magazine, October 1978.

Rack, P. R., Capt, USAFR. "Why Not a Professional Pilot Corps?" Air Force Magazine, January 1979.

Official Documents

Tactical Air Command Inspector General. Functional Management Inspection Report: Aircrew Duty Day. Langley Air Force Base, Virginia, 22 January 1985.

Unpublished Materials

Robinson, P. A., Sqn Ldr, RAF. "Disincentives -- Cause of an Unacceptable Drain On Our Most Precious Resource." Brooke - Popham Essay prepared at Bracknell, Great Britain, 26 Aug 1986.